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PILOTING A WARD ANGER RATING SCALE FOR OLDER ADULTS WITH MENTAL HEALTH PROBLEMS

John L. Taylor

Northumbria University, Newcastle upon Tyne, UK

Lindsey DuQueno

University of Teesside, UK

Raymond W. Novaco

University of California, Irvine, USA

Abstract. Aggression, including physical assault, is a significant problem in providing services for older people with mental health problems. A range of bio-psycho-social correlates of aggressive behaviour have been explored in this client group, but little attention has been given to the role of anger as an activator of aggression, despite its demonstrated predictive association with aggression in other clinical populations. In this pilot study, a staff-rated anger measure was administered to 27 inpatients in a specialist service for older people with mental health problems. The Anger Index was found to have high internal consistency and inter-rater reliability, and it showed robust concurrent and discriminant validity with comparison measures completed by independent raters. Higher anger scores were associated with organic diagnoses, history of aggression, and hospital assault data. The potential role of anger in the activation of aggression, the utility of anger assessment in the evaluation of risk, and the value of therapeutic approaches for aggression problems in older adult patients are discussed.

Keywords: Older adults, mental, health, anger, aggression, assessment.

Introduction

Aggressive behaviour in services providing care for older adults is a significant problem (Jackson, Templeton, & Whyte, 1999; Moniz-Cook, Stokes, & Agar, 2003). In a recent survey of violent and abusive incidents involving staff in NHS Trusts and Health Authorities in England and Wales, staff working in mental health services experienced the greatest number of incidents (NHS Zero Tolerance Zone, 2002). Mental health professionals serving older

Reprint requests to Professor John L Taylor, Department of Psychological Therapies & Research, Northgate Hospital, Morpeth, Northumberland NE61 3BP, UK. E-mail: john.taylor@nap.nhs.uk

adults are indeed often exposed to physical assault (Astrom, Bucht, Eisemann, Norberg, & Saveman, 2002; Bensley et al., 1997). In addition, older adults in residential care are susceptible to assaults from other residents (Shinoda-Tagawa et al., 2004). Aggression is the most frequent reason for older people to be referred to specialist mental health services and is the most common reason for placement breakdown and consequent institutionalization (Margo, Robinson, & Corea, 1980; Steele, Rouner, Chase, & Folstein, 1990).

Patients with dementia appear to have heightened proneness toward aggression (Burns, Jacoby, & Levy, 1990; Hope, Keene, Fairburn, McShane, & Jacoby, 1997; Webster & Grossberg, 1996). Palmstierna and Wistedt (1987) found that the aggressive behaviour exhibited by elderly patients with dementia was generally more frequent, although less severe than that displayed by elders with schizophrenia and other mental health problems. A recent study of violent incident injuries by Shinoda-Tagawa et al. (2004) of nursing home residents (73.5% of whom were over 70 years of age), which involved a large case control comparison group, found that persons living on an Alzheimer's disease unit were at significantly higher risk for injury from the violent behaviour of another resident.

The negative impact of older adult aggressive behaviour on clients themselves, staff and carers, and the healthcare system is significant (Ballard, 2001; Moniz-Cook et al., 2003). Patients displaying aggression are more likely to be physically restrained and (over) prescribed neuroleptic drugs, potentially resulting in addiction and dependence, increased cognitive impairment, and other side effects (Jackson et al., 1999). In addition, aggressive behaviour can be a significant cause of distress, fatigue, sick-leave, injury and burnout amongst staff and carers (Gerdner & Buckwater, 1994; MacPherson, Eastly, Richards, & Mian, 1994).

Despite aggression among older adults having such serious implications for service-users, carers and care systems, little is known about its aetiology or about effective interventions (Ballard, 2001). Cognitive impairment, depression and psychotic symptoms have been associated with aggressive behaviour in this population (Cohen-Mansfield & Werner, 1998; Deutsch, Bylsma, & Rovner, 1991; McShane, Keene, Fairburn, Jacoby, & Hope, 1998). Many other inter-related aspects of the lives of older people with ailing health, including loss of mobility, difficulties in self-care, lack of privacy, social isolation, boredom and poor relationships with carers, are likely to cause frustration and lead to aggression (Deutsch & Rovner, 1991; Moniz-Cook, Woods, Gardiner, Silver, & Agar, 2001). Further, as Ballard (2001) suggests, the strength of the association between dementia and behavioural disturbance points to the involvement of underlying neuro-pathological and biochemical substrates.

There has been little examination of anger as a correlate of aggression amongst older people in NHS and nursing care settings (Fox, Edwards, & Renwick, 2000). Conjecturally, this may in part be due to a tendency to attribute such behaviour to an individual's physical condition (e.g. dementia), rather than see aggression as a manifestation of emotional distress that is perhaps secondary to the medico-physical condition or the disability/handicap that results from it. Thus, observations of "agitation" and "aggression" are often confused in this client group, despite the former being an imprecise and ill-defined term (Ballard, 2001). If the emotional precursors or accompaniments of aggression are accorded higher salience, the relevance of anger comes more sharply into focus. Anger is neither necessary nor sufficient for aggressive behaviour, but it is a significant activator of aggression, particularly in high arousal states, and the relationship is bi-directional (Konecni, 1975; Novaco, 1994; Zillmann, 1988).

One reason that anger may not have received concerted attention in the context of aggression by older people is the lack of efficient anger assessment tools for use by staff, given that anger

self-report instruments potentially present obstacles for completion. Ballard (2001) provides an extensive listing of rating scales commonly used to assess behavioural problems (particularly aggression) in older patients and clients, and Moniz-Cook et al. (2001) and Shah, Evans and Parkash (1998) set out the limitations of many of the measures currently available. To date the focus has been almost exclusively on the development of observer-based measures of aggressive behaviour. Little attention has been given to the assessment of anger as a relevant construct in the activation of and maintenance of aggression, a seeming exception being the RAGE scale by Patel and Hope (1992); only 3 of 21 items on that measure, however, are anger specific (the remainder concern aggressive or deviant behaviours).

Research with a variety of populations in mental health institutional care has demonstrated a strong association and a predictive relationship between informant and self-reported anger and independently measured aggression in psychiatric patients (McNeil, Eisner, & Binder, 2003; Novaco, 1994), mentally disordered offenders (Novaco & Renwick, 1998; Wang & Diamond, 1999) and people with intellectual disabilities (Novaco & Taylor, 2004). A reliable and validated staff-rated anger assessment for use with older adults in care settings would facilitate the study of anger in this client group and elucidate its potential relevance for therapeutic intervention and management approaches. With this in mind, the present study investigated the reliability and validity of an existing staff-rated anger instrument in a sample of older people in a specialist mental health inpatient setting.

Method

Setting and participants

The study was conducted within two of the three specialist inpatient units providing services for the health of the elderly in the North East of England. The units provide assessment, treatment and respite services for people (mostly) aged over 65 years and presenting with functional and organic disorders. Each unit is mixed gender and has a capacity of 20 beds. The third unit was not included in the study due to an acute staff shortage problem caused by sickness and holiday leave.

At the time of the study there were nine vacant beds across the two units. Four patients were excluded because they had either been admitted during the seven days before the study commenced, or they had been on home-leave for part of this period. This left 27 participants, 15 women and 12 men. The mean age of the study sample was 76.6 ($SD = 8.9$, range 58–69). Three participants had more than one previous admission to older adult services, three had one previous admission, and 13 had no previous admissions. Previous admission data were unavailable for the remaining eight participants. The mean duration of current admission was 12.5 weeks ($SD = 14.9$, range 1–72). Sixteen participants (59%) had no known history of aggression and 11 (41%) had histories of verbal aggression, physical assault, or damage to property. Eighteen participants (67%) had organic disorder diagnoses including Alzheimer's disease, alcohol-related dementia and head injury. Nine participants (33%) had a functional disorder, primarily depression. Given that studies cited previously suggest that patients with organic disorder diagnoses would be more likely to exhibit aggressive behaviour, we therefore examined the "organic" versus "functional" diagnosis category grouping of the participants in exploratory analyses.

Procedure

The nature and purpose of the study was agreed with service managers, and staff participation was arranged through meetings with ward managers and clinical team leaders. All staff participants ($N = 8$) received an information leaflet giving details of the study, the requirements of staff involved, and the possible benefits of the research for patients and staff.

For each patient participant, two members of nursing staff who had had regular clinical contact with him/her during the previous seven days were asked to complete the Ward Anger Rating Scale (WARS; Novaco, 1994) independently but at the same time point. In order to investigate the convergent and discriminant validity of the WARS, one of the randomly allocated pair of raters was then asked to complete the Cohen-Mansfield Agitation Inventory (CMAI; Cohen-Mansfield, Marx, & Rosenthal, 1989) and was interviewed using the Neuro-Psychiatric Inventory (NPI; Cummings et al., 1994). Staff participants were briefed about the study measures at the outset by the second author who also administered the NPI. The order in which the measures were administrated was counterbalanced to control for sequencing bias.

Data concerning participants' age, number of admissions, reason for admission, length of current admission, diagnosis, and history of aggression were collected from hospital file records.

Measures

Anger assessment. The WARS is a two-part scale completed by a ward staff member recording judgements concerning the patient's behaviour over the past week. It was designed by Novaco (1994) for simplicity and ease of recording by busy direct-care staff. This measure is given in Appendix A. Patient self-report anger measures were not used so as to be minimally intrusive in this pilot study, which involved often confused and disorientated elderly clients.

The WARS anger measure is entailed in Part B of the instrument. It involves ratings on 5-point scales from 0 (not at all) to 4 (very often) regarding seven affective-behavioural attributes semantically related to anger: angry/annoyed, irritable/grouchy, resistant to suggestions, impatient/frustrated, tense/uptight, agitated/restless, and bitter/resentful. The sum of these seven anger attribute ratings produces an Anger Index. In a study involving mentally disordered offenders in a high security hospital in Scotland (Novaco & Renwick, 2003), the Anger Index had high internal consistency (Cronbach alpha = .88) and good inter-rater reliability (intraclass correlation = .82). Significant concurrent and predictive validity for the Anger Index was also found. In their study with intellectually disabled offenders, Novaco and Taylor (2004) found the Anger Index to have high internal consistency (Cronbach alpha = .95) and significant stability (intraclass correlation = .53) across administrations on two separate occasions several months apart. Concurrent and retrospective validity were obtained for this index in relation to anger self-report measures, and also with violent offence history and assault records in hospital.

Aggression measures. Part A of the WARS consists of 18 dichotomous ratings of patients' verbal and physical behaviours pertinent to aggression during the previous seven days. The ratings, as are those for the anger attributes, are made by ward staff who have observed the patient during this period. The dichotomous ratings generate seven indices: antagonistic behaviour, verbal aggression, physical aggression, emotional/behavioural lability, paranoid attitude, psychotic symptoms, and self-aggression. In a study involving inpatient mentally

disordered offenders, Novaco and Renwick (2003) found that the average inter-rater reliability (percent agreement) across WARS Part A items was 94.7%, and the indices had good concurrent, discriminant and predictive validity. Given the present sample size, so as to minimize the number of statistical tests, only the "emotional/behavioural lability" ("acted impulsively without restraint", "had a temper tantrum", "shouted or yelled" and "slammed, threw, or deliberately broke something") and the "antagonistic behaviour" ("was verbally abusive to someone", "verbally threatened to attack a patient", "verbally threatened to attack a staff member", "physically attacked a patient" and "physically attacked a staff member") indices were used in analyses.

The CMAI (Cohen-Mansfield et al., 1989) assesses agitated behaviour in patients with cognitive impairment. It consists of 29 items describing behaviours that are rated concerning their frequency using 7-point scales from 1 (never) to 7 (a few times an hour). Four indices are derived from this measure: physical aggression, physical non-aggression, verbal aggression, and verbal non-aggression. The CMAI has been shown to have good reliability and validity in a number of studies conducted in a variety of settings (e.g. Shah et al., 1998).

The NPI is administered as a semi-structured interview with an informed observer. It is a relatively brief instrument that provides an index of both the severity and intensity of a range of symptoms and behaviours over a defined time period. The NPI was developed specifically for use with clients with Alzheimer and other dementias, but it is also considered to be a useful behavioural assessment in other conditions. Ten behavioural domains are assessed by the NPI including: agitation/aggression, irritability/lability, disinhibition, delusions, hallucinations, depression, and anxiety. Two neurovegitative areas of sleep/night-time behaviours and appetite/eating changes are included also. The frequency and severity of each symptom or behaviour are rated on 4- and 3-point scales respectively and these scores are then combined to give a total for each domain. In this study, as for the WARS and CMAI, informants were asked to rate participants concerning their behaviour during the previous seven days. Cummings et al. (1994) reported good internal consistency, inter-rater and test-retest reliability, and satisfactory concurrent validity for the NPI with an older adult population.

Results

Two sets of independent WARS ratings were collected for the study participants at the same time so that the inter-rater reliability could be evaluated. One set of staff also completed the CMAI and NPI ratings to provide for convergent and discriminant validity analyses. In the analyses that follow, the WARS only data set is labelled "Raters A", and the WARS plus CMAI and NPI data set is labelled "Raters B". Staff informants were allocated randomly to the groups, which were independent of each other. Raters A failed to return completed WARS assessments on two female participants, and Raters B did not complete the Anger Index for one female patient as the member of staff involved felt unable to infer the emotional state of this participant. For the analyses that follow, the scores obtained from Raters A are used as the predictor variable.

The mean Anger Index from Raters A was 11.4 ($SD = 9.4$), which was comparable to the mean obtained by Raters B ($M = 10.7$, $SD = 8.3$). The results for these anger attribute ratings completed by Raters A are presented in Table 1. For the week of observation, the majority of participants were rated as "not at all" or "very little" for the attributes "angry or annoyed"

Table 1. Staff ratings (Raters A) of participants' anger attributes on WARS Anger Index

Anger attributes	Not at all %	Very little %	Sometimes %	Fairly often %	Very often %
Angry or annoyed	48	8	24	8	12
Irritable or grouchy	40	8	28	8	16
Resistant to suggestions or requests	36	8	16	4	36
Impatient or frustrated	36	12	20	0	32
Tense or uptight	36	4	28	0	32
Agitated or restless	28	4	36	4	28
Bitter or resentful	64	8	12	0	16

Note. $N = 25$. The ratings pertain to the patients' behaviour as observed by the member of staff over a one-week interval.

Table 2. Intercorrelation of WARS indices (Anger Index, emotional lability, antagonistic behaviour) for Raters A and Raters B

	Raters B		
Raters A	Anger Index	Emotional lability	Antagonistic behaviour
Anger Index	.79**	.84**	.66**
Emotional lability	.63*	.70**	.67**
Antagonistic behaviour	.42	.52*	.50

Note. $^{*}p < .01$ $^{**}p < .001$. $N = 25$ patients rated by two sets of independent raters. The correlations are Spearman Rho, two-tailed tests. The WARS ratings pertain to ward observation of the patient in the previous week. The Anger Index consists of seven anger attributes rated on 5-point scales. The Emotional Lability Index consists of dichotomous ratings (absent/present) of four anger-emotive behaviours. The Antagonistic Behaviour Index is comprised of dichotomous ratings of five aggressive behaviours targeting a person.

and "bitter or resentful". The attributes that most frequently received ratings of "fairly often" or "very often" were: "resistant to suggestions or requests" (40%), and "impatient/frustrated", "tense/uptight", and "agitated/restless" (32% each).

Reliability analyses

The internal consistency (Cronbach alpha) for the 7-item WARS Anger Index completed by Raters A was .93 ($N = 25$) and .91 ($N = 26$) for Raters B. The inter-rater reliability coefficient (intraclass correlations, one-way random model) for the Anger Index completed by Raters A and B was .78 ($p < .001, N = 25$). The same computation for each of the seven attribute ratings comprising the Anger Index yielded correlations of between .55 ($p < .01$) for "resistant to suggestions or requests" and .75 ($p < .001$) for "agitated or restless".

The intercorrelation (Spearman Rho) between raters of the WARS indices for Anger Index, Emotional Lability, and Antagonistic Behaviour is presented in Table 2. All coefficients on the diagonal are significant at $p < .01$, except that for antagonistic behaviour, which is $p = .012$. It can be seen that the correlations between raters across indices are substantial. It is noteworthy

Table 3. Correlations of WARS Indices from Raters A with the NPI and CMAI from Raters B

	WARS indices (Raters A)		
Raters B	Anger Index	Emotional lability	Antagonistic behaviour
NPI subscales			
Delusions	−.04	−.21	−.08
Hallucinations	.33	.33	−.14
Agitation/aggression	.71**	.71**	.50
Depression/dysphoria	.02	−.04	−.07
Anxiety	.04	−.03	.00
Elation/euphoria	.34	.19	−.11
Apathy/indifference	.18	.23	.00
Disinhibition	.54*	.54*	.22
Irritation/lability	.71**	.66**	.42
Aberrant motor behaviour	.53*	.30	.06
Sleep	.33	.42	.26
Appetite/eating disorder	.26	.33	.12
CMAI subscales			
Physical aggression	.48	.32	.23
Physical non-aggression	.54*	.32	.05
Verbal aggression	.63**	.45	.34
Verbal non-aggression	.60**	.41	.23

Note. * $p < .01$ ** $p < .001$. All correlations are Spearman Rho, two-tailed tests, $N = 25$.

that the Raters A Anger Index is highly correlated with Raters B emotional lability ($r = .84$, $p < .001$) and antagonistic behaviour ($r = .66$, $p < .001$).

Convergent and discriminant validity

The validity of the WARS indices was examined by correlational analyses of the anger, emotional lability, and antagonistic behaviour scores obtained from Raters A with the NPI and CMAI assessments obtained from Raters B. Because some indices in each instrument had a skewed distribution, the Spearman computation was used for all correlational analyses and the alpha level was set at $p < .01$ (two-tailed). The cross-measure validity correlations are presented in Table 3.

In convergent validity analyses with the NPI subscales, the WARS indices of anger and emotional lability were strongly correlated with the agitation/aggression and irritability/lability scales (all at $p < .001$), which are the NPI subscales most conceptually related to anger and aggression. Significant correlations were also obtained for WARS anger with NPI disinhibition and aberrant motor behaviour, and between WARS emotional lability and NPI disinhibition. None of the coefficients for the WARS antagonistic behaviour index were statistically significant, although its correlation with NPI agitation/aggression was on the margin ($r = .50$, $p = .011$). For the CMAI subscales, significant correlations were obtained for the WARS Anger Index with all subscales, except physical aggression ($r = .48$, $p = .015$). This may due to a restricted range of scores on this frequency measure, as is also the case for WARS antagonistic

behaviour. Neither the emotional lability nor the antagonistic behaviour were significantly correlated with CMAI subscales.

The discriminant validity of the WARS indices was examined by comparing the correlations with the NPI subscales that are not conceptually linked to anger/aggression and were designed to assess the frequency and severity of psychiatric symptoms. The WARS indices did not correlate significantly with NPI delusions, hallucinations, depression/dysphoria, anxiety, elation/euphoria, or apathy/indifference subscales. Nor was it associated with the neurovegatative measures of sleep/night-time behaviour and appetite/eating disorder. There was, however, a significant correlation ($p < .01$) between NPI aberrant motor behaviour and the WARS Anger Index, which may be a function of agitation in this sample.

Diagnostic groupings and gender

The organic and functional disorder groupings were compared in *t*-test analyses regarding the anger and aggression indices of the WARS, NPI, and CMAI. Because of the exploratory nature of this analysis and the number of comparisons, alpha was set at $p < .01$. The comparisons involved the three WARS indices (Raters A only), the NPI agitation/aggression, irritability/lability, and disinhibition subscales, and the CMAI physical aggression and verbal aggression subscales. Of the 8 *t*-test comparisons that could be made concerning these anger/aggression indices, 6 were significant ($p < .01$) with medium to large effect sizes (Cohen, 1988), with the means for the organic disorder grouping being higher than those for the functional grouping in each case. Only the NPI disinhibition and irritability/lability scales did not reach significance, but both approached.

Comparisons between genders were also conducted by *t*-test analyses. The contrasts between the male ($n = 12$) and female ($n = 15$) participants did not yield any significant differences on the anger/aggression indices of the WARS, NPI or CMAI, although the men's mean scores were consistently higher than those for the women on these measures. While a greater proportion of men in study sample (7 out of 12) had recorded histories of aggression than women (4 out of 15), this difference was not statistically significant using Fisher's Exact test.

Anger, aggression history and assaults in hospital

The extent to which anger is associated with recorded history of aggression was investigated by analysing group differences between "no history of aggression" patients ($n = 16$), who had no record of and no clinical concern about aggression, and "history of aggression" patients ($n = 9$), who had documented histories of verbal and/or physical aggression, or damage to property. Patients having histories of aggression scored significantly higher ($M = 17.44$, $SD = 8.40$) on the WARS Anger Index (Raters A) than the "no history of aggression" patients in the week of the obtained ratings ($M = 8.00$, $SD = 8.33$), $t\,(23) = 2.71$, $p < .05$, $d = 1.13$.

To examine the relationship of WARS Anger Index to current assaultiveness (i.e. during the one-week observation period), we compared the anger scores of patients recorded by Raters B as physically assaulting staff or other patients ($n = 4$) with those who had not been assaultive. All of these four patients had recorded histories of aggression and had organic disorder diagnoses (three dementia; one head injury). These "physical assault" patients scored significantly higher ($M = 22.25$, $SD = 5.62$) on the Anger Index completed by

Raters A than the ($n = 21$) "no assault" patients ($M = 9.33$, $SD = 8.56$), $t\,(23) = 2.87$, $p < .01$, $d = 1.82$.

Discussion

It is clear that aggression and patient assault are important issues in services working with older people with mental health problems. Violence in inpatient settings not only has negative sequelae in terms of the physical and psychological well-being of patients and staff, it can also undermine the therapeutic milieu. In addition, risk of aggression and assault can compromise patients' rehabilitation and result in longer institutional care than necessary. In this context, efficient methods are needed for assessing patient anger and investigating its relationship with aggression.

While there is a plethora of scales that assess challenging behaviour (including aggression) in older people in care settings, staff often find them burdensome, they seem to have little utility in terms of clinical formulation and treatment planning, and they rarely give attention to the anger domain that has been found to be closely associated with and predictive of aggression in other clinical populations (Fox et al., 2000; Jackson et al., 1999).

The present study investigated the reliability and validity of a staff-rated measure of anger, as applied to older adult inpatients. The WARS indices were found to have high internal consistency and good inter-rater reliability. The convergent validity of the WARS indices was tested against relevant CMAI and NPI anger-related and aggression indices completed by independent raters. Strong associations were found between the WARS indices and these conceptually relevant measures. Unfortunately, it was outside the scope of this pilot study to investigate the relationship between the staff-rated WARS measures and self-report measures of anger. Novaco and Taylor (2004) found modest but significant correlations between the WARS Anger Index and established self-report measures of anger in an inpatient population of men with mild-borderline intellectual disabilities, thus adding support for the convergent validity of this measure with that particular client group. Future studies involving older people with mental health problems could usefully explore this issue further.

The discriminant validity of the WARS indices was examined by comparing correlations with the NPI subscales not conceptually linked to aggressive behaviour, e.g. delusions, anxiety, depression, collected by independent informants. The WARS indices had no relationship with these measures indicating the robustness of this scale as an anger measure. The results of the validity analyses in this study are consistent with those found by Fox, Renwick, Edwards and Novaco (2003) in their study of aggressive behaviour in elders with mental health problems using an earlier version of the WARS. The WARS was sensitive to patients' aggression histories and their assault behaviour during the previous seven days, as significant differences were found between the "history of aggression" and "assault" groups and their "no history of aggression" and "no assault" counterparts. Clearly the Anger Index ratings may have been affected by the staff rater's knowledge of patients' aggression histories, or their behaviour during the past week. However, the aggression indices of the NPI and CMAI did not distinguish between these categories of patients, with the exception of the NPI agitation or aggression subscale that did differentiate the "assault" and "no assault" groups. The WARS Anger Index and its forerunner has been shown to have predictive validity with regard to physical assaults in hospital by incarcerated mentally disordered patients (Novaco &

Renwick, 2003), and prospective studies with older adult patients would be potentially valuable.

The mean WARS Anger Index score obtained in this study during the one-week observation period (average of Raters 1 and Raters 2 mean scores = 11.0, $SD = 8.8$) is slightly higher than that obtained by Novaco and Taylor (2004) using the same measure with detained male offenders with intellectual disabilities ($M = 7.8$, $SD = 6.9$). This may be related to the organic diagnoses in the present older age study sample. Indeed, those with organic diagnoses had significantly higher anger and aggression scores than patients with functional disorder diagnoses. That "organic" patients were found to be more angry and aggressive than patients with other types of diagnoses is consistent with previous reports (e.g. Palmstierna & Wistedt, 1987).

Previous studies have suggested that among elders with mental health difficulties, men are more aggressive than women (e.g. Eastley & Wilcock, 1987). In the current study, the men scored higher than the women on all the anger and aggression measures taken, and a greater proportion of them had recorded histories of aggression; however, none of these differences were statistically significant.

In addition to its potential value as an anger measure in risk assessment and management of older people, the WARS may have some utility for psychotherapeutic interventions. Moniz-Cook et al. (2003) pointed out that beyond the widespread use of medications with limited proven efficacy, there is very little in the literature regarding the use of psychological therapies to ameliorate challenging behaviour problems in older people. This is a significant omission, as there is now increasing evidence for the effectiveness of cognitive-behavioural therapies (CBT) for anger problems amongst people with intellectual disabilities who likewise have cognitive impairments and skills deficits (see Taylor, 2002 for a review). Within the older age field, there are encouraging examples of the successful use of CBT interventions (e.g. Barrowclough et al., 2001). Therefore, modified CBT approaches could be of benefit to older people with aggression problems associated with anger dyscontrol. The WARS, along with other measures, may have some utility in identifying anger as a target problem and helping to formulate the treatment needs of such patients. It could also be useful as an outcome measure to evaluate treatment effectiveness.

This is a modest pilot study with a small sample, limited measures, and a truncated time frame. Further investigation and validation will require greater diversity in types of patients, self-report anger assessment, a wider range of criterion measures, and prospective behavioural incident data. Despite these caveats it appears from the data obtained that anger (as rated by staff informants at least) can be measured reliably in this client group and that the construct of anger has validity with regard to aggression and assault behaviour. Staff rated anger might be helpful in assessing risk for violence and, as part of a more comprehensive assessment approach, in developing and evaluating new therapeutic approaches for this perplexing problem.

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Appendix A: Ward Anger Rating Scale (WARS)

Patient's Name ..... Ward. .....

Rater's Name ..... Date .....

Directions: Please rate the patient *during the past week* for each of the items below:

Part A:

During the past week, has the patient:

1.	Expressed suspicion of others		YES	NO
2.	Blamed someone else for his/her difficulties		YES	NO
3.	Acting impulsively, without self restraint		YES	NO
4.	Had a temper tantrum		YES	NO
5.	Shouted or yelled		YES	NO
6.	Verbally abused someone		YES	NO
7.	Verbally threatened to attack someone	Staff	YES	NO
8.	Verbally threatened to attack someone	Patient	YES	NO
9.	Physically attacked someone	Staff	YES	NO
10.	Physically attacked someone	Patient	YES	NO
11.	Slammed, threw or deliberately broke something		YES	NO
12.	Talked of suicide		YES	NO
13.	Attempted suicide		YES	NO
14.	Talked of injuring self		YES	NO
15.	Attempted to injure self		YES	NO
16.	Expressed delusional beliefs		YES	NO
17.	Expressed command hallucinations to do harm	To self	YES	NO
18.	Expressed command hallucinations to do harm	To others	YES	NO

Part B: Anger Index

During the past week, to what extent was the patient:

		Not at all	Very little	Some-times	Fairly often	Very often
1.	Angry or annoyed	0	1	2	3	4
2.	Irritable or grouchy	0	1	2	3	4
3.	Resistant to suggestions or requests	0	1	2	3	4
4.	Impatient or frustrated	0	1	2	3	4
5.	Tense or uptight	0	1	2	3	4
6.	Agitated or restless	0	1	2	3	4
7.	Bitter or resentful	0	1	2	3	4