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**“Young Men’s Sexual Health Decision  
Making: A Qualitative Study”**

**Michelle Amina Stamp**

**Research Thesis for the Award  
Professional Doctorate (Public Health)**

**2015**

# **“Young Men’s Sexual Health Decision Making: A Qualitative Study”**

**Michelle Amina Stamp**

A thesis submitted in partial fulfilment of the  
requirements of the University of  
Northumbria at Newcastle for the Degree of  
Professional Doctorate

Research undertaken in the Faculty of Health  
and Life Sciences

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## **Abstract**

The National Chlamydia screening programme in England screens only half the number of men compared with women, and the places men are being screened for chlamydia differ from that of women (NCSP, 2012). There is a wealth of data which shows that men are being screened in non-clinical settings, such as educational establishments, or that they are choosing to self-request screening via the internet as opposed to seeking alternative health service provision. However, we are unsure of the reasons for their choice. Furthermore, it is unclear what the impact of a positive or negative diagnosis for chlamydia has on subsequent sexual behaviour. By adopting a situational, qualitative methodology, this study aimed to understand the complex factors involved in men's sexual health decision making following a request for a home testing kit for chlamydia.

The focus for this study was young men aged 20 to 24 years who have a high rate of chlamydia infection, and who have been screened through the National Chlamydia screening programme in the North East of England. Data was collected through ten in-depth interviews, and seven follow up interviews after 12 months. Follow up interviews were primarily used to gauge any long term behaviour change. Patients' sexual health records provided additional data which was used for triangulation. Data was analysed with the use of framework analysis. Findings from the research were presented to a focus group of professionals and the outcomes from that discussion have been implemented in sexual health provision locally. This research has also fed into a national working group which reviewed chlamydia testing guidelines for positive patients.

Findings show that the decisions the young men made about sexual partners and sexual practice are based on a number of factors: pre-influencing factors, which were based on the men's perceptions and beliefs about women, categorising them as "risky" with a sexually transmitted infection or "clean" with no infections, alcohol use and contraception vs STI prevention. Situational factors including sexual gratification and sexual arousal and post rationalisation factors such as peer pressure and masculinity. Factors influencing decisions to seek testing were triggered by unprotected sex with casual partners, strengthened by catalytic influences including media campaigns. The findings suggest a negative chlamydia test result gives respondents a clean bill of health allowing them to engage in further unprotected sex. A positive diagnosis resulted in the intention to change behaviour and modify sexual practice. After follow up interviews, intention did not lead to actual behaviour change and many became re-infected within 6 months. A conceptual model based on the study findings has been developed for use in professional practice. This

model identifies the variables which influence the men's decision making at different stages in the decision making process. This study has shown that the factors that influence young men's sexual decision making and the impact of diagnosis on subsequent sexual behaviour have major implications for public health in terms of reinfection and further transmission.

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## List of abbreviations

BASHH	British Association of Sexual Health and HIV
CMO	Chief Medical Officer
CVD	Cardio Vascular Disease
DH	Department of Health
ECDC	European Centre for Disease Prevention and Control
EOHC	Emergency Oral Hormonal Contraception
GP	General Practitioner
GUM	Genitourinary Medicine
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immunodeficiency Virus
HPA	Health Protection Agency
IUD	Intra Uterine Device
NAO	National Audit Office
NAATs	Nucleic Acid Amplification Testing
NATSAL	National Survey of Sexual Attitudes and Lifestyles
NCSP	National Chlamydia Screening Programme
NHS	National Health Service
NuTH	Newcastle upon Tyne Hospitals Trust
ONS	Office for National Statistics
PCT	Primary Care Trust
PHE	Public Health England
PID	Pelvic Inflammatory Disease
PN	Partner Notification
QOF	Quality Outcomes Framework
RCT	Randomised Controlled Trial
ROI	Return on Investment
SLA	Service Level Agreement
STI	Sexually Transmitted Infection
UK	United Kingdom
UKNSC	United Kingdom National Screening Committee
WHO	World Health Organisation

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Above all I would like to thank my friends and family for their support and encouragement throughout this process, and to my beautiful children, Mila and Sawyer who were born whilst I was studying for this Professional Doctorate.

**Declaration**

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others. The work was done in collaboration with the North of Tyne Chlamydia Screening Programme.

Any ethical clearance for the research presented in this thesis has been approved. Approval has been sought and granted by Northumbria University Research Ethics Sub Committee, Newcastle Primary Care Trust NHS Research and Development Committee and the National Research Ethics Committee (NREC) on the 30<sup>th</sup> June 2010.

**I declare that the Word Count of this Thesis is 79,890 words**

Name: Michelle Amina Stamp

Signature:

Date:

## **CHAPTER ONE: INTRODUCTION**

This doctoral thesis explores the complex factors involved in men's sexual health decision making, following a positive or negative diagnosis for *Chlamydia trachomatis*. This was investigated from the perspectives of young men who had self-requested internet screening for chlamydia, through NHS Trust web/text based services in a screening programme in the North East of England. As this research was for the award of a Professional Doctorate, it was important that the findings would have relevance for practice. The research findings were therefore presented to sexual health practitioners and public health commissioners, to determine implications for practice.

This chapter sets the scene for the research problem before giving the background to the National Chlamydia Screening Programme in England. A rationale for the study is then given, before presenting the study aims and objectives. The chapter concludes with an overview of the structure of the thesis.

### **1.1 Setting the scene**

This research focused on young men who are deemed 'hard to reach' and difficult to engage in services. 'Hard to reach' is a term which is sometimes used to describe those sections of the community which are difficult to engage in service provision. The term is usually used to refer to sections of the community who are eligible for services or programmes, but are difficult to involve in a given activity (Barrett, 2008). This term also refers to 'underserved', those slipping through the net, or 'the service resistant' (Doherty, Stott and Kinder, 2004). There are no clear criteria for defining who should be included in the 'hard to reach' category. A criticism of the concept of 'hard to reach' is that it is usually constructed and controlled by practitioners, rather than being a concept with which service users would identify (Barrett, 2008).

In this study, the term 'hard to reach' refers to those young men who are under-represented in chlamydia screening service provision (National Chlamydia Screening Programme, NCSP, 2012). These young men are aged between 20 to 24 years, and are not being screened in mainstream health services. They are considered for various reasons to be resistant to traditional sexual health services such as genito-urinary medicine (GUM) or general practice which offers sexual health screening. Perhaps the term 'resistant to reach' is a more fitting category for this group, and it is important to reach this group of men as they have a high rate of chlamydial infection (NCSP, 2012).

They are prone to the longer term consequences of infection and they pose a risk to their sexual partners. Although there has been a history of resistance from young men to attend sexual health services in GUM settings for reasons including: fear of genital examination or ureteral swab (Shoveller *et al.*, 2010), because they consider the setting stigmatising and used only by promiscuous people (Pavlin, Parker and Fairley *et al.*, 2008; Balfe *et al.*, 2010), or they have concerns about seeing people they know, thus putting their reputation at risk (Dixon-Woods, Stokes, Young *et al.*, 2001 Fortenberry *et al.*, 2002; Hogben, Bloom, McFarlane *et al.*, 2004). The internet screening service appears to have a good uptake from this group of men compared to other settings where chlamydia screening is offered. Another reason to target this group is because chlamydia infection is largely asymptomatic with young men, they may not feel at risk of the infection, and therefore not feel the need to access services for screening (Farley, Cohen and Elkins, 2003; Tebb *et al.*, 2004)

There is a strong gender dimension to lifestyle choices and health seeking behaviour (Courtenay, 2000; Dolan 2011), with men less likely to use health care services than women (Verbrugge, 1985, Watson, 2000). Men are expected to present as stereotypically 'masculine' infrequent users of health services, but at the same time they are also expected to show a level of care over their health, which requires engagement with services. This has been termed the 'don't care-should care' dichotomy (Robertson, 2007). However, when it comes to seeking help for sexual health problems, O'Brien, Hunt and Hart (2005) found that men were preserving or restoring their masculinity because they believed that sexual health problems may interfere with their masculinity. Connell (1987) defined masculinity as a social construct, dependent on a specific historical time, culture and locale. It has also been defined in relational terms, as that which is not feminine (Connell, 1995). Masculinity is associated with stereotypical masculine traits such as assertiveness, dominance, physical strength and emotional restraint, with maleness being measured by the continual proving of manhood (Connell, 1996). There is a wealth of literature on the factors associated with men's reluctance to access sexual health services, although there is a dearth of intervention studies on the topic (Elwy, Hart and Hawkes *et al.*, 2002). There is still a need to explore and understand why men are not accessing clinical settings for chlamydia screening and why they make the decisions they do.

Men are often blamed for being poor consumers of health services and are thus seen to be victims of their own behaviour (Courtenay, 2000). Sociologists have inferred that particular behaviours associated with traditional forms of masculinity are likely to be hazardous to men's health (Connell, 2000). Men are also influenced by cultural stereotypes of what it means to be a man; to ignore screening and preventative health care, and to delay help-seeking for symptoms (Courtenay, 2000). This results in men under-utilising health services aimed at early intervention (Lee and Owens, 2002). Social norms and the way men are expected to behave, such as being strong and indestructible may also have an impact on their health seeking behaviour (Mahalik, Lagan and Morrison, 2006). It may be that the internalisation of such norms of masculinity reduces the likelihood of engaging in health protective behaviours. However, it should also be acknowledged that the skills of some health care professionals can sometimes fail men (Burkitt, 1999). Service providers may not feel equipped to deal with men's health issues appropriately. Current rates of STI and Human Immunodeficiency Virus (HIV) screening in general practice are low, which could suggest reluctance on the part of the healthcare provider to offer testing (Sadler, Mercer and Sutcliffe *et al.*, 2010).

The contribution of heterosexual men to STI transmission seems to have been overlooked in many early key policy documents, including: *the Chief Medical Officer's report* (Department of Health, 1989); and *the Sexual Health and HIV Strategy for England* (Department of Health, 2001). These documents failed to identify any means by which heterosexual men were to be targeted by sexual health services (Department of Health, 2001). In 2000, the *World Health Organisation* (WHO) acknowledged the need to pay greater attention to the shorter life expectancy of men, and identified a lack of understanding of the role of masculinity in shaping men's expectations and behaviours, as a primary causative factor for the health disparity between men and women (WHO 2000). Since then, the relatively low numbers of men being screened for chlamydia in relation to women, has been highlighted in the National Chlamydia Screening Programme (NCSP) policy document *Men Too* (NCSP, 2007), a strategy to support equitable access. A more recent framework for *Sexual Health Improvement in England* (Department of Health, 2013) also identified the need to target boys and young men. This report highlighted that the needs of boys and young men are different to that of girls and this should be acknowledged. Issues such as relationships, consent, contraception and infections need to be considered from a young man's perspective

(Department of Health, 2013). This document also recognised the importance of internet testing and recommended the expansion of internet testing services which are particularly attractive to young men.

## **1.2 Chlamydia trachomatis**

Chlamydia is caused by a bacterium called *Chlamydia trachomatis*. The bacteria are found in the semen of men and the vaginal fluids of women who have the infection (Health Protection Agency, 2012). Chlamydia is transmitted through unprotected vaginal, anal and oral sex with someone who is already infected. *Chlamydia trachomatis* is the most common, curable, sexually transmitted infection in the UK and in many other parts of the world. It is of significant public health concern, because the majority of cases are asymptomatic, which provides young people with no clues with which to seek health care (Lorimer and McDaid, 2013). For those who do develop symptoms the symptoms may show up between 1 to 3 weeks after contact with chlamydia, many months later or not until the infection spreads. Women may notice unusual vaginal discharge, bleeding between periods or after sex, pain when passing urine or lower pelvic pain. In men there may be a white/cloudy or watery discharge from the penis, burning and itching in the genital area, pain when passing urine or swelling of the testicles (NCSP, 2012). During 2012, routine data submitted to Public Health England show that over 1.7 million chlamydia tests were carried out in England among 15 to 24 year olds; 137,000 (8%) of these were positive (Public Health England, 2013).

There are serious long term consequences of untreated chlamydia in both men and women. In women, chlamydia can lead to pelvic inflammatory disease (PID), tubal infertility and ectopic pregnancy (Wallace, Scoular and Hart *et al.*, 2008; Haggerty, Gottlieb and Taylor *et al.*, 2010). Between 10 and 40 per cent of infected women will develop PID with a significant proportion of cases being asymptomatic or having mild, atypical symptoms (Simms and Stephenson, 2000). The risk of PID increases with each recurrence of chlamydia infection, as does the risk of reproductive sequelae (Hills Joesoef and Marchbanks *et al.*, 1993; Batteiger, Tu and Ofner *et al.*, 2010). These complications, in particular infertility, have major cost implications for health services and the NHS (Adams, Turner and Edmunds, 2007; Land, Van Bergen and Morre, 2010). The estimated cost of treating these complications has been estimated to be a minimum of £100 million annually (Department of Health, 2004). Infection during



pregnancy is associated with premature rupture of the membranes, low birth weight and miscarriage (Peipart, 2003). Chlamydia can also be transmitted from mother to her baby during labour causing neonatal conjunctivitis and pneumonia (Stamm 1999; Rours, Hammerschlag and Ott *et al.*, 2011). In men, chlamydia can lead to epididymitis and epididymo-orchitis (Cunningham and Beagles, 2008) and Reiter's syndrome (sexually acquired reactive arthritis) (Stamm, 1999).

The natural history of genital chlamydia infection in humans, including how long an individual has had the infection and factors influencing resolution of infection, is not yet completely understood. There are several causes of pelvic inflammatory disease (PID) in women and symptoms, such as fever and lower abdominal pain are not specific to the condition. Since highly effective treatment is available, there are ethical issues with observing the (untreated) natural history of diagnosed infection (Geisler, Wang and Morrison *et al.*, 2008).

Diagnosis of chlamydia is achieved using Nucleic Acid Amplification Tests (NAATs) which are highly sensitive and specific (British Association of Sexual Health and HIV, (BASHH), 2010). Since these tests allow the use of non-invasive samples such as urine and self-taken vulvo vaginal swabs, they remove the need for invasive procedures, and are therefore seen as acceptable tests for the use in screening programmes (NCSP, 2012).

*Chlamydia trachomatis* infection can be effectively treated with antibiotics. Current guidelines recommend azithromycin, doxycycline or erythromycin (BASHH, 2006). Treatment is highly effective and reduces the risk of complications. Partner notification, which entails the tracing and epidemiological treatment of partners, is regarded as an integral part of good management. The notification of sexual partners is critical to ensure that the partners receive appropriate and timely treatment, to prevent re-infection in the original patient, and to prevent further spread in the population. It is likely that most untreated infections eventually resolve although in some cases *Chlamydia trachomatis* has been shown to persist (Parks, Dixon and Richey *et al.*, 1997; Golden, Schillinger and Markowitz *et al.*, 2000; van den Brule, Munk and Winther *et al.*, 2002; Joyner, Douglas and Foster *et al.*, 2002; Moore, Van den Brule *et al.*, 2002; Molano, Meijer and Weiderpass *et al.*, 2005). Two thirds of sexual partners of chlamydia positive individuals, are also chlamydia positive (Quinn, Welsh and

Crotchfeld *et al.*, 1996; Lin, Donegan and Heeran *et al.*, 1998; Clad, Prillwitz and Hintz *et al.*, 2001; Khan, Fortenburry and Juliar *et al.*, 2005), hence the need for effective partner management and modification of risky sexual behaviours.

### **1.3 Background to the National Chlamydia Screening Programme**

Evidence for the effectiveness of opportunistic and proactive screening approaches for chlamydia screening was based upon research, which demonstrated that such programmes were effective in reducing the prevalence of chlamydia and PID in targeted populations (Scholes, Stergachis and Heidrich *et al.*, 1996; Ostergaard, Anderson and Moller *et al.*, 2000; Oakeshott, Kerry and Aghaizu *et al.*, 2010). One of the first studies published by Scholes, Stergachis and Heidrich *et al.* (1996) in the United States of America (USA) showed that proactive screening for chlamydia reduced the risk of PID by 56 per cent. These findings were replicated by Ostergaard, (2000) in a randomised controlled trial (RCT) of screening methods in Denmark, which found risk reduction for PID of 50 per cent. However, a recent meta-analysis of these studies carried out as part of a report by the European Centre for Disease Prevention and Control (ECDC) (2014), reported that these studies were subject to bias. In the Scholes study, the researchers made more of an effort to recruit women to the screening group. These women were also followed up more thoroughly than controls. In the Ostergaard study, the women were randomised before they had consented to take part, and no information was provided at follow up for over half of these women. This suggests that efficacy of chlamydia screening may have been either over or underestimated in these studies (Low, Bender and Nartey *et al.*, 2009).

Further evidence regarding the success of chlamydia screening programmes was based on case studies in Sweden where the number of positive cases for chlamydia fell annually, after widespread opportunistic screening became available in healthcare settings, which attracted young people (Herrman and Egger, 1995). Pelvic Infection rates and the number of ectopic pregnancies were also reported to have fallen in Sweden (Low, McCarthy and Macleod *et al.*, 2004). This has been used as evidence that widespread screening for chlamydia reduces complications. However, prevalence rates began to rise after 1991 and in 2003 the chlamydia rate in Sweden was higher than it was before the start of screening (Swedish Institute for Infectious Disease Control, 2005), although this could have been attributed to the increase in testing and reporting. During the period when chlamydia rates were falling in Sweden, national HIV

prevention campaigns were being attributed to the falling rates of gonorrhoea (Nicoll, Hughes and Donnelly *et al.*, 2001). These campaigns may have encouraged safer sex behaviours amongst population groups thus impacting upon other STIs during this time.

It has been suggested that since screening approaches in Sweden were largely focused on women, a possible contributing factor to the increase in infection may have been due to the absence of screening men (Low and Edger, 2002), especially since men had similar rates of infection as women. Another possible explanation for the rise in chlamydia infection could have been a change in the sexual behaviour of Swedish young people. The National Survey of Sexual Attitudes and Lifestyle (NATSAL), carried out in the UK in 1990 and then again in 2000 (Johnson, Mercer and Erens *et al.*, 2001) showed that there was a significant increase in sexual risk behaviour between the two surveys with the number of heterosexual partners in the previous 5 years increasing considerably for both sexes. Observed differences between NATSAL 1990 and NATSAL 2000 were likely to result from a combination of a greater willingness to report sensitive behaviours in NATSAL 2000 due to improved survey methodology and more tolerant social attitudes (Johnson, Mercer and Erens *et al.*, 2001), and could therefore provide a possible explanation for the changes in sexual behaviour.

The UK National Screening Committee (UKNSC), the body which assesses the evidence for screening programmes and advises the government about implementation in the UK, cites that before introducing a screening programme, there should be evidence from high quality randomised control trials that the screening programme that is to be implemented reduces mortality and morbidity (National Screening Committee 2011). However, as no randomised control trials for opportunistic chlamydia screening have taken place, the NSCP does not fit the criteria for a screening programme under the UKNSC. Screening programmes that are covered by the UKNSC require registers that allow proactive invitations to be sent to people in the target population to ensure regular uptake (NHS Cancer Screening Programmes 2006), whereas opportunistic screening relies on people attending health care settings and health professionals to offer screening at regular intervals. The problem is that young people, who are asymptomatic, may not feel the need to access health services for screening. There may also be gender inequalities utilising this approach, as young men do not access healthcare settings as much as young women, which could result in a large number of young men being missed. Alternatively, not all health care professionals will offer testing, and therefore

individuals will be overlooked or not rescreened. These issues will be explored further in the following chapter, which examines the barriers to screening in different settings.

#### **1.4 Policy drivers for a National Chlamydia Screening Programme**

The first *National Strategy for Sexual Health and HIV* for England was published in 2001 (Department of Health, 2001). This ten year strategy highlighted serious problems in sexual health services, which included four- week waiting lists for GUM appointments, limited sexual health service provision outside of specialist GUM services, and very few GPs providing sexual health services other than contraception. The strategy presented a vision to reform and modernise sexual health services in England and to address the rising prevalence of STIs and HIV. The aims of the strategy were to reduce the transmission and prevalence of STIs and HIV, reduce unintended pregnancy rates and reduce the stigma associated with HIV and STIs. In order to tackle the rising tide of STIs and HIV, the strategy stated a commitment to roll out a programme of screening for chlamydia in 2002, focusing on selected groups of young women such as all those attending GUM clinics, women seeking termination of pregnancy or those having their first cervical smear. This would be followed by implementation of a broader national programme once a pilot programme which was commissioned by the Department of Health, had been evaluated.

The evidence base for the NCSP was based on the Chief Medical Officer's (CMO), 1998 Expert Advisory Committee report on *Chlamydia trachomatis* infection. The report highlighted the public health importance of this disease and the need to screen high risk individuals. The CMO considered the evidence-base associated with screening for genital chlamydial infection, and concluded that chlamydia screening met the criteria for a screening programme as set out by Wilson and Jungner (World Health Organisation, 1968) and recommended that one be established.

The recommended model was an opportunistic screening approach, which was targeted towards young women, and delivered in general practice and community sexual and reproductive health services. As the programme expanded, the NCSP delivery model changed and by 2003 the target population included men. By 2004 testing was being introduced into non-traditional settings such as pubs, clubs, educational settings, and music festivals (NCSP, 2010).

Following the Chief Medical Officer's recommendation, the Department of Health published a pilot study of opportunistic screening for genital chlamydia in England (Pimenta, Catchpole and Rogers, 2003). This study concluded that it was feasible and acceptable to screen women aged 16 to 24 years of age in a range of healthcare settings, which included contraceptive clinics, gynaecology, termination of pregnancy, and general practice. It is noteworthy to add that general practitioners were financially incentivised to perform chlamydia testing during this pilot. High screening volumes of 50 per cent of the total 15 to 24 year old population were confirmed alongside high disease positivity among those attending healthcare settings (Pimenta, Catchpole and Rogers, 2003). A proactive screening approach for chlamydia was rejected for the NCSP because of perceived difficulties identifying those who were sexually active.

The Public Health White Paper '*Choosing Health: Making healthy choices*' easier (Department of Health, 2004) also identified sexual health as a key public health priority and set out commitments to improve sexual health with a £300 million investment to modernise and transform sexual health services over a three year period. The White Paper stated that the implementation of a National Chlamydia Screening Programme would be accelerated with total coverage of England by March 2007 (Department of Health, 2004).

National targets for screening 15 to 24 year olds were first announced in 2005. These targets were based on modelling data, which estimated the level of coverage required to reduce prevalence (Turner, Adams and LaMontagne *et al.*, 2006). These targets were included in NHS Local Delivery Plans from 2006 to 2008, which supported the Government's broader strategy to improve sexual health in the population (Department of Health, 2005). By 2008/9 chlamydia prevalence was included in the vital signs indicator operating framework to increase the percentage of sexually active 15 to 24 year olds accepting screening for chlamydia (Department of Health, 2006). This three year framework set screening targets of 17 per cent 2008/09, 25 per cent in 2009/10 and 35 per cent for 2010/11. However, in 2009 a report by the National Audit Office stated that, as only 67 out of the 152 Primary Care Trusts (PCTs) achieved the 17 per cent screening target, to date the NCSP had not demonstrated value for money (Department of Health, 2009).

In 2012, following a change in government, *the Public Health Outcomes Framework* (2013-2016) - *Healthy lives, healthy people: Improving outcomes and supporting transparency* (Department of Health, 2012) was launched. This document highlighted chlamydia again as a key area and included an indicator to assess progress in controlling chlamydia in sexually active young adults. The diagnosis indicator recommends a level of achievement for local areas to work towards: at least 2,300 chlamydia diagnoses per 100,000 15-24 year olds per annum (Public Health Outcomes Framework, 2012). This rate reflects both coverage and the proportion testing positive. However, this outcome measure now includes the chlamydia diagnoses made in GUM services as well as those made outside of GUM, which is different from previous chlamydia targets.

To date, the NCSP has delivered around 5.5 million tests, diagnosing over 370,000 infections in young adults (Health Protection Agency, (HPA), 2013). HPA modelling suggests that the level of testing that has been achieved in England through opportunistic screening will probably have resulted in a fall in prevalence. Looking forward, the achievement of the diagnosis rate which is set out in the *Public Health Outcomes Framework*, will lead to further falls in prevalence in the coming years (HPA, 2013).

### **1.5 Rationale for the study**

Since the inception of the National Chlamydia Screening Programme (NCSP) in 2003 the number of men who are under 25 years of age who are accessing screening nationally remains low. Although there has been an increase each year from 8 per cent in 2003/04 to 29 per cent in 2006/07 and, 31 per cent in 2008/09 (NCSP, 2007) the number of men being screened for chlamydia is well below that of women. National data show that those men who are being screened for chlamydia are choosing to access screening via internet postal testing or in non-clinical settings (NCSP, 2014).

In the Northumberland Tyne and Wear programme, 45 per cent of young men were screened in 2008/09, 46.8 per cent in 2009/10, 46.7 per cent in 2010/11 and 41.4 per cent in 2011/12. Analysis of chlamydia screening testing data from April 2009 to March 2010 showed that the majority of young men who tested locally for chlamydia were accessing screening through the NHS web/text based service or through outreach strategies in pubs, gyms and universities. In comparison, the proportion of men screened in clinical settings was low. This could be due to a number of factors, such as men not

accessing health care settings as much as women (George and Flemming, 2004; Smith, Braunack-Mayer and Wittert, 2006) or some professionals not feeling equipped to deal with men's health issues appropriately (Addis and Mahalik, 2003; Mahalik, Good and Englar-Carlson, 2003). This is important because if professionals do not feel equipped to deal with men's health issues then they are unlikely to raise the issue of chlamydia screening and sexual health. Although the internet screening service is reaching young men, it is unclear why they are accessing screening in this way rather than attending clinical settings such as GPs where they would obtain sexual health advice.

In addition, little is known about the impact of a positive or negative diagnosis on the young men's subsequent sexual behaviour (Duncan, Hart and Scoular *et al.*, 2001). It has been suggested that those receiving negative screening test results may interpret this as a 'certificate of health' and consequently be less inclined to adopt healthy behaviours (Tymstra and Bieleman, 1987). If those who test positive receive advice around sexual health, along with treatments and referrals and treatment of sexual partners, then what is their perception of the importance of this issue, and their intention to modify their sexual behaviour following diagnosis?

## **1.6 Research Aim**

This research aimed to explore the complex factors involved in men's sexual health decision making.

## **1.7 Objectives:**

- To analyse the influences on young men's decision making in relation to requesting a self-test for chlamydia via web/text based trust services
- To uncover individual perceptions of sexual health screening from 'hard to reach' users, and identify important lessons for practice
- To investigate the relationship between positive and negative diagnosis for chlamydia, and modification for sexual behaviour following diagnosis
- To investigate how the individual's knowledge, attitudes and values around sexual practices impacts upon their sexual choices, prevention, social responsibility and help-seeking behaviour in relation to STIs
- To explore findings with practitioners and determine implications for practice.

## **1.8 Structure of the thesis**

This chapter has introduced the thesis and provided the background to the National Chlamydia Screening Programme and policy context, and has set out the rationale, aims and objectives for the study.

Chapter two provides a review of the relevant literature on chlamydia screening that examines the settings in which men are being screened and the impact of infection. It draws on published literature, public health policy and practice in relation to chlamydia screening and provides information on the population studied.

Chapter three discusses the theoretical context. This chapter explores the links with masculinity as well as with feminism. Behaviour change theory and masculinity theory provide a conceptual framework for the study.

Chapter four begins with an overview of the underlying research paradigm for this study, and the research design and methodology employed in conducting the research.

Chapter five presents the study findings organised around three meta themes which emerged from the data. These themes are presented in a conceptual model which provides a visual interpretation of the data.

Chapter six presents a detailed discussion of the study findings in relation to the conceptual framework for the research. Strengths and limitations of the study are discussed.

Chapter seven concludes the research and gives implications and recommendations for practice, policy and further research.



## **CHAPTER TWO: REVIEW OF THE LITERATURE**

The previous chapter introduced the study, giving the background and rationale. The purpose of this chapter is to present a critical discussion of the literature, policy, and practice underpinning chlamydia screening in relation to screening young men who have been hard to engage in the chlamydia screening process. This chapter begins with an overview of the literature review methodology that was employed in this study. The remainder of this chapter is organised in two sections, the first part discusses public health policy and practice and locates chlamydia screening within the discipline of public health. This is followed by a discussion regarding the state of men's health and the definition of 'hard to reach', before discussing men's health service utilisation and young men's sexual decision making. The second part of this review discusses the settings in which men are being screened for chlamydia and identifies potential barriers that may limit access for young men. Finally the literature regarding the impact of a positive or negative STI diagnosis is explored to determine the impact on behaviour.

### **2.1 Literature review methodology**

A narrative or traditional literature review methodology was used to carry out the literature search. This methodology aimed to review, critique, summarise and synthesise the literature in relation to young men and chlamydia screening, to determine the scope of existing research in this field and to identify areas that have not been investigated. A narrative literature review method is essential for gaining in depth insight into specific subject areas, refining the research question and identifying gaps in existing research (Suresh, 2014). While a narrative review is not the same as a systematic review which uses explicit and rigorous criteria to identify critically evaluate and synthesise all of the literature on a particular topic, the principles and structure of the systematic review were helpful to determine the approach for this review (Timmons and McCabe, 2005). Methods used to conduct this search included: developing a search strategy, identifying inclusion and exclusion criteria, and analysing and synthesising the literature.

As with all types of literature review methodology there are both strengths and weaknesses. The strengths of a narrative approach are that they can offer a greater degree of flexibility with the ability to adapt or change as the literature review progresses, as well as the ability to synthesise ideas, theories and concepts from a range of literature (Kiteley and Stogdon, 2014). Weaknesses include a potential for author

bias regarding decisions about inclusion and exclusion criteria, not being as rigorous as systematic reviews, and lacking transparency of method making narrative reviews difficult to replicate (Petticrew and Roberts, 2006).

### **Search strategy**

As the literature search was narrative rather than systematic, the aim was to identify research studies that might help to inform the research question and study design rather than to provide an exhaustive summary of the literature in relation to the research question. Therefore, a broad and inclusive approach was adopted which focused on the elements of the research aim and objectives. For example, the keywords identified were based on the research topic and included the target population who were 'young men', who had been screened for the infection 'chlamydia' by self-requesting 'internet testing'. The outcomes were the 'impact of a positive/negative test result' on 'modification of behaviour'. The main concepts in the research aim and objectives were also identified and used as key words in the search strategy. The keywords used in the literature are shown below:

### **Search terms**

- Chlamydia, chlamydia screening, men and chlamydia, chlamydia prevalence, chlamydia screening in non-clinical settings, chlamydia screening in clinical settings, internet testing, health seeking behaviour, men's health seeking behaviour, men's health service utilisation, sexual decision making, men's sexual decision making, factors affecting men's sexual decision making.
- Impact of diagnosis, impact of chlamydia diagnosis, impact of STI diagnosis, impact of negative diagnosis, impact of positive diagnosis.
- Theories of gender, theories of masculinity, role theory, hegemonic masculinity, men's health behaviour, and men's sexual risk taking.
- Behavioural theories, social cognitive theories, The Theory of Planned Behaviour, The Health Belief Model, Alcohol theories, alcohol and sexual risk taking, young men's sexual risk taking.

### **Search methods**

The literature search was conducted mainly using the Northumbria university library catalogue to access specific journals including specific books by subject. NORA, the university search engine was used to access a wide range of materials including journal

articles, newspaper articles and government publications. The following databases were used: CINAHL, Cochrane Library, Medline, ProQuest Health and PubMed.

E-mail alerts were set up with relevant databases to keep up to date with any newly published literature. I also kept up to date with the literature through regular email updates from the National Chlamydia Screening Programme and Public Health England which highlighted new peer reviewed articles. Reference lists from primary articles were examined for relevant studies.

The keywords were used when conducting searches on the internet using google and google search engines. Government policy documents and official websites such as the Department Health, Public Health England and Office for National Statistics were searched. Relevant newspaper articles were included in the search to build a local picture. Searches were conducted on a regular basis over the duration of the study to ensure any new literature or relevant policies were identified. EndNote (a reference management software package) was used to store and manage references.

Studies that were not relevant to the research topic were excluded based on the titles of articles. Abstracts of potential articles were then scrutinised to determine whether or not the article should be included. This was followed by a review of the full text of the chosen articles. The inclusion and exclusion criteria for the search were as follows:

#### **Inclusion criteria**

- Studies involving young men were the primary focus of the review however, articles that incorporated both genders were also used where relevant.
- Studies involving both community based STI testing, clinic based testing and home based testing were involved to allow for comparison between the settings
- When looking at the impact of diagnosis, studies involving screening for all STIs were included as there was very little data on the impact of a chlamydia diagnosis.
- Studies from any country were included in the data as a lot of the data in this field is international.

#### **Exclusion criteria**

- Studies involving older adults
- Studies which incorporated a dual test for chlamydia and gonorrhoea

- Studies focusing on the sexual decisions and behaviours of gay and bisexual men, and men who have sex with men except for cases where no or very little literature could be found.

Data were then extracted by identifying the data of interest and devising a consistent approach to compare and contrast literature from the review. The final stage involved synthesising the findings from the literature in order to address the research aim and objectives.

## **2.2 Public health policy and practice**

Public health is a broad and diverse multidimensional field that includes many health related disciplines. A universally accepted standard definition of public health does not seem to exist. However, all definitions of public health have a precursor in the definition of ‘health’, which according to the World Health Organisation (WHO) is: ‘a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity’ (WHO, 2006). *The Alma Ata Declaration of Health for All* (WHO, 1984) and the *Ottawa Charter* (WHO, 1986) emphasized, that it was not only the impact of individuals’ behaviours which influences health but also the social, economic, political and environmental factors, which impact on the health of populations. The public health definition predominantly in use in the UK was coined by the Acheson report on public health in 1998 as:

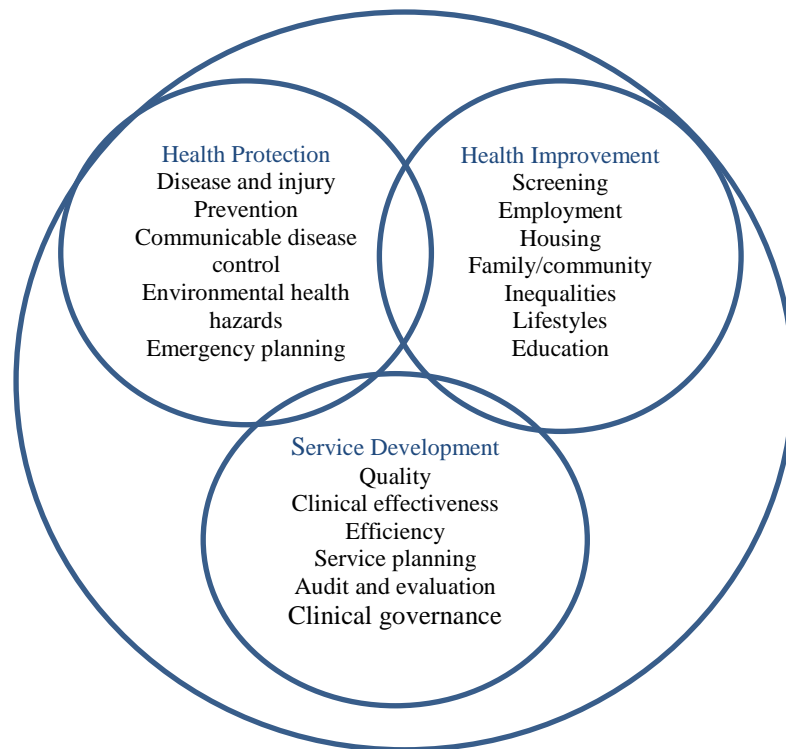
“The science and art of preventing disease, prolonging life and promoting health through the organised efforts and informed choices of society” (Sir Donald Acheson, 1998)

This definition has subsequently been adopted by the UK Faculty of Public Health Medicine (2012). It has, however, been suggested that this public health definition fails to reflect the importance of supporting individuals in their choice of healthy lifestyles. Wanless (2004) argued that rather than being ‘done unto’ individuals need to ‘fully engage’ in their health choices. *Choosing Health* (Department of Health, 2004) addressed this move toward personalisation of healthy choices and the need to reduce health inequalities by addressing access to choices, more information and partnership with communities (Department of Health, 2004).

The issue of inequalities in health became a central feature of health policy of the New Labour government that came into power in 1997. A series of reports exposed the inequalities in health between geographic regions, social classes, and, ethnic groups. The most significant of these was the Acheson Report in 1998, mentioned above, which drew on the ‘rainbow model’ of Dahlgren and Whitehead (1991) to show that inequalities were a result of an interaction of many factors in society. This led onto *Our Healthier Nation* (Department of Health, 1999), which played a major part in influencing public health in England. More recently, the Marmot report *Fair Society, Healthy Lives*, (Marmot *et al.*, 2010) reiterated the link between health and social groups demonstrating that the lower a person’s social position is, the worse his or her health is likely to be. There are clear inequalities in the sexual health of young people (Department of Health, 2010). This has been shown in the relatively high rates of sexually transmitted infections in young males and females, under the age of 25, with the exception of HIV (HPA, 2013). While targeted policies are in place to address gender inequalities and access to sexual health screening for men, such as the National Chlamydia Screening Programme (NCSP) ‘*Men Too*’ strategy (Clark and Battison, 2007), there is some evidence to suggest that an increased focus on behaviour change among young people could help further reduce these inequalities (Department of Health, 2010). This thesis aims to understand the screening behaviours of young men, including the impact of chlamydia infection on subsequent sexual behaviour, to better inform public health policy and practice.

Public health practice in the UK is now seen as falling into three distinct domains (Faculty of Public Health, 2010). These domains cover inter-related and distinct aspects of public health practice, which are underpinned by public health intelligence, health protection, health improvement, and service development. These domains are illustrated and described in figure 2.1.

Figure 2.1: The three domains of public health practice.



*Source: Faculty of Public Health, 2010*

Chlamydia screening fits well within the three domains framework; health protection because it is a screening programme that aims to control communicable disease, health improvement because it aims to reduce inequalities and has a role in education, and service development because it needs to be a cost effective, value for money, accessible health care service.

The Government's increasing emphasis on quality standards, outcomes and choice, highlights the need for evidence based knowledge and informed health service planning (Department of Health, 2004). Population approaches to promoting health and preventing disease are on many agendas both nationally and locally. The report *Securing Good Health for the Whole Population* (Wanless, 2004) emphasised from a population perspective the importance of increased voluntary, individual, and public engagement in the pursuit of improved health, particularly in the context of lifestyle choices such as alcohol use, exercise, obesity, and sexual health. The subsequent public health White Paper *Choosing Health: Making Healthier Choices Easier* (Department of Health, 2004) also emphasised the significance of well informed and appropriately supported choice in promoting better public health. Current government policies are

aimed at facilitating increased choice and supporting healthy lifestyles throughout society. The newly formed Public Health England aims to improve public health through strengthening local action, supporting self-esteem and behavioural change, promoting healthy choices and changing the environment to support healthier lives (Department of Health, 2013).

## **2.2 The local picture**

The Northumberland Tyne and Wear Chlamydia Screening Programme was launched in 2007. This was part of the final phase of a three stage roll out a National Chlamydia Screening Programme across England. During this time the Northumberland Tyne and Wear Chlamydia Screening Programme worked across six Primary Care Trusts (PCTs) in the North East of England covering an eligible screening population of 196,100, 15 to 24 year olds. The recommended model was an opportunistic screening approach that was targeted towards young women and men in a range of clinical and non-clinical settings which included: sexual and reproductive health services, primary care, pharmacies, educational settings, youth services and outreach at music festivals and pubs and clubs. Self-testing was also available whereby young people could order test kits from NHS websites, provide a urine sample and return the completed sample by post for laboratory analysis.

An opportunistic screening approach is different from screening programmes for other conditions such as cervical cancer, which targets older age groups. These screening programmes are sometimes referred to as 'proactive' or 'systematic' screening. They usually take a 'register-based' approach to screening which involves maintaining a register of patients who are deemed to be at risk of the condition and invited to test at regular intervals. An opportunistic approach was adopted for the chlamydia screening programme for a number of reasons, including young people's low response to testing invitations, and the difficulty of maintaining a register of young people, who tend to change their addresses frequently (National Audit Office, 2009).

The local chlamydia screening programme managed a central screening office which was the management and administration centre for the programme which has access to screening and treatment. The roll out of the programme was to increase access and uptake of opportunistic screening for genital chlamydia amongst 15-24 year olds who were resident in Northumberland Tyne and Wear. The national priority for local PCTs

during this period was ‘Tier 2 Vital Signs indicator’ targets. These targets were set to encourage PCTs to progressively increase annual testing rates of 17, 25 and 35 percent over a three year period (Department of Health, 2009).

From 1<sup>st</sup> April 2009 to 31<sup>st</sup> March 2010, the Northumberland Tyne and Wear Chlamydia Screening Programme achieved their target and screened 39,116, 15 to 24 year olds. Fifty three percent were young women and forty seven percent were young men which show a good uptake in men. Further analysis of the data pertaining to young men revealed that those with the highest rate of infection were aged between 20 and 24 year of age. This data also revealed that the majority of these men were accessing chlamydia screening via the NHS internet/text based testing service as opposed to screening in health care settings.

This research therefore aimed to look at the behaviours of these young men as they represented service users who were health seeking and at most risk of infection. Table 2.1 below shows demographic information pertaining to the patients who used the self-request service from April 2009 – March 2010. The population from which the study sample was identified used the information about self-request behaviour. The sample for this study was recruited from the identified population. This is discussed in further detail in chapter four: (Methodology).

Table 2.1: Summary of screening activity related to the self-request of text/web based screening (Source Northumberland Tyne and Wear Chlamydia Screening Programme Data, April, 2010)

		Male % total screens returned	Female % total screens returned	<20 % total screens 21 %		20-24 % total screens 60%		>25 & total screens 12%	
				% by gender (no of screens returned)		% by gender (no of screens returned)		% by gender (no of screens returned)	
				Male	Female	Male	Female	Male	Female
Number of screens returned	4,190	1,710 (41%)	2,480 (59%)	440 (10.5%)	739 (18%)	1025 (24%)	1469 (35%)	247 (6%)	274 (7%)
Number of positives	368	178	190	33	57	115	122	30	11
Positivity rate	9%	10.4%	8%	7.5%	8%	11%	8.3%	12%	4%



From April 2009 to March 2010, 4190 chlamydia tests were completed in total as a direct response to self-requesting online/text based services, representing 2.12 per cent of the target population. The positivity rate within this cohort was 8.78 per cent. A greater number of samples were completed and returned by young women (59.18%), with less young men returning (40.8%). The positivity rate was (10.4%) in young men and (7.66%) in young women. The target age group most likely to self-request screening was the 20 to 24 year olds (59.52%). The young men in this age group had a high rate of infection (11.2%). There were also a number of tests requested and completed from both men and women over 25 years of age, with a high rate of infection in young men (12.1%). However, after looking at the data in more detail the majority of these men were aged 25.

Table 2.2 below shows the testing activity by area of residence, the percentage of screens returned and the positivity among these young men.

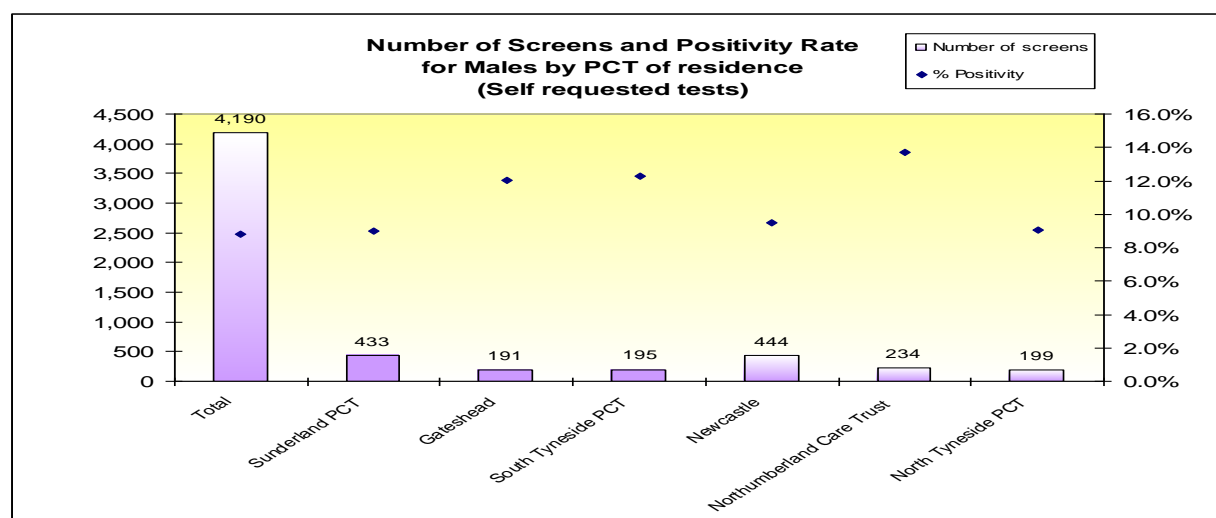
Table 2.2: Testing activity by area of residence, gender and positivity.

<b>Area of residence</b>	<b>A (10.2%)</b>	<b>B (8.35%)</b>	<b>C (7.7%)</b>	<b>D (7.3%)</b>	<b>E (10.55%)</b>	<b>F (9.33%)</b>
% Male screens returned	191 (4.55%)	444 (10.59%)	199 (4.75%)	234 (5.58%)	195 (4.65%)	433 (10.33%)
No of Male positives	23	42	18	32	24	39
Positivity rate Males	12.04%	9.5%	9.0%	13.7%	12.3%	9%

Rates of infection in the young men were consistently high across all six PCT areas and ranged from (9 per cent) in F to (13.7 per cent) in D. The sample was recruited from six areas across the North East of England.

Graph 2.1 below shows the infection rates in males in each area of residence. Positivity ranged from 9 to 14 per cent during 2009/10, which shows a high rate of infection in this population, compared to those screened in other settings.

Graph 2.1 – Number of screens and positivity rate for males by PCT of residence April 2009 to March 2010.



The sample for this study was recruited from this group of young men, those who self-requested screening and had the highest rate of infection.

## 2.3 Chlamydia prevalence

As highlighted in chapter one chlamydia screening has been a government priority area for the past decade and has been a key area in public health policy as genital *Chlamydia trachomatis* is the most commonly reported bacterial sexually transmitted infection in England. Over 186,000 new cases were diagnosed in 2011, with sexually active young adults remaining at the highest risk of infection (Health Protection Agency, 2012).

Population based surveys in the United Kingdom, Scandinavia, and the United States have consistently shown similar levels of chlamydia prevalence among heterosexual men and women (Fenton, Korovessis and Johnson, 2001). Results from the Department of Health screening pilots in Portsmouth and the Wirral found a prevalence of up to nine per cent among young men attending youth centres and nearly twice this among young men attending GUM clinics (Pimenta, Catchpole and Rogers, 2001). Results after the first year of the NCSP implementation showed that chlamydia prevalence rates among young people under 25 years of age who were screened in non-GUM settings was 10 per cent in women and 13 per cent in men (LaMontagne, Fenton and Randall *et al.*, 2004). A recent systematic review of the sex difference of chlamydia prevalence in the general population found the prevalence for men and women was more similar than dissimilar. The prevalence for women varied from 1.1 per cent to 10.6 per cent, and for

men from 0.1 per cent to 12.1 per cent (Dielissen, Teunissen and Lagro-Janssen *et al.*, 2013). These studies confirm an equal prevalence of chlamydia infection in both men and women.

Evidence suggests that the prevalence of chlamydia among men in the UK ranges from 1 per cent to 5 per cent in studies involving men recruited from low prevalence settings such as undergraduates (Rogstad, Bates and Partridge, 2001), and from 9 per cent to 16 per cent in populations recruited from settings such as the military, general practice, family planning and genito-urinary medicine (McKay, Cley and Carrich-Anderson *et al.*, 2003; LaMontagne, Fenton and Randall *et al.*, 2004; Powell, O'Connor and O'hlarlath, 2004). The wide range of prevalence reported is an indication of mixed settings, different recruitment methods, and, varying uptakes. For example, prevalence studies carried out in military populations show a high prevalence of infection in these settings (Hakre, Oyler and Ferrell *et al.*, 2014). Rietmeijer, Hopkins and Geisler *et al.*'s (2008) study on men tested in selected venue types showed that chlamydia rates among men were as high as 12.4 per cent. These studies, along with STI surveillance reports confirm a high prevalence of infection among those young men screened in community and GUM settings, which suggests a high rate of undiagnosed infection in this population. These data suggest that men have an equal or even greater risk of infection than women. It could be argued that to screen and treat one sex and not another would be ineffective in terms of eradication and control. It could also be seen as a form of gender inequality.

## **2.4 Outcomes and targets**

The NHS previously relied on setting process targets for structural and process measures. However, the introduction of outcome targets means that they now measure improvements in health. It has been argued that process targets are not linked to improving health care or outcomes (Bevan & Hood, 2006). However, health outcomes can be difficult to measure and often the health outcome, such as a reduction in mortality, may not be obvious for some time (Detels, McEwen and Beaglehole *et al.*, 2002). Alternatively, critics have argued that the scrapping of targets may lead to poorer health outcomes, especially since there has been notable success with previous process targets such as waiting list times (Appleby, 2011). This is evident with the process targets which were previously set for chlamydia screening. Despite criticism from the National Audit Office in 2009 regarding the low number of Primary Care

Trusts (PCTs) reaching national targets, these targets not only led to a fall in prevalence of chlamydia infection (HPA, 2012), but they also ensured chlamydia screening was high on the agenda for many NHS trust boards, especially as many providers of these services faced Trust financial penalties if targets were not achieved. However, critics argue that a drive to reach STI screening targets means that services risk giving mixed messages about the effectiveness of condom use, thereby undermining the progress being made by health education initiatives (Brook, 2011).

For local authorities to meet the new public health indicator for chlamydia screening of 2,300 chlamydia diagnosis per 100,000 15-24 year olds per annum (Public Health England Outcomes Framework, 2012), means that those most at risk of chlamydia need to be targeted for screening. This includes those 20 to 24 year old men, who have a high rate of chlamydia infection, and who are not currently being screened in mainstream health services such as primary care. *Making it work: a guide to whole system commissioning for sexual and reproductive health and HIV*, (Public Health England, 2014) highlights the current challenge in meeting the public health outcome framework indicator for chlamydia diagnosis. This challenge is directed at those 'hard to reach' young men. The report states that the proportion of young men who had a chlamydia test in the past year is less than two-thirds the proportion of young women (37% vs 57%) (Public Health England, 2014 p18). Commissioning contracts such as service level agreements (SLAs) for chlamydia screening aim to address this challenge by the inclusion of outcome measures which state that at least 50 per cent of 20 to 24 year old men should be screened by local service provision (North of Tyne chlamydia screening, service level agreement, 2013/14).

## **2.5 Men's health: tensions**

Men's health has been raised as an area of public health concern in a recent European report (European Commission, 2011). A large body of health research suggests that men with similar social disadvantages as women experience poorer health outcomes in relation to mortality, disability, chronic illness, and, injury rates (Schofield, Connell and Walker *et al.*, 2000). This inequality is exaggerated by social deprivation, premature cardiovascular disease (CVD) and cancer mortality, suggesting that men are substantially more at risk compared to women. In England life expectancy at birth and at age 65 is lower for men than for women (Office for National Statistics, 2013). For example, in England for the period of 2009-2011, life expectancy at birth by gender was

78.9 and 82.9 for men and women respectively (Office for National Statistics, 2013). Generally men suffer more life-threatening and chronic illnesses such as heart disease, CVD, cerebrovascular disease, certain cancers and emphysema (Lantz, Fullerton and Harshburger, 2001; Williams, 2003). Many of these diseases are generally associated with lifestyle choices and preventable risk factors such as obesity, diet and exercise, tobacco, alcohol and sexual practices.

The health behaviours and beliefs of men have been implicated in the health differences between men and women. Young men are more likely to engage in risk taking behaviours such as fast driving, illicit drug use, excessive alcohol consumption, and, unprotected sexual intercourse (European Commission, 2011, Galdas, Cheater and Marshall, 2005). These behaviours represent a major, modifiable cause of non-communicable disease in men both globally and in the United Kingdom (European Commission, 2011). Particular concern is for those men who demonstrate the poorest health, exacerbated by their lack of awareness of the health risks posed by their lifestyle choices (European Commission, 2011), and men who do not use health services. These men are classed as reluctant (Jefferies and Grogan, 2012) or ‘hard to engage’ (Sinclair and Alex, 2012), and could be used to describe the young men in this study.

Men are more likely than women to drink alcohol and to drink at levels that are hazardous for health. During 2011 in the UK men were much more likely to die from alcohol related causes with over 66 per cent of all alcohol related deaths in the UK being among men (Office for National Statistics, 2011). Binge drinking tends to be a characteristic of young people, particularly those aged 16 to 24 years; with 36 per cent men and 27 per cent women in that age group likely to binge drink (Office for National Statistics, 2002). Evidence suggests that this gender difference in behaviour is related to cultural symbols of masculinity, and that men reaffirm their masculinity by drinking (Lemle and Mishkind, 1989; de Visser and Smith, 2007). Evidence also suggests that excessive alcohol consumption is associated with having multiple sexual partners and poor sexual health outcomes, such as sexually transmitted infections and unplanned pregnancies (Seth, Wingood and DiClemente *et al.*, 2011; Choudhry, Agardh and Stafstrom *et al.*, 2014). This suggests alcohol may be a marker for unprotected sex, and therefore may be one of the contributing factors to risky behaviour for men within this study.

Men's health is complex and multifaceted and it moves beyond those male specific conditions resulting from men's biology differing from women's (European Commission, 2011). It is only in the last 10–15 years that men's health has attracted specific attention. Prior to the mid-1990s testicular cancer and prostate cancer disease aside, topics related to men's health generated little interest (Dolan, 2011). The rise in the interest in men's health has only emerged due to the increase in extensive epidemiological data which show that men die younger than women; experience higher rates of injury and illness; take more risks with their health; and appear reluctant to access health services (Dolan, 2011). This has been identified within a recent report published by the European Commission (European Commission, 2011), which describes how poor lifestyle choices and preventable risk factors account for a high proportion of premature death and morbidity in men.

In terms of explanations for men's health, the focus has tended to centre on men's greater propensity to adopt health damaging behaviours such as smoking, drinking, fast driving and unprotected sex. Implicit in this view is that men simply abdicate responsibility for their own health (Dolan, 2011). However, it is important that men's non-engagement in healthcare is not viewed through the 'stereotypical lens' that sees all men as fundamentally disinterested in their health (European Commission, 2011). Instead we need to understand where and how men want to access healthcare services such as sexual health screening to increase engagement with these young men.

## **2.6 Targeting 'hard to reach' groups**

This study focuses on young men who are perceived as 'hard to reach' or difficult to engage in service provision. The term 'hard to reach' is a contested and uncertain term (Cook, 2002) that is commonly used within a discourse around health and social inequalities. The problem with using a term like 'hard to reach' is that it assumes homogeneity within disparate groups, which does not necessarily exist (Brackertz, 2007). Thereby it defines the problem as one within the group itself, not within the approach to the group (Smith, 2006). For example, in the chlamydia screening policy (Department of Health, 2001; NCSP, 2007) young men are labelled as being 'hard to reach' and difficult to engage in service provision. However, it could be argued that the approach to screening adopted by the National Chlamydia screening programme in England is inequitable since screening is centred on sexual and reproductive services which are frequented by women.

The term ‘hard to reach’ stems from social marketing (Beder, 1980), and starts with the premise that nobody is impossible to reach; it just depends on the approach taken. In a public health context the label ‘hard to reach’ is used in relation to people who are difficult to contact, fail to access appropriate services or do not follow health recommendations (Brackertz, 2007). Other terms that are often associated with hard to reach include: marginalised, disadvantaged, and hard to engage (Sinclair and Alex, 2012). However, such terminology may lead to the stigmatisation of groups identified as ‘hard to reach’. The reasons why hard to reach groups are of such concern in the health related fields is because they tend to share poorer health outcomes (Brackertz, 2007). In the case of this study the young men have a high rate of chlamydia infection thus, pose a risk to their own health and to the reproductive health of their sexual partners (Public Health England, 2012), which is why policy focuses on such groups.

Despite the familiarity of the term ‘hard to reach’ and its use in social research and public policy, for example, *the National Strategy for Sexual Health and HIV* (Department of Health, 2001), and the NCSP ‘*Men too*’ strategy, (NSCP, 2007), there would appear to be a lack of consensus about the meaning of the term. In this study the term refers to those young men who are underserved by services that offer chlamydia screening because they are either inaccessible, or inappropriate in terms of meeting their needs (Brackertz, 2007). One of the aims of this research is therefore, to understand the factors that influence young men’s screening behaviours, including the factors that lead them to anonymous home testing as opposed to attending alternative health care settings.

## **2.7 Men’s health service utilisation**

It has been consistently shown that men of different ages, ethnicity and social backgrounds access health services less frequently than women (Randall and Barroso, 2002; Addis and Mahalik, 2003; Evans, Beotherstone and Miles *et al.*, 2005). In the UK men visit their GP 20 per cent less frequently than women (Office for National Statistics, 2007). The difference in usage is most marked for the 16-44 age groups. Women of this age are more than twice as likely to use services as men (Office for National Statistics, 2007). However, one reason for this may be that women in this age group are more likely to use these services for pregnancy and reproductive related issues.

Infrequent use of and late presentation to health services, have been associated with men experiencing higher levels of potentially preventable health problems and having reduced treatment options (Fletcher and Higginbotham, 2002; White, Sousa and de Visser *et al.*, 2011). A consequence of men's poorer use of health services is delayed diagnosis, resulting in longer incubation periods for harmful diseases (European Commission, 2011). Men's reluctance to seek help may be a result of many factors including, men not being supposed to admit to personal problems, weaknesses or vulnerability. Men will often present themselves as 'virtuous' or 'serious' users of services in contrast to positioning women as 'frequent' and 'trivial users' (Robertson, 2007). A consequence of this is that health promotion services appear to be more acceptable to men when delivered in community settings since they do not have the same concerns about interfering with the real purpose of health services which is to treat ill health (Noore and Stephens, 2008). This may be one of the reasons why young men are being screened for chlamydia outside of health care settings. A prominent theme among white middle class men implicates traditional masculine behaviour as an explanation for delays in seeking help among men who experience illness (Galdas, Cheater and Marshall, 2005). However, O'Brien, Hunt and Harts, 2005 study found that some men deviate from these norms and seek help, particularly if it is to maintain or restore a masculine identity such as sexual health. These ideas around masculinity may be particularly relevant to the young men in this study who sought help via the internet based testing service for chlamydia. This will be explored in further detail in the next chapter. The next section discusses the literature regarding the current state of knowledge on young men's sexual decision making, including possible factors which may influence risky sexual behaviours so that we can be clear about what is already known on the subject.

## **2.8 Young men's sexual decision making**

The decision to have sexual intercourse may seem like a simple decision for some young men. However, for others it may involve a complex weighing up of short and long term benefits and costs to the individual and their sexual partner. The benefits may include sexual gratification or pleasure (Suvivuo, Tossavainen and Kentula 2009), orgasm, closeness, procreation, and possible enhanced reputation with peers (Currier 2014; Limmer, 2014) and the opposite sex, whereas the costs may include regret, tarnished reputation, unplanned pregnancy or STIs. The decisions young men make about sex may be different in different situations. For instance, research has shown that



there are differences in decisions made about sex in regards to ‘relationship type’ and whether it is a long term relationships or a casual relationship (Matika-Tyndale and Herold, 1999; Morrison, Gillmore and Baker, 1995). Alternatively, a long term relationship for one person may be several years whereas for others it may be two weeks, and decisions about sexual activity may be made depending on the perceptions of a relationship.

An important contextual factor to consider in relation to sexual decision making is sexual arousal. Research has shown that sexual arousal affects judgement and choice in relation to sexual activity (Ariely and Loewenstein, 2006). It could be that individuals who are sexually aroused may find it difficult to make rational decisions in relation to sex because of their motivation for sexual gratification (Suvivuo, Tossavainen and Kentula 2009). Blanton and Gerrad (1997) suggest that sexual arousal seems to narrow the focus of motivation, creating a kind of tunnel vision where goals other than sexual fulfilment become the motivation to have sex. A recent study carried out by Skakoon-Sparling, Cramer and Shuper (2015), which investigated the effects of sexual arousal on men and women reiterated the findings from earlier studies. The study found that in situations where there were strong sexually visceral cues, both men and women experiencing strong sexual arousal may have lower inhibitions and may experience impaired decision making. This suggests that these behaviours need to be taken into consideration when looking at the factors affecting sexual decision making in young men in this study.

Peer pressure and social norms, the perceptions about what peers are doing and thinking may also be a strong motivator for engaging in sexual activity. Research has shown that social norms have been found to influence sexual decision making among young people (Svenson, Ostergren and Merlo, 2002). Studies have found that partner attractiveness and similarity has been shown to influence sexual decision making (Hennessy, Fishbein and Curtis, 2007; Masaro, Dahinten and Johnson, 2008). Marston and King’s (2006) systematic review of young people’s sexual behaviours found a number of key themes, for example that young people judged sexual partners as ‘clean’ or ‘unclean’, in terms of having an STI. There was also evidence of gender stereotypes in determining social expectancies, reputations and social displays of sexual activity or inactivity, particularly in relation to young men. The concept of sexual partners being classed as clean and unclean in relation to having an STI has been echoed in a number of more recent studies

(Skidmore and Haytor 2000; Dahinten and Johnson *et al.*, 2008). Limmer's (2014) study found that young men mitigated sexual risk through assigning labels to particular women and used this to form a basis for decisions in relation to sexual activity, contraception and condom use.

There is a strong evidence base to suggest that masculinity and peer pressure are indicators for risky sexual behaviour in relation to sex with multiple partners (Courtenay, 2000; Kimmel, 2008; Devris and Free 2010). Studies have shown that men's discourses around sexual health with other men focus on the sexual encounter or the sexual performance (Limmer, 2014). Knight, Shoveller and Oliffe's, (2012) study referred to this as 'guy talk' and 'manning up' which referred to power over others. By focusing on heterosexuality and sexual activity to impress other men demonstrates a pressure to maintain a socially acceptable level of 'masculine behaviour' (Currier, 2014). The concept of masculinity and risk taking behaviour is examined in greater detail in the next chapter (Chapter Three: Masculinity and Risk taking behaviour).

There is a wealth of empirical research on the links between sexual decision making and risky sexual behaviour. Evidence suggests that there are a range of factors that can influence young men's sexual decision making, such as mood altering substances like alcohol and drugs which can impair judgement or lower inhibitions (MacDonald, Fong and Zanna, 2000) and personality characteristics such as sensation seeking which suggest that individuals with sensation seeking tendencies tend to engage in behaviours that increase the simulation experience (Zuckerman, 1992). These factors are explored in greater detail in the next chapter (Chapter Three: Masculinity and Risk Taking Behaviour).

One of the decisions an individual is likely to make in relation to having sexual intercourse is whether they intend on using any form of protection or contraception. As stated above there are many reasons why young men may or may not intend to use protection. For example, a young man may be in a committed relationship where he and his partner are planning for a baby, a young man may assume that his female partner will take responsibility for pregnancy prevention through oral hormonal contraceptives (Smith, Fenwick and Skinner, 2012), or they may prefer to use the withdrawal method. Sexual arousal at sexual encounter has been found to result in decreased condom use (Arierly and Loewenstein, 2006). Other factors to consider are

‘assumed partner safety’ where a partner is perceived to be free of infection because they are ‘known’ or ‘trusted’ (Marston and King’s 2006). Condoms may be used as a sign of respect for sex with a girlfriend, whereas with a casual partner, a hook up or a one night stand they may be used to protect from STIs. Alternatively because sex involves two people one may be too embarrassed to raise the issue of contraception for fear of sounding presumptuous, or they may simply prefer to have sex without a condom. A study carried out by Stulhofer Bacak and Ajdukovic, (2010) looked at the influence of condom use on decision making during casual sexual encounters. The study found that habitual modality of condom use predicted consistent condom use with both steady and casual sexual partners. In this case condoms were either used consistently or not at all. This may indicate a need to consider the past or habitual behaviour of the young men in this study.

This section has discussed the literature on men’s sexual decision making to be clear about the current state of knowledge on the subject. It has also highlighted factors that may influence risk taking behaviour and condom use, these factors are addressed in greater detail in the next chapter (Chapter Three: Masculinity and Risk Taking Behaviour). The following section discusses chlamydia screening and explores where young men are being tested.

## **2.9 Chlamydia screening**

Chlamydia screening has largely focused on women because they are usually asymptomatic and incur the bulk of the serious morbidity. However, men also play an important part in the transmission of chlamydia infection, both in terms of spread of the infection, re-infection of partners, and, complications to their own health. The NCSP screens only half the number of men than it does women and the places men are being screened for chlamydia differ from that of women (NCSP, 2012)

The evidence suggests that there are a number of reasons why young people do not test for chlamydia. These reasons include stigmatization of young people who take a test, embarrassment, perception of risk and the beliefs of what the test involves (Richardson, Maple and Perry, 2010). In addition, Balfe, Brugha and O’Connell’s (2012) review of the literature on men’s attitudes towards chlamydia screening found that as well as those influences described above, two central themes were also found to discourage young men from testing. Firstly, the young people felt the need to make a positive impression

on others, and therefore did not test for fear of being seen as contaminated or ‘unclean’ and secondly men’s identification with particular ideals of masculinity made them feel invulnerable to infection.

The feasibility of different approaches to chlamydia testing and screening for men has also been demonstrated across a variety of clinical and non-clinical settings (Anderson, Istergaard and Miller, 2001; Low, Connell and McKeivitt *et al.*, 2003) and by postal methods (Stephenson, Carder and Copas, 2000; Macleod, Salisbury and Low *et al.*, 2005). Screening studies involving men were initially undertaken in clinical settings, (Mills, Daker-White and Graham *et al.*, 2006) and with men tested in the military (McKay, Cley and Carrich-Anderson *et al.*, 2003) or in detention units (Blake, Gaydos and Quinn, 2004). Alternative ways to engage men in preventative health interventions have also been offered, particularly in relation to environments where men congregate such as sporting venues, workplaces and pubs (Lorimer, Reid and Hart, 2009). Home testing has been found to be an effective method of screening, especially for those for whom confidentiality is a prime concern (NCSP, 2009). The following section examines the literature that has considered the places where young men are being tested for chlamydia, and examines the barriers and facilitators to screening young men in these settings. These themes are presented in three sections: screening in clinical settings, non-clinical settings and internet testing.

## **2.10 Chlamydia testing in clinical settings**

The uptake of chlamydia screening in young men is lower than that of young women and the places in which men are tested differ from those attended by women (NCSP, 2012). During 2012, only 25 per cent of tests carried out on young men nationally were in clinical services, which included sexual and reproductive health clinics, and general practice, with testing more commonly occurring in 'outreach' and other non-clinical settings (NCSP, 2012). It is not surprising that there are low levels of screening on young men in venues traditionally known as family planning clinics as these services primarily offer contraception for women. However, it is not clear why chlamydia screening levels are so low in general practice settings.

### **2.10.1 Primary care**

At the end of the first year of the national roll out of chlamydia screening in England, only 10 per cent of all tests conducted came from general practice (LaMontagne, Fenton

and Randall *et al.*, 2004). In 2012 there had been a slight increase with 18 per cent of tests being carried out in general practice, of which 9 per cent were in young men (NSCP, 2012). These low figures could be due to a number of factors. As stated above it has been suggested that young men do not access health care settings as much as women (Smith, Braunack-Mayer and Wittert, 2006; Kong, Guy and Hocking, 2010). However, data show that 93.5 per cent of 16 to 24 year old men are registered with a GP with 75.3 per cent having seen their GP in the last year (Salisbury, Macleod and Egger *et al.*, 2006; Saunderson, Mercer and Sutcliffe *et al.*, 2012). These data suggest there are opportunities to reach young men in these settings.

Research suggests that young men are willing to use screening services within clinical settings such as primary care (Heritage and Jones, 2008). Saunders, Mercer and Sutcliffe's (2010) study on the use of self-collected testing kits for STIs and HIV placed in various settings showed the most acceptable pick up points for testing kits for men in the general population were General Practice (79.9%), Genito Urinary Medicine (GUM) (66.8%) and Pharmacy (65.4%). Research has also suggested that young people are happy to be offered a chlamydia test in the general practice setting (Pimenta, Catchpole and Rogers, 2003; Rose *et al.*, 2008; Palvin, Parker and Fairley *et al.*, 2008; Lorimer, Reid and Hart, 2009) and many expect doctors and nurses to discuss sexual health issues with them. For example, a qualitative study by Hogan, Howell-Jones and Pottinger *et al.* (2010) demonstrated that young people felt it was the duty of the general practice staff to offer chlamydia testing. The willingness of young men to accept the offer of screening in these venues, challenges the notions that young men are difficult to engage in sexual health screening, or hold negative attitudes towards their sexual health (Darroch, Myers and Cassell, 2003). Therefore other explanations need to be sought.

Qualitative studies have been carried out to explore the reasons for the variation in testing between general practices. Recurring themes in the literature suggest that there are many barriers that exist for healthcare staff, which impact on chlamydia testing rates within primary care. McNulty, Freeman and Bowen *et al.*'s (2004) study revealed that GPs were not convinced of the benefits a screening programme would bring, nor did they think that their own patient population was at high risk of infection. However, studies where GPs were offered financial incentives to enrol patients for screening have found high acceptance rates (Pimenta, Catchpole and Rogers, 2003). Conversely, the cost effectiveness of this approach would need further investigation as prioritising

chlamydia screening in general practice may require financial incentives through Quality and Outcomes Framework targets (McNulty, Freeman and Howell-Jones *et al.*, 2010).

Other perceived barriers to effective screening in general practice include the lack of knowledge among many general practice staff, and worries about discussing sexual health (Freeman, Howell-Jones and Oliver *et al.*, 2009; McNulty, Freeman and Howell-Jones *et al.*, 2010). It may be that health professionals are reluctant to offer testing because they do not feel equipped to deal with men's health issues appropriately (Addis and Mahalik, 2003; Mahalik, Good and Englar-Carlson, 2003; Sadler, Low and Mercer, 2010). This is important because if health professionals do not feel equipped to deal with men's sexual health issues, then they are unlikely to raise the issue of chlamydia screening and sexual health. Critics argue that doctors and nurses from general practice require further education regarding sexual health and testing so that screening in these settings can be effective in reaching clinic attendees, and managing positive patients (McNulty, Freeman and Bowen *et al.*, 2004; Gott, Galena and Hinchliff *et al.*, 2004). A recent Randomised Controlled Trial based on the Theory of Planned Behaviour (Ajzen, 1991), investigated increasing chlamydia screening in primary care using an educational outreach model to address barriers to full primary care engagement (McNulty, Hogan and Ricketts *et al.*, 2013). The trial demonstrated a 76 per cent increase in chlamydia screening test rates across all practices offered the intervention, with a 40 per cent increase in infections detected (McNulty, Hogen and Ricketts *et al.*, 2013). This suggests that educational interventions, which are based on cognitive theories such as the Theory of Planned Behaviour, may be one way to change the behaviour of general practice staff when offering chlamydia screening. More work is currently underway in England to determine the effectiveness of this approach in primary care via the 3Cs (chlamydia, contraception, condoms) and HIV programme (Public Health England, 2014). This initiative aims to increase chlamydia testing, contraception, condom use and HIV testing in primary care utilising an educational approach based on the Theory of Planned Behaviour (Ajzen, 2001).

The NCSP was initially designed to target individuals in clinical settings such as family planning and general practice. However, a survey carried out by the National Audit Office found that, 61 per cent of chlamydia screening co-ordinators said that difficulty engaging with GPs was one of the greatest obstacles to achieving higher testing rates in

primary care (Department of Health, 2009). It could be suggested that if primary care does not receive additional payments through commissioning contracts or quality outcomes frameworks (QOF), then chlamydia testing may not be prioritised by many GPs. It could also be argued that people with chlamydia infection are usually asymptomatic and therefore may not seek health services for screening (Farley, Cohen and Elkins, 2003; Tebb, Pantell and Wibbelsman *et al.*, 2004). A further explanation could be that an opportunistic screening approach may be inequitable in targeting screening utilising healthcare settings, which are frequented more by women than men and rely on healthcare professionals to raise the issue of sexual health and offer screening. It may, therefore, be important to improve access to chlamydia screening by offering screening within non-clinical settings.

## **2.11 Chlamydia testing in non-clinical settings**

Due to the introduction of Nucleic Acid Amplification Technique (NAAT) urine testing it is now possible to offer chlamydia screening in non-clinical settings. Research in the UK and internationally shows that some testing in non-clinical settings is feasible and could add to existing screening in healthcare venues (Smith *et al.*, 2006; Lorimer, Reid and Hart 2009; Morris, Bauer and Chartier *et al.*, 2010). These studies have explored uptake and prevalence of infection in venues such as educational establishments, sports and leisure, the military and prison settings. However, this literature also shows that prevalence of chlamydia infection varies and is dependent upon the population sampled, age and setting.

### **2.11.1 Military and prison populations**

Studies among military and prison populations have shown high chlamydia rates among men, with the prevalence of chlamydia as high as 12.4 per cent in some settings (McKay, Cley and Carrich-Anderson *et al.*, 2003; Johnson, Jones and Goldberg, 2008; Rietmeijer, Hopkins and Geisler *et al.*, 2008; Satterwhite, Ridvan and Deblina *et al.*, 2008). However, although these studies show the value of screening in non-clinical settings, by reaching men who may otherwise be missed by clinical service provision it could be argued that these groups are at higher risk than the general population for a number of reasons. For example, inmates are a particularly high risk population for many infectious diseases in relation to health compromising behaviours such as no condom use, multiple partners and promiscuity related to incarceration (Niveau, 2006; Adams, Carter and Prussia *et al.*, 2008). Alternatively, military personnel may be a

particular high risk population because of the transient nature or because of riskier behaviours than the general population. McKay, Cley and Carrich-Anderson *et al.* (2004) tested 798 male military recruits for chlamydia as part of their routine medical examination in Scotland. Almost ten per cent of them were infected with chlamydia, with 88 per cent of the infected men being asymptomatic. This suggests many of these infections may go undetected as many asymptomatic men would not be actively seeking screening for chlamydia. A further study of male military recruits who were stationed at Fort Bragg, North Carolina, found that 1 in 10 soldiers had tested positive for chlamydia, with 10.6 per cent of those followed up experiencing a recurrent chlamydia infection (Hakre, Oyler and Ferrell *et al.*, 2014). Infection risk was higher in those soldiers who were stationed at a specific location of their regular duty assignment as opposed to those who were deployed, highlighting infection in the local community, and a need to screen young men.

### **2.11.2 Education, sports and social settings**

Innovative ways to engage men in preventative health interventions for a range of health issues have been offered, particularly in relation to settings where men attend, such as educational establishments, sports arenas, football clubs and public houses (McCoy *et al.*, 2012; Mason and Holt, 2012; Pringle, Zwolinsky and McKenna *et al.*, 2014). Lorimer, Reid and Hart (2009) explored the willingness of young men and women to be tested for chlamydia in three non-clinical settings in the UK. These settings included education, health and fitness and workplace. Results showed that the uptake of screening varied by setting with men testing more than women. The prevalence among men tested was 4.9 per cent. The perception of the risk of having chlamydia was a strong predictor of taking a test. However, the study did not examine why those young men who felt susceptible to chlamydia infection, did not attend a healthcare setting previously for screening. One explanation may be that men do not perceive chlamydia to be a serious infection and therefore delay health seeking (Darroch, Myers and Cassell, 2003). Alternatively, it has been suggested that young people rate their peers to be at a higher risk for STIs, than when rating themselves (Whaley and Winfield, 2000). A possible theoretical explanation could be a result of Optimism bias (Weinstein, 1989), which is commonly defined as the mistaken belief that one's chances of experiencing a negative event are lower than that of one's peers. These issues will be discussed in greater detail in the following chapter which focuses on the theoretical context.



The advantages of screening in non-clinical settings are that they enable a good uptake, and are effective methods of reaching young men (Shillinger *et al.*, 2005; Lorimer, Reid and Hart, 2009). Local service data support such findings where almost 60 per cent of those screened through the local Chlamydia Screening Programme during 2011/12 were in education and outreach settings, which included pubs, gyms, and, universities (North of Tyne Chlamydia Screening Annual Report, 2011/12). However, it would seem that the prevalence of infection among those men who are willing to be tested in these settings is lower compared to other settings (Pierpoint, Thomas and Judd *et al.*, 2000; Rogstad, Bates and Partridge, 2001). NCSP supports these findings and data have consistently shown that the prevalence of chlamydia infection in men and women tested in outreach settings is low (NCSP 2010). For example, data from 2011-12 show prevalence of 2.2 per cent in education settings and 3.2 per cent via outreach which included sports and leisure settings (NCSP data sets, 2012). Although men are willing to be screened in settings such as education, health and fitness, and workplaces, these venues yield low risk populations, and therefore may not be cost effective places to target screening resources. This highlights the limited impact that screening men in such settings may have on public health, as it is the coverage of screening that is important ensuring that populations with the highest prevalence of infection are tested (Turner, Adams and LaMontagne *et al.*, 2006).

## **2.12 Internet testing**

Home testing via the internet is an attractive option for young people, particularly among those young people who are asymptomatic and those who are concerned about confidentiality (NCSP, 2009). The benefits of internet testing are that young people can access the service 24 hours a day. It is convenient and anonymous, and testing can take place in the home as opposed to attending a health clinic setting. More adults are seeking health information online (ONS, 20013), and for men the internet is often the first place they will look for help (Pollard, 2007). Technology including the internet, mobile phones, and short messaging services (SMS or 'texts'), provide opportunities to offer convenient, easy, confidential services which fit with what young people report they would like (Lorimer, Reid and Hart, 2009). In the first quarter of 2012, in Great Britain, 99 percent of young people aged 16-24 years had used the internet (ONS, 2012), with young people increasingly requesting chlamydia tests through the internet (Woodhall, Sile and Talebi *et al.*, 2012).

Strategies combining the internet with home testing for chlamydia have been successful in reaching asymptomatic individuals, who may not wish to access clinic based settings for routine care (Ostergaard, Anderson and Moller *et al.*, 2000; Rogstad, Bates and Partridge, 2001; Gaydos, Dwyer and Barnes *et al.*, 2006). A recent systematic review and meta-analysis suggested that taking samples at home compared with taking samples in a clinic setting also improves the uptake of testing for STIs among women (Odesanmi *et al.*, 2013). Other studies which have focused on internet testing have demonstrated the acceptability of this approach among young men who reported high risk behaviours (Novak and Karlsson, 2006; Chai, Aumakhan and Barnes *et al.*, 2010; Greenland, Coul and Van *et al.*, 2011). In preparation for a National online HIV testing initiative for ‘hard to reach groups’ across England, a recent evidence summary to address late diagnosis of HIV screening via self-sampling (Public Health England, 2014) suggests that internet testing is acceptable to these populations.

Woodhall, Sile and Talebi *et al.* (2012) analysed NCSP testing data (2006-2010) to describe the populations who used internet testing, including the positivity rates for those tests in comparison with those from other venues. Results showed that the proportion of tests with a positive result, which were accessed online (7.6%), was higher than tests from general practice (5.6%) and comparable to those from community sexual and reproductive health (SRH) services (8.2%). Internet testing was evenly distributed across areas of high deprivation, which suggests that this approach is successful in reaching ‘hard to reach’ populations. The study also found that a higher proportion of people accessing online testing were male aged 20-24 years. As with the above studies these men were also more likely to report risk behaviours associated with chlamydia. These studies suggest that young men, in particular those with high risk behaviours, prefer to access internet testing compared to other settings such as general practice.

Current NCSP data show that the majority of young men who are being tested for chlamydia are accessing screening through non-clinical settings such as via outreach or internet testing (NCSP, 2012). However, it is important to note that the prevalence of infection differs between these two settings, with more infection being detected in those who use internet testing and low prevalence in those testing in non-clinical settings such as education or outreach (NCSP, 2012). A possible theoretical explanation may be that those who self-request testing have the intention to seek screening because of a

heightened perception of susceptibility of infection due to previous risky sexual behaviour, as suggested by the Health Belief Model (Rosenstock, 1966). Alternatively, those who are tested in non-clinical settings such as outreach or educational settings are generally targeted by outreach workers or peer educators. Many of these young men may not be at risk, but will provide a urine sample for screening so that they appear to be sexually active in front of their peers. This will be discussed in greater detail in the next chapter which provides the theoretical context for this study.

Most of the studies on internet based screening have been quantitative, utilising data collection methods such as questionnaires to collect information on sexual behaviour. These studies have consistently shown that internet testing attracts young men with high risk sexual behaviours (Novak and Karlsson, 2006; Chai, Aumakhan and Barnes *et al.*, 2010; Woodall, Sile and Talebi *et al.*, 2010; Greenland, Coul and Van *et al.*, 2011). Characteristics of these young men are: aged between 20 and 24 years; reporting inconsistent condom use; previous STI; and more than one sexual partner reported in last six months. These characteristics are similar to those found in the young men after analysis of the Northumberland Tyne and Wear Chlamydia Screening Programme database (Chapter two: Review of the Literature) when presenting the local picture and determining the population to be studied.

There is limited information regarding the experiences of young men's testing behaviours, including the factors that influence men to self-request screening via the internet, as opposed to clinic based services for STI screening. One explanation may be the anonymity this type of screening provides (NCSP 2009), or the convenience this approach affords, which enables individuals to test at home. Alternatively, it may be that services are not accessible or health care providers are not equipped to deal with their needs (Brackertz, 2007). This study aimed to fill this gap in the literature by exploring the factors associated with screening via web/text based services as opposed to attending a clinical service.

### **2.13 The impact of diagnosis**

Receiving a positive diagnosis for chlamydia can cause anxiety and may have an adverse impact on psychosocial wellbeing (Duncan, Hart and Scoular *et al.*, 2001; Mills, Daker-White and Graham *et al.*, 2006). Evidence from studies investigating the psychological harms that can arise from screening across various conditions found that

anxiety is often raised, at least in the short term, when a positive result is received, although it is unlikely to be experienced when receiving a negative diagnosis (Shaw, Abrams and Marteam, 1999; Gottlieb, Stoner and Zaidi *et al.*, 2011). However, most studies investigating the impact of testing on subsequent sexual behaviour have taken place among young people attending STI clinics in the United States. Only limited evidence exists on the effect of testing offered to asymptomatic individuals in community settings (Newby, Wallace and French, 2011).

### **2.13.1 False reassurance**

A recurrent theme in the literature regarding the impact of a negative diagnosis is the concept of false reassurance (Marteau, 1996; Sznitman, Stanton and Romero, 2011). False reassurance is apparent when people misinterpret their screening test result to mean that they are less at risk than they actually are (Marteau, 1996). When testing negative for disease, there is usually no post diagnosis intervention from health professionals. This is certainly the case for STI testing and chlamydia screening where either ‘a no news is good news’ approach is taken, or a text, letter, or phone call is used to relay a negative diagnosis. Negative test results given without explanation or advice may result in individuals feeling falsely reassured. In turn they may incorrectly conclude that they are not at risk for disease, which can reinforce an unhealthy lifestyle (Tymstra and Bieleman, 1987) and bolster a pre-existing sense of invulnerability, making participants less likely to return for subsequent testing (Weinstein, 1984).

False reassurance is a concept implicit in risk homeostasis or risk compensation theory (Wilde, Robertson and Pless, 2002). This theory is based on two core assumptions. The first assumption is that people will behave in the way that maximizes overall benefits. The second assumption is that people have an implicit level of risk in this case by taking a chlamydia test decreases their risk below the level they consider acceptable, resulting in behaviour that then increases their risk, (continuing to have unprotected sex with people who are perceived ‘safe’). Thus, acting to reduce a risk may result in an overestimation of the risks entailed in unchanged risk enhancing behaviours. Although there have been many reports on the adverse psychological effects of screening tests (Marteau, 1993), there are few studies published on the impact of receiving a positive or negative test result for chlamydia trachomatis with even fewer focusing on young men. Studies regarding the impact of a negative test result for STIs have found no increase in condom use (Kangas, Anderson and Olsen *et al.*, 2006) and no change in the number of

partners or unprotected sex (O'Campo, Deboer and Faden *et al.*, 1992). This suggests that those who test negative after screening may not see themselves at risk of STIs (Fortenberry, McFarlane, Bleakley *et al.*, 2002; Sznitman, Stanton and Romero, 2011).

### **2.13.2 Gender differences**

There are quite clear gender differences regarding the impact of a chlamydia diagnosis. Studies exploring the impact of a positive diagnosis on women have found perceptions of stigma associated with STIs, uncertainty about reproductive health after diagnosis, and anxiety regarding partners' reaction to diagnosis (Redfurn and Hutchinson, 1994; Holgate and Longman, 1998; Duncan, Hart and Scoular *et al.*, 2001; Kangas, Anderson and Olsen *et al.*, 2006). Responses from men expose the clear gender differences regarding the impact of a positive diagnosis for chlamydia. Studies suggest that young men do not perceive an STI diagnosis such as chlamydia or gonorrhoea as a serious threat (van der Snoek, de Wit and Mulder *et al.*, 2005), but perceive it to be a minor infection. This perception may result in delayed treatment. It has even been used as a form of entertainment by disclosing status to peers (Darroch, Myers and Cassell, 2003; Mills, Daker-White and Graham *et al.*, 2006). It seems that gender and the concept of masculinity may influence the different attitudes and behaviours between these two groups. This will be explored further in the next chapter which provides the conceptual framework for the study.

### **2.13.3 Adoption of protective behaviours**

The literature regarding the impact of a positive infection on subsequent sexual behaviour is inconsistent. For example, both clinical and community based studies regarding the impact of a positive STI diagnosis on sexual behaviour suggest that risk reduction behaviours increase following STI diagnosis (O' Campo Deboer and Faden *et al.*, 1992; Crosby, DiClemente and Wingood, 2004; Fortenburry McFarlane, Bleakley *et al.*, 2002; Sznitman Stanton and Romero *et al.*, 2011). Self-reported changes in sexual behaviour following a positive result for STIs, have reported an increase in condom use post treatment, a decrease in sexual partners, and the probability of unprotected sex. In contrast, other studies have revealed that a positive STI test result does not lead to modification of sexual behaviour for men (Payn, Tanfer and Billy *et al.*, 1997; Kangas, Anderson and Olsen *et al.*, 2006), nor does the type of disease (i.e. viral vs bacterial) appear to be an important determinant of the likelihood of behaviour change (Payn, Tanfer and Billy *et al.*, 1997). More recently an online survey, carried out by Public

Health England (2014) on the impact of screening on behaviour, found that respondents who reported higher numbers of sexual partners and recent unprotected sex were more likely to be regularly tested, in terms of number of times ever tested and proportion tested in the last year. Of those testing positive, respondents were more likely to report both negative and positive behavioural consequences of testing (Public Health England, 2014). However, many of these studies used quantitative data collection methods such as surveys or questionnaires to obtain sexual history data. The limitations of using quantitative methods in this type of research are that they do not allow for further exploration of the phenomenon. Further investigation would have allowed for probing to clarify the factors which may have influenced these behaviours. A further limitation is that many of these studies relied on self-reported data. The truthfulness and accuracy of these self-reports may have been compromised by participants either under reporting or over reporting behaviours, which are perceived as socially undesirable or desirable, respectively (Brener, Billy and Grady, 2003). Understanding individual behaviour subsequent to chlamydia infection is therefore crucial to understanding the behavioural component of transmission.

#### **2.13.4 Re-infection**

A further impact of a positive chlamydia infection, which is evident in the chlamydia screening literature, is re-infection. Population based as well as observational studies in clinic populations have shown that one previous episode of chlamydia to be a risk factor for a recurrent or new infection for both sexes (Kjar, Dimcevski and Hoff *et al.*, 2000; Peterman, 2006; LaMontagne, Baster and Emmett *et al.*, 2007). Work undertaken in the United States suggests that a significant proportion of patients identified with chlamydia infection become re-infected within six months (Burstein, Gaydos and Diener West, 1998; Bloomfield, Steiner and Kent *et al.*, 2003; Hosenfeld, Workowski and Berman, 2009). Although these studies contribute to the evidence that rates of reinfection are significant in young people, they do not identify whether screening increases or decreases the risk of re-infection.

As discussed earlier the consequence of repeat infections is the risk of further spread of the disease, and an increased risk for chlamydia complications. Studies suggest that recurrent infections increase the risk for adverse sequelae, such as PID in women (Hillis, Owens and March banks, 1997; Aral and Wasserheit, 1998). The main reasons for re-infection in these populations are: incomplete treatment of sexual partners;

continuing risk behaviour by having unprotected sex with a new or existing partner (Rietmeijer, Van Bemmelen and Judson *et al.*, 2002; Lamontagne, Baster and Emmett *et al.*, 2007) or in rare cases treatment failure (BASHH, 2006).

To detect repeat infections early and reduce further transmission, chlamydia testing guidelines are in place in several countries, for example Scotland (Scottish Intercollegiate Guidelines Network, 2009), United States (CDC, 2010), and New Zealand (Ministry of Health New Zealand, 2012). These guidelines recommend repeat testing for positive patients between three and six months post treatment. Previous NCSP recommendations in England state that all individuals regardless of their diagnosis should test annually or after every new partner change (NCSP, 2012). However, due to the current evidence base, and a national consultation and expert group workshop held in December 2013 (where findings from this study were presented), current guidelines in England for those testing positive, have recently changed to rescreen positive patients three months post treatment (NSCP, 2013). Although rescreening aims to halt further transmission of chlamydia in the population, it does not tackle the underlying causes of re-infection or behaviour change.

### **2.13 Chapter summary**

The first part of this chapter discussed current public health policy and practice in the UK, and provided information regarding the population studied by examining the concept of ‘hard to reach’, men’s health, and men’s health care utilisation. The final part of this chapter examined the relevant chlamydia screening literature to determine young men’s access to chlamydia screening services and explored the impact of a chlamydia test result on subsequent sexual behaviour.

There is a dearth of research on the prevalence of chlamydia in different populations, age groups, genders, and settings. Evidence suggests that the majority of young men are being screened in non-clinical settings such as outreach or through home based testing via the internet. Few young men are being screened in clinical settings, such as general practice, where a range of barriers to screening men exist. Research also suggests that home testing seems to be a preferred option for screening young men especially those groups with a high prevalence of infection.

Regardless of setting, repeat chlamydia infections among men and women are evident in the literature. Research has consistently shown that one previous episode of chlamydia is a risk factor for recurrent or new infection. Understanding individual behaviour subsequent to chlamydia infection/repeat infection is crucial to understanding the behavioural component of transmission. It would also seem there are gaps in the research regarding men's behaviour following a negative diagnosis for chlamydia. Research regarding the impact of a negative test result for other conditions, suggests the results may give individuals false reassurance to continue with unhealthy behaviour. It is unclear what the impact a positive diagnosis for chlamydia has on subsequent sexual behaviour, and therefore the factors affecting these behaviours require further investigation.

The following chapter provides a critical discussion on the theories of masculinity and risk taking behaviour which provides the contextual framework for the study.



## **CHAPTER THREE: MASCULINITY AND RISK TAKING BEHAVIOUR**

Chapter two (Review of the literature) highlighted the inequality in men's health and the links to masculinity (European Commission, 2011). This chapter explores theories of gender, in particular masculinity and the association between health-related beliefs and behaviours that may have a negative impact on men's sexual health. Masculinities and femininities are social constructs which may vary between cultures and across time (White, 2011). There are also differences in the ways in which maleness and masculinities are linked to health and health behaviours (White, 2011). These behaviours may be influenced by a range of factors including personality and beliefs and perceived or actual peer behaviour (Albarracin, Johnson and Fishbein *et al.*, 2001; Wardle and Steptoe, 2003; Kuntsche, Rehm and Gmel 2004; De Visser and Smith, 2006). There are a number of health promotion theories which address behaviour and behavioural influences. Behavioural change theories and models attempt to explain people's behavioural patterns at the individual, intrapersonal and community level. Such theories seek to explain why individuals engage in, or fail to engage in, health-related behaviours. Behavioural theories and models are discussed in relation to the literature on masculinities and sexual risk taking and may help to explain some of the young men's health behaviours.

Published literature highlights the sociological impact of masculinity and the feminised depiction of caring about one's health. The traditional masculine concept of not expressing emotion, being able to cope with pain and not needing to seek help may hinder a man's ability to access health services. Theories of masculinity offer a framework to analyse and conceptualise gendered data from the research findings. Several theories and constructs are drawn on to help develop the framework and understand the issues associated with sexual health decision making and behaviour among the young men in this study. Drawing on the different constructs from masculinities theory and behavioural theories ensures that a number of variables are considered which are relevant for explaining or predicting sexual health decision making. Theories of masculinity and behaviour change are also discussed in subsequent chapters throughout this thesis in particular chapter six: (Discussion) and are applied to the research findings to help explain the factors which influenced the young men's behaviour.

### **3.1 Theories of masculinity**

How men's health is understood depends on the lens through which it is examined. In the biological approach, anatomy is proof of being a man. Aggression, power, a need for control, competitiveness, and emotional restraint are thought to be 'natural' attributes for a man (Edley and Wetherall, 1995). Masculinity is therefore often understood as being biologically male or 'biological sex'. Men's poorer health outcomes can be seen as stemming from a genetic predisposition or a hormonal drive that leads to damaging high risk behaviours (Kraemer, 2000). However, it has been argued that the biological explanation is too simplistic, because it does not take account of heterogeneity within male behaviour. Creighton and Oliffe (2010) argue that biologically driven masculinity merely serves to uphold and excuse men's risky health practices. Masculinity theory challenges the view that masculinity is biologically predetermined or natural for men and unnatural for women. Kimmel (2004) proposes that rather than evolving naturally from biological sex, masculinity is socially constructed through performances. Men are said to construct their masculine identities through relationships with others (Kimmel, 2004). Theories of masculinity may help to explain the gendered aspect of the findings in relation to the young men's perception of women as sexual partners, risk taking behaviours, attitudes towards sex, and health seeking practices around sexual health screening. The following section addresses sex role theory.

### **3.2 Sex role theory**

Sex role theory was used by early feminists during the 1970s and 1980s, who in their search for an explanation for the differences between men and women developed various ideas about how gender was constructed and why masculinity and femininity was different. Sex role theory states that 'gender is culturally determined and that we become differently gendered through socialisation into gender roles or sex roles' (Haywood, Mac and Ghaill, 2003 p19). Sex role theory draws on the principles of social learning theory (Bandura, 1998). Through various learning processes such as imitation, modelling, and reinforcement and through socialisation with parents and teachers, children learn the social meanings, values, norms and experiences associated with being a boy or a girl. Sex role theory supposes that having being born into one sex or another, individuals are then socialised according to specific gender expectations and roles. Males learn to take on masculine roles and are socialised to think and act in masculine ways i.e. toughness and competitiveness. Females learn to take on feminine

roles. They are socialised to think and behave in feminine ways i.e. caring and nurturing. The assumption of sex role theory is that social expectations about a person's status in society produce conformity to a given role such as father, doctor, or provider (Robertson, 2008). However, difficulties emerge when particular social roles cannot be fulfilled. For example, society may expect one of men's roles to be in employment and to provide for his family. However, if the man becomes unemployed the cultural norms of masculinity roles for the individual cannot be lived up to (Robertson, 2008). A further example in relation to the current study is that men are expected to be able to perform sexually, especially in the case of procreation. However, if a man suffers from erectile dysfunction problems or has difficulty in maintaining an erection for example, whilst using condoms then this male role is not fulfilled. Failure to live up to these high expectations may create pressures that result in stress, ill health and risk taking (Mahalik, Burns and Syzdek, 2007)

From a sociological perspective, women and men think and act in the ways that they do, not because of their role identities or psychological traits, but because of concepts about femininity and masculinity that they adopt from their culture (Pleck, Sonenstein and Ku, 1994). The influence of culture in shaping masculine identity begins early (Brody, 2000; Bronstein, 2006). Boys learn not to show physical vulnerability or weakness, (Addis and Mahlik, 2003), they are taught to be tough and told 'boys don't cry'. It is also suggested that men and boys experience comparatively greater social pressure than women and girls to endorse gendered societal prescriptions such as the strongly endorsed health beliefs that men are independent, self-reliant, strong and tough (Williams and Best, 1990; Martin, 1995). The social behaviours that are perceived as masculine or non-masculine include behaviours for which there are clear gender stereotypes (e.g. paid work and domestic labour), but they also include health related behaviours that men and women engage in which demonstrate femininities and masculinities (Courtenay, 2000).

Sex role theory has been widely criticised (West and Zimmerman 1987; Kimmel 1987; Messerschmidt, 1993; Connell, 1995). Kimmel (1987, p.521) argued that sex role theory implied that gender represents 'two fixed, static and mutually exclusive role containers'. Connell (1995 p.26) stated: 'Sex roles are defined as reciprocal; polarisation is a necessary part of the concept'. This being the case, it becomes clear to see how it is difficult to explore gender relations when they are presented as opposite

ends of a continuum as sex differences. This polarisation also encourages a focus on differences rather than congruency and in this way helps obscure other important issues of identity such as class and race (Connell, 1995). This section has focused on theories of gender from the sociological perspective; the following section looks at theories of masculinity, in particular hegemonic masculinity.

### **3.3 Hegemonic masculinity**

Research suggests that rather than there being one single masculinity, several different ways of being masculine exist (Edley and Wetherell, 1999; Frosh, Phoenix and Pattman, 2002; Connell, 1995). According to Whitehead (2002) masculinities are multiple and plural, differing over time, space and context and are enmeshed with variables such as race and ethnicity, class and age. This is an important consideration as the young men in this study were interviewed over a prolonged period where their situations were likely to change; some were in long term monogamous relationships and others were single. They were of different ages, and class and most of those who studied at university were from other parts of the country, thus potentially resulting in differing masculinities.

There are many definitions of masculinity. Connell, (1987) defined masculinity as a social construction dependant on a specific historical time, culture and locale. Masculinity is also defined in relational terms as that which is not feminine (Connell, 1995; Messner, 1998). Hegemonic masculinity is a term used to define the dominant form of masculinity acceptable within a patriarchal culture; what it means to be a 'real' man (Connell, 1995). This type of masculinity is characterised by competitiveness, aggression, being emotionally contained, physically tough and, heterosexual and taking risks. This gender stereotype is among the meanings used by Western society in the construction of gender. The characteristics of hegemonic masculinity are those that are generally believed to be typical of a man, and may therefore apply to some of the young men in this study. Unhealthy practices, such as not going to the doctor, are seen as displays of masculinity. These have an ideological function: by dismissing their health needs and taking risks, men legitimise themselves as the 'stronger sex' (Courtenay, 2000). Although different discourses exist, many men endorse and aspire to 'hegemonic masculinity' (Connell, 1987; 1995), which represents power, authority and heterosexuality.

The concept of multiple masculinities reflects the social diversity of men associated with age, race, ethnicity, culture, class and sexuality. Some men will conform to dominant masculinities, however, others will resist. The concept of multiple masculinities may be relevant for this study in terms of the types of masculinities the young men ascribe too. For example, dominant masculinity may be particularly relevant to those young men in the study who exhibit high risk sexual behaviours such as multiple partners and engaging in sex without a condom. This form of masculinity may also be displayed during the interview process if young men feel the need to ‘brag’ or exaggerate sexual claims to a female researcher to prove they are sexually successful. This will be discussed in further detail in chapter 6: (Discussion).

Those who ascribe to complicit masculinity may wish to be perceived by their peers as dominant and conforming to risk taking behaviours, but have opposing internal beliefs. For example, the young men may participate in ‘man talk’ about sexual conquests in order to be accepted without, realising that they will never be in the dominant sphere of masculinity. Men who belong to subcultures categorised as marginalised groups such as gay men experience poorer health outcomes (through homophobia and high risk sexual practices) than other groups of men (Connell, 2011). Subordinate masculinities refer to masculinities, which are viewed as denigrated forms of masculinity. Gay men can be viewed as subordinate, as not only are they marginalised but they are also as a whole rejected as being a part of masculinity (Connell, 2001). Although this framework is useful as an overarching guide to masculinities it cannot address the individual development process or the unique histories, life events and experiences of all men (Connell, 2001). While there is much support for Connell’s theory of hegemonic masculinity, it is not without its issues. It has been criticised for being structurally deterministic and ‘disavowing of agency’ (Whitehead, 2002) and as detached from people’s everyday lives (Jefferson, 2002). Critics have implied that specific behaviour associated with traditional forms of masculinity is likely to be hazardous to men’s health. Impassiveness and withholding of emotion for example are values often associated with the masculine gender role (Smith, Braunack-Mayer *et al.*, 2006). Within any given society a hierarchy of masculinities can exist, with an idealised version being dominant or hegemonic. In Western culture contemporary hegemonic masculinity is associated with being white, heterosexual and middle class and possessing stereotypical masculine traits of assertiveness, dominance, control, physical strength and emotional restraint (Courtenay, 2000; Smith, Braunack-Mayer and Wittert

*et al.*, 2007). As a result many men experience subordination and marginalisation by not measuring up to the ideal standard against which all men are judged (Evans, Frank and Oliffe *et al.*, 2011).

### **3.4 Masculinity and men's health**

Research has demonstrated that some men who adopt traditional beliefs about masculinity may engage in behaviours that have greater health consequences than other males with less traditional beliefs about masculinity (Courtenay, 2003). These beliefs about masculinity play an important role in the health of men and may lead them to engage in harmful behaviours or to refrain from health protective actions (Williams, 2003). For example, men who hold more traditional beliefs about masculinity may be more likely to smoke, use alcohol and drugs and engage in more risky behaviour (Courtenay, 2003). The typical qualities of men such as autonomy, impassiveness and physical aggression, as well as avoidance of showing emotion or displaying weakness may contribute to poorer health in men (Williams, 2003).

The concept of hegemonic masculinity has been highly prevalent in studies of men's health. These studies have shown how high risk behaviours and a reluctance to seek healthcare link with hegemonic masculinities (Courtenay 2000; Robertson, 2003; Williams, 2003; O'Brien, Hunt and Hart, 2005). However, sexually transmitted infections like chlamydia are mainly asymptomatic. Many of the young men in this study might not have felt the need to seek STI testing, as without symptoms there would be no reason to be concerned or to seek care. Alternatively, the young men might have felt the need to adhere to hegemonic masculinity by not seeking treatment for infections. Kalmus and Austrian's (2010) study of young Latino and African American men found that some of the men from their study would 'tough things out' even in the case of symptomatic STIs. Although this was a less typical response, it was none the less another way of adhering to the hegemonic script. However, a possible limitation of this study was the use of focus groups; the young men may have said this so that they were perceived as dominant in front of their peers. A different response may have been given if the men were interviewed in private. Haywood, Mac and Ghail, (1996 p.54) argue that for young men, male peer group networks are the most oppressive arenas for the production and regulation of masculinities.

Hegemonic masculine performances are also often linked with lavish sexual encounters (Courtenay, 2000), sexual risk taking behaviour such as sex without a condom, engaging in casual sex and, endorsement of risky condom related beliefs (Shearer, Hosterman and Gillen *et al.*, 2005; Kimmel, 2008; Devris and Free 2010). Currier's, (2013) study on hegemonic masculinity in the hook-up<sup>1</sup> culture found that not only did the men in her study want to emphasize their heterosexuality and impress other men, but they also assumed that hooking up with or having sex with various women would "make a name" for themselves. Kimmel (2008) posits that this desire to be a 'man' in the eyes of other men comes at the expense of the women they are treating as sexual objects. This may however, reveal a sexual double standard in which men receive more sexual and in particular, social benefits from casual sex than do women (Kimmel, 2008; Fielder and Carey 2009). Richardson's (2010) study of young men found that sex talk was a key form of social interaction where hierarchies between men were provided. Engaging in public performances, such as 'boasting and bragging' achieved status and gained male approval and power. This suggests that the perception of social norms regarding the behaviour of peers is a powerful psychosocial influence on men's sexual risk behaviour. Thus engaging in such risky sexual behaviours helps achieve or maintain participants' social status, which wins respect amongst other men. Kimmel (2008) argues that there is a relational influence of peer networks in the production of youth masculinities, which is largely performed for and judged by other men. Males may be viewed by society as active participants in risk taking behaviours who perceive risk differently to females because of the expected performance of masculinity (Mitchell *et al.*, 2001; Le Breton, 2004). It is therefore likely that theories of masculinity, in particular hegemonic masculinity, could provide a framework for explaining the risk taking behaviour of the men in this study.

### **3.5 Behaviour and sexual risk taking**

As this study is about young men's sexual decision making it was important to explore the theories of behaviour. While theories from health promotion provide frameworks for understanding behaviour and behaviour change, it was useful to draw on some of the constructs within these theories to help understand men's sexual health decision making. Men's sexual health decision making is influenced by a complex interplay between different factors at different levels. For example, in relation to this study at the individual level, safe sex may be influenced by self-efficacy, which refers to an

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<sup>1</sup> Hook-ups are uncommitted sexual encounters

individual's belief in his or her ability of performing a specific behaviour such as condom use (Bandura, 1977). At the interpersonal level, an individual may be influenced by friends and family (significant others) and social norms behaviours which may lead individuals to conform in order to be accepted (Ajzen, 2001). Therefore, men's sexual behaviour may be more adequately explained by the theories which take account of variables such as social values and peer pressure as well as individual cognitions, such as values and beliefs. It has been suggested that any given behaviour is unique, and that the factors that influence one type of behaviour may be very different to those that influence another type of behaviour (Fishbein, 2002). For instance, using condoms for sex with a regular partner (e.g. a sign of respect) is a very different behaviour to wearing condoms with a casual partner or a commercial sex worker (for example, to avoid an STI). Fishbein (2002) posits that in any given behaviour there are at least four elements: the action (using), the target (a condom), the context (sex with a regular partner) and the time period (always). Therefore, it is likely that factors such as, type of partner, the type of sex and the environment may also need to be taken into consideration when examining the behaviours of the young men in the study.

A number of health promotion theories were explored for use within this study. However, some of the theories were not as relevant as others, and there was an overlap of constructs among many of these theories. For instance, the concept of self-efficacy in Social Cognitive Theory (Bandura 1986) overlaps with the construct of perceived behavioural control in the Theory of Planned Behaviour (Ajzen and Fishbein, 1980) and the barriers concept from the Social Cognitive Theory overlaps with the barriers concept in the Health Belief Model (Rosenstock, 1974). The theories that were selected were chosen because they contain constructs which may be important for determining the young men's sexual behaviour. For instance, The Health Belief Model (Rosenstock, 1966) focuses on the fear of negative consequences as a motivator to change behaviour. The perceived susceptibility construct may be useful in determining the men's threat of infection which may help explain screening behaviour. It was also important to focus on those theories that offer a clear theoretical account of the links between attitudes, intentions and behaviour (Fishbein and Ajzen, 1975). For these reasons three behavioural theories which are commonly used in health promotion, were drawn on: the Social Norms Theory developed by Perkins and Berkowitz (1986), and The Theory of Planned Behaviour (Ajzen and Fishbein, 1980) and the Health Belief Model (Rosenstock, 1966).



### 3.6 The Social Norms Theory

Men's health behaviours are embedded in, and likely to be influenced by the social context in which they live. Perceptions of how others behave may influence the actions of the individual in terms of the behaviours they adopt. The Social Norms Theory developed by Perkins and Berkowitz (1986) suggests that peer influence, and the role it plays in individual decision-making around behaviours is the primary focus. This theory aims to explain the influences of environmental and interpersonal influences (such as peers) in order to change behaviour. Perkins and Berkowitz's (1986) study of college students revealed a consistent pattern of misperceptions held by students regarding the norms of alcohol use among their peers. Students thought that their peers were drinking higher volumes and more frequently than they actually were. Perkins and Berkowitz (1986) believed correcting such misperceptions or 'pluralistic ignorance' (the concept used to explain misperceived norms) might reduce heavy drinking and related harm. Much of the work carried out using Social Norms Theory has focused on alcohol, illegal drug use and smoking (Berkowitz, 2005). However, this approach has also been applied to sexual behaviour. For example, research suggests that some people tend to place themselves in, and below average range, of numbers of sexual partners, believing they have fewer sexual partners and engage in less risky sexual behaviour than their peers (Lambert, Kahn and Apple, 2003; Martens, Page and Mowry *et al.*, 2006). A study by Katz, Tireore and Van dear kloet (2012) found that college students perceived casual sex to be common on campus and that those who actively engaged in the behaviour perceived it to be more common than those who did not.

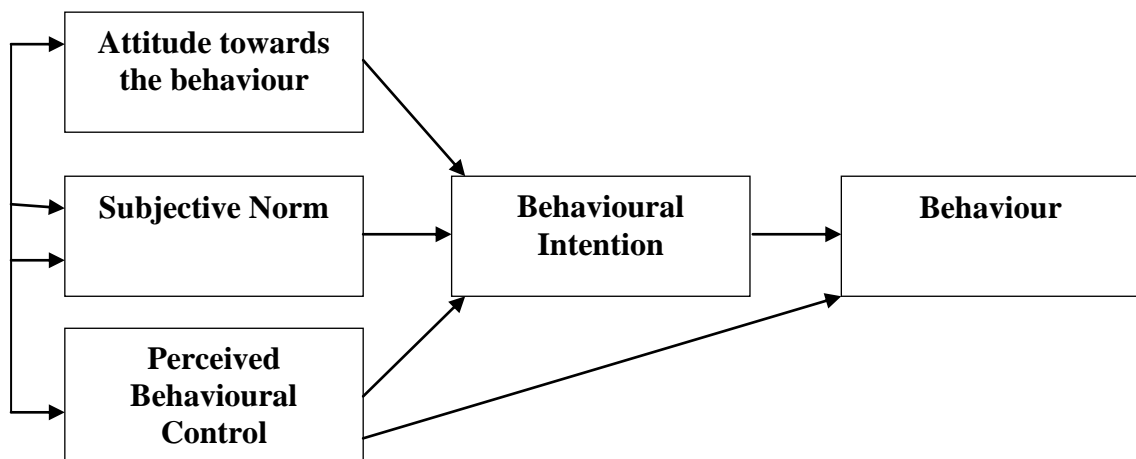
According to a recent student newspaper article, alcohol consumption and risky sexual behaviour in the North East of England is considerable at universities, particularly during Fresher's week where excessive alcohol consumption, unprotected sex, multiple sexual partners and risky sexual practice are said to be the norm (Painter, 2014). However, Social Norms Theory would posit that this could be a misconception based on the risky behaviours of a minority of Fresher's. Research suggests that reported sexual risk taking behaviours are higher for men than for women (Poppen, 1995; Seal and Agostinelli, 1996; Turchik and Garske, 2008). However, social desirability and adherence to gender roles of how men are supposed to behave may be another reason to consider. Some researchers have stated that these findings occur simply because men are over-reporting their sexual behaviours, especially the number of sexual partners (Morris, 1993; Smith, 1992; Jonason and Fisher 2009). Robertson (2003) highlights

the need to be cautious when interpreting men's representations of their health. He argues that how men actually behave may differ from how they say they behave. Perceived social norms, or what an individual believes others are doing or would approve of, play an important role in health behaviour (Perkins and Berkowitz, 1986). For instance, if the young men in the study perceive sex without a condom as being the social norm then this could influence their behavioural intent to have unprotected sex. Studies have found evidence linking perceived norms to a variety of health behaviours including condom use (Albarracin, Kumkale and Johnson, 2004), and therefore this construct may be useful in determining safer sex behaviours among the men in this study. It is likely that peer influence and social norms may play a part in influencing the young men's behaviours.

### **3.7 The Theory of Planned Behaviour**

The Theory of Planned Behaviour (Ajzen 1988, 1991, 2002) is an extension of the earlier Theory of Reasoned Action (Fishbein and Ajzen 1975) which focuses on a person's intent to behave in a certain way. The basic assumption of this theory is that beliefs are the fundamental determinants of any behaviour and therefore, risk behaviour can be changed by modifying the underlying beliefs. Behavioural intent and action are two particular constructs which may be relevant to the young men within this study. For example, intent and action are influenced by two important factors: one's attitude toward the positive and negative aspects of a particular behaviour, and one's perception of social norms, or what others think about engaging in the behaviour. Attitudes are made up of beliefs that a person accumulates over his lifetime. Some beliefs are formed from direct experience, some from outside information and others inferred or self-generated (Ajzen, 1988). However, only a few of these beliefs are salient beliefs said to be the immediate determinants of a person's attitudes (Ajzen and Fishbein, 1980). An attitude is a person's belief about whether the outcome of his/her action will be positive or negative. If the person has positive salient beliefs about the outcome of his/her behaviour then he/she is said to have a positive attitude about the behaviour, and vice versa. The beliefs are rated for the probability that engaging in the behaviour will produce the believed outcome, see figure 3.1 on the following page:

Figure: 3.1: The Theory of Planned Behaviour



Source: Ajzen, (2005). p.135

As previously discussed perceived social norms, or what an individual believes others are doing or would approve of, play an important role in health behaviour (Perkins and Berkowitz, 1986). For example, if the young men in the study perceive sex without a condom as being the social norm among their peer groups then this could influence their behavioural intent to have unprotected sex. A further construct within the Theory of Planned Behaviour (Ajzen, 2002), which may be relevant for explaining some of the behaviours of the young men in the study is the concept of ‘significant others’. Normative beliefs and subjective norms may be relevant to this group in terms of pressure from peers to have sex with as many women as possible. Sexual partners may influence condom use or testing behaviour and family members such as fathers and any brothers the young men may have could influence their beliefs. In addition, a number of studies have shown the validity of the Theory of Planned Behaviour in predicting the strength of intentions to use condoms to engage in risky sexual behaviours and to initiate sexual behaviours (Armitage, Norman and Connor, 2002; Albarracin, Johnson and Zanna, 2005; Munoz-Silva, Sanchez-Garcia and Nunes *et al.*, 2007; Ajzen *et al.*, 2007; Simms and Byers, 2013), and to determine intentions to test for chlamydia (Booth, Norman and Harris *et al.*, 2013). Although there is much support for the Theory of Planned Behaviour, it is not without criticism. For instance, there may be a substantial gap of time between the assessment of behaviour intention and the actual behaviour being assessed (Werner, 2004). In that time gap, the intention of an individual might have changed. Godin and Kok (1996) conducted a review that showed components of the Theory of Planned Behaviour to explain on average 41 percent of the variance in intention, but only 31 percent of the variance in behaviour. This is an

important consideration as the young men in this study may have strong intentions, but because of time lapse and other factors they may not actually change their behaviour. The impact of behavioural intention and actual behaviour change of the young men in this study will be explored through the use of follow up interviews post diagnosis. This is explained in further detail in the next chapter (Methodology).

A further weakness of The Theory of Planned Behaviour may be its inability to account fully for the influence of previous behaviour on intention and future behaviour. Previous behaviour is a strong predictor of intention and behaviour, explaining variance over and above that accounted for by the Theory of Planned Behaviour variables (Ajzen, 1991). For example, past behaviour may influence an individual's beliefs about that behaviour which in turn determines future behaviour. Any remaining impact of a previous behaviour is taken to indicate that the model is not sufficient and that additional social cognitive variables need to be considered (Ajzen, 2002). This is an important consideration for this study as it is likely that the young men's past sexual behaviour will have an impact on their future behaviour.

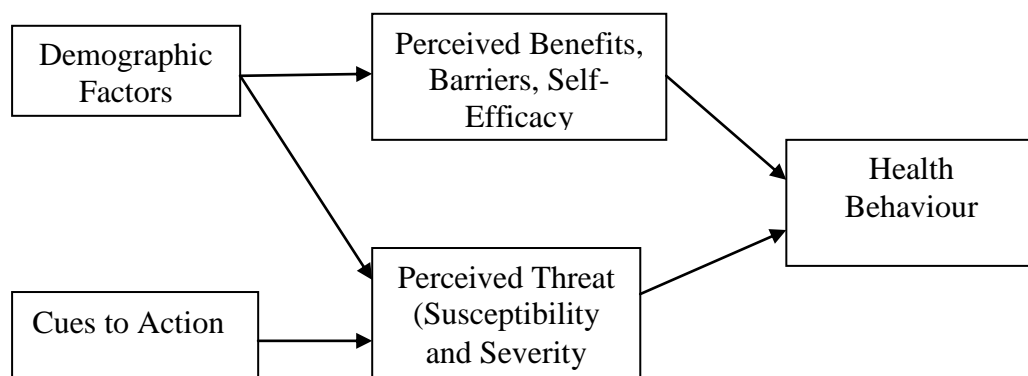
A study carried out by Kasima, Gallois and McCamish (1993) on sexual behaviours relevant to HIV transmission found that although the Theory of Planned Behaviour did an adequate job of predicting intentions, condom use was predicted by the interaction between intentions and past behaviour. Sexual behaviour is complicated because two people are involved. People may change their mind because of their partner's influence or for other reasons. Behavioural intentions that are supported by previous behaviour may be more firm than those conflicting with previous behaviour (Kasima, Gallois and McCamish, 1993). Fishbein and Ajzen (1980) acknowledge that The Theory of Planned Behaviour works best for behaviours that are under the individual's volitional control. As sexual intercourse involves two people the behaviour in question is not fully under the individual's control (Fishbein and Ajzen, 1980), and therefore, needs to be taken into consideration.

### **3.8 The Health Belief Model**

The Health Belief Model (Rosenstock, 1966), focuses on how an individual's beliefs impact on their behaviour (Conner and Norman, 2005). The major proposition that this model makes is that if an individual perceives a disease or negative health outcome to be a threat, then an individual will be motivated to take action to avoid that threat.

Perceived threat is made up of two constructs *perceived susceptibility* and *perceived severity* (see figure 3.2). A prerequisite for taking action includes high perceived susceptibility and severity towards the negative health outcome (Janz and Becker, 1984). Perceived susceptibility is a component that is unique to the Health Belief Model and may be useful to determine the young men's perceived susceptibility to chlamydia infection. It is possible that the men feel susceptible to chlamydia through previous infection or unprotected sex. Downing-Matibag and Geisinger, (2009) study used the Health Belief Model to understand hooking up and sexual risk taking among college students. Findings demonstrated that the young people's assessments of their own and their peers' susceptibility to STIs are often misinformed; results also showed that self-efficacy was affected by situational factors such as spontaneity and therefore some of these constructs may provide a useful framework for explaining some of the risk taking behaviours in this study.

Figure 3.2: The Health Belief Model



*Perceived benefits* and *barriers* are also important determinants of adopting health behaviour. In relation to this study the perceived benefits of using condoms may be a wish to avoid an STI, compared to the perceived barriers to using condoms which could be availability of condoms or that they diminish sensation. In addition *cues to action*, a further component of this model, refer to stimuli in the environment which may trigger behaviour for example, media information, or the influence of partners, peers or health professionals. Again this may be another useful construct to establish if any external influences impact on screening behaviour. A further construct includes demographic factors such as age, gender and ethnicity which may affect the perceived threat of a disease as well as the perceived benefits and barriers. Self-efficacy was a construct that was later added to the Health Belief Model (Rosenstock, 1988). Self-efficacy is a term

used to describe an individual's beliefs about their ability to perform behaviour (Bandura, 1977). The perception that one can engage in protective behaviour has been highlighted as a key factor in predicting health promoting behaviours (Bandura, 1986). For example, condom self-efficacy has been found to be a significant predictor for engaging in safe sex behaviours (Basen-Engquist and Parcel, 1992) and may be useful in determining the young men's self-efficacy to change their behaviour.

The Health Belief Model has received empirical support for predicting a wide range of health behaviours including: breast screening (Breners and Skinner, 1999), contraception behaviours (Hall, 2012) and risky sexual behaviour (Hingson, Strunin and Berlin *et al.*, 1990; Basen-Engquist and Parcel, 1992; Bakker, Buunk and Siero *et al.*, 1997) and may therefore be helpful for explaining some of the young men's attitudes and beliefs about unprotected sex, or screening behaviour. However, although there is much support for this model, it is not without its criticism. Roden, (2004), comments that it ignores the social and economic factors which influence behaviour. These are important considerations where the influence of peers on young people's risky behaviour is evident (Hollander, 2001; Sieving, Eisenberg and Pettingell *et al.*, 2006). Sheeran and Abraham (1998) also point out that this model does not address the important role of intention to behave, only behaviour itself. Therefore, although a number of constructs within this model may help to explain some of the behaviour of the men in the study, alternative models and theories are needed to ensure other variables such as behavioural intent, irrational determinants, social norms, motivation and pleasure are considered for explaining men's sexual health decision making.

Further criticism of behavioural theories such as the Theory of Planned Behaviour and the Health Belief Model, is that they assume that all behaviour is rational. Critiques argue that these types of theories fail to take account of emotions, compulsions and other non-cognitive or irrational determinants of human behaviour (Werner, 2004; Armitage, Connor and Norman, 1999; Ingham, 1994), which are likely to be important factors in this study. However, Fishbein, (2008) posits that a reasoned action approach says nothing about rationality nor does it deny the role of emotions, and that mood and emotion are considered as 'background' variables that may influence one's belief about performing a behaviour. Ajzen (2011) acknowledges that the focus of The Theory of Planned Behaviour is on the controlled aspects of human information processing and decision making, and is concerned with behaviours that are goal-directed and steered by

conscious self-regulatory processes. Ajzen, (2011) suggests that this has often been misinterpreted to mean that decisions are made rationally, when in reality the theory is more complex. Ajzen (2011) suggests that there is no assumption in the theory that behavioural, normative and control beliefs are made in a rational way or that they accurately represent reality, and what may seem irrational to an outsider may seem perfectly reasonable beliefs that are held by the individual (Ajzen, 2011; Fishbein, 2008). Two important factors which are frequently cited as neglected from the Theory of Planned Behaviour are affect and emotion (Conner and Armitage, 1998). However, there are two ways in which these factors are addressed in the Theory of Planned Behaviour. Firstly, they can be background variables affecting behavioural assumptions, but also normative and control beliefs. For example, being in a negative mood will have a different effect on beliefs and evaluations than being in a positive mood. Secondly, affective states are able to help select the behavioural, normative and control beliefs that are immediately accessible in memory (Ajzen, 2011). In addition, Ajzen (1991) has stated that the Theory of Planned Behaviour is open to inclusion of additional variables if they are shown to reliably increase the models ability to predict behaviour beyond the original variables. Research has shown that the addition of outside variables can increase the predictive ability of the Theory of Planned Behaviour (Conner and Armitage, 1998; Albarracin et al., 2001). Therefore, the remainder of this chapter explores other variables that are highlighted in the sexual decision making literature which be relevant for explaining young men's sexual decision making.

The role of emotion is an important consideration which may be relevant to the health behaviours of the young men in this study. For example, the difference in the emotional state between the context in which the interviews for this study took place, and the one in which the behaviour was performed (Albarracin, Johnson and Fishbein *et al.*, 2001) is an important consideration. The emotional state of the mind of the young men within this study is likely to be different at different stages. This is especially important where sexual behaviour is concerned as the young men's sexual decisions may have been influenced before sex by mood altering substances such as, alcohol or drugs. During sex, decisions may have been affected by the 'heat of the moment' when individuals were sexually aroused (Ariely and Lowenstein, 2006) and after sexual intercourse their emotional state may have been influenced by regret or male bravado, depending upon the context in which the sexual behaviour took place and therefore, this this needs to be taken into consideration.

Studies have demonstrated that sexual arousal acts as an internal cue that interacts with alcohol intoxication to enhance attitudes and intentions towards risky sexual behaviours, even when these behaviours contradict their 'sober' attitudes and intentions (MacDonald, Fong and Zanna, 2000; Davis, Hendershot and George *et al.*, 2007). The previous chapter (Review of the literature) highlighted binge drinking as a characteristic of young people and emphasised the link between alcohol consumption, masculinity and sexual risk taking (Pleck, Sonenstein and Ku, 1994; De Visser and Smith, 2007). Like sexual risk taking discussed above, the adoption of particular health related behaviours such as 'drinking alcohol' may also be understood as a way of "doing gender" (De Visser and Smith, 2007; O'Brien, Hunt and Hart, 2009). Therefore, alcohol theories may help to explain any risk taking behaviour that is reported in the context of alcohol.

The relationship between alcohol and sexual health is increasingly cited in the literature as a cause for concern (BASHH, 2011). Although a causal link has not been established, there is strong evidence to suggest that excessive alcohol consumption is associated with poor sexual health outcomes such as unplanned pregnancies, STIs and sexual assault (BASHH, 2011). An analysis of British national probability survey data found that alcohol use is an important determinant of early sexual activity (Aicken, Nardone and Mercer, 2010). Those who usually drank in excess of recommended limits were more likely to report unprotected sex with multiple partners and poor contraception choices (Aicken, Nardone and Mercer, 2010).

However, the link between alcohol use and risky sex has received mixed support in empirical studies (Cooper, 2002; Weinhardt and Carey, 2000; Standerwick, Davies and Tucker, 2007). For example, a review of the literature carried out by Cooper (2002), found that alcohol use was positively correlated with the likelihood of sex with multiple or casual partners. However, the majority of the evidence showed no relationship between alcohol consumption and the use of condoms. Conversely, in a study of the patterns of alcohol consumption and risky sexual behaviour among Ugandan university students Choudhry, Agardh and Stafstrom *et al.* (2014) found that alcohol consumption was associated with having multiple sexual partners and inconsistent condom use with new partners. However, this study did not provide any information about social norms or the influence of peers, which may be an indicator for risky sexual behaviour (Cooper,



2002) nor did it address personality factors such as sensation seeking which may have influenced condom use (Kalichman, Simbayi and Jooste 2006).

Experimental studies investigating the effects of alcohol on the intentions of engaging in sexual risk taking have been conducted. A study by Young-Hee and Span (2010) investigated the effects of alcohol and gender on the intentions of engaging in sexual risk taking after listening to audiotaped scenarios regarding a romantic situation. The study found that unlike intoxicated and placebo treated women, who reported a greater likelihood of engaging in sexual risk taking, the men reported less willingness to engage in sex than sober men. This finding is inconsistent with similar research carried out by MacDonald, MacDonald and Zanna, (2000) which found that intoxicated men reported a greater willingness to engage in sex as opposed to those men in the placebo and control conditions. A possible explanation could be the difference in the vignettes between the two studies. In the latter study participants were given further information regarding the use of birth control by the women. It is possible that this information may have alleviated pregnancy concerns and influenced respondents' intentions to have unprotected sex. Further limitations of these types of studies are that they are only able to investigate behavioural intentions of sexual risk taking and not actual sexual behaviours.

Alcohol Myopia Theory (Steele and Josephs, 1990) states that alcohol intoxication restricts attentional capacity so that people are highly influenced by the most salient cues in their environment. In the case of sexual situations, impelling cues, such as sexual arousal, tend to be immediate, whereas cues that would inhibit sexual behaviour such as STI risk are more remote or abstract (Cooper, 2002), thus resulting in risky behaviour. Alternatively, Alcohol Expectancy Theory (George, Stoner and Norris *et al.*, 2000) postulates that individuals who think drinking alcohol will cause them to become less nervous, more sexually uninhibited, and thus at greater ease in potential sexual situations are more likely to drink before a possible sexual encounter, such as at a party or on a night out.

There are a number of alternative factors which need to be taken into consideration for understanding young men's sexual behaviours. For example, the state of physical arousal in the 'heat of the moment' may have a potentially important role for rationalisation tendencies since high levels of arousal severely diminish the ability to

judge future consequences of current behaviours (Tiedens and Linton, 2001; Loewenstein and Lerner, 2003). Studies suggest that individuals who engage in high risk behaviour tend to underestimate their personal risk in comparison to similar others, and that some individuals display maladaptive coping strategies such as defensive denial of risk (Gerrard, Gibbons and Reid-bergani *et al.*, 2000; Ariely and Loewenstein, 2006). This form of 'alternative rationality' can be used to explain why some people do not use condoms despite their understanding of their protective value. For example, Pivnic's (1993) study with HIV positive women and their condom use, found the women used condoms with casual partners but they did not use them with a lover or husband. By not using condoms they could become as intimate as possible. The lack of condom use also implied trust and commitment to a long term relationship. An alternative explanation, which may apply to some of the young men in this study, may be linked to the concept of fidelity. This means that condoms are used with casual sexual encounters as opposed to long term partners to avoid the possibility of being caught out by contracting a sexually transmitted infection.

Motivational factors such as pleasure and sex are also important factors when understanding human behaviour. Katz, Peberdy and Douglas (2000) explored sexual risk taking activity of young people and suggested that the pursuit of pleasure and short term gratification may seem more attractive to an individual than the longer term goals of good health. This may be applicable to young men in this study who may be more concerned about the instant gratification from sexual intercourse as opposed to the possible long term consequences of a chlamydia infection. This could be explained further using the theory of Sensation Seeking (Zuckerman, 1994). Sensation seeking is a personality trait which has shown to be related to risk taking behaviour. Zuckerman defined sensation seeking as:

*'a trait defined by seeking of varied, novel, complex and intense sensations and experiences and the willingness to take physical, social, legal and financial risks for the sake of such experiences' (Zuckerman 1994, p.27)*

Sensation seeking individuals tend to engage in behaviours that increase the amount of stimulation they experience, for example, sex without a condom or drug use are activities which involve seeking out arousal. The literature shows that higher sensation seeking tendencies are associated with more risk taking behaviours (Horvath and Zuckerman, 1992; Piko, 2001; Grinblatt and Keloharju, 2009). Although, risk taking is

a correlate of sensation seeking it is not a primary motive in behaviour (Zuckerman, 1994). Research examining the relationship between sensation seeking and sexual risk taking has found sensation seeking to be significantly associated with greater numbers of sexual partners (Zuckerman and Kuhlman, 2000), greater numbers of one-night stands (Gaither and Sellborn, 2003) and less consistent contraceptive use (Sheer and Cline, 1994). In a state of sexual arousal, the young men's normal, rational decision making may be impaired and the desire or need to experience orgasm. It is possible that this may affect the outcome of behaviour, particularly as penetration may be perceived as a masculine behaviour by some young men. Therefore; it is likely that theories which address variables such as motivation and pleasure will help to explain the irrational tendencies associated with men's sexual risk taking behaviours.

### **3.9 Chapter summary**

This chapter has explored the key concepts underpinning young men's sexual health decision making that contributed to the conceptual framework used to develop the study aims and objectives. Each of these concepts has been discussed in turn, using examples from the theoretical and empirical literature, to illustrate understanding and debates surrounding men's sexual decision making. Young men's sexual decision making and risky behaviour are complex processes with no universally agreed explanation. There are multiple contributing factors that need to be considered before we can begin to understand this phenomenon. However, it is likely that theories of masculinity, in particular hegemonic masculinity and theories of behaviour will help explain the young men's health related beliefs and behaviours in this study. The next chapter presents the research methodology.

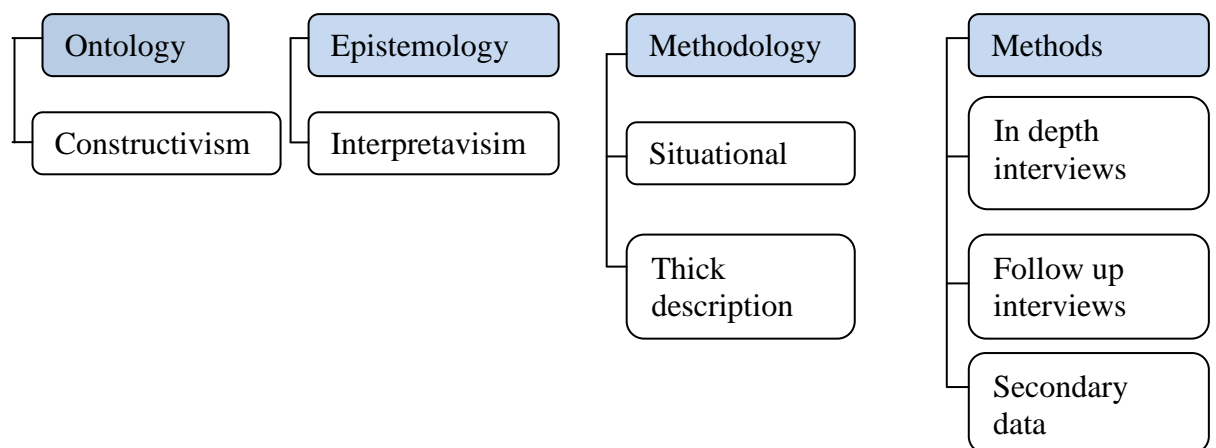
## CHAPTER FOUR: METHODOLOGY

This chapter discusses the research paradigm used to inform the study and the research design and methodology employed in conducting the research. At the outset of any research project it is important to make explicit the philosophical perspectives and presuppositions that will inform the knowledge generated by the process of enquiry (Guba and Lincoln, 1994). Philosophical and theoretical research frameworks also known as paradigms reflect interrelated beliefs about the world and how it may be perceived and interpreted. These consist of three components:

- Ontology – what is the nature of reality
  - Epistemology – what is the nature of knowledge and the relationship between knowledge and the researcher
  - Methodology – the design, processes and outcomes associated with the study
- (Denzin and Lincoln 2003)

Figure 4.1 below provides a visual representation of the philosophical and methodological approach which was taken in this study.

Figure 4.1: Philosophical and methodological approach



The first part of this chapter discusses the four components described above, outlining the philosophical and methodological approach to the study. The second part describes the sampling process, recruitment methods and the framework that was used to analyse the data.

## **4.1 Research philosophy**

Ontology and epistemology are key components of research paradigms. They provide frameworks of inquiry which define the nature of the world, and the researcher's place within it (Guba and Lincoln, 1994).

### **4.1.1 Ontology**

Ontology is the philosophical study of the form and nature of reality which addresses questions about the nature of being (Guba and Lincoln, 1994). Key ontological questions concern whether or not there is a social reality that exists independently of human conceptions and interpretations and, whether there is a shared social reality or only multiple, context-specific ones (Richie, Lewis and McNaughton *et al.*, 2014, p.4). This study centres on the factors that influence participants' risky sexual behaviours, their experiences of receiving a positive or negative diagnosis for chlamydia and the impact on subsequent sexual behaviour. Reality in this research is viewed from the perspectives of the researched. It focuses on their understandings of sexual risk taking which are influenced by their experiences of their worlds and the meanings they attribute to sexual risk taking.

### **4.1.2 Epistemology**

Epistemology is concerned with ways of knowing and learning about the world. It forms the basis of our knowledge. In this research knowledge is based on an inductive approach through which patterns are derived from observations of the world, as opposed to a deductive approach where hypotheses are tested against observations (Richie, Lewis and McNaughton *et al.*, 2014). Blaikie (2007) however, argues that there is no such thing as 'pure' induction or 'pure' deduction. Researchers do not generate or interpret data with a blank mind. The data they have generated or the questions they have asked will have been influenced by assumptions derived from previous work in their field (Richie, Lewis and McNaughton *et al.*, 2014). I am a public health practitioner with over 14 years' experience of managing sexual health services and working with 'hard to reach' groups. Because I come with prior practice knowledge and experience relating to young men's sexual health, it would be impossible to separate myself, my prior knowledge and assumptions from the phenomena. In addition, my perceptions and understandings as a woman who enters the research field with my own personal views on sexual health, means that the phenomena of investigation are linked such that who we are and how we understand the world is a central part of how we

understand ourselves, others and the world. Instead the research recognises the influence on my own subjectivity on the work, its results and my interpretations of those results. This is addressed in further detail in the section on reflexivity.

#### **4.1.3 Positivist paradigm**

Several sets of traditions underlie social research; they are referred to as the positivist and interpretivist paradigms (Bryman, 2001). In the positivist approach the focus is on the methods of natural science. Interpretivists place emphasis and value on the human interpretation of the social world and the significance of both participants' and the researcher's interpretations and understanding of the phenomenon being studied. Positivism is an approach to science based on a belief in universal laws and insistence on objectivity and neutrality (Thompson, 1995). Positivists follow the natural science approach by testing theories and hypotheses. Positivists posit that researchers should attempt to distance themselves from any influences that might corrupt their analytical capacity (Ritchie and Lewis, 2003). One of the traits of this approach is the quest for objectivity and distance between the researcher and the researched, in order to avoid bias.

#### **4.1.4 Interpretivist paradigm**

This methodology centres on the way in which human beings make sense of their subjective reality and attach meaning to it. Knowledge of the world is based on 'understanding', which arises from reflecting on what happens, not just from having had particular experiences (Ritchie, Lewis and McNaughton *et al.*, 2014 p 10). Interpretivism was chosen because this study aimed to explore the complex factors involved in men's sexual health decision making. Therefore, it was necessary to use an approach that focused on the experiences of participants themselves, their actions, thoughts, feelings and perceptions. Interpretivist, qualitative research, is about identifying, describing, understanding and interpreting the experiences people have in their day to day lives and the way peoples experience and understand their world (Crotty, 1996). In this approach knowledge is created through the understandings of participants rather than testing theories or hypotheses as in positivist, quantitative approaches.

Qualitative enquiry aims to describe social phenomena and behaviour through the collection of rich contextual data. It seeks to explore and explain the world through

observation, by appreciating the experiences of individuals and unearthing data that is not easily accessed by quantitative means (Pope and Mays, 1995). The interpretive paradigm posits that the researcher's values are inherent in all phases of the research process, and it is through a dialectical process with participants, that an understanding of the social world can be created. This methodological approach was most appropriate to guide the inquiry where quantitative methods would not have been able to adequately describe or interpret the phenomenon (Corbin and Strauss, 2008).

## **4.2 Methodology**

The following section describes the research methodology employed in this study. Methodology refers to the principles and ideas on which researchers' base their procedures, strategies and methods. Mason (2002, p32) suggests that as qualitative strategic thinking is a dynamic, active and reflexive process it is not advisable to advocate selecting a methodological strategy 'off the peg' and then following it to the letter. It is more important to find a coherent and consistent approach to answering the research questions (Mason, 2002). This approach is echoed by Seale, Gobo and Gubrium et al. (2007, p7) who advocate choosing a flexible approach to research design that takes account of the aims and context of a study. This strategic thinking was the approach taken to guide the research design for this study. I needed to be pragmatic given the potential difficulties of accessing 'hard to reach' groups of men about sexual health issues. It was thought early on in the research process that finding a philosophical label to hang the research design on would not work, and instead, a qualitative situational methodological approach was taken. A number of methodological approaches were explored during the early stages of the research, in particular phenomenology which looks at the lived experience of participants (Heidegger, 1962). It was envisaged that this approach would have been useful in exploring the lived experience of testing positive or negative for chlamydia. However, it was decided that not all of the research objectives would have been adequately addressed using this approach, especially as follow up interviews and the need to explore behaviour change over time and context was included in the research design. Employing a phenomenological approach as suggested by Husserl (1931) would also have involved attempting to put aside or 'bracket' presuppositions about men's sexual health. Given my previous experience of working in the field of sexual health and as a woman with personal views on sexual health this would have been difficult to achieve. Instead this research has taken an eclectic approach and has drawn on a number of

different traditions within qualitative research, all of which have been underpinned by philosophical considerations.

In this study the research methodology involved a qualitative approach which utilised 'thick description' (Geertz, 1973). This involved writing detailed portrayals of the participants' experiences, going beyond a report of surface phenomena to their interpretations, uncovering feelings and the meanings of their actions. This approach provides context and meaning to observed actions, rather than simply recording the occurrence of an action in isolation (Ponterotto, 2006). Thick description involves describing in depth and giving visual pictures of the people, settings, the events and perceptions of their accounts. The task of the researcher is to explain the context of the behaviour and the discourse that takes place within a society, so that practices become meaningful to the reader. For example, in this study participants may describe a situation involving risky sexual behaviour. It would therefore be important to provide a deep, detailed account of this experience, including the setting, those involved and any perceptions the individual has about that behaviour. Denzin (1989, p83) defines thick description as 'deep, dense, detailed accounts of problematic experiences'.

Thick description refers to the researcher's task of both describing and interpreting social action and behaviour within a particular context (Ponterotto, 2006). Thick description accurately describes social actions, and allocates purpose and intentionality to those actions by ways of the researchers understanding and clear description of the context under which social actions took place (Ponterotto, 2006). It captures the thoughts and feelings of participants as well as the often complex web of relationships between them, which was important in this study when looking at the factors which influenced the men's sexual behaviours. Thick description is described by Lincoln and Guba, (1985) as a way of achieving a type of external validity. By describing a phenomenon in sufficient detail one can begin to evaluate the extent to which the conclusions drawn are transferable to other times, settings, situations and people. Thick description leads to thick interpretation, which in turn leads to thick meaning of the research findings. Thick meaning of findings leads the reader to a sense of 'verisimilitude', wherein they can cognitively and emotionally place themselves within the research context (Ponterotto, 2006).



### **4.3 Methods**

Qualitative methods are concerned with how individuals define situations and explain the motives which govern their actions. It is through dialectic processes with participants that an understanding of their social world can be created (Richie and Lewis, 2003). Interpretative approaches rely on naturalistic methods such as interviewing or observation in order to construct a meaningful reality collaboratively (Richie and Lewis, 2003). Therefore it was important to select data collection methods which enabled an interaction with the participants, so that rich descriptions could be gained to help understand the young men's behaviour and gain an insight into their world. Because of the sensitive nature of the subject area, individual interviews were chosen over group interviews as group dynamics in this situation could either inhibit or distort responses from the different participants. For instance, those who view sexual behaviour as private could be inhibited in a group situation. Alternatively, it was also likely that masculinity, peer pressure or social norms would predominate group discussions around some of the young men's sexual practices and could therefore have been less conducive in this study. Instead, a multiple methods approach was used in the research design to support the construction of meaning in the data analysis and avoid single source bias. As the study had a range of objectives to explore, a mixed methods approach through triangulation of the data could provide greater detail and complexity to the findings. It did not attempt to validate findings by finding objective reality as in quantitative approaches but added depth and credibility (Silverman and Marvasti, 2008).

#### **4.3.1 In-depth Interviews**

In-depth interviews were chosen as the primary method of data collection because they focus on verbal accounts and social realities. It was the respondents' accounts which were being sought and were valued. In-depth interviews rely on the social interaction between interviewer and informant to elicit information, and construct meaning. Such interviews have no predetermined set of questions (Crabtree and Miller, 1999; Patton, 2002), but start with a broad, holistic question relating to the research issue. They provide the opportunity to probe deeply, to uncover new clues, open up new dimensions of a problem and to secure vivid, accurate, and inclusive accounts from informants that are based on personal experience (Patton, 2002; Creswell, 2003). This type of interview is like a normal everyday conversation which is geared to the research questions. The elements of control is regarded as minimal, but nevertheless present in order to keep the

informant relating experiences and attitudes that are relevant to the problem (Burgess, 1982).

The aim of the interview was to discover the informant's world by understanding their perspectives in language that was natural to them. It is important to know what people think in order to understand why they behave in the ways that they do. Human sexual experience involves emotion and personal meaning which requires rich in-depth research to illuminate perceptions which would help gain a deeper understanding of the participant's behaviour and attitudes. In-depth interviews also enabled comparisons to be made between other interviews, as well as allowing participants the freedom to raise issues that were important to them (Britten, 2000).

As this study involved participants who were deemed 'hard to reach', and because the respondents chose to test anonymously as opposed to attending health clinics, there was concern that the sample may be difficult to obtain. It was therefore necessary to explore different data collection techniques which may be more attractive to the recruitment of potential participants. On-line interviewing was one approach that was considered. Because respondents had ordered their testing kit using the internet, it was necessary to explore the utility of this data collection tool. Mann and Stewart (2002) suggest that interviews carried out using e-mail are asynchronous and semi-private which could mean that the young men could remain anonymous during the research. In addition this visual anonymity afforded by this approach may promote participants self-disclosure (Opdenakker, 2006). However, the main disadvantage of this approach is that it would exclude the development of a rapport between the researcher and the participant. On-line interviewing would also have missed out on important nonverbal cues such as facial expressions and body language between the researcher and the interviewee (Curasi, 2001), which would have made it very difficult to present the data using thick description.

The use of trained chlamydia peer educators to collect the data was also explored because the study participants were young men who might have felt more able to talk to other young men. It has been suggested that peers of the same age and gender communicate in readily understandable ways (DiClemente, 1993). However, these methods were discarded because the subjective nature of the researcher participant relationship was an important aspect of this research. Conducting interviews in

qualitative research is a complex social interaction that both the researcher and the respondent have the capacity to influence or be influenced by (May 1991; Hutchinson and Wilson 1994). The quality of the data that is shared and collected is influenced by multiple factors including the context of the interview; the meaning(s) attributed to being interviewed; and the values, beliefs, and experiences of both the researcher and the participant (May, 1991). Therefore in-depth interviews were deemed the most appropriate method of data collection for this study.

#### **4.3.2 Research setting**

All interviews were carried out face to face with respondents in a range of NHS locations across the North East of England. These included Primary care walk in centres (N: 3), GP practices (N: 2) and a sexual health service (N: 5). Interviews took place in meeting rooms, offices, and counselling rooms. The interview setting was negotiated with each participant prior to the interview. These settings were usually near the respondent's home or place of work or study to make it easy for the respondent to attend. The first interview took place in a Primary Care walk in centre near to the participant's home. This setting had been negotiated with the participant because it was felt that no one would know the reason for his attendance at such a venue. The following interviews took place over the next two months in settings which were agreed with the respondents. Interviews usually took place out of hours due to participants' work or university commitments. The organisations lone worker policy was adhered to for interviews conducted out of hours.

An interview topic guide acted as an aide-memoire of what topics to explore (Marshall and Rossman, 2011). This was developed based on findings from empirical literature relating to the impact of diagnosis, and theories of behaviour. This helped to ensure that relevant issues were covered systematically, while allowing flexibility to explore the detail salient to each participant. Areas to be explored during interviews were shared with the participants at the beginning of the interviews and are shown in table 4.1 below:

Table 4.1: Interview topic guide

Sexual History
Previous use of sexual health/health services
Existence of symptoms
Perceived sexual risk behaviour
Knowledge of chlamydia, and barriers to testing
Influences on decision making
Communication/ influences (peers, family, partner, before during after)
Factors associated with health seeking
Sexual behaviour and its perception as a health or social related activity
Screening via home based kit vs. health service
Psychosocial impact of receiving a test result
Impact of diagnosis on future sexual behaviour
Intention to change behaviour

It was important to build a rapport with the respondents prior to the interview to make them feel comfortable and help put them at ease. In-depth interviews allow ample time with the participants and a rapport is developed which is said to be necessary for collection of rich data (Marshall and Rossman, 2011). This was done by offering refreshments and engaging in general conversation to help put the young men at ease. Silverman (2006, p110) suggests that rapport is about being able to see the world from the respondents' viewpoint. It is important for gaining trust with respondents, and is the foundation for acquiring the fullest, most accurate disclosure a respondent is able to make (Glesne and Peshkin, 1992 p79). A good rapport was evident in this study, by the intimate disclosures that the young men made about their sexual history in their interviews. The terminology and phrases they used about women and sex suggested that they felt comfortable talking to me.

The interviews took the form of an everyday conversation which utilised open-ended non-judgemental questions. This enabled the young men to disclose personal accounts of their behaviour which included; unprotected sexual intercourse, multiple partners, and personal experiences relating to sexual encounters with women. The opening question was designed to elicit descriptions of subjective experience. 'Tell me about your sexual history over the last 12 months?' This broad question enabled respondents

to reflect on their sexual history over the last 12 months to tell their story in their own words.

Further probing questions included ‘can you tell me a bit more about that’? These types of questions were used to encourage respondents to expand on their narrative and share their thoughts, feelings and perceptions of the phenomena under investigation. Non directive techniques were adopted throughout the interview such as active listening, frequent ‘um hums’, reflective silences, repetition of statements, and refocusing responses, which were used to encourage the respondent to tell their story and, to ensure they felt fully engaged and listened to. Tape recording was chosen over note taking and memory construction as the interview needed to take on the form of a natural conversation and eye contact was essential. Interviews were transcribed as they were completed. This was an important part of the data analysis phase to allow full immersion of the data to become familiar with each individual transcript. Interviews lasted from 40 to 90 minutes.

During the first few interviews it became apparent that there may be sources of respondent bias which needed to be acknowledged. For example, alcohol consumption was noted early on as one of the main contributing factors to the young men’s risky sexual behaviours. The stories the young men were relaying involved binge drinking, alcohol intoxication, and unprotected sex. This led me to believe that some of these men may have had faulty memory when recalling such events, and therefore could not remember everything. A further concern was that because I was a woman who was interviewing young men there was the possibility of exaggeration or under reporting of sexual activity, or number of sexual partners. Respondents may have been embarrassed and may therefore have under reported sexual activity. Alternatively, cultural norms and traditional masculine behaviour as discussed in (Chapter three: Masculinity and Risk Taking Behaviour) meant that some of the young men may have wanted to prove themselves as successful practising heterosexuals and exaggerate claims. In order to minimise this I noted any inconsistencies that arose in the data, and, checked key events in follow up interviews and through secondary data.

### **4.3.3 Follow-up interviews**

The aim of the follow up interview was to explore the impact of a positive or negative diagnosis for chlamydia on subsequent sexual behaviour. This would allow for any insight into short term and long term behaviour change from respondents. Follow-up interviews were conducted with seven of the ten participants 12 months after the first interviews. Follow up interviews lasted between 30 and 60 minutes and were tape recorded and transcribed. The subjective character of the data was left intact and untainted throughout the data collection stage by sharing transcripts, data analysis and themes with the supervision team and by member checking.

Of those who were followed up, four had previously tested negative for chlamydia and three had previously tested positive for chlamydia. It was not possible to trace the other three participants, due to a change in their mobile telephone numbers for two respondents and the difficulty in arranging a convenient time for another respondent who was frequently away from home due to military commitments. Follow up interviews also allowed for further investigation on lines of enquiry, which were pertinent to individual interviews and were used to describe the different types of behaviour change that took place. Qualitative research explores the broader context within which change takes place, and so can capture the full set of factors that participants perceive as contributing to behaviour change over time (Richie, Lewis and McNaughton *et al.*, 2014 p62). Follow up interviews also allowed for further enquiry into areas missed during the first interviews, particularly in relation to the men's attitudes towards women who carry condoms versus those who use non-barrier contraception. The use of follow up allowed for areas such as these to be explored further.

The first stage of the follow up process involved interviews with respondents regarding their sexual history since their previous interview. The location and time of these interviews were negotiated with the participants. It was agreed that follow up interviews would be carried out with respondents in the same locations as the first interviews. Interview questions were designed to explore respondents' sexual behaviour, including the impact of their diagnosis on behaviour since their previous interview. This helped to explore any behaviour change by the individual, which allowed for comparison between time periods. The second stage involved presenting the themes, which had been brought together after the analysis of all interviews to the

participants. Lincoln and Guba (1985) argue that member checks are the most important techniques for establishing credibility. This helped verify the data analysis by asking the participants to check how the data had been interpreted, to ensure that they were accurately represented and could recognise themselves in the data. Respondent validation was important because it provided further information which helped to interpret the study findings. In this study the transcript themes became objects of reflection in the follow up interviews in which both the researcher and the participant attempted to interpret the significance of preliminary themes in light of the original question. Although some authors have noted several challenges to respondent validation such as participants challenging interpretations with which they feel uncomfortable (Robson, 2011 p158), the seven participants accepted the themes as a true interpretation. The process of how the themes were created is discussed in the data analysis section.

#### **4.3.4 Secondary data**

Secondary analysis of data can be a valuable approach which provides an opportunity to bring a new perspective to existing data or to form a base for comparison with newly collected data. However, the adequacy of the original data for the new research questions and the ethics for this data should be considered (Richie, Lewis and McNaughton *et al.*, 2014). Secondary data was in the form of patients sexual health records which were used to cross reference and verify the findings generated through the in depth interviews that were accessed at 0, 12 and 18 months in line with the interviews. These records were available for individuals who tested both positive and negative for chlamydia and provided information on the patients test form which had been completed by the patient prior to testing. Information included demographics such as age, ethnicity, a brief sexual history relating to symptoms, previous STIs, number of sexual partners, and condom use. Further information was available for patients who tested positive for chlamydia. These records were written by health advisors at the time of the patient's treatment and management of their chlamydia infection and included information regarding the consultation, treatment given, number and details of any sexual partners, sexual history, sexual practice, alcohol and drug use, testing history, any new diagnosis, and outcomes for partner notification. It is important to recognise that this data was produced for different reasons other than research and that certain subject areas were not central to the original objectives and therefore this needs to be reflected in the analysis. To address any ethical concerns, consent was obtained from

participants to access their NHS sexual health records prior to commencement of the research.

#### **4.3.5 Practitioner focus group**

As this research was for a professional doctorate it was important to ensure the findings would have relevance for practice or practice knowledge. Therefore part of the research involved presenting the findings to a group of practitioners involved in sexual health. This focus group consisted of a range of stakeholders with experience of working in sexual health, public health and commissioning. The professional role of practitioners included gynaecology consultant, sexual health service managers, health advisors, public health consultants and specialists and sexual health and contraceptive nurses. A focus group of health professionals was chosen because it had the ability to gain an insight into practitioners' shared understanding of everyday practice. This would enable the exploration of the research findings to determine how this would impact on practice. To affect change successfully it is more likely that stakeholders will take note and change practice if it is something they have been involved in (Cabrey and Haughey, 2014). The purpose of incorporating a practitioner focus group into the research design was to help close the theory/practice gap associated with men's sexual health decision making which would ultimately impact on practice.

A thirty minute presentation based on the findings from the study was presented to the focus group. This included presentation of a conceptual model which was developed from the data (Chapter five: Findings). This model presented three Meta themes which demonstrated how the categories and concepts influenced the young men's sexual decision making. A co-facilitator and I took notes during the group discussion regarding the possible implications for practice. As a consequence of this focus group, there was wider interest in the topic at both a local and national level. This led me to present at various conferences, the impact of which will be discussed in further detail in (Chapter six: Discussion).

#### **4.4. Sampling**

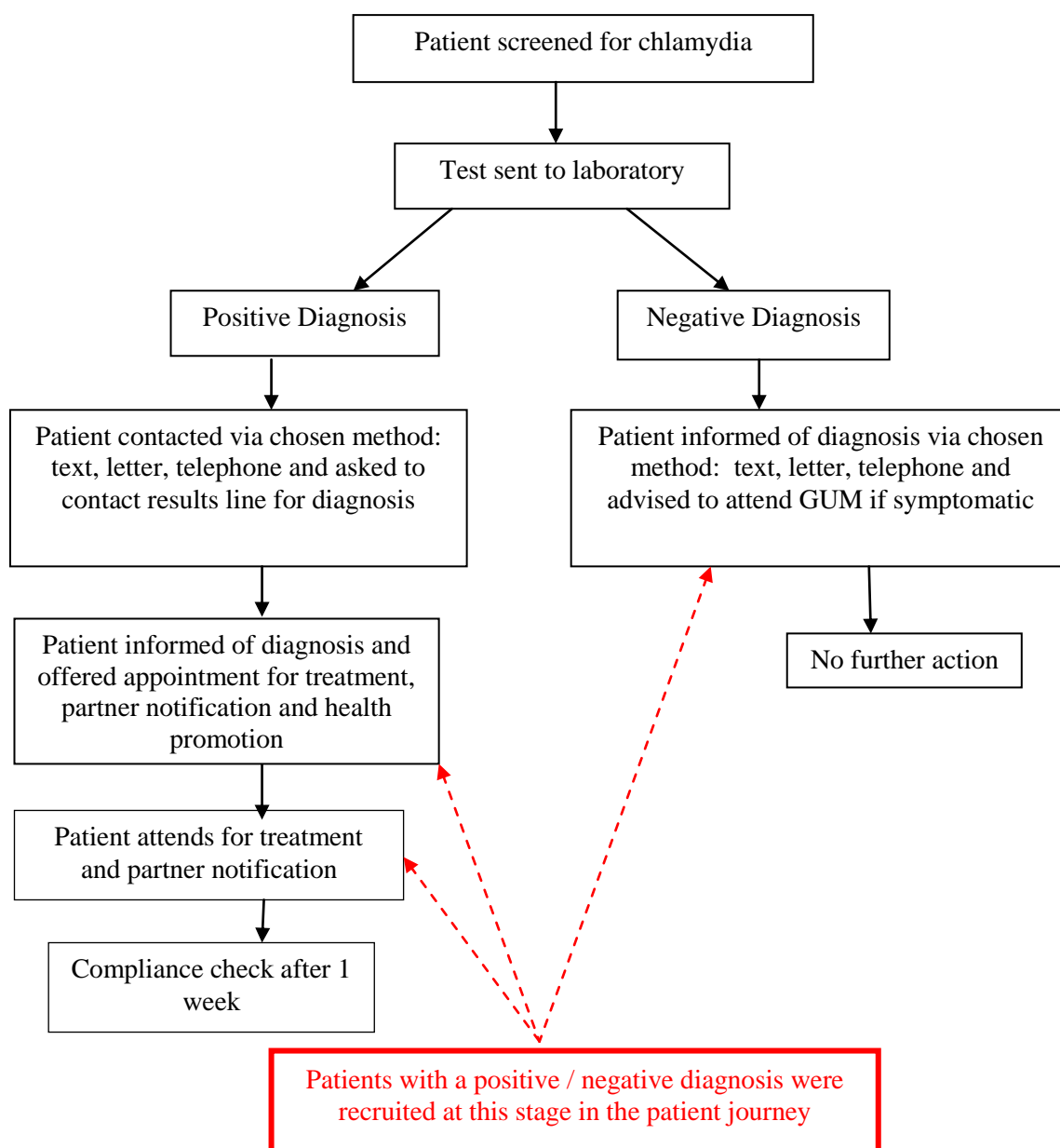
Participants were selected using a purposive sampling technique. This method of sampling selects individuals for the study based on their particular knowledge of a phenomenon (Silverman and Marvasti, 2008). The sample is chosen because they have particular features or characteristics which will enable a detailed exploration and



understanding of the central themes and questions which the researcher wishes to study (Bryman, 2012). Information rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, thus the term purposeful sampling (Patton, 1990). The recruitment aimed to identify individuals who had taken a test for chlamydia and may have tested positive or negative. To that extent it was purposive based on a need to explore the difference in behaviours of those testing positive and negative for chlamydia.

Inclusion criteria included: male patients aged 20 to 24 years, screened within the last year identified from the Blithe Lilie sexual health management database, and testing either positive or negative via self-request of a home testing kit. Exclusion criteria included: young men under the age of 20 and over the age of 25, those screened in a health care setting at the time of their last test, and those with an inhibitory (invalid) or equivocal (indeterminate) test result. Figure 4.2 shows the care pathway for those testing positive or negative through the chlamydia screening programme, including the stage in the patient journey where participants were recruited.

Figure 4.2: Care pathway of the patient journey including the stage (in red type) where participants were recruited.



The sample was recruited using three approaches which included text, telephone and face to face. In sexual health the main method of informing young people of their test result is by text message. It was therefore felt that this approach would be the most acceptable recruitment method for this group.

The first round of recruitment took place when patients were notified of their negative test result, and involved the administration team from the screening programme. A text message was sent to all young men who met the criteria for the study, asking them if

they would be willing to participate in the research. This was done using the following message:

*Good news your recent test result was negative. I would like to invite you to take part in a research study about your decision to be screened for chlamydia, if you would be willing to take part or would like further information please reply to this text message and we will contact you, alternatively you can contact Michelle on Tel: 0191 2292958.*

A second round of recruitment was necessary for those who did not respond to the text message. These individuals were contacted directly by telephone one week after their test result text had been sent out to invite them to participate in the research. Recruitment by telephone was a more successful method than text alone, although the text message may have acted as an initial prompt. By talking directly with potential study participants meant that I had the opportunity to introduce myself and discuss the purpose of the study as well as answer any questions.

The third round of recruitment was carried out by health advisors from the screening service who identified male participants with a positive test result, who met the criteria, and either before the treatment consultation via telephone or during their face to face consultation they were asked if they would be willing to take part in the study. Once patients expressed an interest to participate in the study, a member of the team went through the patient information sheet (Appendix A) to answer any questions. A reply slip was provided with the patient letter which enabled the patient to indicate a willingness to be involved in the study. Once a patient had indicated their willingness to participate, they were then contacted within 24 hours to arrange an interview. It is important to note that those who were recruited to the study via this route may already have had a health intervention. This could have been either through a one to one behaviour change intervention with a health advisor or a telephone conversation incorporating a health intervention. It is likely, that this would have had an impact on the respondents' decision to take part in the study as well as having an impact on the respondents' future sexual behaviour. When a patient receives a positive diagnosis for chlamydia they are given an appointment with a health advisor. The health advisor should offer the following services: treatment of infection, partner notification or contact tracing any sexual partners to reduce the further transmission of infection,

sexual health promotion including safer sex information and recommendation for further testing.

For those patients who continue to exhibit unsafe sexual behaviour a behavioural change intervention such as Motivational Interviewing (Miller and Rollnick, 1991), a one to one behavioural approach used by sexual health advisors, should be carried out to help patients change their behaviour. NICE guidance, (2014) makes recommendations on individual level behaviour change interventions which aim to change a range of unhealthy behaviours such as unsafe sexual behaviour, alcohol misuse and lack of physical activity. However, it is also possible that a behaviour change intervention, for whatever reason was not carried out as part of the consultation with the young men, either because they agreed to take part in the study via telephone before their consultation or because a behavioural change intervention was not carried out by the health advisor. This may have been due to the practitioner feeling an intervention was not necessary, time constraints on busy clinics or lack of experience or knowledge. As there was no record of any specific behavioural change intervention carried out in the young men's sexual health record it should be assumed that this did not take place. However, it should also be acknowledged that consultation with a health advisor may have had an impact on the data.

It had been anticipated early on in the research that the study sample may be difficult to recruit because this group of men were deemed 'hard to reach' and chose to test anonymously. However, the sample was obtained in a relatively short time period, by employing the different strategies discussed above. Recruitment was not without its problems. There were a number of young men who refused to take part in the research. This may have been due to several possible reasons for example; some young men may have been too embarrassed to take part in the study, while others may have seen it as a joke and hung up the phone. Other respondents made arrangements to meet for interview but then did not turn up at the agreed meeting location. To address this issue with future participants it was decided that a text message reminder or telephone call would be made to the participants to remind them of the interview and give them the chance to pull out or rearrange. Although, some may perceive this as coercion, this strategy has been adopted by many services in the NHS to reduce the rate of people who simply do not attend for health care appointments. This worked well and reduced the

level of drop out. All participants agreed to further contact via telephone to arrange follow-up interviews.

As there would be more than one research episode with the same group of young men a sample size of 10 young men, five who had tested positive and five who had tested negative for chlamydia was included in the study. It was anticipated that two research episodes would be carried out resulting in 20 interviews. There is much debate in qualitative enquiry regarding how many people to include in the sample. Baker and Edwards (2012) conclude that 'it depends' as there are a number of issues that will determine sample size. In this case it was more important to yield rich detailed in-depth data from more than one episode than to sample larger numbers. In addition it was felt that if the time was spent to properly analyse the data there would come a point where no new evidence would be obtained (Richie, Lewis and McNaughton *et al.*, 2014). In general it is advised that qualitative samples for a single study involving individual interviews have a sample size of between 12 and 60 (Adler and Adler, 2012).

#### 4.4.1 Description of participants

The table below (Table 4.2) introduces the study participants. The names presented have been changed to pseudonyms to preserve the young men's anonymity.

Table 4.2 Information about the study participants

Pseudonym	Age	Occupation	Description of participants
Robbie (Positive)	20	Call centre worker	Robbie lived at home with his parents and sister. He had taken a number of chlamydia tests both positive and negative. Robbie described himself as single during his interview. He had 10 sexual partners in the last 12 months.
Gary (Positive)	20	Agriculture student	Gary lived in halls of residence whilst studying at university. He had 6 sexual partners in the last 12 months. Gary had taken several chlamydia tests previously. He usually took these on nights out in clubs or at university. Gary had always tested negative.
Lee (Positive)	20	Factory worker	Lee lived at home with his parents, he described himself as single. Lee had had 9 sexual partners in the last 12 months, and has had a number of chlamydia tests which he had taken on nights out in pubs and clubs or via the internet. These tests had all come back negative until now.
Joe (Positive)	21	Royal Navy	Joe was based around the country at various Naval bases. He had 6 sexual partners in the last 12 months and had previously tested negative for chlamydia. Joe had attended a sexual health clinic in the past.
Justin (Positive)	20	Media student	Justin lived in student accommodation. He described his relationship status as single. He had 4 sexual partners in the last 12 months had previously tested negative for chlamydia.
Clive (Negative)	24	Student Nurse	Clive lived in student accommodation at university with three other women. He described his relationship status as single during the study. Clive reported 8 sexual partners during the 12 months prior to his interview, and several chlamydia tests, which he ordered via the internet. He had tested negative for all of these tests. He described being in an open relationship at his second interview. He had also previously visited a sexual health clinic.
Micky (Negative)	22	Medical student	Micky lived with his peers whilst studying to be a doctor. He described himself as single during his first interview and in a relationship at follow up. Micky had taken two chlamydia tests before his first interview which were both negative. During his follow up interview he tested negative again, however six months later he tested positive at his GP.
Simon (Negative)	20	Accountancy student	Simon was in a long term relationship with his partner for the duration of the study, she was also a student. Simon lives in halls of residence. This was his first chlamydia test which was negative; he had never attended a sexual health service before
Andrew (Negative)	24	Army	Andrew lived with his long term partner, whom he had been with for several years. He described their relationship as monogamous, and hoped to marry his partner sometime soon, and he wished to start a family with her. He referred to a lively sexual past during his interview. This was Andrew's first chlamydia test which was negative. He had never used a sexual health clinic before.
Craig (Negative)	24	Team Leader Call centre	Craig was a team leader at a call centre. He lived at home with his parents. He had 3 sexual partners in the last 12 months. Craig previously tested positive for chlamydia; however his last test was negative. He described himself as single during the interview.

#### 4.5 Data analysis

Data were analysed using Framework analysis (Ritchie and Spencer, 1994). This approach contrasts with inductive approaches where the research is an iterative process, which develops in response to the data obtained. It is similar to grounded theory as it has the ability to generate theory as well as describe and interpret phenomenon (Ritchie and Spencer, 1994). This approach was chosen because it made it possible to explore data in depth while simultaneously maintaining an effective and transparent audit trail. This enhanced the rigour of the analytical processes and the credibility of the findings (Richie and Lewis, 2003). Framework analysis allows for flexibility during the analysis process as it allows the researcher to either collect all of the data and analyse it or do data analysis during the collection process which is what happened in this study (Ritchie and Spencer, 1994). In the analysis stage data is sifted, charted and sorted in accordance with key issues and themes. This involves three stages:

1. **Data management** – becoming familiar with the data (reading and re-reading); identifying initial themes/categories; developing a coding matrix; assigning data to the themes and categories in the coding matrix.
2. **Descriptive accounts** – summarising and synthesising the range and diversity of coded data by refining initial themes and categories: identifying association between the themes until the ‘whole picture’ emerges; developing more abstract concepts.
3. **Explanatory accounts** – developing associations/patterns within concepts and themes; reflecting on the original data and analytical stages to ensure participant accounts are accurately presented and to reduce the possibility of misinterpretation; interpreting/finding meaning and explaining the concepts and themes; seeking wider application of concepts and themes (Richie and Lewis, 2003).

The following section describes how the data were analysed using the Framework approach.

#### **4.5.1 Data management**

Analysis began after the first two interviews had been transcribed. This started with listening to the audiotapes and reading the transcripts to gain a sense of the whole. It was then necessary to go through them line by line to identify key words, seek prevalence of themes, and relate commonalities and differences across individual experiences. This detailed reflection, comparison and analysis took place by reading and highlighting paper copies of interview transcripts, and writing notes in the margin of the transcripts. An iterative approach was taken generating themes and sub themes transcript to transcript.

The data were then given codes, which described the activity, behaviour or perception. Key phrases were summarised using participants' own words which included: alcohol consumption, dirty girl, clean girl, no condoms, non-barrier contraception, trust, and sex feels better without a condom. The use of participants' own words are advocated in the framework approach as a means of staying 'true' to the data (Richie and Lewis 2003). These codes were then conceptualised into categories and given a name, which described the phenomenon. These were grouped in order to create descriptive, multi-dimensional categories, which helped form a preliminary framework for analysis. Words, phrases and events that were similar were grouped into the same category. These categories were modified and replaced during the next stages of analysis. Table 4.3 gives an example of the coding index or conceptual framework which shows the process involved in the identification of codes and categories.



Table 4.3: Coding index

Initial themes	Initial categories
<b>1. Reasons for not using condoms</b>	1.1 Alcohol 1.2 Perception of sexual partner (dirty/clean) 1.3 Sex feels better without condoms 1.4 Had no condoms 1.5 Girl was on the contraceptive pill 1.6 Notches on the bedpost 1.7 Trusting a sexual partner/long term partner
<b>2. Reasons for using condoms</b>	2.1 Respecting a partner 2.2 Wanting a relationship to develop 2.3 Partner enforces condom use 2.4 Regular partner 2.5 Fear of pregnancy 2.6 Girls who have a reputation 2.7 Being sober
<b>3. Perception of chlamydia</b>	3.1 Easily treated 3.2 Not a serious infection 3.3 Common infection (everyone gets it) 3.4 Disappears itself 3.5 Publicity (branding/public health messages) 3.6 Dirty girls have it (slags) 3.7 Peers laugh about it 3.8 Dirty infection 3.9 It has a bad reputation (people sleeping around) 3.10 Infertility

Breaking down the raw data into manageable chunks whilst devising an audit trail to identify who said what and in which context was an important part of the process. At this stage in the analysis, themes emerging from the data were described by the language and terms used in the interview transcripts. This ensured that the analytical process was grounded in the data.

The next stage involved sorting and synthesising the data to create thematic charts. Tables were created for each participant: these included all categories with participant quotes, which illustrated the themes being described. Each main theme and its subtopics were plotted on a separate thematic chart with each participant allocated a row in the matrix, with each subtopic displayed in a separate column in order to visualise commonalities, similarities and differences in themes. Ten subject charts were developed covering 70 subthemes.

Table 4.4 shows an example of a thematic framework developed and translated into a thematic chart. The thematic chart gives the example of the theme ‘reasons for

unprotected sex' and lists the six categories which relate to this theme: alcohol, perception of sexual partner, attitude to condoms, non-barrier contraception, peer influence, and trusting a sexual partner. Participant quotes which relate to the themes are then placed in the categories. Table 4.4 uses the data from Clive's interview to illustrate how the data was sorted and synthesised to create a thematic chart.

Table 4.4 Thematic chart

<b>Reasons for unprotected sex</b>	<b>1.1 Alcohol</b>	<b>1.2 Perception of sexual partner</b>	<b>1.3 Attitude to condoms</b>	<b>1.4 Non barrier contraception</b>	<b>1.5 Peer influence</b>	<b>1.6 Trusting a sexual partner/long term partner</b>
Clive 22 years 4 Tests 3 Negative 1 Positive (tested + after follow up interview)	"... I think the initial decision to not use a condom comes about after we've been drinking and it'll be like we've done it now so there's no point in starting to use a condom now if we've already..." (Clive)	"... if I'd just been out on the town met someone, a complete stranger I think I would be a lot more careful whereas I don't know for some reason the girls in my immediate community or less likely to have something..." (Clive)	".... I hate using condoms ... I've always checked that they've been on the contraceptive pill, but err yeah I understand the risks but it's a bit stupid really." (Clive)	I would ask girls ... if I was going to have sex 'are you on the pill' ... I know it's stupid and some days I wake up and say are you going to get the morning after pill? And sometimes withdrawal. (Clive)	"...with friends you talk about it and they say I had sex with so and so last night and didn't wear a condom and maybe subconsciously softens my attitude...but then I have the odd slip up and my mates have slip ups as well then it moves on from being a slip up to not using them, so as a group I guess your attitudes soften." (Clive)	I had slept with one [girl] she said she'd been checked pretty recently and the other erm said she had not been checked in a while but she'd not been you know doing anything risky. So I mean I'm obviously just taking their word for it (Clive)

#### **4.5.2 Descriptive and explanatory accounts**

This stage involved summarising and synthesising coded data by refining themes and categories to understand what was happening in each sub topic on the thematic chart. This was done by reading across cases to understand the range of data to identify different elements, constructs and categories, then classifying them by grouping them under a higher label.

The next stage involved re-examination of the categories to determine how they were linked. The categories identified were compared and combined in new ways as the phenomenon under study began to emerge. The purpose was to describe and acquire new understanding of the phenomenon. Therefore casual events contributing to the phenomenon, descriptive details of the phenomenon and ramifications of the phenomenon were all identified and explored.

During the next stage the beginnings of a conceptual model were constructed. This helped determine whether sufficient data existed to support that interpretation including what further questions needed to be asked during follow up interviews, which would help uncover gaps and follow up of any lines of inquiry.

Secondary data were analysed during the next phase, which involved an iterative process of comparing participant's sexual health records with transcripts, to cross reference, enable recurrent patterns to be identified and verified where there were discrepancies or contradictions in the two data sources and seek explanations for this.

The final stage in the analysis involved a further iterative approach exploring the themes, in relation to relevant literature. By drawing on the different theories discussed in the previous chapter ensured all variables were considered for explaining or predicting the men's sexual health decision making. During this process a conceptual model (Figure 5.1 Chapter Five: Research Findings) was developed which identified meaningful relationships between themes and concepts which addressed sexual health decision making in relation to the impact of a positive and negative diagnosis for *Chlamydia trachomatis* on modification of sexual behaviour.

#### 4.6 Validity and reliability in qualitative research

In the natural sciences, reliability and validity are essential to the integrity of research, and this is of equal importance in the social sciences. From a qualitative perspective Hammersley (1992, p67) suggests that reliability ‘refers to the degree of consistency with which instances are assigned to the same category by different observers or by the same observer on different occasions.’ Validity refers to the ways of demonstrating and communicating the rigour of research processes and the trustworthiness of research findings (Roberts and Priest, 2006). There are two measures of validity: external and internal. External validity addresses the ability to apply the findings of the study to other situations it ensures that the conditions under which the study is carried out are representative of the situations and time to which the results are to apply (Roberts, 2006). Internal validity addresses the reasons for the outcomes of the study, and helps to reduce other, often unanticipated reasons for these outcomes. However, traditional methods employed for ensuring that the research is reliable and valid are not always the most appropriate for social sciences (Glazier, 1992). Lincoln and Guba (1985, p290) state that the aim of trustworthiness in qualitative inquiry is to support the argument that the inquiry’s findings are “worth paying attention to”, and provide four criteria for establishing trustworthiness in qualitative research:

- **Truth Value.** How can one establish confidence in the ‘truth’ of the findings of a particular enquiry for the persons with which, and the context in which, the enquiry was carried out?
- **Applicability.** How applicable are these findings to another setting or group of people?
- **Consistency.** How can one have confidence that the findings would be replicated if the study were repeated with the same (or similar) persons, in the same (or similar) situation?
- **Neutrality.** How can we be sure that the findings are determined by the respondents and the situation and context, and not by the biases, motivations, interests or perspectives of the inquirer?’ (Lincoln and Guba 1985).

Lincoln and Guba (1985) propose four concepts that establish trustworthiness. These are: credibility, an evaluation of whether or not the research findings represent a “credible” conceptual interpretation of the data drawn from the participants’ original data; transferability, the degree to which the findings of this inquiry can apply or transfer beyond

the bounds of the project; dependability, an assessment of the quality of the integrated processes of data analysis, and theory generation, and; confirmability, a measure of how well the inquiry's findings are supported by the data collected (Lincoln and Guba, 1985). In this study trustworthiness was addressed using the following strategies:

#### **4.6.1 Credibility and Transferability**

To address credibility a number of techniques were employed which included, member checking, triangulation, prolonged engagement, reflexivity and peer debriefing. Oilier (1982) suggests that the appropriate test of validity for qualitative research is that the findings are recognised as true by those who had the experience. These discussions were tape recorded and transcribed as part of the follow up interview process.

A further important strategy used to ensure credibility was to spend an extended period of time with informants, Lincoln and Guba (1985) termed this prolonged engagement. Kielhofner (1982) supported the importance of intense participation, suggesting that it enhances research findings through intimate familiarity and discovery of hidden fact. This was important because building a rapport with participants encouraged them to give more sensitive information than they did at the beginning of the research. This was evident with a number of respondents who disclosed further information relating to sexual behaviour during follow up interviews, with one respondent acknowledging that loss of erection due to alcohol consumption and condom use were main factors influencing unprotected sex for him. He had felt unable to disclose this during his first interview, but by the second interview a rapport had been built in which he felt comfortable to divulge further information.

As highlighted above triangulation was addressed by using different data collection methods, which included interviews, follow-up interviews, patients' sexual health records and a focus group. These data sources were assessed against each other to cross check data and interpretation. This helped to minimize distortion from a single data source or bias, and ensured a more accurate, comprehensive and objective representation of the phenomenon under investigation. A study's credibility can also be threatened by errors in which research subjects respond with what they think is the preferred social response, so that data are based on so called social desirability rather than on personal experience (Kirk and Miller, 1986). The use of triangulation with follow-up interviews and patient records allowed the identification of the occurrence of this problem.

Reflexivity addresses both the credibility and confirmability of the study, and has been described as encompassing continual evaluation of subjective responses, intersubjective dynamics and the research (Finlay, 2002). It refers to the assessment of the influence of the investigator's own background, perceptions, and interests on the qualitative process (Ruby, 1980). This background is reflected in the multiple roles which I played whilst engaged in the research, with a dual role as researcher interested in men's sexual health decision making and also as a practitioner responsible for managing the chlamydia screening programme motivated to look for practice implications during the research process. It was therefore important to reflect on how this knowledge position and experience, as well as my own beliefs may have been shaping the analysis, and interpretation of the data.

Peer debriefing was another method used to address the credibility of the research, this involved exposing and presenting transcripts, theme notations and reductions to the supervision team throughout the data analysis stages and to participants during follow up interviews for confirmation to ensure credibility. One of the ways research can be shown to be sound is for the research process to be clear, so that another researcher can understand the methods and process of the researcher and research (Koch, 1994). This is one way of keeping the researcher honest, and the searching of questions may contribute to deeper reflexive analysis by the researcher (Lincoln and Guba, 1985). Transferability was addressed by presenting long extracts of the data in the findings, including the question that provoked the answer.

#### **4.6.2 Dependability**

To address dependability, interviews were tape recorded and carefully transcribed verbatim to include pauses and utterances. Transcripts were examined line by line to produce labels/codes. These codes were developed into categories as shown in table 5.5. A reflective diary was also kept during the data analysis phase, in which thoughts and diagrams around emerging themes and concepts from the data were recorded. Thick description was used when writing the study findings. This entailed the use of direct quotes from the participants to demonstrate the interpretation process which led to the development of the meta themes.

### **4.6.3 Confirmability**

The audit strategy in the research is a major technique for establishing confirmability. Audibility also suggests that another researcher could arrive at similar conclusions with the same data and research setting. The records available for this research audit strategy are as follows: an example of the raw data which included transcripts (Appendix B), data reduction and analysis products, data reconstruction and synthesis products which included thematic categories and interpretations and an interview topic guide as this refers to the instruments developed to undertake the research (Appendix C). Reflexive analysis was also applied to address prior practice knowledge, which may have influenced the data.

### **4.7 Ethical issues**

The research was carried out through in-depth interviews, follow-up interviews at 12 months, secondary data from respondents' sexual health records, and a focus group in order to create a rich description of the phenomenon being explored in this research. The data included demographics, age, gender, diagnosis, sexual history and sexual risk taking behaviour.

Research on human subjects, especially if it investigates personal sensitive issues necessitates regulations regarding its organisation and the role of the researcher. The research required ethical approval from three regulatory bodies before research with human subjects could commence. This was required from the following organisations:

1. *Northumbria University Research Ethics Sub Committee.* (Appendix D)
2. *Newcastle Primary Care Trust NHS Research and Development Committee.* (Appendix E)
3. *National Research Ethics Committee (NREC).* (Appendix F)

Ethical principles and processes were followed in line with research governance and included the following: a written invitation letter with reply slip (Appendix G); participant information forms to ensure respondents understood the purpose of the research and to inform them that they had the right to withdraw from the study at any time (Appendix A), consent was obtained using a consent form devised in line with NRES guidance (Appendix H). This provided written information for participants to read and sign to confirm they understood, to give permission to access their sexual health records, agree to be contacted

for follow up as well as consent to audiotape interviews including the use of anonymous direct quotes in study reports.

Materials relating to the study were treated as confidential and kept secure at all times in compliance with the Data Protection Act (1998). These were stored in a locked cabinet in the Newcastle Hospitals Trust (NuTH). Participant information was rendered anonymous, ensuring no one could be identified from the raw data. All names (both the participants' names and any names of significant others mentioned by the interviewee through the course of the interview) were changed to pseudonyms. No personal information that would allow the participant to be identified by a third party was recorded (e.g. where they live, defining physical characteristics etc.). Any information held on a computer had the appropriate security devices and were password protected in line with trust information governance procedures. All hard copy information was kept in line with the university storage and retention policy.

The application to NRES and all accompanying documentation stated above was reviewed by the relevant research ethics committees. Several ethical issues involving disclosure, lone working, recruitment and selection and follow up interviews were raised. In light of these ethical issues documentation was amended, resubmitted and approved.

They were a number of ethical issues that occurred during the study. One issue arose due to a potential interview setting. One of the young men who had agreed to participate in the study wanted me to carry the interview out in his home, in a rural location, out of hours where he lived alone. I felt quite uncomfortable about the prospect of interviewing a young man about his sexual behaviour in his home. This may have been due to a previous bad experience involving research interviews with young men in a hostel setting which left me vulnerable. After discussion with the principal supervisor and a risk assessment of the situation, it was decided that due to the risks, he should be removed from the sample and no further contact was made.

Other ethical issues involved the recruitment process. The majority of respondents did not respond to the first round of recruitment which involved a text message, it was necessary to incorporate a second round of recruitment which involved a telephone call where I was able to talk directly to the participants about the study. It could be argued that this approach to recruitment may be seen as a potential power imbalance (Etherington, 2001)



where a participant may have felt pressurised to participate (Holloway, 1995), especially since my practice role involved managing the chlamydia screening programme. However, the boundaries of the research were explained to the potential research participants. It was also reiterated that they did not have to take part in the study, but if they chose to, they had the right to withdraw at any time and that this would not affect their treatment or care.

#### **4.8 Reflexive account**

This section evaluates the influence of prior knowledge and experience as a practitioner on the research process, sampling, data collection and analysis. It also reflects upon how the research was shaped by personal and professional life throughout the duration of the study:

*“A researcher’s background and position will affect what they choose to investigate, the angle of investigation, the methods judged most appropriate for this purpose, the findings considered most appropriate, and the framing and communication of conclusions” (Malterud, 2001 p483-484).*

Reflexivity in research is a process of critical reflection on the type of knowledge that is produced from research and how that knowledge is generated. This level of analysis on the part of the researcher improves the quality and validity of the research and allows the researcher to recognise the limitations of the knowledge throughout the process leading to a more rigorous study (Smith, 2009).

##### **4.8.1 Practitioner researcher**

Being a researcher and practitioner managing the chlamydia screening service creates ethical implications. A close familiarity with the context of the research and the politics of the NHS causes unavoidable subjectivity. Practitioner research can be defined as research that is carried out by someone who has expertise and insight into the people and the settings being researched. The practitioner researcher has deep and intimate information and insight into the stakeholders, context and practices of a community where the research is being undertaken (Drake and Heath, 2011). To balance this, it was important to ensure that a comprehensive account for guiding and documenting the research process was in place (Giorgi, 199). This was achieved by keeping a reflective journal during the research process. Entries made included any methodological decisions and the reasons for them, and reflection on what was happening in terms of my own values and interests, including my thoughts and feelings associated with the research journey. Other ethical issues which

needed to be addressed within this study in relation to insider or practitioner research, was the advantages and disadvantages associated with this type of research.

Advantages of being a practitioner researcher in relation to this research study meant that I had insider knowledge of the chlamydia screening service, including access to people and to information. The strengths of the insider researcher is that research is undertaken in a familiar setting which may mean a relative lack of culture shock or disorientation and the possibility of enhanced rapport and communication (Hockey, 1994). There is also the ability to gauge the honesty and accuracy of colleagues' responses (Hockey, 1994), which was important when presenting the study findings to the health practitioners. However, there are also disadvantages, which should be considered such as loss of the broader perspective, or being too familiar with the subject and therefore this needs to be acknowledged and managed. Closeness to practice was acknowledged early on in the research process including the need to critically engage with information and data. Therefore, a research diary was kept to record my thoughts and feelings about the interview process, including any decisions that were made which may have affected the research. This was an important means of self-triangulation during the data analysis phase of the research and interpretation of the data.

As a practitioner researcher I needed to be aware that the interview did not take the form of a therapeutic consultation, where I was expected to take on the role of a practitioner, this became apparent during one interview with a young man who had tested positive for chlamydia twice. He asked me questions about the potential damage that repeated chlamydia infection may have on his reproductive health. A further example of this was during an interview with a young man who tested negative for chlamydia, he became concerned about the risk of other STIs and asked me to book him an appointment at the clinic. This was dealt with by providing these participants with information leaflets, detailing where they could go for further STI screening.

One particular issue that I had documented was my status as a young woman interviewing young men about sex. I was concerned that this may have negatively impacted on the interviews. Concerns were that respondents may have held back sensitive information about their sexual history for fear of embarrassment. Alternatively, they may have exaggerated their stories and increased the number of sexual partners to show their masculinity and prove themselves as practising heterosexuals as they did with their peers.

Gender is often highlighted when women interview men because the researcher “is required to take on an acquiescent, attentive and assenting role very close to traditional notions of femininity” (Green, Barbour and Barnard *et al.*, 1993, p630). Gurney (1985) suggests that women conducting gender-related research with male subjects may encounter barriers and are treated as ‘outsiders’ I was therefore mindful of the ways in which my own gender may have influenced the interactions with the young men and ensured that my thoughts and key observations following the interviews were recorded to help facilitate critical reflection.

#### **4.9 Chapter summary**

The purpose of this chapter has been to describe the strategies involved in the research design and to provide a context within the interpretation of the data presented in the remainder of this thesis can be more fully understood. The philosophical position in relation to this research including the chosen research methodology has been provided, before presenting a detailed description of the sampling and recruitment process including the challenges encountered along the way. The use of follow-up interviews and thick description has facilitated prolonged engagement with study participants which enabled a meaningful research relationship. The techniques employed in Framework analysis were used to maintain an effective and transparent audit trail, to enhance the rigour of the analytical processes and the credibility of the findings. Ethical considerations and a reflexive account have also been described in this chapter. The next chapter presents the study findings using thick description to describe and interpret the data.

## CHAPTER FIVE: RESEARCH FINDINGS

This chapter presents the data from ten in-depth interviews and seven follow up interviews, including extracts from the case notes, which were used to obtain a complete, holistic and contextual portrayal of the phenomenon under study. The findings give an insight into the young men's sexual practices, including the complex factors which influenced their sexual health 'decision making' in relation to factors influencing unprotected sexual intercourse, and, influences that led to anonymous chlamydia testing. The impact of diagnosis on decision making, and the impact on subsequent sexual behaviour are also evident.

Participants' demographics will be presented in table 5.1. The table highlights the differences and similarities between interview respondents during initial interviews and at follow up interview.

A conceptual model figure 5.1 of the data relating to findings from this study will also be presented. This model identifies meaningful relationships between themes and concepts which addressed the young men's sexual health decision making in relation to the impact of a positive and negative diagnosis for *Chlamydia trachomatis* on modification of sexual behaviour. The model incorporates three key Meta themes which emerged from the data in relation to men's sexual health decision making. These are:

- Contributing factors associated with unprotected sexual intercourse
- Influences on testing behaviour
- Impact of diagnosis on modification of sexual behaviour

Each Meta theme will be presented and discussed sequentially. A summary of the thematic structure of the data for each of the three Meta themes will precede the discussion. These data provide a visual explanation of the content and relationships of the Meta themes. Direct quotes from study participants are used to illustrate and support the analysis relating to the theme. The chapter concludes with a summary of the chapter discussions and key conclusions.

### 5.1 Demographic details of respondents

Participants were all white, Caucasian, heterosexual males. Table 5.1 on the following page summarises the demographic details of respondents who took part in the interviews, and includes: respondent pseudonym, initial diagnosis, age at interview, employment

status, relationship status, number of tests taken in the last 12 months, number of partners in the last 12 months, type of sex and if it was protected or unprotected, and any previous STIs. Respondents were recruited from the North East of England and were from a range of social class backgrounds which included: students from a medical school, accountancy, agriculture and other academic disciplines, nursing, the armed forces, call centre workers, and manual factory workers.

Five respondents who tested positive and five who tested negative for chlamydia were included in the study. Respondents reported that they had between one and ten sexual partners in the previous twelve months. The average number of chlamydia tests taken via the chlamydia screening programme throughout the duration of the study ranged from two to six. Two of the participants reported a previous chlamydia infection during the last 12 months. The majority of the respondents also reported that they had regularly participated in unprotected sex with multiple partners in the previous twelve months. The type of unprotected sex reported by participants was vaginal or oral sex without a condom. Unprotected sex was reported in a number of situations which involved: sex with a regular partner or 'girlfriend', with women they had met on a night out 'a one night stand', or with 'casual partners' or 'hook ups' where respondents reported meeting a girl on a regular basis for sex. None of the respondents reported same sex partners.

As previously discussed, follow up interviews were conducted with seven of the ten participants twelve months after the initial interviews. Data from follow up interviews is presented below in table 5.2 and comprise information from respondent NHS records at 18 months. Follow up interviews were necessary to gauge any long term change in behaviour. This allowed for comparisons to be made regarding the young men's reported intention at first interview and their actual behaviour which was reported at follow up.

**Table 5.1 Interview respondents**

<b>Respondent pseudonym</b>	<b>Initial diagnosis prior to 1<sup>st</sup> interview</b>	<b>Age at 1<sup>st</sup> interview</b>	<b>Relationship status at time of 1<sup>st</sup> interview</b>	<b>Employment status</b>	<b>No of partners last 12 months</b>	<b>Type of sex protected/unprotected</b>	<b>No of tests taken last 12 months</b>	<b>Previous STI Last 12 months</b>
Robbie	Positive	20	Single	Employed	10	Both	3	Chlamydia
Gary	Positive	20	Single	Student	6	Both	2	No
Lee	Positive	20	Single	Employed	9	Both	2	No
Joe	Positive	21	Single	Employed	6	Both	2	No
Justin	Positive	20	Single	Student	4	Both	2	No
Clive	Negative	24	Single	Student	8	Both	2	No
Micky	Negative	22	Single	Student	7	Both	3	No
Simon	Negative	20	Partner	Student	1	Both	1	No
Andrew	Negative	24	Partner	Employed	1	Both	1	No
Craig	Negative	24	Single	Employed	3	Both	2	Chlamydia

**Table 5.2: Interview respondents after 12 months and 18 months**

<b>Respondent pseudonym</b>	<b>Initial diagnosis prior to 1<sup>st</sup> interview</b>	<b>Follow up at 12 month</b>	<b>No of new partners since last interview</b>	<b>Type of sex protected / unprotected since 1st interview</b>	<b>New test after 12 month</b>	<b>New Diagnosis</b>	<b>New test after 18 month</b>	<b>New Diagnosis</b>
Robbie	Positive	YES	3	Both	Yes	Negative	No	-
Gary	Positive	YES	4	Both	Yes	Positive	No	-
Lee	Positive	YES	2	Protected	Yes	Positive	No	-
Joe	Positive	NO	-	-	-	-	No	-
Justin	Positive	NO	-	-	-	-	Yes	Negative
Clive	Negative	YES	3	Both	No	-	No	-
Micky	Negative	YES	1	Unprotected	Yes	Negative	Yes	Positive
Simon	Negative	YES	Same partner	Both	No	-	No	-
Andrew	Negative	YES	Same partner (co-habiting)	Unprotected	No	-	Yes	Negative
Craig	Negative	NO	-	-	-	-	No	-

## **5.2 The complex factors affecting young men's sexual decision making**

The complex factors affecting young men's sexual decision making is summarised in figure 5.1. This model presents the data from the findings which incorporate three Meta themes: (i) contributing factors associated with unprotected sexual intercourse; (ii) influences on testing behaviour; (iii) the impact of diagnosis on subsequent sexual behaviour.

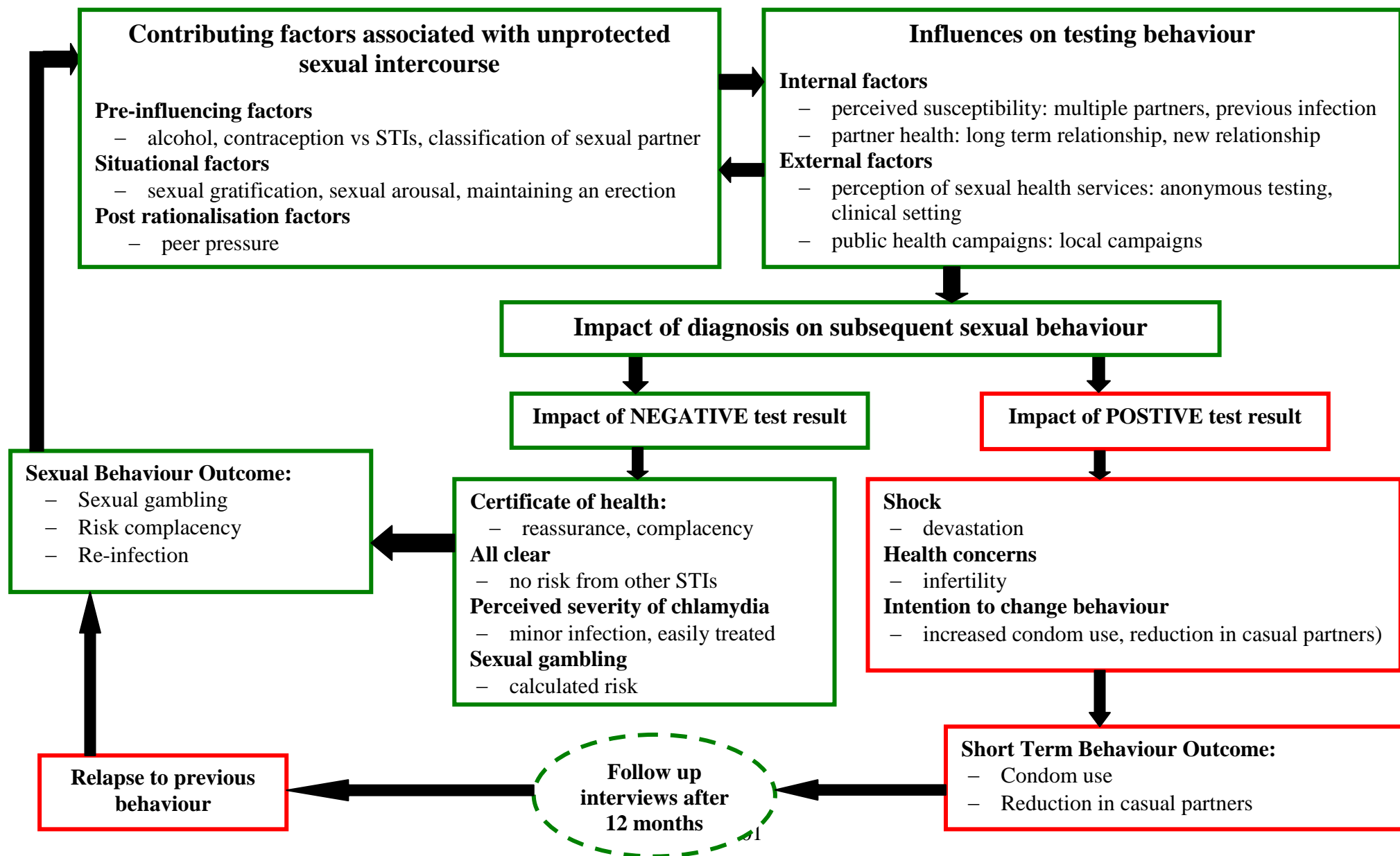
The contributing factors associated with unprotected sexual intercourse, influenced the young men's behaviour at three stages in the decision making process: pre influencing factors, situational factors and post rationalisation factors. Pre-influencing factors influenced decision making prior to sexual behaviour and included alcohol use, contraception versus STIs, and classification of sexual partner. Situational factors were those factors which had an impact on behaviour at the time of the event and included: sexual gratification, sexual arousal, and the ability to maintain an erection. Post rationalisation factors were those factors which the young men used to rationalise risky behaviour after the event and included peer pressure and the need to appear sexually successful among their peer groups. The second meta theme: influences on testing behaviour included both internal and external factors that encouraged the young men to request an internet test for chlamydia. Internal factors included perceived susceptibility due to multiple partners or a previous infection. Partner's health was another internal factor. The reason for testing in this context was to protect a long term partner or to ensure that a new relationship was not jeopardised by the potential transmission of an STI. External factors that influenced testing were the perception of sexual health services which were viewed as stigmatising, as well as anonymity and the convenience of home testing. Cues to action were a further external influence on testing behaviour, these triggers to testing included national and local public health campaigns on chlamydia and sexual health.

The model shows the first two meta themes of equal value, situated, side by side. Unprotected sex leads to the testing process but the outcome of testing also leads to further unprotected sex. This is discussed in further detail in the following chapters and is shown by the third meta theme: The impact of diagnosis on subsequent sexual behaviour. The model shows the impact of a negative and positive test result on subsequent sexual behaviour.

A negative test result leads to a 'certificate of health' effect which gives the young men false reassurance to continue with their risky behaviour. The perceived severity of chlamydia as a minor infection means the gamble is worth taking. A positive test result initially leads to shock, devastation and concerns about fertility. This results in the intention to change behaviour by using condoms and reducing the number of sexual partners. However after 12 months follow up behavioural intention does not lead to actual behaviour change and participants relapse to previous risky behaviour.



**Figure: 5.1: The complex factors affecting young men's sexual health decision making**



### **5.3 Contributing factors associated with unprotected sexual intercourse**

The young men spoke about several factors that influenced their sexual practices. Figure 5.2 provides a summary of the thematic structure of the data, contributing factors associated with unprotected sexual intercourse. This Meta theme is multidimensional in that it has many contributing factors. These factors have been categorised under three themes: pre influencing factors such as alcohol use, which affected the young men's decision making prior to the behaviour, situational influences, such as the heat of the moment which influenced the behaviour at the time of the event and post rationalisation factors, such as peer pressure which respondents used to justify or rationalise their behaviour after the event. Each of these themes has concepts and indicators that describe in greater detail the factors affecting the respondent's behaviour. Some of these factors in particular, the effects of alcohol consumption overlap or interconnect with other factors in some way, for example sexual performance and the inability to maintain an erection, and peer pressure. These overlaps are highlighted where appropriate throughout this chapter. The factors relating to this Meta theme are now discussed illustrated by participant quotes.

**Figure 5.2 Summary of the thematic structure of the data**

**META THEME: Contributing factors associated with unprotected sexual intercourse**

THEMES	CONCEPTS	INDICATORS
<b>5.4 Pre-influencing factors</b>		
Alcohol use	<div> <div></div> <div>Regret</div> <div>Excuse</div> <div>Culture</div> <div>Being drunk</div> </div>	<div> <div>Social activity</div> <div>Memory loss</div> </div>
Contraception vs. STI prevention	<div> <div></div> <div>Barrier method</div> <div>Non barrier method</div> </div>	<div> <div>Diminish pleasure and spontaneity</div> <div>Birth control</div> </div>
Classification of sexual partner	<div> <div></div> <div>Education/Social class</div> <div>Knowing/Trusting</div> <div>Stranger</div> <div>Sex on first night</div> </div>	<div> <div>Safe partners</div> <div>Clean girls</div> <div>Risky partner</div> <div>Dirty girl</div> </div>
<b>5.5 Situational factors</b>		
Sexual gratification	<div> <div></div> <div>Sensation seeking</div> <div>Sexual arousal</div> <div>Maintaining an erection</div> </div>	<div> <div>Pleasure</div> <div>Emotional state</div> </div>
<b>5.6 Post rationalisation factors</b>		
Peer pressure	<div> <div></div> <div>Masculinity</div> <div>Bravado</div> </div>	<div> <div>Sexually successful</div> </div>

## 5.4 Pre influencing factors

Pre influencing factors refer to the factors which affected the young men's decision making before the behaviour in relation to whether condoms were used for sexual intercourse. Excessive alcohol use, contraception versus STI prevention and classification of sexual partner were the three main pre influencing factors which seemed to affect the young men's decision making prior to unprotected sex. However, alcohol use or binge drinking affected the respondents' decision making before, during and after the behaviour and therefore is discussed in each of the three categories below.

### Alcohol use

Alcohol use featured frequently in the young men's interviews and was reported as the main contributing factor to unprotected sex by all ten respondents. Participants referred to alcohol consumption as impairing their judgement when making rational decisions such as using a condom, giving them confidence to approach women, lowering their inhibitions, and strengthening their sexual desires to have sexual intercourse with women they would not have been attracted to without drinking alcohol. Alcohol use was referred to as the norm for young people, and was described as a social activity, which was accepted in a number of different social contexts. The concept of 'regret' associated with alcohol use was also apparent in the young men's stories. This negative emotion was usually experienced the morning after an alcohol fuelled night that ended in unprotected sex with a one night stand:

*"...there's one or two when you wake up in the morning and it's like, I just wouldn't have done it if I hadn't have been drinking, definitely not..."*  
[Micky]

Excessive alcohol consumption was also reported in secondary data within the sexual health records of those who tested positive for chlamydia. Alcohol use was noted as a trigger for risky sexual behaviour within all of these men's records. Secondary data gained from the NHS records showed that these participants were drinking between 21 and 30 units on a night out, which is well over the Government's recommended limits of three to four units per day for men (House of Commons, 2011). Some respondents reported drinking every night with binge drinking taking place at the weekends, which was when most of the sexual risk taking behaviours took place. The secondary data also reconfirmed the study participants' self-reported drinking behaviour.

The description of excessive alcohol use dominated all of the interviews. The young men spoke about the effects of alcohol, which gave them confidence and lowered, their inhibitions:

*“...it just makes you behave more irrationally and you don't think about what you're doing erm and your sex drive just dictates what you're doing when you're drunk...” [Micky]*

They referred to living in the moment and not thinking about the consequences. This suggests that immediate cues such as sexual arousal may have had more influence on the young men's behaviour than the possible risk of an STI.

Being 'drunk' due to excessive alcohol consumption was used as an excuse for having sex without a condom, or to justify risky sexual encounters for many of the participants. Thus, it was used by the young men to post rationalise their behaviour. The young men externalised factors for their own risky sexual behaviours by attributing them to factors that they felt to be out of their control because they were drunk or they could not remember. Two respondents reported consuming so much alcohol that they 'blacked out' and lost their memory about the sexual encounter they had that night. One respondent talked about going out drinking on several occasions throughout the week and getting 'out of his head' with alcohol which made him think more about sex. It was common for respondents to report consuming so much alcohol that they could not remember most of the night, and they would wake up the next morning with a stranger they had met the night before. The quotes below describe the experiences of Lee and Robbie regarding alcohol use and unprotected sexual intercourse:

*“erm one night stands... when I've just been out on the town and I've getting talking to them ye naw and they've come back to mine or me back to theirs . I don't know what I'm doing when I'm drunk I can't remember a thing...” [Lee]*

*“In the morning I did, [use a condom] but I don't think I did in the night, can't really recall it, due to alcohol again, basically a lot of my sexual encounters are due to alcohol.” [Robbie]*

Excessive alcohol consumption was associated with risky sexual behaviour and poor sexual health outcomes for all of those young men who tested positive for chlamydia. Alcohol use was mentioned in many different social contexts. Those in higher education

spoke about drinking being part of student lifestyle at university. Justin spoke about alcohol use and unprotected sex being part of student drinking culture:

*“...I don’t know everyone thinks casual sex is fine because you’re drunk. I’m drunk oh it was a silly mistake...” [Justin]*

Those participants who were in employment referred to a 'work hard, play hard' culture in relation to working hard through the week equalled playing hard and drinking to excess at the weekend as described in the quote below:

*“....my friends ... they work full time... they’re always out on the piss...chasing tail and stuff... they’re only after one night stands...” [Clive]*

Alcohol was also commonly talked about in the sports context where three participants talked about drinking with their football or rugby team mates. These nights out usually ended in unprotected sex with girls they had met that night.

There was an obvious relationship with alcohol use and high risk sexual behaviour among this group of men. Again the secondary data supported findings which revealed that those young men who described binge drinking reported more sexual partners, unprotected sex and chlamydia infection. This suggests that alcohol use may be a marker for risky sexual activity within this group.

### **Contraception versus STI prevention**

This section explores: non-barrier contraception which focuses on birth control as opposed to STI prevention and, barrier contraception which, focuses on condoms. It also considers the young men’s perception of women who use this dual method as a form of contraception and STI prevention. This category explores the types of contraception which were highlighted by respondents and given as a reason for unprotected sex. Non barrier contraception methods including the contraceptive pill, the Inter uterine device (IUD) and emergency oral hormonal contraception (EOHC) were the main methods of contraception. The young men’s main concerns regarding unprotected sex centred on the prevention of pregnancy as opposed to the prevention of sexually transmitted infections. They felt the consequences of pregnancy and a baby would have a far greater impact on their lives than a sexually transmitted infection. These forms of contraception, which are managed and controlled by women, were favoured over condoms, which were seen to interfere with the

sexual act. The perception of women who used different forms of contraception was also viewed differently by respondents. Those who used methods such as the contraceptive pill were viewed in a positive light whereas women who used condoms as their main method of contraception were perceived as promiscuous.

The contraceptive pill was the main method of non-barrier contraception, which was identified by eight of the respondents as a reason for having unprotected sex. This method of contraception is controlled by women and is taken well in advance of sexual intercourse as a method of birth control. Respondents stated that if a woman said she was on the pill then this meant they could have unprotected sex because they were more apprehensive about pregnancy than STI prevention. Even those respondents who were in long term relationships throughout the duration of the study felt that STIs were not applicable to them and they referred to pregnancy as their main concern. Respondents felt that the impact of a pregnancy would have a much greater impact on their lives than an STI:

*“...pregnancy implications are much greater, yeah definitely more of a concern...” [Micky]*

Another respondent described the potential impact a pregnancy would have on him and his partner:

*“...she does law and has only got a couple of years left and I think a baby would put a large dent in that course and mine as well...” [Simon]*

Respondents relied on sexual partners to use birth control and believed it was a woman's responsibility to make sure she did not get pregnant. They only intervened when they were informed by the woman that she was not using the contraceptive pill by suggesting she obtain emergency contraception. Emergency oral hormonal contraception (EOHC) was talked about by three respondents in the study:

*“...every time I've ever had unprotected sex that's always on my mind [pregnancy] not sexually transmitted infections or anything just pregnancy, erm... so that's why they went to take the morning after pill, cos I don't want any babies to be honest at the minute” [Lee]*

Although it was acceptable and sometimes expected that sexual partners used non-barrier contraception before or after sexual intercourse, the view of women using barrier

contraception, in particular male condoms, were not viewed in a positive light by half of the respondents.

Respondents reported mixed views about the women who carried male condoms. Two respondents stated that women who carry condoms 'are sensible as it shows they are looking after themselves', yet in the same sentence they contradicted themselves by referring to women as sluts for carrying them: 'they must be looking for sex'. The quote below described one respondent's view on the women who carry condoms:

*"...sensible you've got to look after yourself. I mean if they are deliberately going out just to have sex then my opinion would change that they are more slaggy, but if they are carrying them just in case. I don't think I've ever met a girl who has openly admitted to carrying them" [Simon]*

Respondents could not think of anyone who they had met that carried condoms. One respondent described it as 'slightly odd' because it looked as though the girls were expecting to have sex with someone:

*"...I would think she would be sleeping with strangers on a night out, it wouldn't put me off cos it would probably only happen on a one night stand and you wouldn't be looking to have a relationship with them..." [Gary]*

Other respondents believed that only 'dirty girls' carried condoms and also suggested that if they carry condoms then they must be looking for sex, as illustrated in the quote below:

*"if I met a girl and I said I didn't have one and she said I have I would automatically think you were looking to go out and have sex makes me think you're a dirty girl...it's alright for a lad to carry one...to have five in his wallet yet if a girl has one she's a slag and that's the way people portray it" [Robbie]*

The majority of respondents did not view these women as protecting themselves and their sexual partners from unwanted pregnancies and STIs. Instead they were perceived as promiscuous, sexual predators or reservoirs of infection.

Although the young men were happy to have sex with women who used non-barrier contraception, some respondents had negative attitudes towards having sex with women using condoms. This form of contraception was referred to as 'interfering with the heat of the moment' affecting the 'ability to maintain an erection' and 'spoiling the sensation'.



### **Classification of sexual partner**

Respondents used a range of criteria to evaluate their partner's level of STI risk. This was based on personal characteristics such as education, and social class, knowledge of a partner and whether they were known or trusted. Sexual partners who were seen in a positive light, in particular those who possessed the qualities sought in a relationship such as intelligence, caring, a virgin, were unlikely to be considered a source of risk for STIs. These partners were perceived as 'clean' as opposed to risky partners who were described as 'dirty' and a potential source of infection. These heuristics were used to evaluate a partner's STI risk, thus help justify unprotected sex without a condom.

All respondents described 'risky' sexual behaviours regarding multiple partners and unprotected sex in their interviews however, some of the young men did not perceive this behaviour as risky. Their rationale was that they had sex with girls who they perceived as 'clean' and free of STIs. These women were referred to as 'nice girls' who would not engage in such behaviours that would put them at risk of an STI. These girls were therefore classified as 'safe'.

Education and social class were two concepts that three of the young men used when deciding to have unprotected sexual intercourse. Two of these respondents were university students, who used criteria similar to themselves and talked about educated girls, the other respondent believed social class to be an important safety factor:

*"...she lived in like a massive house so... I think her mam and dad brought her up right and said look obviously this is the way you've got to go about it, you don't want to get pregnant or, or you don't want to catch anything"*  
[Andrew]

These respondents believed that if a partner was educated and had been to university then she would be aware of STIs. If she was middle class then she would have had a good upbringing and would be more likely to look after herself. Therefore she would be less likely to take risks and have an STI. These comments suggest that partners may be selected based on assumed STI safety as shown below:

*"...is she educated does she have a good background if she does then she will be informed about erm safe sex and stuff and you know that she'll be clean... she won't have anything on her I know I don't have anything on me therefore I'm not going to force it [condoms]..."* [Clive]

Micky and Clive acknowledged that the use of criteria such as education and social class may be irrational. However, they believed these were important factors to consider when evaluating sexual partner risk. These respondents favoured criteria, which were similar to them choosing sexual partners from the student population or their university courses:

*“... just thinking she’s middle class and educated is pretty stupid but when you’re wanting to have unprotected sex you just kind of use that in your head to justify it more. Try and rationalise it a little bit...” [Micky]*

Several respondents in the study reported that knowing or knowing of someone from their circle of friends made potential sexual partners less risky in terms of STIs. It was believed that these partners would have similar values and beliefs as the respondents. Knowing a sexual partner through a university course, from a place of work or via friends was commonly cited as a sign of a ‘safe’ sexual partner by respondents and a justification for unprotected sex. This assumed knowledge of partner sexual history was identified by five of the young men in the study. Respondents believed that knowing a sexual partner made unprotected sex less risky as described by one young man:

*“...if there’s a girl who’s really putting it about, word gets around... in your social circles and you get to hear about it...but if it’s a complete stranger she could have had four blokes in three days...whereas if someone in that circle had done that I’d probably have a rough idea” [Micky]*

This respondent described having unprotected sex with several girls during the past twelve months who were from his university or his university course. He described the riskiest sexual partner as someone he had met on a skiing trip, because he only knew her a couple of days before they had sex. This perspective was similar to many of the respondents who used the criterion of knowing a sexual partner to decide whether to have unprotected sexual intercourse.

Friends of friends were also perceived as safe partners because they were known to peers:

*“...because I know them as friends not like close friends, like distant friends...”* This respondent talked about getting to know these girls by  
*‘...build[ing] up some kind of rapport over the night with them...” [Clive]*

Chris believed that building a rapport would help to develop a connection with the girls where a deeper level of knowing would take place. Like the respondents discussed above, this young man described all of his sexual encounters over the last twelve months with

girls he knew who were either from his university course or acquaintances he had met through friends.

Trust was used as a further STI safety concept for half of the men in the study. The rationale for having unprotected sex for these men was based on trusting that a sexual partner had been tested previously or the belief that these partners had not put themselves at risk of contracting an infection by having unprotected sex with someone they had met on a night out as illustrated by another respondent:

*“...the girls I have gone out with have never, would never I don't think consider sleeping with a random person on a night out” [Gary]*

Clive talked about the concept of trust. In his interview, he spoke about one of the girls he was having regular unprotected sex with. He described an open relationship where it was acknowledged that both parties were having sex with other people. During his interview he also disclosed that he was aware that this sexual partner had unprotected sex with another man because of a condom allergy. However, he was confident that she had not contracted any infections because he trusted her and believed she was a good judge of character:

*“...the regular partner I'm seeing at the moment despite the fact that she had unprotected sex a few times...I trust her, because I know she is concerned about it and despite her relaxed attitude that she's now got, I still trust her...” [Clive]*

The classification of unsafe partners or ‘dirty’ girls was based on the binary opposites of the concepts discussed above which were used to describe ‘safe’ partners. These included characteristics such as uneducated girls as opposed to educated girls and strangers as opposed to partners who were known to respondents. Girls who had sex on the first night were also deemed ‘risky’ although this was not the case for those respondents who used knowing a sexual partner as a safety indicator. Clive talked about the venues where ‘dirty girls’ could be found:

*“...you can go to some of the more notorious clubs around town...’ where you can pick girls up who are glammed up with make-up ...you can work out if they are not so well educated... and you think yeah she might have something [an STI] I need to protect myself” [Clive]*

Respondents perceived these girls to be promiscuous and spoke about them using derogatory terms and showed expressions of disgust. For example, Andrew who had been in a long term relationship throughout the duration of the study relayed a previous event regarding unprotected sex with a risky partner:

*“...the next morning when I looked and... thought (respondent scrunches up face) I bet you’ve had a few (he laughs) that you’ve opened your legs a bit...” [Andrew]*

All of the young men in the study referred to risky partners as ‘dirty girls’ or ‘slags’ and potential reservoirs of infection.

The respondents who used knowing a sexual partner as a safety indicator defined girls they did not know or girls who were ‘strangers’ as risky sexual partners. The majority of these men stated that they would intend using a condom with these girls in order to protect themselves from STIs. The reason for condom use with strangers was because respondents would be unaware of the girls’ sexual history as illustrated below:

*“...if it was someone I had just met on a night out I’d definitely wear a condom because you don’t know who they’ve been out with or where they have been on holiday...” [Simon]*

This was as opposed to respondents’ assumed knowledge of a partner’s sexual history discussed above under ‘knowing a sexual partner’.

Another indicator of a risky partner was a girl who would have unprotected sex on the first date or during the first night of meeting someone. This was a common indicator for most respondents, except for three of those in higher education who used ‘knowing a partner’ as a safety indicator. This is illustrated by the quote below:

*“...if you meet a girl on a night out and sleep with her and she’s willing to sleep with you without a condom then how many other random people is she’s willing to sleep with without a condom and this obviously therefore increases the chances of getting a sexually transmitted disease...” [Gary]*

Robbie talked about these girls having no respect for themselves:

*“...she showed me how much she respects herself... then it’s highly unlikely she’ll get respect from me” [Robbie]*

Although the criteria discussed above were mainly used to determine condom use for respondents, there were three respondents who would still engage in unprotected sex with the women they believed to be infected. The quote below described one respondent's sexual encounter with a girl he had unprotected sex with on the same night as meeting her:

*“...I wasn't the only one she had sex with that night...and I was thinking aye she's got no respect and...she didn't even ask if I was gonna wear protection and I didn't ask her if she wanted us to wear it and I just thought how many times has she had sex unprotected...” [Joe]*

Although the majority of respondents stated an intention to wear condoms with partners they believed to be risky influencing factors such as alcohol intoxication, immediate pleasure and short term gratification were the main drivers of their behaviour.

## **5.5 Situational factors**

There were several situational factors that impacted on the young men's decision making during the behaviour. These relate to their sexual priorities, needs and their emotional state in relation to sex without a condom. The main factors which influenced the young men's decision were grounded in sexual gratification, which was the primary motivator for the majority of respondents. The concepts relevant in this category were sensation seeking, sexual arousal, and the inability to maintain an erection whilst using condoms. The latter was however, often discussed in relation to alcohol use.

### **Sexual gratification**

The interviewees acknowledged that sex without a condom put them at risk of sexually transmitted infections however, sexual gratification was more important in the situational context than the possibility of contracting an infection. For these young men the benefits were the instant sexual gratification and the greater pleasurable sensation which was achieved by sex without a condom. This outweighed the negative consequences of possibly contracting an STI.

Respondents described how having sex without a condom was a form of sensation seeking. Five respondents referred to factors relating to sensation seeking as the main reason for not using condoms. Participants were aware of the health benefits of using condoms but they preferred not to use them. The barriers to using condoms included the reduction in

pleasure and sensation. The young men also spoke about condoms interfering with spontaneity. The young men said they carried condoms in their wallet or kept them in their bedroom, but preferred not to use them because of the lack of sensation as described by one respondent:

*“...the thing about condoms is I mean you don’t wear a raincoat in the shower I don’t know it makes it less enjoyable ...” [Clive]*

Condoms were used when sexual partners insisted on the young men using them. However, if some of these men were offered the opportunity not to wear a condom they would not hesitate as described by another respondent:

*“...I’m not going to turn it [unprotected sex] down because I haven’t got a condom; a guy would never turn down sex because he doesn’t have a condom...” [Clive]*

Participants stated that if they were not encouraged to use a condom by a sexual partner then they did not feel it was a priority for them. Possibly, the act of sexual penetration of the female partner made them feel they were not at risk of an STI. Alternatively sex without a condom may have been perceived by the young men as a more masculine behaviour.

The majority of respondents spoke about unprotected sex taking place in the ‘heat of the moment’ at the height of sexual arousal:

*“... if you’re in the mood...you just want to get on with it. It’s all like testosterone...hormones...” [Robbie]*

‘The heat of the moment’ was discussed by all respondents, including those who regularly used condoms with long term partners. Sexual pleasure took precedent over any pregnancy or STI concerns one might have previously had as illustrated in the quote below:

*“...I think that has a major influence on it when you go to the drawer and there’s none there, as the mood is still there you think do it now and get some tomorrow...” [Simon]*

The inability to maintain an erection whilst using condoms was reported by two respondents in the study. This physical factor was mainly reported in the context of

alcohol consumption and therefore interconnects with the alcohol concept. One young man talked about the effects of alcohol and condom use had on his sexual performance:

*“...sustaining an erection when I’m drunk I would say that was a big factor...” [Micky]*

Sexual performance seemed to take precedence over concerns about STIs or the risk of pregnancy for Joe and Micky. The following quote describes Joe’s experience of trying to use a condom whilst under the influence of alcohol:

*“...I just never seem to wear it, [condom] it’s just if I’m drunk it just never seems to work like (laughs). It’s just a case of I’ll get rid of this and try it that way it works then...” [Joe]*

The factors discussed above affected the young men’s judgement and emotional state and seemed to be an immediate driver for behaviour among this group of men. The next section discusses the factors that were used by respondents to post rationalise their behaviour.

## **5.6 Post rationalisation factors**

This theme relates to the factors which were used by respondents to explain and justify risky sexual encounters. They are different from the factors discussed above in that these were used by respondents during their interviews to justify and post rationalise their risky behaviours. As previously discussed, respondents also used excessive alcohol consumption as a reason for their risky behaviour; saying that they would not have had unprotected sex had they not been drinking.

### **Peer pressure**

Peer pressure refers to the pressure the young men felt from their peers to be perceived as sexually successful, which often influenced their sexual behaviour. The concept of masculinity was also apparent in the data, which was reflected in the young men’s attitudes and beliefs and the way they spoke about different women. Although peer pressure and masculinity could also be included in the pre-influencing factors, the young men mainly spoke about the effect of peer pressure when they were reflecting and trying to justify or post rationalise their behaviour.

Peer pressure was identified as another important factor which influenced the decision making process of respondents who reported risky sexual behaviour and multiple sexual partners. The young men described the social pressure by members of their peer group to adopt particular values and behaviours in order to be accepted and respected. The young men's perception of their peers' opinions and how these perceptions influenced their behaviour was a strong predictor of behaviour for these men. Four respondents referred to the pressure from their peers early on in their sexual careers at school, which related to their first sexual experience:

*"...if you're leaving school and you're still a virgin... like you've got to have sex before you leave school just for the sake of it..." [Joe]*

This was followed by peer competitiveness in relation to having sex with as many women as possible, which Clive described as 'notches on the bedpost'. The quote below describes one respondent's experience of the pressure exerted by a group of peers at school. These young men influenced the attitudes and behaviours of others in order to conform to their group norms regarding unprotected sex:

*"...when I was still back in 6<sup>th</sup> form college I remember this one time we were playing football and afterwards we were talking in the locker room, like locker room talk and err... someone said their girlfriend wasn't on the pill and they weren't using protection and they kind of got high fives for that..." [Simon]*

Peer pressure became more influential and seemed to peak during the young men's early twenties when respondents adopted similar values, beliefs and goals in order to fit in and be accepted by those in their peer groups. Key times reported by respondents were during the first year of university where there was more social interaction with their peers whilst living away from home. These young men spoke of becoming involved in an alcohol culture which involved socialising in pubs and clubs with peers, forming relationships and experimenting sexually. The quote below describes the influence peer pressure had on Clive:

*"....my friends [are a] massive, massive influence. I've got two main sets of friends one of the sets of friends are university educated guys very clever they do football, rugby whatever, most have girlfriends and stuff and my other set of friends they work full time they don't go to uni they're always out on the piss, always after chasing tail and stuff they don't really have girlfriends there only after one night stands, basically what I try to do is meet them in the middle ...my uni friends they haven't been with many girls I don't know maybe four or five each, I don't want to seem to whoreish to*



*them at the same time I don't want to seem too frigid ...my working friends they erm ...probably about 30s [sexual partners]and it's trying to be with enough girls to... be respected among them at the same time you don't want to be frigid you don't want to like have slept with no girls but you want to have slept with a decent amount you want to have slept with between 5 to 30 girls...so I want to be somewhere in between that and I'm comfortable erm say like two years ago I hadn't been with that many women I'd feel a bit like ashamed of myself because when I go out with my working friends their always chasing tail telling each other stories showing each other pictures and stuff I'd feel a bit mmm I really need to sleep with more women purely for the notches [on the bedpost] and the stories nothing more than that not like for a relationship or anything like that yeah I'd say friends are a massive influence. [Clive]*

Clive talked about not wanting to be the 'frigid' one in the group. He felt the need to have sex with as many women as possible so that he would be respected by his peers. The quote above is a typical response from those interviewed regarding the influence peers had on their sexual decisions.

The concept of masculinity was demonstrated by participants' 'man talk' and their 'bragging' to peers about the number of sexual partners they had had and the type of sexual practice they had engaged in. The purpose was to enhance the respondents' image of themselves to others as practicing heterosexuals. Joe talked about peer pressure in the military being notorious. He recalled an event which led him to have sex with two girls on the same night. This resulted in a celebratory reception from his peers when he arrived back to the Navy base the following day:

*"... in the office they heard that I'd had sex with two birds so I went in and everyone was clapping thinking ah he's a legend like, just well done..."*  
*[Joe]*

Joe was treated like a hero for having unprotected sex with two women in one night. He talked about how his peers would now try and have sex with three women on the same night just so they could be seen as the 'alpha male'. Gary talked about an unprotected threesome (penetrative sexual acts involving three people) he had taken part in with his male friend and a girl from their university, describing how he and his friend had laughed and cheered during the sexual act. The quote below shows how he used this story as a form of male bravado by disclosing the sexual adventure to an audience of male friends the following day who cheered and applauded him and his friend:

*“It was quite funny, well the girl was not very attractive at all, she’s quite a large girl and yeah my friends thought it was quite funny and took the piss...” [Gary]*

The description of the girl as unattractive and large suggests that sex was initiated purely for the entertainment value and the status a young man may achieve through having a ‘threesome’. He then went on to describe how he and his male friend were ‘high fiving’ in celebration while having sex with the girl. Gary and his friend were perceived by their peers to be ‘alpha’ males having unprotected vaginal and oral sex with a girl at the same time.

This concept implicates 'traditional masculine behaviour' as a reason for unprotected sex. The young men felt that they needed to prove themselves as 'real men' by engaging in risky sexual behaviour with multiple partners. They described women as sexual conquests and used these experiences in stories to define themselves as practising heterosexuals, which were relayed in locker room conversations to peers on nights out or at different sporting events. These conversations could suggest that the values of these young men conformed to a ‘traditional’ masculine identity, which dominates women and refers to them as objects instead of as people.

## **5.7 Summary**

This Meta theme ‘contributing factors affecting unprotected sexual intercourse’ has explored the five main themes associated with unprotected sex for young men in this study. Alcohol consumption was the main influence, which affected the decision making process for all of the respondents. This was reported in the context of most unprotected sexual encounters. Peer pressure was described by half of the respondents in the study and was linked to stereotypical masculine behaviour and sexual risk taking, along with the need for immediate pleasure and sexual gratification. Respondents based their choice of sexual partner and sexual practice on perceptions, attitudes and beliefs which they held of different types of women, categorising them as “risky” in terms of their probability of having an STI or “clean” as their probability of having no infections. Respondents used this categorisation to justify unprotected sexual intercourse. Non barrier contraception methods, such as the contraceptive pill, were favoured over barrier methods such as condoms which were seen as interfering with the sexual act. The second theme presents the data on respondents’ testing behaviour and discusses the influences which led participants to order a chlamydia test via the internet

## **5.8 Influences on testing behaviour**

Through the duration of this study respondents had taken between two and six tests for chlamydia and the reasons for testing differed depending on their relationship status. Figure 5.3 on the following page gives a summary of the thematic structure of the data relating to this Meta theme. There were four main themes that influenced the young men to order an online test for chlamydia. These included both internal and external factors that contributed to testing behaviour: perceived susceptibility, partner's health, perception of sexual health services and public health campaigns on the television, radio and magazines. The first two themes were based on the internal influences of screening behaviour and related to respondents' perceived susceptibility which was based on previous risky behaviours and their partner's health. The latter two, perception of sexual health services and media campaigns were external factors that triggered or prompted participants to self-request chlamydia screening via NHS web/text based services.

**Figure 5.3 Summary of the thematic structure of the data:**

**META THEME: Influences on testing behaviour**

THEMES	CONCEPTS	INDICATORS
<b>5.9 Internal factors</b>		
<b>Perceived susceptibility</b>	Multiple partners	Unprotected sex
	Previous infection	Dirty girls
<b>Partners health</b>	Long term relationship	
	New relationship	Respect
<b>5.10 External factors</b>		
<b>Perceptions of sexual health services</b>	Anonymous testing	Anonymity
	Clinical settings	Convenience Embarrassing Stigmatising
<b>Public health campaigns</b>	Local campaigns	Health message
	National campaigns	Perceived severity

## 5.9 Internal influences

Internal influences referred to the young men's perception of the likelihood of contracting the infection.

### Perceived susceptibility

Risky sexual behaviour, multiple partners, perceived susceptibility of infection, and previous infection played a big part in eight of the young men's decision to seek testing. Perceived susceptibility of infection contributed to the health seeking behaviour in those testing positive for chlamydia. This is described in the quote below:

*"... I was pretty certain I had caught something because well I had sex with two girls in one night and err I just thought one of them has got to have something so I just thought I would get tested." [Joe]*

Perceived susceptibility was based on the young men's perception of the odds of catching chlamydia. Joe felt susceptible to chlamydia because he had had unprotected sex with two girls in the same night. He described these girls as 'rough' and believed one of them was bound to have an STI. However, this was not the case for those respondents who tested negative for chlamydia. Their perceived susceptibility was lower than those testing positive even though the majority of participants had reported similar risky sexual behavioural patterns during their interviews, many of those testing negative said that they had expected a negative test result:

*"...I expected it to come back negative again because I was asymptomatic and I know that with chlamydia it's asymptomatic, but at the end of the day I'm not too worried about chlamydia because it is very common..." [Clive]*

Those young men who tested negative did not perceive themselves as susceptible to contracting an STI. A possible explanation could be that the young men rationalised their risk taking behaviour using the criteria discussed earlier under the pre influencing factors.

Other respondents talked about having multiple one night stands in a short period of time, which led them to the testing process:

*"...Err six different partners. The first of the six was a long term girlfriend then that relationship ended then after that err I don't know how to put it, just two random, then another one over the*

*summer I was seeing, then since coming to university two more... ”*  
[Gavin]

However, it would take more than one unprotected sexual encounter to encourage testing for the majority of young men:

*“...erm, it’s not if I sleep with someone unprotected, it would have to be with a couple, like two or three or more... to be prompted, otherwise it would be I’ll do it at the end of the week and then it would just keep going until the week after. I’d have to sleep with two or three to prompt me, to be a big enough influence on me...”* [Clive]

Previous infection was another further trigger to testing behaviour for Robbie, and Craig. These young men felt more susceptible to contracting chlamydia because they had already had it once. Robbie described having both protected and unprotected sex with several girls in the last 12 months. He believed his previous chlamydia infection put him at risk of contracting the infection again:

*“...I think every time I’d been with someone else obviously I could have something, I’ve got one in the house [chlamydia test] that I can just take every now and again better to be safe than sorry, because when you’ve had it once you’re more likely to catch it again..”*  
[Robbie]

For those young men, chlamydia testing seemed to be used as a secondary prevention measure, to be able to have sex without a condom. Respondents spoke about ordering a test, which was usually prompted after unprotected sex with several one night stands:

*“...like I said I don’t leave it very long between getting tested...”* [Micky]

Robbie spoke about keeping spare testing kits at home which he could take when he felt the need. Although these young men felt susceptible to chlamydia infection, either through risky sexual behaviour or previous infection, their perception of the severity of the infection was low. This was evident by the way they used the testing service which is discussed in further detail in the next theme.

### **Partner’s health**

Concerns about a partner’s health were another reason to seek testing. For these young men they were worried about potentially infecting a current partner. However, this was

more apparent in those respondents who were either in a long term monogamous relationship or with those who were about to embark on a new relationship.

Simon and Andrew were in long term monogamous relationships throughout the study. Influences on testing behaviour for them differed compared with respondents who were not in relationships. Their reason for testing was for their own and their partner's health, to ensure they had not given their partner chlamydia as a result of their previous sexual behaviour. Simon tested at the request of his partner (who had previously been a virgin) who had displayed symptoms following sex with him. She wanted to make sure that she had not been infected from his previous partners. Andrew sought testing because he had a discharge and itching on the tip of his penis. He also wanted to make sure he had not been infected through previous risky sexual behaviour. He described his fears in the quote below:

*"...what I'm worried about, in the next couple of years we want to start a family, we've just bought a house so obviously we want to start a family and you know if me sperms not right.." [Andrew]*

The respondent above was worried in case he had contracted chlamydia, through previous sexual partners because of the symptoms he was displaying.

During follow up interviews Micky and Gary spoke about a new relationship being a further reason to seek testing for them. These young men spoke about not wanting to risk their reproductive health of a new partner:

*"... if I was going with a new girl and I really liked her then I would go out of my way to test myself for her protection and her benefit..." [Gary]*

These respondents did not want anything to jeopardise a new relationship and felt that testing for chlamydia was a necessary precursor for starting a new relationship:

*"... when you're starting in a new relationship you need to discuss it... it's much my concerns for her than me...that would be the reason I would go and get tested because I wouldn't want to give anything to her. I wouldn't be able to live with it if I caused her lasting damage in that way" [Micky]*

Micky had embarked on a new relationship at the time of follow up. Reasons for his second test differed from those of his first test, which was unprotected sex with multiple partners. This showed that those in a relationship or about to embark on a new relationship tested for different reasons compared to those of single status. Those in a relationship tested at the request of a partner, or to avoid transmitting potential infection to a sexual partner, whereas those who were single and felt susceptible to infection tested regularly for reassurance.

## **5.10 External Influences**

External influences referred to those factors which prompted screening behaviour and included partner health, perception of sexual health service provision and public health campaigns

### **Perceptions of sexual health services**

Perception of sexual health services refers to the reasons why respondents chose to test via the internet as opposed to attending a health service for testing. Respondents talked about their perceptions of the different types of sexual health service provision in relation to STI testing, and stated their preference for the ease and convenience of home testing. Other screening preferences included outreach in university halls and pubs and clubs because of the accessibility of these services. Most of the young men interviewed said that they preferred to test anonymously without consultation with a health professional because it was less embarrassing, easy, and convenient. Seven of the respondents said they would not have accessed a health service for their chlamydia test. Gary, Micky and Clive had accessed a GUM clinic previously. The quote below described why Simon chose to test anonymously:

*“...at the end of the day it’s not like face to face cos that’s a lot more embarrassing ...I think having a service; like this on line is the best way to get students and teenagers as well cos I know no one really wants to walk up to someone that they don’t know and say I have an issue” [Simon]*

Craig referred to the convenience and privacy of home testing:

*“..you can do it in your own home, yeah it’s private, I can do it just in the loo [toilet], just pee in the bottle send it away and I won’t have to worry about it....it’s convenient, private and I didn’t want anybody to see is[me] ...” [Craig]*



The majority of the respondents stated they would not have accessed a GUM clinic or their general practitioner for their chlamydia test. The quote below from Gary is a typical response when asked if they would have accessed either of these services for sexual health screening:

*“No never, I think I may be in the same position as my friends sitting at home saying we need to go and get tested but probably wouldn’t have got it done, I don’t think I would ever had gone...definitely not”*  
[Gary]

Gary tested positive for chlamydia. During his interview he said he would not have tested anywhere else. This suggests his infection may have gone undetected with the potential for onward transmission to other sexual partners.

Robbie displayed symptoms prior to testing and was referred to the GUM clinic for treatment and further testing, in case he had contracted further infections. In his quote below he described how he would rather leave his infection untreated rather than attend a GUM clinic:

*“... like I said to the woman [health advisor] ... I’m not going [to the GUM clinic] end of story. She was like err, I was like listen I don’t want to go, I said just give us the tablets cos if you don’t I’m not going.... I ticked the thing saying pain when passing urine and that’s when she said you’ve got to go and I said I’m not going to the clinic so you either give us the tablets ...or you don’t and you said I’ve got chlamydia which I have and it will get rid of it. If not and you say go to the clinic I’m not going and I’ll end up walking about with it, so she gave me the tablets...”* [Robbie]

Respondents referred to a number of barriers to accessing GUM clinics. These barriers included: fear of the unknown, because they had not been before and did not know what to expect. Others referred to the painful swabs, and the embarrassment of someone else seeing your genitals, as stated by Craig:

*“...being a bloke, erm I think the fear of someone seeing your cock...erm its very daunting taking your pants off ...”* [Craig]

Micky, Craig and Clive, had been to a GUM clinic previously however, chose to go with a friend because it was less embarrassing. They also preferred to access clinics away from where they lived, in case they were seen by anyone they knew. The following quote described Clive’s story about the time he and his friends visited a GUM clinic:

*“...I didn’t go to a GUM clinic near me. I did not want anyone to see me there. We made a plan we would drive 15 miles away to a GUM clinic in a different town because erm...if you’ve got an STI it could be anything and therefore you’re seen as unclean...” [Clive]*

Many of the respondents stated that they would not attend a GUM clinic unless they displayed symptoms:

*“...if I was symptomatic... like pissing razor blades I’d come in I’d accept it, give up my anonymity and come to the nearest place to get it sorted...” [Clive]*

The only criticisms of GUM clinics from these respondents were the opening times and being turned away because the walk-in clinic was too busy. However, for those respondents it encouraged them to be a bit more relaxed about using condoms as they felt they could fall back on the GUM service if they got an infection as described by Clive in the quote below:

*“...I’m a bit more lax now because I know all about it and that’s not a good thing it’s probably the negative thing about it being so accessible I’m no longer scared of getting chlamydia or gonorrhoea because I know it can be sorted just like that, erm and I’ll probably put extra drain on the NHS but I mean it’s good for me as a service user but for NHS maybe not so good I don’t know. Well they took some terrible swabs that nearly put me off I’ll say that that taught me a lesson to use condoms (laughs) but err a couple of weeks later I forgot about how painful the swabs were” [Clive]*

Clive felt he could now be more lax about using condoms because the consequences of a bacterial STI could be easily treated.

### **Public health campaigns**

Local and national public health campaigns about chlamydia and sexual health were referred to as triggers to action by all ten respondents. These campaigns which highlighted the prevalence of chlamydia infection in the 15 to 24 year old population, and the consequences of untreated infection on fertility, were a big influence on testing behaviour. Various forms of media including men’s magazines, teenage films such as American pie (which feature young men and the race to lose their virginity), and the national sexual health campaign ‘condom essential wear’ were also described as factors which influenced their testing behaviour.

Participants referred to local chlamydia screening campaigns across the North East of England since 2007. These local campaigns, which were designed to target the 15 to 24 year old population, were featured on bill boards, buses, on posters in health centres, colleges, universities and on adverts on local radio stations and television commercials. The purpose of these campaigns was to increase screening rates in the 15 to 24 year old population. Respondents referred to seeing the adverts on buses, in GP surgeries and on posters in shopping centres and ordering testing kits using their mobile phones to text. Others referred to seeing the adverts on television:

*“... TV adverts really stick out because there are not loads of public health adverts, so when a sexual health one comes on it really sticks out...” [Micky]*

Robbie described the appeal of the adverts, which led him to the screening process, as the following quote illustrates:

*“...the adverts are quite knowledgeable I only found out about it, because as I say it wasn't in the public eye until the last how many years? and then there's a big campaign on it...then it's on the telly...but if it wasn't advertised no I wouldn't have [tested], but it seems to me like it wasn't about before [chlamydia], it just wasn't mentioned erm so probably not unless I was made aware of it through the likes of ...the adverts” [Robbie]*

Radio campaigns were also mentioned as an influencing factor to testing. The quote below described the effect that one local radio campaign for chlamydia had on testing behaviour:

*“...I heard it on Metro Radio first in the car on the way to work, it was on the radio and I thought I may as well get myself checked out in case I've got anything off the previous partners that's when I decided to take a test ...” [Lee]*

Anonymous testing played a big part in the decision to seek testing. Most respondents reported they would not have attended a health setting for their chlamydia test. They also stated that they would have declined the offer of a test, if it had been suggested by a health professional, whilst attending for a non-related health problem for fear of being judged.

### **5.11 Summary**

This Meta theme has presented the data relating to the influences on the respondents testing behaviour. This has highlighted that respondents used the testing service for different reasons depending on their relationship status. Those who were single and having casual sex used the testing service as a back up to unprotected sex, under the assurance that they could test every now and then to check their status. Those in a relationship tested at the request of a sexual partner or to avoid passing on any potential infection to a new partner. Anonymous home testing was preferable over health service testing, primarily because of the ease, convenience and privacy, but also because respondents did not need to engage in discussions with a health professional regarding their risky behaviours. Chlamydia was perceived as a minor infection which is easily treated with antibiotics and therefore did not warrant a visit to a GUM clinic. However, if respondents were to develop symptoms such as ‘pissing razor blades’, as described by one respondent, or develop genital herpes or warts, which would make the penis look aesthetically displeasing, then they would not hesitate attending a GUM clinic despite the perceived barriers. Public health campaigns acted as cues to action or triggers to the testing process for all respondents.

### **5.12 The impact of diagnosis on modification of sexual behaviour**

Figure 5.4 shows a summary of the thematic structure of the data relating to the impact of diagnosis on subsequent sexual behaviour. A negative diagnosis was interpreted by the young men as a certificate of health to carry on with their risky behaviour, whilst a positive diagnosis was met with shock and feelings of devastation which resulted in short term behaviour change. Follow up interviews conducted twelve months later gave further insight into the modification of the young men's sexual behaviours.

**Figure 5.4 Summary of the thematic structure of the data:**

**META THEME: The impact of diagnosis on modification of sexual behaviour**

THEMES	CONCEPTS	INDICATORS
<b>5.13 Impact of negative test result</b>		
Certificate of health	Reassurance Complacency	
All clear	No risk from other STIs	
Perceived severity of chlamydia	Minor infection Common infection	Easily treated Affects women
Sexual gambling	Calculated risk	
<b>5.14 Impact of positive test result</b>		
Shock	Devastation	Disbelief
Health concerns	Infertility	Self /partner
Intention to change behaviour	Increased condom use Limit number of casual partners	
<b>5.15 Behaviour after 12 months</b>		
Adoption of protective behaviour	Resumption of old behaviour	Re-infection

### **5.13 Impact of a negative test result**

Those respondents who had tested positive for chlamydia had had several chlamydia tests in the past, many of which were negative. During their interview these young men described the same relaxed attitudes in relation to condom use as those young men who were recruited to this study because of their negative diagnosis. Because of their experience of receiving a negative diagnosis they have been included in the analysis of this section.

The young men who tested negative for chlamydia did not feel susceptible to the infection, or think that they were at risk of contracting chlamydia and therefore felt no reason to change their behaviour. For those respondents a negative test result was interpreted as a 'certificate of health' to continue with the same risky behaviour. It was also viewed as an 'all clear' for other STIs. This was based on the respondents' perceptions of the severity of chlamydia infection, including the perception of their personal risk. This in turn led them to gamble with their sexual health.

#### **Certificate of health**

The findings of this study suggest that respondents interpreted a negative test result to mean a clean bill of health. This gave them the reassurance needed to continue with their current behaviour, which involved unprotected sex with multiple partners. The quote below demonstrated the impact a negative test result had on one respondent's subsequent sexual behaviour:

*"... It's... a kind of message that you're doing great having unprotected sex keep going, getting a good result but at the same time you can carry on having unprotected sex." [Clive]*

Clive perceived the negative test result as an indicator that he was doing well. He believed he was doing all the right things to avoid contracting an infection, such as having sex with 'clean girls' who he perceived as safe. These young men believed that 'it would not happen to them' that they would not catch an STI. They believed that they were at less risk of contracting a chlamydia infection compared to others. This under estimation of personal risk hindered their precautionary behaviour. Gary spoke about how a negative test result made him become complacent with his sexual behaviour as illustrated in the quote below:

*“...Yeah in all honesty it probably actually made me a bit complacent...I’ve done it and you get a bit complacent thinking it’s not going to happen, so thinking yeah a condom is not essential and err you’re not likely to catch anything...” [Gary]*

Gary had tested positive at the time of this study however, and during his interview he reflected on previous negative tests which had resulted in the same attitudes as those discussed above.

### **All clear**

The ‘all clear’ message was a further interpretation of a negative test result. Respondents believed that because they received the ‘all clear’ for chlamydia then it was highly unlikely they would have contracted any other sexually transmitted infections, even though they knew they had only been tested for one infection. Respondents stated that chlamydia was the most common sexually transmitted infection and if they had the ‘all clear’ from that, then it was highly unlikely they would have any of the others. The internet was one strategy that was used by respondents to seek information and advice about sexual health problems. This was evident in Andrew’s account where he talks about searching the internet to rule out any other potential STIs:

*“...when it came back negative, I sort of thought right so if I haven’t got chlamydia then I haven’t got any others err and I searched some of the pictures [on the internet] and I double checked and I’m thinking well I cannot have that, and cannot have that because it’s not visible so if it’s not visible then you think, hang on I haven’t got it...” [Andrew]*

Many respondents admitted that their knowledge of other STIs was poor. They were aware of other infections and quoted gonorrhoea, genital herpes and HIV but admitted that they did not know much about them. This lack of knowledge indicated that the perception of other STIs were more severe. The lack of publicity on other STIs was also perceived as an indicator that they were rare:

*“...HIV because if you get that its game over but your chances of getting that are very, very slim erm and I think you could spot someone with that ... genital warts and gonorrhoea are big ones, chlamydia not so because it’s well advertised you know...its asymptomatic and it disappears with two years so erm I’ve got no fear. It’s like everyone’s going to get chlamydia at some point so I’m like if I get it fair do’s I’ll accept it erm no big deal. gonorrhoea I don’t know too much about it so it’s more of a fear of the unknown...I think that smelly discharge and like pissing razor blades so*



*yeah I'd hate to have that, and genital warts purely for the aesthetic...it looks terrible and that's like me pride and joy [penis] ...” [Clive]*

### **Perceived severity of chlamydia infection**

Chlamydia was viewed as a minor infection which was easily treated with antibiotics. Respondents spoke about it having greater health consequences for women than men and therefore not impacting on them so much. The quote below illustrated the perception of chlamydia for one of the young men:

*“...it's just a simple course of antibiotics, I mean I understand that there can be complications from it but yeah it generally is easy to treat...you don't really know about it, it's just a bit of discharge perhaps; so you just take a pill it's not a big deal...” [Micky]*

Respondents were aware that untreated chlamydia could cause complications. However, the consequences of chlamydia infection were not relevant to these men at this time:

*“...all lads would say if they were to get anything they'd prefer to get chlamydia cos you can get rid of it in the space of a week and you don't think of it as too serious, but there is some serious effects later on but I don't think anyone looks at that. If you've got it any lad will tell you not to worry cos they say all you've got to do is take these four tablets and that's it...” [Joe]*

The asymptomatic nature of chlamydia, and the simple treatment regime meant that respondents perceived chlamydia to be a minor infection. They believed most young people would contract it at some stage and because it was easily treated with antibiotics and is usually asymptomatic it would not interfere or impact too much on their life.

### **Sexual gambling**

Sexual gambling was a further consequence of a negative test result. Respondents felt reassured that they could continue with their risky behaviour, as described by Justin:

*“...you just carry on. I haven't caught anything yet, just playing the game for now...” [Justin]*

Micky described it as ‘a calculated risk’. The term ‘calculated’ suggests that the risk was planned with foresight and therefore taken after consideration of the probable outcome. Clive described using his judgement to weigh up information about the costs and benefits of potential sexual partners which helped inform the decision to use a condom or not:

*“...when I have unprotected sex I use my initiative... and I’m using my judgement to work out this girl has she got something, has she been with other guys and that’s just from what she’s wearing what she does, her education everything and I’m judging from there... but I don’t mind taking the odd gamble” [Clive]*

Respondents spoke about gambling with their sexual health. By comparing their sexual activity with gambling suggests that the young men were aware that there may be risks involved in their choice of sexual partner. The risks and benefits associated with engaging in unprotected sex with a particular individual were evaluated; their sexual risk behaviour was driven by the positive or negative consequences of risk taking most salient to them. The majority of respondents believed their chance of contracting chlamydia was slim because of the women they chose to have sex with. Therefore, the gamble was worth taking because of the greater pleasurable sensation of having sex without a condom. This suggests that the greater pleasurable sensation of sex without a condom may make the risk worth taking, especially since the consequences of the severity of the disease was perceived as minor:

*“...you haven’t really got that much to lose erm if you have protected sex you’re not going to catch anything but you’re not going to really enjoy yourself so much. If you have unprotected sex then you’re going to have more pleasure and the slim chance that you catch something ... then you can get it sorted so you might as well go for the gamble, as it’s going to be sorted out anyway” [Clive]*

The interviews suggest that the only thing which would encourage a change in behaviour would be a positive test result. The young men talked about continuing to play the game until they caught the infection:

*“...it would change my behaviour I would probably keep going until I did catch something and when I did it would be like a kick up the arse... I would pull myself together wear condoms all the time, because at the moment I’ve been with loads of women and never caught anything therefore my perceived idea of STIs is there’s barely any out there...” [Clive]*

Clive’s sexual behaviour was linked to his perception of chlamydia. He believed the prevalence of STIs in young people was low and therefore his risk of contracting the infection was unlikely. He was therefore willing to gamble with his sexual health. Micky had similar attitudes as those described above he described feeling relieved after receiving his negative diagnosis:

*“...relieved, but I wasn’t particularly concerned before it’s always yeah I haven’t got it that’s great, I guess that’s just the reassurance I’m seeking when I do get it done...” [Micky].*

Clive and Micky had a good knowledge of STIs as they were students on academic medical and nursing programmes. They talked about spontaneous clearance of chlamydia infection, and believed the consequences of infection were more serious for women. They thought the only thing that would encourage them to change their behaviour would be a positive diagnosis.

### **5.14 Impact of a positive test result**

A positive diagnosis for chlamydia had the opposite effect on respondents. It encouraged them to change their behaviour by using condoms and limiting the number of casual sexual partners. Respondents described feeling shocked, devastated, or depressed that they had actually contracted an STI, especially those who had tested negative previously. Concerns centred on their reproductive health including the possible damage the infection may have caused. Respondents spoke about not knowing how long they had had the infection for and they believed that the longer they had had it the more serious the health consequences would be. They reflected on the women they believed had given them the infection, and referred to them as rough or dirty girls. The reality of the risk of contracting other STIs was raised followed by the fear of contracting one of the more serious infections like HIV next time. They spoke about the possible onward disease transmission to sexual partners and their feelings about this. However, two participants were equally concerned about the damage to their reputation with these women and their peers when they found out they had given them chlamydia.

### **Shock**

Robbie, Gary, Lee, Justin and Joe described feeling shocked when they received their positive test result. Lee who had previously tested negative for chlamydia did not anticipate his current test result to come back positive. He described feeling devastated when he received the news and confided in his parents about contracting the infection. He was concerned about how long he could have had the infection, and did not know what damage it could cause. When asked how he felt after receiving his diagnosis, he said he felt sick that he had been with a girl who had given him an STI:

*“...I was anticipating it would come back negative because everyone thinks you’re not going to get a sexually transmitted infection...and when I came off the phone I was pretty devastated to be honest, erm...I was down in the dumps for a couple of hours... no one thinks they going to get a sexually transmitted infection...but it happened to me so that’s pretty sad...and obviously I don’t know how long I’ve had it for...and what it’s done to is...”*  
[Lee]

Joe described the time he received his positive test result:

*“...when you get told the positive it’s just like a kick in the balls really, sort yourself out ... look what you’ve done now. So that made is say like I’ve got to start because it could be anything next time...”* [Joe]

Justin talked about learning from his mistakes. He described feeling ‘gutted’ when he got the news. When asked if he was concerned about chlamydia, he reflected on how easy it was to catch the infection and worried that if he continued with his current behaviour he may contract something more serious next time.

It was highlighted in chapter four (Methodology), that those who tested positive for chlamydia would have had a health intervention from a Health Advisor, either by telephone or during a face to face consultation which may have had an influence on the young men’s behaviour. When the young men talked about the impact of a chlamydia infection on their health it seemed that the intervention with a health advisor may have had an impact on some of the young men’s knowledge of chlamydia including the consequences of untreated infection on their own and their partner’s reproductive health. It is therefore possible that this may have contributed to the young men’s future behavioural intentions. This is highlighted in the concept of health concerns below.

### **Health concerns**

Concerns over infertility featured throughout the interviews of all those who tested positive for chlamydia. Respondents were worried about the impact the infection would have on their fertility in later life. Lee talked about having children in the future and did not want to think that for the sake of a one night stand, it could ruin the rest of his life. Robbie talked about having a promiscuous lifestyle and having unprotected sex with many women yet no sexual partner had ever said to him that they might be pregnant. He had contracted chlamydia for a second time and he wondered whether his fertility had already been affected. He talked about how long he could have had his previous infection, because he had been sexually active from the age of fourteen:

*“...I wasn’t using any protection with them [girls] and none of them...thought they might be pregnant...I’ve done it [had sex] hundreds and hundreds of times and I... never had any scares...but I would like to have fertility tests...like there’s doubt in my mind, like cos more and more you’re walking past the bus and its so many men are in fertile, and, chlamydia can make you infertile... that’s one of my fears...” [Robbie]*

Those young men who tested positive for chlamydia were also concerned in case they had infected their sexual partners. Some of the young men were worried in case it had affected their sexual partner’s fertility, whilst others spoke about feelings of guilt as shown in the quote below:

*“...I felt really bad, it really upset her she felt dirty and everything erm and I felt really guilty about it erm and I think we both have different outlooks on life, like from my point of view it was like oh crap like get tested get treated, jobs a good un, whereas she sees it as a scar if that makes sense.” [Craig]*

Those who tested positive for chlamydia seemed to feel more knowledgeable about the infection and some referred to their consultation with the health advisor regarding the impact of chlamydia infection on sexual partners:

*“I’m concerned about their health just what... [the health advisor] was talking about what could happen to them makes me feel horrible that I could have gave them that, I could have affected them, well that they can’t conceive or erm they could pass it on to the baby it just makes me feel horrible that it could have an impact on other people’s lives...” (Lee)*

### **Intention to change behaviour**

The impact of a positive diagnosis encouraged respondents to look at changing their future sexual behaviour and use condoms more. Gary was concerned because he believed chlamydia had a bad reputation which people associated with sleeping around. He said he would now wear condoms with every sexual partner and take regular tests. He talked about starting a clean slate as illustrated by the text below:

*“erm with every sexual partner I have I’ll definitely wear protection, I think even with a long term partner and I’d get a test and they get tested sort of start a clean slate” [Gary]*

Other respondents said they had learnt from their mistakes and many said they had not had casual sex since they received their diagnosis. Joe said he felt quite dirty after receiving his diagnosis and that put him off sex for a while:

*“... even pulling someone I didn’t do that for a while...” [Joe]*

Respondents who tested positive for chlamydia all spoke about changing their sexual behaviour and wearing condoms with new partners. However, follow up interviews which were conducted twelve months later gave further insight into the modification of respondent’s sexual behaviours. The following section describes the changes in the young men’s behaviour after 12 months.

#### **5.15 Behaviour after 12 months**

For those who tested negative for chlamydia, no behaviour change was noted. Clive, Micky, Simon and Andrew all reported further unprotected sex since their previous interview. Micky took a further chlamydia test, which was negative while the others had not tested despite reporting casual partners and unprotected sex. Simon and Andrew were still in long term monogamous relationships with the same partners. Their situation had not changed since their last interview; they still reported both protected and unprotected sex with their regular partners.

Patient records were checked again at 18 months for all of the participants. These records revealed that Andrew and Micky who had previously tested negative for chlamydia, tested again after six months. Andrew obtained a further negative test result after ordering another online testing kit and Micky tested positive for chlamydia through a GP consultation. No further tests were recorded for the other three participants.

#### **Adoption of protective behaviours**

For those who tested positive for chlamydia, Robbie, Gary and Lee were followed up. Justin was un-contactable due to a change in mobile phone number and Joe found it difficult to arrange a further interview date due to work commitments in the military. Robbie, Gary and Lee all claimed to have changed their sexual behaviour following their diagnosis. However, after examining case notes and conducting follow up interviews, multiple partners and unprotected sexual intercourse were reported in participant case notes and in the interviews. These young men said that their behaviour had changed, in that they did not have unprotected sexual intercourse with as many women, or as often as they used to. Gary and Lee took a further test for chlamydia after the initial interview and within six months both were re-infected with chlamydia. Robbie had reported re-

infection in his first interview but had not been tested again prior to follow up interview, although he acknowledged the need for further testing. Secondary data from NHS records and their interviews showed that risk for re-infection with chlamydia was associated with sexual behaviour in regard to number of partners and unprotected sexual intercourse. The quote below described how Gary became re-infected with chlamydia after an alcohol fuelled night- out with a touring Rugby team:

*“...me and a friend ended up having a threesome with a girl from our halls (laughs)..., stupidly didn’t used a condom...we both went and got tested... as we discovered she was renowned for sleeping with a lot of people as you would probably expect as she was taking two at a time. Erm actually sadly tested positive for chlamydia...” [Gary]*

Predictors for re-infection for this participant were acquisition of new sexual partners, repeated unprotected sexual intercourse and new exposure to infection, which indicated no behaviour change. Contributing factors for unprotected sexual intercourse were the same as in his first interview and included alcohol consumption and peer pressure. His reason for unprotected sex was being ‘very drunk’. He described the impact of re-infection as minimal and talked about his lack of concern about being re-infected as the treatment was so easy:

*“err because I knew how easy the treatment was I was less concerned than the last time...” [Gary]*

Gary delayed his treatment for several weeks until his return to university after the holidays, to avoid going to his local GUM clinic for fear of being seen. His main concerns centered on his reputation with other women if they were to find out he had chlamydia. His health and fertility were of secondary concern. Gary thought it was quite amusing that he had been re-infected with chlamydia. He spoke about the way his friends mocked him for getting chlamydia for the second time, and was more concerned about his friends joking about him than the infection itself:

*“...if I did get it [chlamydia] again it wouldn’t be worth it purely because of the abuse I would get from my friends, sorry!...” [Gary]*

Lee also became re-infected with chlamydia after his first interview but believed this was because he took a test too soon after his initial treatment. This participant also claimed to

have changed his sexual behaviour since his first diagnosis and described how he initiated condom use prior to sexual intercourse with two partners:

*“...I was using protection, because of the bad experiences I’ve had in the past, I thought now I’m taking no chances...and the second one it’s been my decision to use something in that relationship as well because I don’t want anything” [Lee]*

Lee’s case notes revealed that a test had indeed been taken too soon after the previous infection and therefore his diagnosis may have been a false positive result. However, further analysis of his case notes revealed that two months later he tested positive again for a further infection after having unprotected sex with a new sexual partner. This indicated a new chlamydial infection.

Lee, Gary and Robbie were all re-infected with chlamydia either before their first interview or during follow up. Joe and Justin, the other two respondents who tested positive in the study were unavailable for follow up interviews and no further tests could be found for them through the screening programme at the time of follow up. However, six months after follow up case notes were examined for a third time. This showed that Justin who had previously tested positive had tested again at university but the test result was negative. However, this suggests continued risky behaviour.

### **5.16 Chapter summary**

The findings presented in this chapter build a picture of the factors involved in the decisions men make about their sexual behaviour, sexual practice and screening behaviour. A number of internal, external and societal factors which influence respondents’ sexual health decision making have been uncovered. Their values and beliefs about sexual partners, the perceived threat of chlamydia infection, the influence of normative beliefs, peers and masculinity all play a part in the participants’ behaviour. This research also explored preferred screening choices for men including the reasons why they decide to seek chlamydia screening. Anonymous internet testing being available for STI screening is a major factor in the decision to take up testing. Most of the respondents indicated that they would not have accessed a sexual health service for testing if the online service had not been available.

Factors influencing the decision to seek testing differed depending on relationship status. Those who were single used the screening service as a backup to sex without a condom,



whereas those in a relationship tested at the request of a sexual partner or when starting a new relationship. Irrespective of relationship status, testing was strengthened by catalysts which included media campaigns on the radio and television, and posters in health centres and shopping malls. These campaigns prompted testing behaviour for all respondents, and the ease and convenience of home testing via text or the internet appealed to this group of men.

The research also investigated the relationship between a positive and negative test result for chlamydia and modification of sexual behaviour following diagnosis. Findings revealed that the impact of a negative diagnosis gave respondents a 'clean bill of health' with the reassurance to carry on gambling with their sexual health. A positive diagnosis had the opposite effect on respondents. Their initial reaction was the shock of contracting an STI followed by concerns around the impact the disease may have had on their reproductive health. This encouraged participants to reflect on and modify their sexual behaviour by increasing condom use and limiting the number of sexual partners. However during follow-up interviews the participants' intent to change their sexual behaviour was not maintained and many of the young men became re-infected with chlamydia. This is important because if follow up interviews had not been incorporated into the research design, then the findings would have indicated that a positive test result for chlamydia does lead to modification of sexual behaviour.

The next chapter will discuss the findings in relation to the research questions; relevant theories and concepts in the literature and to professional practice and policy.

## CHAPTER SIX: DISCUSSION

The previous chapter presented the research findings. This chapter discusses and explains how meaning was extracted from the research data to provide the textual bridge between what has been found in the fieldwork and the conclusions which are drawn from that evidence (Trafford and Leshem, 2008). This is explained by addressing the research objectives and discussing the key findings of this study in relation to the theoretical perspectives which provided a conceptual framework for the study. It will then highlight how this thesis contributes to knowledge and practice regarding young men's sexual decision making. The study objectives were:

- To investigate how the individuals' knowledge, attitudes and values around sexual practices impacts upon their sexual choices, prevention, social responsibility and help seeking behaviour in relation to sexually transmitted infections.
- To analyse the complex influences on young men's decision making in relation to requesting a self-test for chlamydia via web/text based trust services.
- To uncover individual perceptions of sexual health screening from hard to reach users and identify important lessons for practice.
- To investigate the relationship between positive and negative diagnosis for chlamydia and modification for sexual behaviour following diagnosis.
- To explore findings with practitioners and determine implications for practice.

The findings of this study provide a comprehensive exploration of the complex factors affecting young men's sexual health decision making, including the factors associated with unprotected sexual intercourse. This chapter discusses three key findings from this study: the first key finding '*out on the piss, chasing tail*' examines sexual risk taking and alcohol use in relation to hegemonic masculinity, the second key finding discusses what the young men described as '*a calculated risk*' which discusses the costs and benefits associated with sex without a condom. This is discussed in relation to the impact of a negative and positive test result on the young men's behavioural intentions and their actual behaviour. This is considered in relation to the relevance of behavioural theories, and how well they help explain other variables that affected behaviour such as masculinity, alcohol use and sexual arousal. The third key finding discusses '*screening behaviours*' and examines the reasons why young men prefer internet testing as opposed to attending health services, drawing on theories of masculinity and men's use of health services. This section also

looks at the impact of local and national media campaigns, and the public health messages that were initially used to target the screening population. No other research has focused on this from the perspective of ‘hard to reach’ young men who have been screened through a chlamydia screening programme. Therefore the findings will make a unique contribution to knowledge, practice, policy and further research.

### **6.1 “Out on the piss, chasing tail”**

The concept of hegemonic masculinity was prevalent among the young men in the study and was associated with a range of risky sexual behaviours including, the number of sexual partners, condom use, alcohol consumption and reputation with peers. The young men’s perceptions of their peers’ opinions and how this perception influenced their behaviour seemed to be a strong predictor of behaviour. *‘Out on the piss chasing tail’* derives from the quote by a young man in this study to describe the actions of his peer group, which were linked to masculinity, sexual risk taking and alcohol use. The following section discusses how these traditional norms of masculinity exert a strong influence on male attitudes and behaviours in relation to the risk of STIs.

The young men in this study wanted to conform to the social norm within their peer group which meant multiple partners and unprotected sex. Their interpretation of this social norm resulted in dominant masculine behaviours involving risky sexual practices and unprotected sex in order to fit in and to be accepted. One particular behaviour which was apparent in all of the young men’s accounts was binge drinking. Alcohol consumption and binge drinking<sup>2</sup> is high among young people in the UK (Public Health England, 2013) and sexual activity is often linked with alcohol consumption in ways that are viewed as culturally acceptable (BASHH, 2011). The North East region has one of the highest levels of alcohol consumption in the country (Public Health England, 2013), with men in the North East drinking on average, over 21 units (unsafe limits) compared to England as a whole (Public Health England, 2013). The North East of England, in particular Newcastle, is renowned for its busy night life, lively clubs and legendary treble bars that are visited by students, residents and guests out on the ‘Bigg Market’ or ‘Diamond Strip’<sup>3</sup> most nights of the week. The alcohol culture in the North East is perceived as the norm, and many young people choose to study or visit Newcastle because of its nightlife. The local media (Appendix I) also play a part in promoting a drinking culture that is fraught with ‘Horney’

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<sup>2</sup> Defined as consuming more than twice the daily recommended levels in one session (Cabinet Office/Prime minister’s strategy unit (2004)

<sup>3</sup> An area in the city centre of Newcastle with a high population of clubs and wine bars.

students and ‘rampant’ unprotected sex (Painter, 2014). However, a recent newspaper article highlighted the city’s playful and fun reputation as being called into question with multiple suspected rapes which have been reported in the city’s night hot spots, where intoxicated female students were targeted (Vanstone, 2014). This highlights the type of drinking culture present in the North East of England.

In this study, alcohol use played a big part in the lives of the young men and was used in a number of different social contexts. Alcohol use was also a major influence on their sexual behaviour. For example, all of the young men referred to drinking alcohol before sexual contact, with some describing alcohol use as a planned activity which gave them the confidence to initiate sex with a woman they had met on a night out. Alcohol Expectancy Theory (George and Stoner, 2000) suggests that individuals who think drinking alcohol will cause them to become less nervous, more sexually uninhibited, and thus at greater ease in potential sexual situations are more likely to drink before a possible sexual encounter, such as at a party or on a night out. Participants described their alcohol consumption being a major part of their social life. It was associated with watching the football or after rugby practice, during university socials or going to pubs and clubs at the weekend with the aim of getting ‘drunk’ and meeting women for sex. Those young men who reported binge drinking were more likely to report unprotected sex, with their number of partners increasing with the amount of alcohol consumed. This is consistent with previous research which suggests that alcohol consumption is associated with having multiple sexual partners and inconsistent condom use (Choudhry, Agardh and Stafstrom *et al.*, 2014)

Alcohol use was also referred to by some of the young men to justify having sex without a condom when they were post rationalising their behaviours during the interviews. These behaviours usually involved a ‘drunken’ sexual encounter with a woman they had met on a night out. Alcohol was used in this context as an excuse to legitimise the behaviour in a way that may have otherwise been perceived as unacceptable or too risky (Skinner, Smith and Fenwick *et al.*, 2008). The young men tended to externalise the reasons for their own risky behaviours by attributing them to factors that were felt to be out of their control, for example, being ‘drunk’ due to excessive alcohol consumption, or their lack of behavioural control whilst being ‘sexually aroused’ or during the ‘heat of the moment’. This could suggest an external locus of control (Rotter, 1954). However, as the participants were under the influence of alcohol, it could also be argued that the interaction between sexual arousal and alcohol intoxication enhances attitudes and intentions towards risky sexual

behaviours, even when these behaviours contradict their ‘sober’ attitudes and intentions (MacDonald, MacDonald and Zanna, 2000; Davis *et al.*, 2007). This could be used to explain why those young men in relationships also reported occasional unprotected sex. It has also been suggested that alcohol intoxication restricts attentional capacity so that people are highly influenced by the most salient cues in their environment (Steele and Josephs, 1990). In the case of the young men in the study sexual arousal tended to be immediate, whereas cues that would inhibit sexual behaviour such as STI risk are more remote or abstract (Cooper, 2002). Therefore, risky behaviour is more likely to occur.

### **6.1.1 Alpha males and the social pressure to perform**

Those who tested positive for chlamydia described participating in risky sexual activities after alcohol was consumed, which suggests alcohol use is linked to risky sexual behaviours and STIs (Seth, Wingwood and DiClemente *et al.*, 2011). For example, two young men tested positive for chlamydia following unprotected sex with multiple partners after alcohol fuelled nights out with their peer groups. The effects of alcohol consumption coupled with the pressure to appear the dominant male among their respective groups (military personal or rugby teammates), resulted in risky sexual performances involving threesomes. The young men demonstrated sexual superiority over women using a range of means through, sexism, sex talk as well as through physical sexual activity with a woman (Holland *et al.*, 1998; Richardson, 2010). Their stories about their sexual conquests were used to demonstrate dominant masculinity. These stories were used to elevate their masculine status thus enhancing their reputation among their peers. Because these men were referred to as ‘legends’ or ‘alpha males’ it suggests that these behaviours were looked up to, and, the young men idolised. The admiration and praise which was received for these behaviours, positioned these men in a hierarchy of sexual successfulness amongst their peers, which set the standard for others to achieve. This was demonstrated by the young man who had sex with two women on the same night. He said that his peers in the military would now try and have sex with three women on the same night. Flood (2007) states that men’s discussions about sex are often the medium in which male bonding is enacted and internal pecking orders of the masculine hierarchy are (re)enforced. The young men were competing with each other and measuring success in terms of sexual conquests and risky sexual practices (Holland, 1994; Kimmel, 1994).

The young men in the study described the need to have sex with as many women as possible and prove this by public displays of ‘macho’ heterosexual performances where

women were referred to as sexual conquests. By 'boasting and bragging' about risky sexual behaviours the young men seemed to achieve status which gained male approval and power (Richardson, 2010). These stories suggest that the values of the young men who behaved in this way conformed to a 'traditional' masculine identity, which dominates women and refers to them as objects instead of as people (Curry, 1991; Kimmel, 2008). Although the majority of the young men in the study ascribed to hegemonic masculinity, achieved through the risky sexual behaviours discussed above, others ascribed to complicit masculinity, in that they did not live up to the ideology of hegemonic masculinity, although they benefit from its dominant position in the patriarchal order (Connell, 2005). One example of this was a young man, who was in a long term relationship throughout the duration of the study. Although he did not adhere to the same level of risky sexual behaviours as the majority of the men in the study, he did make compromises with those around him by taking part in male locker room 'banter' regarding women who, he referred to as 'slags' and reservoirs of infection. By negotiating assertion with those around them, these young men were able to preserve successful relationships whilst continuing to reap the benefits of being masculine. It is this negotiation which caused Connell (2005, p79) to describe these masculinities as 'carefully crafted'.

The findings of this study have clearly shown how the men's behaviours fit with the dominant theory of hegemonic masculinity. This section has shown how the traditional norms of masculinity, risk taking, excessive alcohol consumption and multiple partners continue to exert a strong influence on the young men's attitudes and behaviour in relation to the risk of STIs. It has also demonstrated that social norms and the perception of how other men behave was a strong indicator of behaviour in this study. The following section discusses the second key finding from this study regarding the impact of a positive and negative test result on subsequent sexual behaviour. This is discussed in relation to the relevance of behavioural theories and the limitations of these theories to help understand the young men's behaviours. The young men's interpretation of a negative and positive test result for chlamydia are surprising and have major implications for policy and practice.

## **6.2 'A calculated risk'**

Those who tested negative for chlamydia were not surprised by their test result. They did not feel susceptible to the infection, and displayed traits of optimistic bias (Weinstein, 1980). They had the attitude that 'it won't happen to me' and therefore, felt that they had no reason to change their behaviour. According to Lyng (1990) young men perceive risk

positively as an aspect of their life over which they have control and for which they are able to set their own limits and boundaries. Weinstein (1987) suggests that the more a situation is considered to be within the control of the individual, the more it is considered to be low risk. The young men who had repeated episodes of unprotected sexual intercourse without getting infected with an STI used this past experience to judge their risk. Health related decisions like safe sex behaviour are not determined by risk perception alone (Noar, 2007), there are other factors that may have influenced preventative behaviour. These include: perceived benefits, or disadvantages of unsafe sex, confidence in one's ability to perform a behaviour, social norms and perceived barriers. The young men referred to unprotected sex as 'a calculated risk', although some men reported not using a condom because they were caught up in the 'heat of the moment', while others reported that their decisions to not have protected sex were intentional and deliberate. 'A calculated risk' was based on previous experience of unprotected sex, assumed partner safety and several negative screening test results. As previously mentioned those respondents who tested negative for chlamydia did not feel susceptible to infection, even though the majority reported risky sexual behaviour patterns. The young men spoke about sexual gambling which referred to the risks and benefits they associated with engaging in unprotected sex. For some of these young men, under certain circumstances, risky sexual behaviour may be rational in terms of STIs. It is not implied that risky behaviour is rational in any objective sense, only that given certain sets of values and perceptions, engaging in unsafe sex seems like a reasonable gamble (Pinkerton and Abramson, 1992), which was the case for the young men in this study.

Risk avoidance is typically portrayed as a rational behaviour, while risk taking is represented as irrational or stemming from a lack of knowledge or faulty perception (Lupton and Tulloch, 2002, p114). In this sense 'voluntary risk taking, is a behaviour that involves participants in activities that are perceived to be dangerous, but undertaken deliberately and by choice' (Lupton and Tulloch, 2002, p114), which is the case for the young men in this study. The perception of being in control and optimism bias towards the risk of infection was demonstrated by those young men who tested negative in the study. Weinstein (1987), found that in assessing risk judgements on 32 different hazards, optimism bias was not limited to age, gender, education or occupation. He found that the individual will use their past experience to determine their future vulnerability, with the calculation that if a problem has not yet appeared it is unlikely to arise in the future. This is reinforced by those who had previously tested negative for chlamydia, and the STI

safety criteria that was used to select sexual partners. These sexual partners were chosen based on perceptions about how ‘contaminated’ they were. For example, knowing or trusting a sexual partner influenced the young men’s beliefs about an individual’s safety, indicating that social class, education, income and numbers of sexual partners were predictors of perceived STI/HIV safety, (Maticka-Tyndale, 1991; Skidmore and Hayter, 2000; Masaro, Dahinten and Johnson *et al.*, 2008; Limmer 2014). Once a partner had been evaluated and deemed as safe, then sex with that partner was no longer seen as ‘risky’. It has been suggested that some individuals are more likely to underestimate than overestimate their risk of STIs/HIV infections regardless of the nature of their sexual behaviour (Ingham and van Zessen, 1997; Aggleton, O’Reilly and Slutkin *et al.*, 1994), which may be the case for the young men in this study. Previous research has shown that as individuals often rationalise risk taking behaviour using a range of socially constructed criteria, this could explain the apparent mismatch between objective risk and personal risk (Abrams, Abraham and Spears *et al.*, 1990).

The young men in this study felt reassured after receiving a negative test result. They referred to the reassurance they were seeking when they received a negative test result, as this gave them permission to carry on with their risky behaviour. This finding is supported by Pettigrew, Sowden and Lister-Sharp *et al.*’s. (1999) systematic review of the impact and implications of false negative results in screening programmes. This review suggested that negative test results could convey a feeling of ‘false reassurance’ which the individual interprets as a green light to continue with their unhealthy behaviour. This is similar to the ‘certificate of health’ effect (Tymstra and Bieleman, 1987), which describes individuals’ inclination to regard a negative test result as justification for their risky behaviour. The interpretation of a negative diagnosis for chlamydia as a ‘certificate of health’ has major implications for public health, and health protection regarding the spread of other undiagnosed sexually transmitted infections. This potential for multiple infections is evident locally in asymptomatic populations and is discussed in more detail later in this chapter in implications for practice.

### **6.2.1 Perceived costs and benefits of unprotected sex**

The construct of perceived costs and benefits which is present in the Health Belief Model (Rosenstock, 1991) and the Theory of Planned Behaviour (Fishbein and Ajzen, 1994) focuses on the individual’s opinion of the benefits and costs of a behaviour change in preventing a disease. This study has shown that a number of personal and cultural factors



interact to encourage sexual risk taking in ways that are not fully captured by the Theory of Planned Behaviour alone and that other variables identified in this study should be taken into consideration in relation to young men's sexual decisions. These theories have been found to be valid in a number of relevant contexts such as intentions to test for chlamydia (Booth, Norman and Harris *et al.*, 2013) and predicting risky sexual behaviours (Albarracin, Johnson and Fishbein 2001; Godin and Kok, 1996), but they solely could not be applied successfully to young men's sexual decision making and risky sexual behaviour in this study. Behavioural theories such as the Theory of Planned Behaviour (Ajzen, 1991) and the Health Belief Model (Rosenstock, 1966) recognise factors such as threat of a disease, but they do not account for the role of emotion, personality traits such as sensation seeking, cultural influences and concepts of masculinity or the time gap between behaviour intention and the actual behaviour (Werner, 2004), which were evident in this study. Therefore, an extended version of the Theory of Planned Behaviour which incorporates variables identified in this study (past behaviour, time gap between intention and behaviour, sensation seeking, alcohol and masculinity) might be useful in helping to explain the young men's sexual decisions. The benefits of not using condoms for the young men in this study were the greater pleasurable sensation of sex, which for them greatly outweighed the negative consequences that could potentially result in a STI. The benefits of unprotected sex are immediate, whereas the costs or consequences which might occur, if at all, will be some time in the future, and therefore not relevant to the young men in the situational context. Canin, Dolcini and Adler. (1999) suggest that sexual arousal and desire for sexual satisfaction impose a sense of urgency that can affect judgement. This is evident when the young men referred to 'testosterone' levels or the 'heat of the moment' taking control. They spoke about sensation seeking (Zuckerman, 1979) that was achieved by not using condoms, and compared condom use to wearing a 'raincoat in the shower'.

Zuckerman (1979) argues that any given individual's, sexual risk behaviour is driven by the idiosyncratic focus on the positive or negative consequences of risk taking most salient to that individual. He suggests that the high sensation seeker is more likely to downplay the risks associated with a given behaviour if he has experienced the behaviour previously without any negative consequences, which was the case for the majority of the young men who tested negative in the study. It has been suggested that:

*“the unique nature of the sex drive contributes to the fact that decisions about sex are often made in the heat of the moment when the person is emotionally and physically aroused rather than after careful or even*

*rational deliberation*” (Gerrard, Gibbons and Reid-Bergani *et al.*, 1996, p.400).

This would fit with the situational influences given by the young men in the study. A further reason stated by some of the participants for not using condoms included the negative effect they can have on sexual performance such as erectile failure, which could be linked to their reputation or the fear of not measuring up to be a real man (Flood, 2003). Alternatively, as young men with a strong endorsement of masculinity report greater numbers of sexual partners, greater sexual risk taking and more negative attitude to condoms (Pleck, Sonenstein and Ku *et al.*, 1994; Shearer, Hosterman and Gillen *et al.*, 2005; Numer and Gahagan 2009) it could be argued that sex without a condom may also be perceived by the young men to be a more masculine behaviour.

### **6.2.2 Perception of the severity of chlamydia**

The perception of the severity of the infection, combined with effective treatment for chlamydia also seemed to affect the young men’s decision making. This perception resulted in complacency among this group, and is similar to research findings carried out with other sexually transmitted infections, and different population groups (Mackellar, Hou and Whalen *et al.*, 2011). Studies involving men who have sex with men and HIV have found that, they too became complacent because of efficacy beliefs of highly active antiretroviral therapy (HAART) (Mackellar, Hou and Whalen *et al.*, 2011). It has been suggested that an individual’s perceived ability to carry out a health strategy successfully, such as consistent condom use, may greatly influence their decision and ability to enact and sustain a changed behaviour (Bandura, 1989). Studies involving self-efficacy, in other words confidence in one’s ability to practice safer-sex in difficult situations, and HIV risk behaviours have been successfully tested in a variety of risk groups for sexual acquisition of HIV, including heterosexually active adults (Wulfert and Wan, 1995) and gay men (Wulfert, Wan and Backus, 1996). However, because the benefits of the behaviour outweighed the negatives, then the behaviour was not considered to be risky. Katz *et al* (2000) suggests that the short term quest of pleasure outweighs the goal of good health. This is similar to the findings of studies carried out with gay men and HIV risk behaviour which show that condoms are not used because they diminish enjoyment (Carballo-Diequez and Bauermeister, 2004). These factors may account for some of the young men being more resistant to behavioural change and therefore not consistent with behavioural theories which do not address these variables.

### **6.2.3 Young men's real concerns about unprotected sex**

Participants relied on their sexual partners to use the contraceptive pill or emergency contraception (EOHC) for birth control, which was their primary concern. This choice of contraception was guided more by a wish to avoid pregnancy rather than a wish to be protected from STIs (Cooper, Agocha and Powers, 1999; de Visser, 2007). The young men believed a pregnancy would have a greater impact on their life than a sexually transmitted infection. Non barrier contraception was acceptable to the participants as long as it did not require them to do anything. The contraceptive pill, the coil and the morning after pill were all methods mentioned by the young men as reasons for risking unprotected sex. These forms of contraception are controlled and managed by women. They are perceived by men as not being intrusive in the act of sexual intercourse, unlike barrier methods (Thomas and Holland, 1998). If the women were thought to use condoms as their main form of protection against pregnancy and STIs, or were found to be carrying condoms then they were referred to as 'dirty girls' who must be going out looking for sex. This implies that girls who carry condoms have premeditated sex, which conflicts with ideas of romantic spontaneity and implicitly labels them as 'slags' (Lee, 1993). These views adhere to a sexual double standard which rewards and praises men for sexual contact but derogates and stigmatises women for similar behaviours (Kreager and Staff, 2009).

Structural factors like social norms shape individuals' perceptions of appropriate sexual behaviors for men and women. These social norms set up double standards that allow men more sexual freedom than women (Wingood and DiClemente, 2000). Although not all of the young men in the study took this view, at least two of them believed women who carried condoms were promiscuous. Further examples of a sexual double standard among the men in this study were related to young women they met on night out who had casual sex with them. These young women were described as 'dirty girls'. Research shows that hookups or casual sex are perpetuating a sexual double standard in which men receive more sexual and social benefits from hooking up than do women (Bogle, 2008; Kimmel, 2008; England and Bearak, 2014). This reinforces a gender order which is evident in hegemonic masculinity and traditional views of femininity and how women are supposed to behave.

### **6.3 'Getting more than you bargained for'**

Participants who tested positive for chlamydia talked about feeling susceptible to chlamydia as opposed to those testing negative who did not feel susceptible. Reasons

included previous infection or perception of their risky sexual behaviours with multiple partners. Post rationalisation may have also played a part in individuals' perceived susceptibility, where individuals felt the need to justify and rationalise risky behaviour to help with possible internal feelings of guilt. Personal risk or susceptibility is believed to be one of the more powerful perceptions in prompting people to adopt healthier behaviours (Rosenstock 1974). However, a perception of increased susceptibility did not lead to behaviour change as described in the Health Belief Model (Rosenstock, 1966). The construct of perception is modified by other variables, such as education, culture and past experiences. These individual characteristics influence personal perceptions. Therefore, those who had been infected with chlamydia previously may have had a heightened perception of susceptibility because of their past experience. This experience may also have diminished the person's perception of the seriousness of the infection, which is a further construct of the Health Belief Model. Because chlamydia is easily treated and cured with a short course of antibiotics, the young men interpreted chlamydia as a minor infection, which may explain why respondents who became re-infected did not change their behaviour.

For those who tested positive for chlamydia the impact of diagnosis was initially the shock of contracting the infection and concerns over the potential damage to their reproductive health and fertility, which is similar to the experiences of men and women screened for chlamydia in Mills, Daker-White and Graham *et al.*'s (2006) study. As a result they reported the intention to change their sexual behaviour as suggested by the Theory of Planned Behaviour (Ajzen, 2001), which included more condom use and fewer sexual partners. This could suggest that a positive diagnosis increases risk reduction behaviours (O'Campo, Deboer and Faden *et al.*, 1992). However, at follow-up interviews behaviour change had not been maintained and the majority of the young men become re-infected. This suggests that regardless of the diagnosis the screening programme for chlamydia may not be influencing behaviour change in individuals and may be giving individuals false reassurance regarding other infections. Although the young men said they had the intention to change their behaviour, because of the time lapse between the intention to change behaviour and the actual behaviour, their behavioural intention had changed (Werner, 2004). Although the Theory of Planned Behaviour (Ajzen, 2001) may help to explain *initial* intention to change behaviour, other variables such as emotions seemed to influence the behaviour. At the time of the interview when the men discussed their intentions to change behaviour, they had recently been diagnosed, and were still feeling

shocked and upset. However, after some time the young men's emotions were likely to be very different prior to performing the behaviour (sexual intercourse). Studies have shown that intentions to use condoms have a moderate to strong correlation with self-reported condom use (Sheeran and Orbelli, 1998; Albarracin, Johnson and Fishbein *et al.*, 2001). However, the interval between the first and second interview in these studies were less than 2 months. It has been shown that the strength of the connection between intention and behaviour decreases as the period between measuring intention and behaviour increases (Bennett and Bozionelos, 2000; Sheeran and Orbelli, 1998), which suggests that intentions do not necessarily lead to behaviour change. Other variables which are not taken into account by behavioural theories, and which had an obvious bearing on the young men's behaviours were the effect of mood altering substances such as alcohol use, and personality traits such as sexual arousal which was discussed earlier. Although the young men who tested positive for chlamydia had the initial intention to use condoms for sexual intercourse with new sexual partners, excessive alcohol use or sexual arousal were likely to impact on the rational decision making process, which these theories are based on, and critical to an intention behaviour relationship.

Predictors for re-infection among the young men in the study were acquisition of new sexual partners, which indicated new exposure to infection and unprotected sexual intercourse, which indicated no long term behaviour change. For those who were re-infected with chlamydia the perception of the severity of the infection had changed by the second interview, with those who became re-infected reporting less concern because they knew how easy it was to treat the infection. While the perception of seriousness is usually based on the individual's knowledge of a disease, it may also come from beliefs a person has about the difficulties a disease would create or the effects it would have on their life in general (McCormick- Brown, 1999). Chlamydia was perceived as an infection that was associated with women's fertility and therefore did not affect them. In addition, decisions regarding behavioural change, initiation and maintenance may be dependent on the extent to which people are dispositionally optimistic about their future (Scheier and Carver, 1985). The possible consequence of an infection on their lives in the future may not be considered at the time. As opposed to a pregnancy which was the main concern of this group.

The final key finding highlights the reasons why the young men chose to self-request screening via the internet as opposed to attending alternative health services for testing.

Because the young men actively chose to access home testing kits, it would seem that men are not disinterested in their health as suggested by the literature (Mansfield, Addis and Mahalik, 2003), but seem to prefer preventative services which are accessed remotely at a time that is convenient for them. It seems to be that these services are more acceptable to men when delivered outside the NHS setting, since they do not have the same concerns about interfering with the real purpose of health services which is to treat ill health (Noore and Stephens, 2008).

#### **6.4 Screening choices**

Screening choices refer to the perception of sexual health screening, and the complex influences on the young men's decision to request a self-test for chlamydia via the internet as opposed to accessing sexual health services for screening. The young men in this study tested for a number of reasons, however, the reasons for those who tested positive were different compared to those who tested negative. Those who tested negative chose to test to reassure themselves that they were free of infection, and to counterbalance their risk. A recent survey carried out by the NCSP, (2014) found that only 25 per cent (305/1,218) of those young people surveyed were more likely to think they were at personal risk of acquiring chlamydia after being tested (Public Health England, 2014), which suggests that the screening programme may be giving young people false reassurance.

In contrast, a major influence on testing behaviour by those young men who tested positive for chlamydia was perceived susceptibility, which was based upon the individuals' perceptions of their own risk. This could suggest that the young men were maintaining their health as well as the need to assure themselves that they would not transmit any infection on to a new or existing partner, thus highlighting a degree of personal and moral responsibility towards the self or others. Alternatively, it may be that those young men just do not want to be 'caught out' because of infidelity, or to jeopardise a new relationship by passing on an STI. In this study perceived susceptibility of infection contributed to health seeking behaviour in those testing positive for chlamydia, which is consistent with the Health Belief Model which posits that perceiving oneself to be susceptible to the disease and belief that it can have serious consequences are determinants of health seeking behaviour (Rosenthal *et al.*, 1992). This factor has been identified in previous studies with both men and women, where believing to be at risk of disease through unprotected sex with casual partners is a reason to seek STI screening (Balfe, and Brugha, 2009). The Health Belief Model was originally developed during the 1950s to determine uptake of

screening for Tuberculosis (TB) (Hochbaum, 1958). It was found that beliefs about susceptibility to the infection and the benefits of screening led to screening uptake. Therefore this model may be suited to predict this type of behaviour change. However, it should also be acknowledged that although the perception of susceptibility of infection in this study encouraged some of the young men to request chlamydia screening, a positive test result did not lead to a change in their sexual behaviour.

#### **6.4.1 Internet testing versus sexual health clinic testing**

Easy access to testing was a significant predictor of the intention to test and is consistent with other studies on STI and HIV testing in young people (Hou and Wisenbakker, 2005; Peralta, Deeds and Hipszer *et al.*, 2007). Thus, by proving free confidential, anonymous testing which is available out of hours, and can be accessed from your own home using the internet or mobile phones appears to contribute to the intention to get tested for chlamydia. The provision of internet testing was also successful in reaching ‘hard to reach’ groups of young men with high risk sexual behaviours; a group which have traditionally been difficult to engage with chlamydia screening (Woodhall, Sile and Talebi *et al.*, 2012). For these young men the appeal of internet testing was that it was anonymous and required no face to face contact with a health professional. As the majority of the young men were asymptomatic, testing via the internet would mean that they would not have to discuss or justify their risky sexual behaviours if they were found not to have the infection. For these young men preventative services such as screening for chlamydia were best delivered outside of clinical settings.

The majority of young men in the study said that they would not have accessed a sexual health service for a chlamydia test. The main reasons were the stigma associated with people who attend sexual health services and for fear of being classed as ‘unclean’. Some of the young men had very negative attitudes towards sexual health services and believed these services were used by ‘dirty people’ who had other, more serious infections like HIV. Two of the young men who tested positive for chlamydia refused to be treated at a sexual health clinic and were prepared to leave their infection untreated for fear of being seen by someone they knew. Lindberg, Lewis-Spruill and Crownover’s (2006) study with young men found that perceived barriers to testing in clinic settings related to the fear of being discovered going to a clinic by peers. They were also concerned about women finding out, which would result in less social desirability, which is similar to the attitudes of some of the men in this study. However, the young men said that they would access a sexual health

service if they were symptomatic and had painful or visual symptoms which affected the look of their penis, as these infections were seen to be interfering with their masculinity (O'Brien, Hunt and Hart, 2005).

#### **6.4.2 Mass media campaigns as external triggers to testing**

Mass media campaigns have been used for a range of health related areas and have successfully achieved appropriate changes in the use of healthcare services amongst young people (Gobin, Verlander and Maurici *et al.*, 2013). The impact of mass media campaigns had an obvious impact on the health seeking behaviours of the young men, regardless of their diagnosis. These cues to action included local and national media campaigns, which aimed to encourage young people to request chlamydia screening. These campaigns included TV and radio adverts, and posters displayed on bill boards and buses, and have clearly contributed to the decision to seek testing for individuals in the study. These triggers to testing are similar to those found in George and Flemming's (2004) study on factors affecting men's health seeking in the early detection of prostate cancer, where cues to action for those men included media, and partner influence.

The public health messages in these campaigns focused on early key health messages from the National Chlamydia Screening Programme which stated that '*1 in 10 young people have chlamydia*' and chlamydia is '*easy to test and easy to treat*'. The rationale for these public health messages was intended to reassure the population that testing and treatment was easy, and that chlamydia could be cured with antibiotics. Although these campaigns seemed to have the desired effect by raising awareness of chlamydia and increase the screening uptake among this group. The messages used in the campaigns may have also led to individuals misinterpreting the severity of the disease and its potential consequences. This was evident, not only by the way the young men were using the screening service to counterbalance their risk, but also through those individuals who delayed their treatment.

Findings from this study show that because 'hard to reach' young men actively sought internet testing for their sexual health testing, challenged the notion that men are disinterested in their health. The findings suggest that if internet testing were not available, many of these young men would not have accessed testing in clinical services unless they had obvious symptoms which had affected their manhood.



## **6.5 The role of the professional focus group and implications for practice**

As this research is for the award of professional doctorate it was important that findings would impact on professional practice. The following section discusses the role of the professional focus group in this research and how this impacted on local practice and national policy.

Recommendations for practice included the following: i) retesting those with a positive chlamydia test result 3 months post treatment, ii) changing the management of results notification for those testing negative to address the concept of false reassurance in patients, and iii) a review of the public health messages and campaigns to address complacency and misinterpretation of the chlamydia as a minor infection. As a result of the practitioner focus group, these interventions were implemented with immediate effect into the North of Tyne Chlamydia Screening Programme and the Newcastle Sexual Health service.

### **6.5.1 Retesting positive patients**

To address the high re-infection rates for chlamydia, retesting of all positive patients was identified as an appropriate intervention. This would involve recalling positive patients between three and five months after treatment for re-screening and follow up. The National Chlamydia Screening Programme adopts an opportunistic screening approach. However; the problem with this approach is that there are no robust systems in place for repeat screening. It is up to the health professional who screens the young person, or the individual to decide if they need a further test. This is problematic as some young people either do not believe they have put themselves at risk, or do not access screening. The findings from this study have demonstrated the importance of repeat screening for young men, especially for those who have previously tested positive for chlamydia and become re-infected within six months of treatment.

This recommendation for practice was endorsed by the practitioners group and due to a potential increase in costs for the chlamydia screening programme, the case was also presented to and agreed by the public health commissioners. In December 2012, I was invited to present the study findings and implications for practice (Appendix G) to a national working group in London who were considering the evidence base for rescreening positive patients to change policy (Public Health England, 2013). As a result, new national

guidance was published (Public Health England, 2013), followed by a national retesting audit tool published in March 2015 (Public Health England, 2015).

Because I was a researcher working in my area of practice meant that I could implement the changes to practice in the local chlamydia screening programme and assess the results of this change. From 1<sup>st</sup> April to 31<sup>st</sup> September 2013, I carried out an audit of two hundred patient records from the North of Tyne chlamydia screening programme to examine and measure the rate of retesting including the positivity of those that re-tested. Results showed that from 200 patient records, 110 (55%) retested (48% male; 60% female), which suggests retesting is acceptable to young men and women, with 20 (18%) testing positive again, which is consistent with the literature (Fung, Scott and Kent *et al.*, 2007; Hosenfeld, Workowski and Berman *et al.*, 2009). The data showing the reasons for re-infection suggest that re-infection was due to continued risk behaviour, which is consistent with the study findings. It should however, be acknowledged that there is limited evidence on the impact of increasing repeat testing on the incidence or prevalence of chlamydia or on the development sequelae and thus this requires further research.

#### **6.5.2 Management of negative test results**

Findings from this research show that those who tested negative for chlamydia viewed their negative test result as a certificate of health effect. In the screening programme results are relayed to the patients by their preferred method of contact, which is usually a text message. The current message states “Good news your recent test result is negative, all clear” which may be interpreted to mean a certificate of health. Therefore, a new message was required which indicated that their test result was negative this time, but that continued unprotected sex still put them at risk of re-infection. Practitioners suggested that further information may be necessary to explain that they had only been tested for one infection, which would remove any doubt of being clear of all STIs. Practitioners believed these were simple yet effective measures which could be implemented with ease. However, this does not tackle the young men’s perceptions about the severity or consequences of untreated chlamydia or the complacency this group have about contracting the infection.

As previously discussed, being a practitioner researcher enabled me to have a greater insight into the screening service than if I had not been directly involved in the service. Although being a practitioner researcher can be seen as problematic, it also has advantages (Hewitt-Taylor, 2002). These advantages included an overview on what was happening

locally in terms of the wider sexual health and STI rates in general. During the study an increase in asymptomatic gonorrhoea was detected in the North East of England in the same population as those targeted by the screening programme (Health Protection Agency, 2012). As a result the North of Tyne chlamydia screening programme began to dual test all samples for chlamydia and gonorrhoea in March 2012. This was to assist the Health Protection Agency's (HPA) outbreak management and case finding for gonorrhoea in the same population as the chlamydia screening programme. Feedback from patients who had tested positive for gonorrhoea and who had been screened for chlamydia previously through the National Chlamydia Screening programme revealed that they believed a negative diagnosis for chlamydia gave them the 'all clear' for all STIs (Health Protection Agency, 2012). Within six months of dual testing for chlamydia and gonorrhoea a substantial increase in positive cases for gonorrhoea was detected in mainly those testing negative for chlamydia (Health Protection Agency 2012). This indicates that individuals who had been screened through the chlamydia screening programme previously may have been falsely reassured by a negative chlamydia test result as suggested by the research findings.

### **6.5.3 Public health campaigns**

A further implication for practice concerned the public health messages. Future public health campaigns need to focus on giving the right public health messages through the media and other communication channels, which concentrate less on the ease of treatment message, and more on the consequences of untreated infection. From 2002 the public health messages from the NCSP had focused on how many people had the infection and how easy it was to treat chlamydia. These messages, which were designed to reduce stigma and encourage young people to come forward for testing have helped create a social norm, where chlamydia is perceived to be a common infection which is easy to treat. Future public health campaigns need to address complacency and focus more on susceptibility, severity and consequences of untreated infection, including public health messages about re-infection and the risk of other STIs.

## **6.6 Contribution to new knowledge**

The findings suggest that social cognitive theories such as the Theory of Planned Behaviour (Fishbein and Ajzen, 1994) and the Health Belief Model (Rosenstock, 1966), if used in isolation do not fully explain the sexual risk taking behaviours of young men. Although some of the constructs within these models were useful in identifying particular

determinants of behaviour such as health seeking, which was based on the individual's perceived threat of a disease, they did not adequately explain the relationship between behavioural intention and actual behaviour. The young men's accounts of their behaviour suggested that other variables not addressed by these theories affected adoption of these behaviours. These variables included: past behaviour, time gap between intention and behaviour, sensation seeking, alcohol, and masculinity. Therefore, the findings suggest that the use of these additional variables in conjunction with these theories may help to understand better or predict young men's sexual intentions and health behaviours. A possible explanation as to why these theories were successful in identifying health seeking behaviour may be because these theories were initially developed for general populations to look at the factors that influence screening uptake, rather than being developed for specific populations like 'hard to reach' young men who represent a population with complex needs.

A further contribution to knowledge is the impact that a positive or negative diagnosis for chlamydia has on subsequent sexual behaviour. A positive diagnosis led to the intention to change behaviour however, after a time lapse, the intention did not lead to behavioural change, thus increasing the risk of re-infection. A negative diagnosis gave individuals false reassurance to continue with their risky behaviour. The young men felt in control of their risk and displayed traits of optimistic bias, which was based on their previous experience. This suggests that the National Chlamydia Screening Programme is not contributing to behaviour change, but rather giving individuals false reassurance to continue with their risky behaviour.

A conceptual model (Figure 5.1, Chapter five) was constructed from the data to explain the complex factors involved in men's sexual decision making and behaviour including the impact of chlamydia diagnosis on modification of sexual behaviour. This model may be useful in helping identify implications for practice as well as pinpoint at what stage an intervention should be implemented. This model will be useful for professional practice to help practitioners understand the complex factors that affect the decisions that young men make about their sexual behaviour including their health seeking behaviour. The recommendations for practice can be identified at specific points in the model to help break the chain of infection to tackle behaviour change. For example, the model shows that the intention to change behaviour following a positive test result does not lead to actual behaviour change after 12 months. It also highlights a range of variables (alcohol,

masculinity, social norms and sexual arousal) that influences young men's sexual decisions. A recommendation from this study is therefore to retest those who test positive for chlamydia to reduce the onward transmission. This change to practice would be implemented 3 months post treatment for those testing positive. For those testing negative the intervention would need to occur at the time individuals are given their negative test result. Key messages would aim to reduce the false reassurance created by a negative test result and highlight the potential risk for other STIs.

### **6.7 Strengths and limitations of the study**

A particular strength of this study was in the research design which included the use of participants' NHS records and follow up interviews. The benefits of longer periods of follow up enhanced understanding of the longer term influence of participants' risk behaviours. If follow up had not been part of the research design the study findings would have indicated that a positive diagnosis for chlamydia led to modification of sexual behaviour. One of the original concerns at the beginning of the study was the potential difficulties in recruiting a 'hard to reach' group of young men who had decided to test anonymously through the internet. However, the ability to engage this group in this study is a clear strength which challenges the notion that young men are 'hard to reach'.

A further strength of this study involved the utility of the framework analysis approach which was used to analyse the data. This approach maintained an effective and transparent audit trail, which enhanced the rigour of the analytical processes and the credibility of the findings.

However, the study did have some limitations. The relatively small sample size of 10 service users could render the study open to criticism in that the participants may not have been representative of all individuals using the service. However, credibility of qualitative research depends less on sample size than on the richness of the information gathered.

A further possible limitation of this study may have been the reliance on self-report measures as masculinity ideology endorsement may have caused an over reporting of engagement in risky sexual behaviour in an attempt to prove their masculinity. A further possible limitation which should be taken into account is social desirability bias. This refers to the tendency of participants to answer questions with responses they believe are socially desired, rather than answering questions with answers that reflect their actual

thoughts are feelings (Grim, 2010). However, as the research included secondary data in the form of patients' sexual health records, the behaviour reported in their interviews was consistent with the behaviour that was reported in their records. Respondents may also have been post rationalising their sexual behaviour. Most of them were intoxicated or at the height of sexual desire at the time of the event, and therefore had had time to reflect and rationalise when recapping their narrative.

This study focused on 'hard to reach' young men about their sexual decision making and therefore fills an important gap in the literature.

## **6.8 Chapter summary**

This chapter has discussed the study findings in relation to the research questions, relevant literature and theories, policy drivers and current practice. This has given an insight into the young men's sexual health decision making processes their values and beliefs about sexual partners, the perceived threat of chlamydia infection, and the influence of alcohol, social norms, masculinity and personality traits in relation to sexual risk taking. The research has investigated preferred screening methods for men, including the appeal of anonymous internet testing.

This research was unique in that it has identified the influences on sexual risk taking and screening behaviour from a 'hard to reach' group of young men who have self-requested screening for chlamydia through NHS trust internet services. One of the main contributions to knowledge that this study brings is that social cognitive theories such as the Theory of Planned Behaviour (Fishbein and Ajzen, 1994), are inadequate in explaining the sexual risk taking behaviours of 'hard to reach' young men as they do not address important variables such as irrational decision making, the role of emotion and cultural influences such as masculinity which are vital to understanding young men's sexual risk taking behaviours.

The next chapter will conclude this research and give recommendations for practice, policy and further research.

## **CHAPTER SEVEN: CONCLUSIONS AND RECOMMENDATIONS**

This chapter provides a brief overview of the research, highlighting the main findings and contribution to knowledge and professional practice. The significance of the findings for policy and further research will also be explored.

This research, sought to discover the factors involved in young men's sexual health decision making, and, thereby gain an insight into the complex factors which influenced health related behaviour and behaviour change. Furthermore researching young men who are deemed 'hard to reach' allowed for greater understanding of what motivates this group. Previous research shows very little qualitative work into the factors affecting young men's sexual decision making, and the impact of diagnosis on subsequent sexual behaviour. No other research had previously investigated this from the perspectives from young men screened through the NCSP. Therefore, this research sought to investigate factors influencing sexual decision making in this 'hard to reach' group.

The research utilised a qualitative interpretivist approach to explore the factors involved in the young men's decision making. In depth interviews were used to gain an insight into the worlds of the young men and follow up interviews were used to gauge any long term change in behaviour. The study findings were presented to a group of practitioners to explore implications for practice. As a result, recommendations have been implemented into practice.

Findings from this study show that there is a strong link between masculinity, sexual risk taking and alcohol use. This research has highlighted the major impact that alcohol has on the young men's sexual risk taking. Alcohol consumption or binge drinking was associated with engaging in unprotected sex among the young men in this study. As this research was carried out with young men who were living in the North East of England where cities such as Newcastle are renowned for a 'boozy party' culture, it may be that this association is more prominent in areas like the North East. However, as other studies involving young people, alcohol and risk taking have highlighted similar links (Choudry, Agardh and Stafstrom *et al.*, 2014), this may be more to do with the effects of alcohol and with young people's propensity to experiment and take risks.

Another important area to highlight is the association between hegemonic masculinity, social norms and sexual risk taking. The young men were viewed by their peer networks in terms of how sexually successful they were. The riskier the sexual practice resulted in a higher status in the male pecking order. Even those young men who did not conform fully to hegemonic masculinity, engaging in sex with multiple partners was still seen to be contributing to the culture by denigrating women and referring to them using derogatory terms such as 'slags' in order to be accepted by their peer groups. This type of behaviour seemed to have formed early on in adolescence and had become more influential as the young men reached their twenties.

The findings suggest that young men are taking 'a calculated risk' when having unprotected sex displaying traits of optimistic bias believing that it would not happen to them. A set of STI safety criteria was used by the young men to determine the level of risk that a potential sexual partner posed. The young men used the term 'dirty girls' which referred to perceived sexual history, using comments like 'I bet she has opened her legs a bit'. 'Dirty' was associated with 'strangers' met in bars or clubs, girls who wore glamorous make up and expressed an interest in them. The level of education and social class were also used as signs of a risky partner. One young man even referred to dirty girls as fat and unattractive. These women were associated with STIs. The opposite was the case for those young women who were perceived as 'safe' partners or 'clean' girls. These young women were known by the young men or at least by their friends and, they were educated and trusted. Therefore, risk was perceived positively by the young men, as they were in control. In the situational context the young men's priorities and needs in relation to sex without a condom, including the desire to orgasm, by far outweighed the costs of the behaviour, which could potentially result in a minor STI, easily treated with antibiotics. The perception or threat of infections such as chlamydia was not a deterrent for not using condoms. The short term gratification of unprotected sex was immediate, whereas the consequences incurred, if at all, were sometime in the distant future. Their main concerns were the impact of a pregnancy, but, this was perceived as the woman's responsibility in the form of the contraceptive pill or EOHHC. Condoms were viewed as spoiling the 'heat the moment' or interfering with the ability to maintain an erection, which would interfere with their masculinity. The findings show that a sexual double standard still exists in relation to women who carry condoms and with those who engage in casual sex. The women who were seen to carry condoms were perceived as predatory, dirty girls who must be out looking for sex.



The research also confirmed that those receiving a negative diagnosis for chlamydia interpreted this as a 'certificate of health', to continue with the same behaviour. Those who tested positive for chlamydia revealed that they perceived this as a wakeup call to change their 'risky' behaviour. However, within six months respondents with positive test results and health intervention relapsed. Therefore, in relation to sexual practice, behavioural intention does not necessarily lead to actual behaviour change. Other variables also discussed in this thesis influence the sexual decision making process of young men. A conceptual model based on the findings has been constructed for use in professional practice. This shows the young men's behaviour as a cycle which helps to explain the factors involved in men's sexual health decision making and behaviour including the impact of chlamydia diagnosis on subsequent sexual behaviour. This model identifies the variables which influence the men's decision making at different stages in the decision making process, thereby enabling interventions to be targeted at the desired points in the behavioural cycle.

### **7.1 Contribution to knowledge**

This study was carried out with young men aged 20 to 24 years who had been screened for chlamydia after requesting a home testing kit via the internet. The study sought to investigate the factors affecting young men's sexual decision making in relation to unprotected sex, testing behaviour and behaviour following diagnosis. To my knowledge no other study has explored the impact of a positive or negative chlamydia diagnosis on the modification of sexual behaviour, using a 'hard to reach' group of young men screened through a chlamydia screening programme. The findings show that a negative test result for chlamydia gave the young men 'false reassurance' to continue with risky behaviour. The young men felt in control of their risk, which was based on previous experience.

The study showed that a positive diagnosis for chlamydia led to the intention to change behaviour, by limiting their number of sexual partners and using condoms. However, within six months behavioural intention did not lead to actual behaviour change, thus increasing risk of re-infection. Additional variables identified in the study that affected sexual decision making such as sensation seeking, alcohol consumption, and masculinity resulted in further risky behaviour and re-infection. The study highlighted a change in attitudes in those testing positive after one year follow up. Since their treatment the young men had become complacent about chlamydia.

The study showed that the young men used chlamydia testing as a secondary prevention measure and a reason to not wear a condom. Armed with the knowledge and past experience of infection they knew that if they did become infected again it would be easily treated. In addition, the ease of ordering a home testing kit for chlamydia via the internet provided an attractive option for the young men who took risks. This meant that they did not have to access a health service for testing, nor did they need to provide an explanation to a health professional for their behaviour.

This study provides a model (p101) which identifies the complex factors involved in young men's sexual decision making. This model offers a visual representation of the factors that influence sexual decision making in relation to unprotected sex, influences on testing behaviour and the impact of diagnosis on future behaviour. The findings from this study may contribute to the development of public health interventions for STI prevention by focusing on those who test positive and are at increased risk of re-infection, while at the same time identify potential areas for improvement in chlamydia screening programmes. For example, although nationally a retest is now recommended for those testing positive three months post treatment, there is a lack of information and guidance regarding working with young people with continued repeat infections. In addition, there is also a need to focus on those who are repeatedly testing negative for chlamydia and using a negative test result to continue their risk behaviour.

## **7.2 Implications for theory**

Those who tested positive for chlamydia had the intention to change their behaviour by using condoms and limiting the number of sexual partners. However, behavioural intention did not lead to actual behaviour as suggested by the Theory of Planned Behaviour (Fishbein and Ajzen, 1994). Other variables identified in this study that affected sexual decision making were previous behaviour, time gap from intention to actual behaviour, sensation seeking, masculinity and the influence of substances like alcohol. The factors identified in this study could contribute to these theories to ensure all variables that affect sexual decision making in young men are addressed. Although, the Health Belief Model (Rosenstock, 1966) was helpful in identifying screening uptake, which is what this model was originally designed to do, like The Theory of Planned Behaviour (Fishbein and Ajzen, 1994) on its own was not entirely helpful in determining sexual behaviour change among young men. Therefore, an extended version of the Theory of Planned Behaviour which

incorporates the variables identified in this study might be useful for explaining young men's sexual decision making.

### **7.3 Recommendations for professional practice**

There are a number of key recommendations for professional practice from this research. These recommendations were endorsed by the professional focus group and as a result have been implemented into practice: (i) to address the high re-infection rate within this population of the key recommendations was that routine re-testing should be offered to all patients who test positive for chlamydia to diagnose any re-infection and reduce the risk of further transmission. (ii) To reduce the concept of false reassurance that a negative test result can give, the recommendation for practice involved a change in the way individuals are notified of negative test results. Test results should be communicated to the individual by their chosen method informing them of their diagnosis, making it clear that they have only been tested for one infection. (iii) Further recommendations include a review of the public health messages for chlamydia to change young people's perceptions of the severity of the infection and a review of messages aimed at behaviour change. Consideration should also be given to how best to provide safer sex information to individuals who access testing via the internet. These recommendations are discussed in further detail below.

#### **7.3.1 Recommendation for those testing negative**

Findings from this study show that those who tested negative for chlamydia interpreted this as a 'green light' to continue with their risky behaviour. They believed that by using selected STI safety criteria, previous experience and optimistic bias, reduced their level of risk. As many of these young men had taken several chlamydia tests, it may also be that chlamydia screening was being used to counterbalance their risk as well as an excuse for not using condoms. These findings suggest that testing negative for chlamydia leads to complacency about health, which leads to false reassurance and deterioration in health behaviours. A recommendation for practice is therefore that all patients who test negative for chlamydia need to receive appropriate health messages. These messages should indicate that their test result for chlamydia was negative, but that they had only been tested for one infection. It should also be stated that continued unprotected sex still puts them at risk of infection as well as of other STIs. Such messages should remove any doubt of false reassurance, and reiterate that unprotected sex leaves them vulnerable to a range of STIs. These messages should also be given by health professionals during the screening process and incorporated in chlamydia screening literature.

### **7.3.2 Recommendations for those testing positive**

The literature suggests that those who test positive for chlamydia are at increased risk of subsequently testing positive (LaMontagne, Baster and Emmett *et al.*, 2007; Gotz, van and Hoebe *et al.*, 2012; Woodhall, Atkins and Soldon, 2012). This may be due to lack of partner management, continuing risk behaviour which was the case for the men in this study, or rarely treatment failure. This study found that those testing positive for chlamydia have an initial intention to change behaviour, but because of other variables previously discussed, this does not lead to actual behaviour change. This has implications for practice in terms of the transmission of chlamydia infection spreading, re-infection of partners and complications to health. Therefore, it is recommended for practice that a routine re-test offer is included for all patients who test positive for chlamydia 3 months after treatment.

### **7.3.3 Commissioning implications**

As the NCSP have moved away from screening volume to diagnosis rate it is important that retesting should be included as outcomes in local sexual health service specifications, especially since those testing positive are at increased risk of subsequent infection thus risk further transmission. However, it should also be acknowledged that these recommendations have implications for commissioning. The retest may attract additional cost associated with laboratory analysis, treatment and recall. Therefore further research and economical modelling needs to be done to ensure ROI (return on investments and efficacy) as well as associated costs of PID.

National guidelines emphasise the importance of identifying, testing and treating current and recent sexual partners of people diagnosed with chlamydia (BASH, 2006; MedFASH and BASHH, 2010). Guidance from the National Institute of Clinical Excellence (NICE) recommend that people at high risk of infection are offered one to one structured discussions with appropriately trained health professionals (NICE, 2007)

### **7.3.4 Review of public health campaigns**

This recommendation involves a review of the public health campaigns on chlamydia to ensure young people are given the correct information to avoid misinterpretation of health messages. Also, given that those young men who choose to access the internet will have had no information about chlamydia or intervention from a health professional regarding

their risk behaviour, consideration should be given to how best to provide this information to 'hard to reach' groups who use internet services.

### **7.3.5 Review of sexual health education**

The final recommendation relates to education in secondary schools. Findings from this study highlighted that the young men held negative attitudes and beliefs about young women in relation to sex and condom use. It was also clear that a sexual double standard where young men are praised for sexual activity and young women are degraded is still in existence. It is therefore, recommended that a review of sexual health education in secondary schools is carried out to ensure that concepts of masculinity are addressed for young men and that attitudes, beliefs and social norms are explored to dispel any myths and to ensure that young men have access to good quality sex education. A synopsis of the findings from this study will be produced and shared with head teachers, local authorities, Clinical Commissioning Groups (CCGs), and Public Health Leads to influence practice locally.

## **7.4 Recommendations for policy**

Public health policy needs to recognise the links between alcohol, sexual risk taking and masculinity in relation to young men's sexual health. Although, the NCSP has made a shift away from targets to outcomes (Public Health England, 2012), there is still a need to maintain high screening volumes in order to meet the public health indicator for chlamydia screening of 2,300 chlamydia diagnosis per 100,000 15-24 year olds per annum (Public Health Outcomes Framework, 2012) and bring down the prevalence of chlamydia. However, this will not happen unless young people's in particular young men's risk taking behaviours are addressed. Therefore public health policy needs to acknowledge the complex factors involved in young men's sexual health decision making as identified in this study. Government policies such as *Sexual Health Improvement in England* (Department of Health, 2013), are now beginning to recognise that the needs of young men are different to that of young women, by highlighting issues such as relationships, consent, contraception and infections. However, they also need to acknowledge cultural influences, such as alcohol use, masculinity and the impact of social norms, which have a major influence on the sexual health decisions that young men make.

This research has already had an impact on national policy regarding the routine offer of retesting positive patients for chlamydia (Public Health England, 2013) and local practice, which is currently being evaluated. Measuring the rate and positivity of those re-testing in

England has become a priority for the NCSP in 2015 and will be included in the national audits conducted across the country (Public Health England, 2015).

### **7.5 Recommendations for future research**

This study has identified the following gaps that need to be addressed in future research:

- Although one of the recommendations for practice is to offer routine retest for those testing positive for chlamydia, there is limited evidence on the impact of increasing repeat testing on the incidence or prevalence of chlamydia or on the development sequelae and thus this requires further research.
- There is no comparable study on the factors that affect young women's sexual decision making. This study found that the influences of unprotected sex for young men were alcohol, masculinity, sexual gratification and social norms. The impact of a positive and negative diagnosis on subsequent sexual behaviour from the women's perspective may be different to young men's especially since the consequences of untreated chlamydia infection have a greater impact on female fertility. Therefore, there is a need to understand the differences between genders.
- This research found that those who tested negative for chlamydia interpreted this as 'false reassurance' which gave them permission to carry on with previous risky behaviour. Further research is required to understand the most effective ways of informing individuals of negative test results, including what to include in health messages, to whom, and how these should be delivered to reduce the perception of false reassurance. Social marketing may be one approach to segment the audience to identify the most appropriate messages for those testing positive and negative
- This research found that public health campaigns regarding the NCSP have led to a misinterpretation of the severity of the infection. This was due to earlier key messages regarding the infection which stated that '*1 in 10 young people have chlamydia*' or the messages which focused on chlamydia *being 'easy to test easy to treat'* A further recommendation for future research is to investigate the impact of chlamydia campaigns on perceptions and behaviour.

### **7.5 Conclusion**

This study has shown that the factors that influence young men's sexual decision making and the impact of diagnosis on subsequent sexual behaviour have major implications for

public health in terms of reinfection and further transmission. This research has identified the major factors which influence young men's sexual decision making, and screening behaviour. By having a deeper understanding of these factors, and through the implementation of the recommendations for practice, policy and research we can begin to gain a better understanding of young men's sexual behaviours.

## **Appendices**

**Appendix A:** Participant information sheet

**Appendix B:** Example of interview transcript

**Appendix C:** Interview topic guide

**Appendix D:** Northumbria University Research Ethics Sub Committee (approval letter)

**Appendix E:** NHS Newcastle and North Tyneside Community Health, Research and Development Committee (approval letter)

**Appendix F:** National Research Ethics Committee (NREC) (approval letter)

**Appendix G:** Participant Invitation letter

**Appendix H:** Participant consent form

**Appendix 1:** Local newspaper article

**Appendix J:** Presentation to expert working group

**Appendix K:** Poster presentation, BASHH



**Part 1: Participant Information Sheet****What is the purpose of the study?**

This study will explore the factors involved in men's sexual health decision making from the experiences of young men who have tested for chlamydia via the web/text based postal service. The research will consider personal experiences of men when they speak about their sexual health, and understand how sexual health seeking behaviour among men is explained. This research aims to develop understanding of men's attitudes and behaviours to sexual health services. A deeper understanding of men's sexual health decision making will be valuable when working with young men, and may offer different ways to inform and design future sexual health services.

**Why have I been invited to take part?**

You have been chosen as you meet the criteria for the study which is male aged 20 to 24 years of age who has accessed chlamydia screening through the web/text based service.

**Do I have to take part?**

No. Your involvement in the study is purely voluntary, so it is up to you to decide if you wish to take part. To help you decide I can go through the information sheet and describe the study to you in further detail. If you agree to take part, we will then ask you to sign a consent form. You are free to withdraw at any time, without giving any reason this would not affect the standard of care you receive.

**What will happen if I decide to take part?**

If you decide to participate you will be asked to undertake an interview with the researcher. This interview may take up to 90 minutes and will be held at a time and venue agreed with you. The interview will consist of a number of questions designed to gather information to inform the study. The interview will be tape recorded. Following the interview the recording will then be typed up into a written document and the recording will be erased. Any direct quotes you make during the interview may be published in the final study. However you will remain anonymous and all personal details will remain confidential. You will also be required to undertake a further follow up interview to discuss and confirm what you have said from the first interview. This should take no longer than 30/40 minutes, the date and time will be arranged with you at the first interview.

**What are the disadvantages of taking part?**

Interviews can be time consuming and I will need to see you again so that you can verify what I am saying from your interview.  
Talking about personal, sensitive information with a stranger may also be distressing for some people.

**What will happen after the interview ends?**

After the interview ends the researcher will offer an opportunity for you to reflect and comment on your participation. You will have a further opportunity at your follow up interview to make a final withdrawal of consent for the information you have provided for the study at this time.

**Will my participation in the study be kept confidential?**

Yes. I will follow Research Ethics Committee ethical guidelines and legal practice and all personal information about you will be held confidential. The details about how I will do this are included in Part 2. This completes Part 1 of the participant information sheet. If the information provided has been of interest to you and you are considering taking part, please read the additional information in Part 2 before making any decision.  
If you disclose any information which may cause risk of harm to self and others, then I may need to disclose this information to the relevant party.

**Part 2: Participant information Sheet****What will happen if I wish to end my involvement with this study?**

Your decision will be respected without prejudice, and you will retain the right to have any data you have provided withdrawn from the study. After the interview ends the researcher will offer an opportunity for you to make a final withdrawal of consent for the information you have provided for the study.

**What if there is a problem and I wish to make a complaint?**

If you have a concern about any aspect of the study you should inform the researcher who will try to answer any questions you may have by contacting [michelle.stamp@nuth.nhs.uk](mailto:michelle.stamp@nuth.nhs.uk) – Tel 01912292853. If you remain unhappy and wish to complain formally, you can do this by contacting NHS complaints manager on Tel: 0191 2336161.

**How will my participation in the study be kept confidential?**

All personal information regarding you will be stored in a locked cabinet in Newcastle PCT; information will be made anonymous, ensuring no one can be identified from the data. This information will be held until after the study has finished and only the researcher will have access to this. Any data held on a computer will have the appropriate security devices and will be password

protected in line with the trust information governance policy. All copy information will be destroyed by shredding so that it is not possible to 'recreate' the record. Disposing of electronic data on a PC or USB will be in consultation with PCT IT department to ensure this information has been deleted from the system.

**Who is responsible for funding and undertaking the study?**

The research is being carried out by Michelle Stamp who is the Chlamydia Screening Programme Manager, as part of a Professional Doctorate at Northumbria University to improve practice and service development.

**Who has reviewed the study?**

The study has been reviewed by Northumbria University as part of a process of University ethical approval. Academic experts from the university and NHS Newcastle and North Tyneside Community Health have also reviewed this study and deemed it worthwhile and an important contribution to health care.

All NHS research in the NHS is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed favourably opinion by Research Ethics Committee.

**For further information about this research please contact:**

Michelle Stamp  
Chlamydia Screening Programme Manager  
New Croft Centre, Market Street East  
Newcastle upon Tyne, NE1 6ND  
Tel: 0191 2292958  
[michelle.stamp@newcastle-pct.nhs.uk](mailto:michelle.stamp@newcastle-pct.nhs.uk)

## **Appendix B: Example of interview transcript**

**Interviewer:** Can you tell me about your sexual history over the last 12 months?

**Respondent:** ok erm I've been in one relationship, one proper formal relationship one kind of a relationship and then erm I'd say probably about 4 or 5 one night stands, well not like one night stands it makes them sound really bad their just like friends. Erm the one night stands were like friends. I think I used condoms on all of them I think I believe all of them I used condoms I'm sure I did, they made sure the girls made sure erm and the relationship the main one we made sure we used condoms all the time and she was very keen on it erm and now this kind of is it a relationship is it not um we sometimes use protection we sometimes don't but were not anything formal or anything. Those one night stands I have to say I was drunk on those occasions cos I think three of them were house parties and two of them were nights out but then again they weren't with random strangers if it was a random stranger then I would enforce it myself but because I know them as friends not like close friends like distant friends so I build up some kind of rapport over the night with them kind of them erm like for example when you meet a girl in town you measure her up your looking to what she says and your looking to like where has this girl been how many guys has this girl been with all of these things going on in your conscious like you're thinking about them even though you don't think you are whilst your taking to her and your building up all these images of like who she is what she's done her background and stuff and by the end of the night you go back to hers or she comes back to yours you work out whether you should enforce protection or not erm this is especially hard when your drunk cos your less keen to enforce I mean the thing about condoms is I mean you don't wear a raincoat in the shower I don't know it makes it less enjoyable and it's the least of your worries when your drunk, but I mean at the end of the day I can rely on the GUM clinic as well because the GUM clinics here and I know where it is erm and I've been before I'm a bit more lax now about it whereas before I'd never been I could always use condoms I don't want to come here and go through the humiliation but now that I've been I've found out it's not too bad and its easy its free, accessible then I'm a bit more lax I'm not wanting to put a condom on each time although I do care, I do care about my health and erm I don't know it just depends upon how I image the girl when I'm talking to her whether she's like sensible or whether she gets around there we go.

**Interviewer:** How do you define the difference?

**Respondent:** Everything really yeah say like I'm at a house party and I'm with my friends and there are a lot of people there that I don't really know like sometimes I've met a girl I don't really know and I've got on fantastically with her and your talking to her and you're working out like how does she know everyone where is she from, does she go to university is she educated does she have a good background if she does then she will be informed about erm safe sex and stuff and you know that she'll be clean she won't have anything on her I know I don't have anything on me therefore I'm not going to force it however, if I go down to some of the more notorious clubs around here then erm I mean you can pick girls up who are like glammed up with make- up, I don't know you can work them out if they are not so well educated like it's not really a priority for them and I don't know then there not on the ball as such and you think yeah she might have something I need to protect myself erm more often or not when I'm in town when I'm drinking or when I am with a girl I think about her than myself, about protecting her, I mean I don't mind getting anything I've been to a GUM clinic now if I get something then to be honest I'll accept

that that's my fault, but I don't want to be passing anything on to her because at the end of the day I think it's going to affect her more than me especially with fertility and I know how precious that is to the girl so yeah.

**Interviewer:** can you tell me a bit about what led you to use sexual health services?

**Respondent:** erm I went with a friend basically I probably had unprotected sex about three times but I thought I used my intelligence to work out, well I thought these girls were keen educated and stuff you know I hadn't displayed any symptoms I didn't use condoms those times the girls weren't too enforcing on it maybe because they thought I was a smart guy who wouldn't screw around with any skanky girl erm.... my friend was going I wouldn't have gone myself like it comes to unprotected sex and your like right I really should go to GUM clinic just in case the girls probably go anyway but I thought maybe there's slim chance I might have and I'll say right I'll go at the end of this week and then next week and it just keeps getting longer and longer and then you just forget about it, I haven't shown any symptoms fine she hasn't been a bit iffy with me I haven't had an texts or anything so everything's good, but you know my personal perception of STIs is the government propaganda and that just exaggerates it all so I'm using my intelligence to know there's not that many STI's but what made me come here is my friend said he was coming and I thought I should pull myself together I've been with three women now my chances have tripled of having something so I should get it sorted erm. If he hadn't have gone if he hadn't of said do you want to come with me I would have continued to leave it so I think it's best to go in twos as well but once you come here it's all good erm their friendly and everything so I'd be happy to come back. But I'm a bit more lax now because I know all about it and that's not a good thing it's probably the negative thing about it being so accessible I'm no longer scared of getting chlamydia or gonorrhoea because I know it can be sorted just like that, erm and I'll probably put extra drain on the NHS but I mean it's good for me as a service user but for NHS maybe not so good I don't know. Well they took some terrible swabs that nearly put me off I'll say that that taught me a lesson to use condoms (laughs) but err a couple of weeks later I forgot about how painful the swabs were and yeah it only took me 20 minutes and the nurses were really friendly so it was fantastic.

**Interviewer:** What did you expect your results to come back?

**Respondent:** erm I thought I was negative the way they were doing it was no news is good news so we waited anxiously for a text to come through and we never got it so we were like yeah we're all clear erm so we were happy and I thought yeah well I've got no symptoms and I thought if you're gonna like at school sex education you're taught to look out for smelly discharge , painful when peeing you see all these movies of people having sex and then having all these horrible things there's not really any focus on like the public's life in films and magazines, I mean I get men's fitness [magazine] and there's an article about pain when peeing and that raised awareness of like that, I thought cos I've had no symptoms I'm guaranteed not to have anything but I thought just to be sure, it's much as an experience because I wanted to know what it was like just in case I did need to go next time.

## Appendix C

### Interview Topics and Questions

**Table 1: Interview Topics**

▪ Sexual History
▪ Previous use of sexual health services/health services
▪ Existence of symptoms
▪ Perceived sexual risk behaviour
▪ Knowledge of chlamydia, and barriers to testing
▪ Decision making influences of health seeking
▪ Communication/Influences (friends, family, peers, partner, before, during, after)
▪ Factors associated with health seeking
▪ Sexual behaviour and its perception as a health or social related activity
▪ Psychosocial impact of receiving a test result
▪ Impact of diagnosis on future sexual behaviour

**Table 2: Probing Interview Questions**

▪ Can you tell me about your sexual history, number of partners, type of sex, protected, unprotected, intentions of protected sex, thoughts feelings, do you feel your sexual behaviour is risky, are you concerned about STI, pregnancy
▪ How would you describe your experience of testing for chlamydia
▪ What led/contributed to your decision to seek testing
▪ Are you concerned about your sexual health? and what does that mean to you
▪ Have you ever had a test for a sexually transmitted infection? If so where and what factors led you to test?
▪ Did you have any thoughts or feelings about testing, if so can you tell me about them
▪ How did you feel about your test result? Can you tell me a bit more about that?
▪ What kind of effect do you think your test result had or has on your life/sex life now?
▪ What is your perception of health services?

## Appendix D



*School of Health, Community & Education Studies*

Professor Kathleen McCourt, FRCN

Michelle Stamp  
New Croft Centre  
Market Street East  
Newcastle upon Tyne  
NE1 6ND

**This matter is being dealt with by:**  
*Research and Enterprise Office  
School of Health, Community & Education Studies*

*Coach Lane Campus East  
Newcastle upon Tyne  
NE7 7XA  
Tel: 0191 215 6276  
Fax: 0191 215 6083  
E-mail: lorna.kennedy@northumbria.ac.uk*

16 March 2010

Dear Michelle

School of HCES Research Ethics Sub Committee

**Title: A Qualitative Study to explore the factors involved in men's sexual health decision making**

Following independent peer review of the above proposal, I am pleased to inform you that University approval has been granted on the basis of this proposal and subject to compliance with the University policies on ethics and consent and any other policies applicable to your individual research. You should also have recent CRB and occupational health clearance if your research involves working with children and/or vulnerable adults.

The University's Policies and Procedures are available from the following web link:

<http://www.northumbria.ac.uk/researchandconsultancy/sa/ethgov/policies/?view=Standard>

You may now also proceed with your application (if applicable) to:

- NHS R&D organisations for approval. Please check with the NHS Trust whether you require a Research Passport, Letter(s) of Access or Honorary contract(s). The Research Passport application is available from the School Ethics website <http://www.northumbria.ac.uk/sd/academic/sches/research/861565/?view=Standard>
- Research Ethics Committee (REC). [They will require a copy of this letter plus the ethics panel comments and your response to those comments]. If your research is subject to external REC approval, a 'favourable opinion' must be obtained prior to commencing your research. You must notify the University of the date of that favourable opinion.

**Any research that has issues relating to the Mental Capacity Act 2005 needs to be submitted to an approved REC.**

**All researchers must also notify this office of the following:**

- Commencement of the study;
- Actual completion date of the study;
- Any significant changes to the study design;
- Any incidents which have an adverse effect on participants, researchers or study outcomes;
  
- Any suspension or abandonment of the study;
- All funding, awards and grants pertaining to this study, whether commercial or non-commercial;
- All publications and/or conference presentations of the findings of the study.

We wish you well in your research endeavours.

Yours sincerely

Professor Charlotte Clarke  
Associate Dean (Research)





### NHS Newcastle and North Tyneside Community Health

Research and Development  
12 Hedley Court  
Orion Business Park  
North Shields  
NE29 7ST  
Tel: 0191 293 1140  
Fax: 0191 293 1160  
Email: Gillian.johnson@newcastle-pct.nhs.uk

Project ID: 2010SH001

Miss Michelle Stamp  
Newcroft Centre  
Newcroft House  
Market Street East  
Newcastle  
NE1 6ND

28th June 2010

Dear Michelle

#### Re: To Explore the Factors Involved in Men's Sexual Health Decision Making

Thank you for sending me information about the above project. I am pleased to inform you that the Trust supports your proposed research study to take place in Newcastle Primary Care Trust.

We have registered your project on the Trust research database and you should keep us informed of your progress every 12 months to allow maintain Trust approval.

In addition, we also have an obligation to monitor at least 10% of all research studies undertaken in our area and the database is used to identify such projects. Should your project be randomly chosen for monitoring, the R & D Department will contact you.

In particular, it is a condition of our support that the R & D Department *must* be notified of:

- Completion date of the study;
- any significant changes to the study design;
- any decision made by a Research Ethics Committee regarding this study, including a copy of your ethics approval letter;
- all funding, awards and grants pertaining to this study, whether commercial or non-commercial;
- any serious adverse effects on participants or staff;
- any suspension or abandonment of the study;
- all publications and/or conference presentations of the findings of the study
- if the project is accepted onto the portfolio at any stage, the accruals must be attributed to Newcastle or North Tyneside PCT, as appropriate.

## Appendix F

### County Durham & Tees Valley Research Ethics Committee

Room 002  
TEDCO Business Centre  
Viking Industrial Park  
Rolling Mill Road  
Jarrow  
Tyne & Wear  
NE32 3DT

Telephone: 0191 428 3566  
Facsimile: 0191 428 3432

02 June 2010

Miss Michelle Amina Stamp  
New Croft Centre  
Market Street East  
Newcastle upon Tyne  
NE1 6ND

Dear Miss Stamp

**Study Title:** A Qualitative study to explore the factors involved in men's sexual health decision making  
**REC reference number:** 10/H0908/23  
**Protocol number:**

Thank you for your letter of 20 May 2010, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

#### Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

#### Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

#### Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

For NHS research sites only, management permission for research ("R&D approval") should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at <http://www.rdforum.nhs.uk>.  
*Where the only involvement of the NHS organisation is as a Participant Identification*

*Centre, management permission for research is not required but the R&D office should be notified of the study. Guidance should be sought from the R&D office where necessary.*

*Sponsors are not required to notify the Committee of approvals from host organisations.*

### ***Other conditions specified by the REC***

- **Please submit a copy of a valid indemnity certificate in respect of Northumbria University.**

**It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).**

**You should notify the REC in writing once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers.**

### **Approved documents**

The final list of documents reviewed and approved by the Committee is as follows:

<i>Document</i>	<i>Version</i>	<i>Date</i>
Covering Letter	1	Undated
REC application	IRAS 2.5	29 March 2010
Investigator CV	1	01 February 2010
Letter from Sponsor	1	25 March 2010
Referees or other scientific critique report	1	16 March 2010
Interview Schedules/Topic Guides	1	01 February 2010
Investigator CV – Dr Sookhoo	1	Undated
Protocol	3	20 May 2010
Participant Information Sheet: Client	2	20 May 2010
Participant Information Sheet: Staff	2	20 May 2010
Participant Consent Form: Client	2	20 May 2010
Participant Consent Form: Staff	2	20 May 2010
Letter of invitation to participant - Staff	1	20 May 2010
Response to Request for Further Information	1	20 May 2010
Letter of invitation to participant	2	20 May 2010
Letter from Northumbria University	1	24 May 2010

### **Statement of compliance**

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

### **After ethical review**

Now that you have completed the application process please visit the National Research Ethics Service website > After Review

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

The attached document “*After ethical review – guidance for researchers*” gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email [referencegroup@nres.npsa.nhs.uk](mailto:referencegroup@nres.npsa.nhs.uk).

<b>10/H0908/23</b>
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<b>Please quote this number on all correspondence</b>
---

Yours sincerely

**Dr John Drury**  
**Chair**

Email: [leigh.pollard@nhs.net](mailto:leigh.pollard@nhs.net)

*Enclosures:* “After ethical review – guidance for researchers”

*Copy to:* *Research & Development Office, NHS Newcastle & North Tyneside  
Community Health, 12 Hedley Court, Orion Business Park, North Shields,  
Tyne & Wear, NE29 7ST*

*Dr M Sookhoo, Principal Lecturer, Northumbria University, Coach Lane  
Campus, Newcastle upon Tyne, NE7 7XA*

North of Tyne Chlamydia Screening Programme  
2<sup>nd</sup> Floor  
New Croft Centre  
Market Street East  
Newcastle upon Tyne  
NE1 6ND

Tel: (0191) 229 2958

Fax: (0191) 229 2982

Dear Patient

**Chlamydia screening research – To explore the factors involved in men’s sexual health decision making**

I would like to invite you to take part in the above research study, to explore the factors involved in men’s sexual health decision making. I am a student at Northumbria University studying for a professional doctorate in public health, and also manage the chlamydia screening programme. I am interested in sexual health seeking behaviour of young men and would like to know more about your experience of being screened for chlamydia. You have been chosen to take part in this study because you meet the criteria for the study as you are male, aged 20 to 24 years who lives in Northumberland Tyne and Wear and have been screened for chlamydia in the last year following your request using the web/text service in the trust. Patients with both positive and negative test results will be included in the study, to look at differences in behaviour following a chlamydia test result.

Before you decide to participate in the study it is important that you understand why the research is taking place and what is involved for you. If you consent to take part, one of the health advisors from the team will go through the project information sheet with you and answer any questions you have. Please take time to read the attached participant information sheets before making any decisions to consent to participate in this research. You will have a second opportunity to clarify any issues with the researcher before the interview. Informed written consent will be taken immediately prior to the interview.

Part 1 of the participant information sheet tells you the purpose of the study and what will happen to you if you choose to take part. Part 2 gives you more information about how the study will be conducted.

A member of the team will contact you within one week after you receive your test result to find out if you are interested in taking part in this study.

Please ask us if there is anything that is not clear.

Yours Sincerely

**Michelle A Stamp**  
**Chlamydia Screening Programme Manager**  
**Researcher**

<b>Participant Consent Form</b>
---------------------------------

**Title of Project:** A Qualitative study to explore the factors involved in men's sexual health decision making

**Name of Researcher:** Michelle Stamp

Please initial box below

1. I confirm I have read and understand the participant information sheet for the above research study. I have had the opportunity to consider the information provided, ask questions and have had these questions answered satisfactorily.

☐

2. I understand that my participation in depth interviewing is voluntary and that I am free to withdraw from the interview at any time without giving reason and I understand my withdrawal will be accepted without prejudice.

☐

3. I am aware my personal identity will be kept confidential and data protected and I will not be named in any written report, conference or other means of reproducing the findings related to this study.

☐

4. I agree to the interview being tape recorded and the use of anonymous direct quotes in the study report.

☐

5. I confirm I have read and understand this consent form and am aware of the nature and purpose of my participation and agree to take part in the above study

☐

6. I am aware that I can withdraw from this study at any time.

☐

7. All data will be stored within a locked cabinet within Newcastle PCT

☐

8. I am aware that disclosure of risk of harm to self/others may be passed on to the appropriate authorities

☐

9. 'I understand that relevant sections of my chlamydia notes may be looked at by the researcher through access of employment with NHS Newcastle & North Tyneside Community Trust, where it is relevant to my taking part in this research. I also understand that data collected during this study may be looked at by individuals from regulatory authorities. I give permission for these individuals to have access to my records'.

☐

Signature of research participant

Date

I can confirm that I have explained the nature of the research to the above named participant and have given adequate time to answer any questions concerning it

Signature of researcher

Date



## Appendix I: Local Newspaper Articles







# 5 RAPES SHOCK STUDENTS

ELOISE VANSTONE PICS: ELOISE VANSTONE

*Five suspected rapes within three weeks have stunned the students of Newcastle as they fear for their safety, causing police to increase patrols.*

Newcastle is renowned for its busy night life, lively clubs and legendary treble bars that are visited by students, residents and guests out on the diamond strip every single night. However, the city's playful and fun reputation is being

called into question with multiple suspected rapes having been reported throughout September and October.

On Tuesday 16th September, an 18 year old girl was allegedly raped inside OhSo, a busy bar on Newcastle's Groat Market. In the early hours of the morning, on a student night out with friends, the teenager was approached by a man inside the bar who

then allegedly attacked her. Students and regular night club-goers are shocked and in disbelief that such a horrifying act can take place in a room full of people.

A 19 year old girl was also sexually assaulted on Thursday 18th September on Warwick Street, walking home at 1.30am through the City Stadium. It is alleged that a man approached the girl before pulling her into a forested area and assaulting

her, she luckily managed to break free and run away.

Following this, on Sunday 28th September, a 17 year old girl is suspected of being raped after waking up in alleyway between Warwick Street and Statford Road. The girl had been heading to a party in the student populated area of Heaton with two teenage boys, before being woken up by

» CONTINUED ON PAGE 19

**WWW.UNIPAPER.CO.UK**



## Appendix J: Presentation to National Working Group



The Newcastle upon Tyne Hospitals NHS Foundation Trust  
Newcastle Hospitals Community Health

### Repeat Testing for Chlamydia

NCSP Repeat testing workshop  
20th December 2012  
Health Protection Agency, Victoria, London

Michelle Stamp  
Chlamydia Screening Programme Manager

The Newcastle upon Tyne Hospitals NHS Foundation Trust

### Background and rationale

- Evidence describes that those who test positive for chlamydia are at increased risk of subsequently testing positive, compared to those testing negative. This may be due to lack of partner management, continuing risk behaviour or, rarely treatment failure.
- Following the results of local PhD research carried out on young men screened through the NCSP. The NOT CSP implemented a routine offer of re-testing those positive for chlamydia around 3 months after treatment.
- This presentation describes the research findings and how the retest has been implemented into practice.

### Aim and objectives of the study

**AIM**  
To explore the complex factors involved in men's sexual health decision making.

**OBJECTIVES**

- To analyse the complex influences on young men's decision making in relation to requesting a self test for chlamydia via web/text based trust services.
- To uncover individual perceptions of sexual health screening from 'hard to reach' users and identify important lessons for service
- To investigate the relationship between positive and negative diagnosis for chlamydia and modification for sexual behaviour following diagnosis.
- To understand how the individual's knowledge, attitudes and values around sexual practices impacts upon their sexual choices, prevention, social responsibility and help seeking behaviour in relation to sexually transmitted infections
- To explore findings with practitioners and determine implications for practice

### Findings

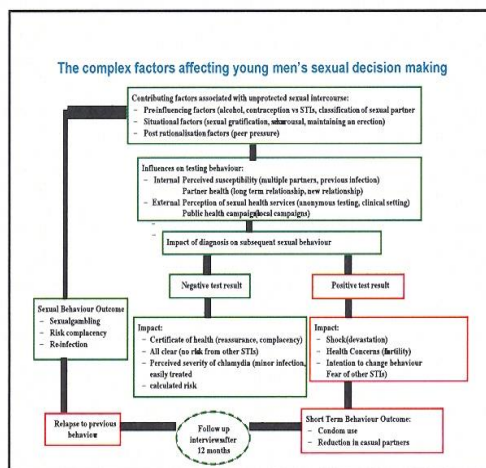
- The data give rise to three Meta themes:
- Factors associated with unprotected sexual intercourse
- Influences on testing behaviour
- The impact of a diagnosis on modification of sexual behaviour
- **Recommendations for Practice**

### Factors affecting unprotected sex

1. Alcohol
2. Non barrier contraception
3. Stereotypical classification of sexual partner
4. Peer pressure

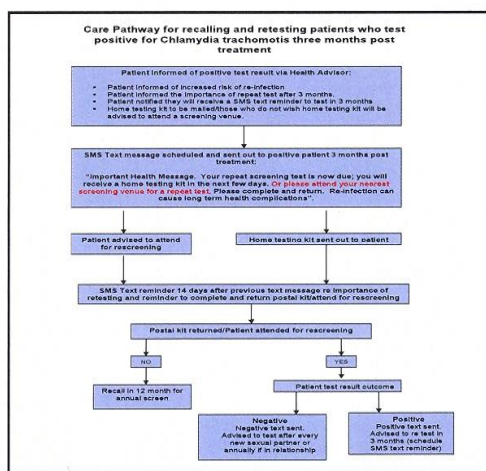
### Influences on testing behaviour

1. Multiple sexual partners
2. Public health campaigns
3. Reproductive health concerns
4. Perception of sexual health services



## Implications for Practice

1. A new public health campaign which focus on sexual behaviour change
2. Fast track patient for full STI screen for all those testing positive
3. Change to negative text result to avoid misinterpretation of test result as 'STI all clear'
4. Recall and retesting of positive patients within 3 months post treatment



## Home testing kit/Retesting Information

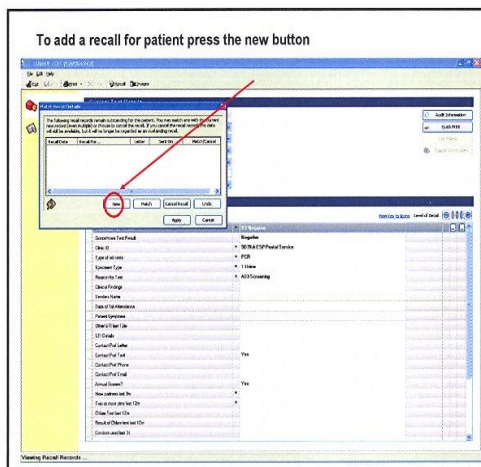


### IMPORTANT INFORMATION ABOUT RETESTING

- Having Chlamydia once will not protect you from getting it again
- There is a high chance of being infected with Chlamydia again a short time after you are treated for your first infection
- One of the reasons people get infected again with Chlamydia is because they have sex again with someone who still has the infection. It is very important to make sure everyone you are having sex with has treatment.
- For women: getting a second infection with Chlamydia can be much worse than the first infection because it is more likely to lead to dangerous and long term problems, including pain during sex, ongoing lower belly pain, and not being able to have babies when you want to (infertility)
- It is very important to get tested again for Chlamydia about three months after you were treated in order to find any new infections early, before they do more harm to your body.

## Administration

- Obtain clinic ID code for retesting
- Utilise recall system on blithe lilie database to schedule SMS text 3 months post treatment (using treatment date)
- Create custom crystal reports to obtain relevant data from fields within blithe lilie to audit intervention



Add the recall date 3 months from the treatment date

Select the recall type and press save

To run the report select recall list

Enter start & finish date and select the recall type then press print to run the report

Newcastle and North Tyneside PCT's Page 1

Report Date 19/12/2012 11:32

Recall List which occurred between 31/10/2012 and 30/04/2013

New Croft Centre

Agreed to Postal Kit & TEXT reminder

Recall Date	Patient Number	Name	Mobile number
17/03/2013			

Reminder text only

Recall Date	Patient Number	Name	Mobile number
08/02/2013			

Postal Kit already issued

Recall Date	Patient Number	Name	Mobile number
21/01/2013			

Declined

Recall Date	Patient Number	Name	Mobile number
14/02/2013			

Report Produced from Blithe Computer Systems' Life - Sexual Health Management System (BCSRpt0015.CReport v1.0.23)

## Audit measures

- Number of those responding to retesting
- Gender
- Age range
- Proportion testing positive/negative
- Response time to SMS text
- Response time to reminder text
- Number responding to home testing kit
- Number of those attending a clinic for retesting
- Reason for reinfection (new sexual partner/untreated sexual partner)

## Where are we now?

- CSP started informing patients of recall in October
- Patients responded well and thought it was part of patient management
- 74 patients scheduled for recall
- First wave will commence in Jan 2013
- 51 patients wanted SMS reminder only and agreed to attend clinic (declined postal pack as most were young and didn't want pack delivered to home)
- 14 agreed to postal pack being sent out
- 8 were issued a pack at treatment – scheduled text
- 1 requested a letter and a postal pack
- 1 opted out of recall

### **Queries/Assurances for commissioners**

- Antibiotic resistance
- Will this increase risky behaviours
- Optimum time for retesting
- What will it cost/most cost effective method of delivery
- Should we just be focussing on women
- Do those who come back reinfected need to be managed in GUM or require a different intervention



## Men's behaviour change following a positive or negative diagnosis for *Chlamydia trachomatis*

Michelle Amina Stamp

Newcastle Hospitals, Community Directorate (Chlamydia Screening)

The Newcastle upon Tyne Hospitals NHS Foundation Trust

### Introduction

This study explored the complex factors involved in young men's sexual health decision making, following a positive or negative diagnosis for *Chlamydia trachomatis*. This has been investigated from the experiences of young men who had self-requested internet testing for chlamydia, through NHS Trust web/text based services in a screening programme in the North East of England. The research focused on young men who are deemed 'hard to reach' and difficult to engage in services. In this study, the term 'hard to reach' refers to those young men who are under-represented in chlamydia screening service provision (National Chlamydia Screening Programme, NCSP, 2012). These young men are aged between 20 to 24 years, and are not being screened in mainstream health services. It is important to reach this group of men as they have a high rate of chlamydial infection (NCSP, 2012). They are prone to the longer term consequences of infection and they pose a risk to their sexual partners.

### Methods

Data were collected through in-depth interviews, and follow up interviews after 12 months. Follow up interviews were primarily used to gauge any long term behaviour change. Patients' sexual health records provided additional data which was used for triangulation.

Data were analysed with the use of framework analysis. Findings from the research were presented to a focus group of professionals and the outcomes from that discussion have been implemented in sexual health provision locally. This research has also fed into a national working group which reviewed chlamydia testing guidelines for positive patients.

### Results

A conceptual model of the data relating to the findings from this study is presented in figure 1 below. This model presents the complex factors associated with young men's sexual health decision making in relation to the impact of a positive or negative diagnosis for chlamydia on subsequent sexual behaviour. The model incorporates three key meta themes which emerged from the data, two of which are presented below:

- Contributing factors associated with unprotected sexual intercourse
- Impact of diagnosis on subsequent sexual behaviour

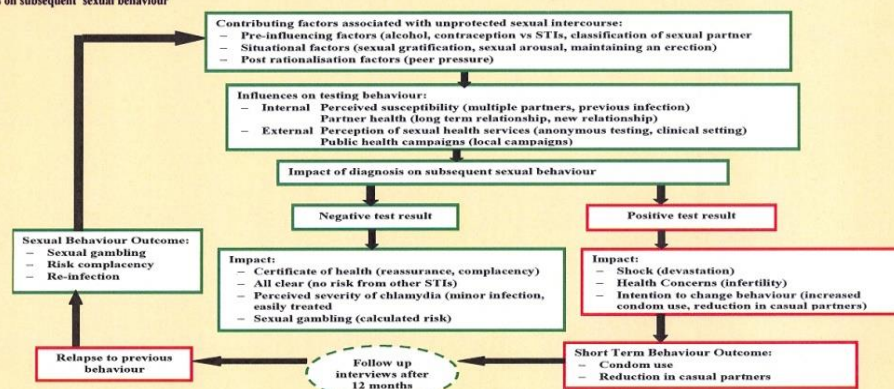


Figure 1: The complex factors affecting young men's sexual health decision making

### Contributing factors associated with sexual intercourse

♦ **Alcohol use**  
There is a relationship between alcohol use and high risk sexual behaviour. Alcohol was referred to as the 'norm', being part of student life, or part of a 'work hard, play hard' culture:

"erm one night stands...when I've just been out on the town and I've getting talking to them you know, and they come back to mine or me back to theirs. I don't know what I'm doing when I'm drunk, I can't remember a thing..."

♦ **Pregnancy vs STIs**  
Contraceptive pill, coil and EOHc were reasons for unprotected sex. Pregnancy was more important than concerns about STIs (the men relied on women to say they were on the pill and only intervened to tell them to get EOHc the next day)

"the pill, if a girl says that plus alcohol then...you generally think pregnancy more than sexual diseases..."

However attitudes to women carrying condoms was positive:

"if I met a girl and I said I didn't have one and she said I have I would automatically think you were looking to go out and have sex makes me think you're a dirty girl...it's alright for a lad to carry one...to have 3 in his wallet yet if a girl has one she's a slag and that's the way people portray it"

♦ **Stereotypical classification of sexual partner**  
Sexual partners were chosen based on assumed STI safety criteria (educated, nicely dressed, known to them) Risky partners were defined as 'dirty girls' (glammed up with make up, no education, strangers)

"When I have unprotected sex I use my initiative...and I'm using my judgment to work out this girl, has she got something has she been with other guys and that's just from what she's wearing what she does, her education everything and I'm judging from there...but I don't mind taking the odd gamble"

The young men weigh up the positives and negatives of having unprotected sex. The perceived susceptibility of contracting chlamydia is low because the women they choose to have sex with. Chlamydia is viewed as a minor infection which is easily treated, therefore the risk of sex without a condom is worth taking

♦ **Peer pressure**  
Peer pressure was associated with risky sexual behaviour and alcohol, and was experienced by all young men at some point. Linked to masculinity and male bravado:

"...when I go out with my...friends they are always chasing tail telling each other stories showing each other pictures...I really need to sleep with more women purely for the notches on the bedpost, nothing more..."

"...in the office they heard that I'd had sex with two birds so I went in and everyone was clapping thinking ah he's a legend, well done"

### Impact of diagnosis on subsequent sexual behaviour

♦ **Impact of negative test result**  
The young men interpreted a negative test result to mean a 'clean bill of health' which gave them the reassurance to continue with their current behaviour involving unprotected sex with multiple partners:

"it's...a kind of message that you're doing great having unprotected sex, keep going, getting a good result but at the same time you can carry on having sex."

"relieved, but I wasn't particularly concerned before, it's always yeah I haven't got it that's great, I guess that's just the reassurance I'm seeking when I do get it done..."

♦ **Impact of positive test result**  
A positive diagnosis for chlamydia encouraged the young men to reflect on previous risky behaviour and question future sexual practice and condom use:

"...when you get told the positive it's just like a kick in the balls really, sort yourself out...look what you've done now, so that is like I've got to start because it could be anything next time..."

♦ **Behaviour change following positive diagnosis**  
The majority of young men with a positive diagnosis were re-infected with chlamydia within 6 months:

"...me and a friend ended up having a threesome with a girl from our halls (laughs)...stupidly didn't use a condom...we both went and got tested. As we discovered she was renowned for sleeping with a lot of people, as you would probably expect as she was taking two at a time. Erm actually sadly tested positive for chlamydia"

Predictors for re-infection were new sexual partner, unprotected sex and alcohol.

### Conclusion

Key points

- A negative test result was interpreted as a clean bill of health, to continue with risky behaviour
- A positive diagnosis resulted in an intention to change behaviour, however other variables influenced this intention in the longer term
- Re-infection within 6 months occurred in the majority of positive patients
- Concept of masculinity had a significant impact on the young men's attitudes and behaviors
- There was obvious links between alcohol and sexual risk taking behaviour
- The promotion of the ease of testing message impacted on the perception of the severity of the infection
- Chlamydia screening was used as a secondary prevention method rather than primary prevention

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