Self-reported problems: a comparison between PTSD-diagnosed veterans, their spouses, and clinicians

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Abstract

This study investigated self-reported problems in a sample of help-seeking Vietnam veterans, comparing the veteran’s own view with clinician and spouse perspectives, with the aim of examining convergence in reports across different informants. Veterans with PTSD (N=459) were asked to list and rate their five most serious problems. Spouses and treating clinicians completed the same questionnaire in relation to the veteran. Rates of endorsement for each problem area, and levels of agreement between raters, were calculated. Veterans, spouses, and clinicians were all likely to rate anger as a high priority, with veterans also likely to nominate anxiety and depression. Spouses were likely to nominate more observable behavioural problems such as interpersonal difficulties and avoidance, while clinicians were likely to nominate indications of psychopathology, such as anxiety, depression, and intrusive thoughts. Agreement across raters was generally high, although interpretation of agreement levels was complex. © 2002 Elsevier Science Ltd. All rights reserved.

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1. Introduction

In the assessment of psychopathology in clinical settings, particularly where treatment outcome evaluations are concerned, considerable emphasis is placed upon the use of standardized measures such as structured clinical interviews and psychometric measures. Thus, the patients’ presenting...
problems are moulded to fit pre-existing conceptualizations of psychiatric dysfunction. One example of this approach is apparent in the assessment of war-related mental health problems in veteran populations presenting for treatment (Creamer, Morris, Biddle, & Elliott, 1999; Fontana & Rosenheck, 1997; Johnson et al., 1996). Considerable emphasis is placed upon the presence and severity of core disorders (such as posttraumatic stress disorder, or PTSD) and related comorbidity, as defined by diagnostic manuals or symptom checklists. While this procedure is important in ensuring a standardized approach to assessment across treatment settings and across time, it has disadvantages. Notably, it precludes the possibility of patients nominating problem areas outside the range defined by the clinician (or the assessment protocol). It assumes also, perhaps incorrectly, that the core diagnostic category — PTSD in this case — is, in fact, the primary problem for which the veteran is seeking help.

Stage 1 of the current study was designed to provide veterans presenting for PTSD treatment with an opportunity to list the problems of most pressing concern to them, along with a rating of perceived severity, without prompting for categories of response. Thus, it has the potential to provide important qualitative information regarding the extent to which the existing assessment protocols were sufficiently comprehensive in covering the range of problems identified by veterans. It also allowed identification of which problems the veterans perceived as being the most severe and distressing. While there is little in the way of previously published literature upon which to base this stage of the research, it has the potential to inform clinical practice and warrants appropriate investigation.

Stage 2 was designed to compare the veterans’ own reports of their problem areas with the perceptions of the assessing clinicians and the veterans’ partners. In other words, it investigated the extent to which clinicians, veterans, and partners were in agreement regarding what constituted the major problem areas. Although few attempts have been made to specifically compare differences in perceptions of problems between clinicians, veterans, and their partners, there is some existing literature to inform this stage of the research. For example, Litz, Keane, Fisher, Marx, and Monaco (1992) compared clinician ratings and self-report ratings of physical health in 37 Vietnam veterans seeking treatment for PTSD. The group was divided into those with PTSD (N=19) and those without (N=18). The authors concluded that, while the presence of physician diagnosed problems did not differentiate between the two groups, veterans with PTSD were more likely to complain of physical health problems on self-report measures. Perconte and Wilson (1994) examined self-report (Brief Symptom Inventory: BGSI; Derogatis & Spencer, 1982) versus observer ratings (Brief Hopkins Psychiatric Rating Scale: BHPRS; Derogatis, 1983) in a group of 40 Vietnam veterans and found a significant correlation between the two (r=0.49, p<0.01). Finally, in one of the few studies to investigate partners’ perceptions, Gallagher, Riggs, Byrne, and Weathers (1998) used the PTSD Checklist (PCL: Weathers, Litz, Herman, Huska, & Keane, 1993) to examine partner estimations of PTSD severity in a sample of 50 Vietnam veterans. They found that partner ratings of veterans’ PTSD symptoms were only moderately associated with veteran reports, with good prediction of avoidance symptoms but poor prediction of re-experiencing and arousal symptoms. This is, perhaps, not surprising since the avoidance symptoms are more readily observable than the symptoms of intrusive memories and arousal.

Convergence of opinion among veterans, spouses, and clinicians concerning problem areas is important. As noted by Taft, King, Leskin, and Riggs (1999, p. 328), “spouses are likely to have observed the behaviours of their partners in varying contexts and on repeated occasions and may
be able to offer useful evaluations when the client or patient is reluctant or incapable of reporting symptoms”. Further, since spouses serve as a primary source of social support, it is important to investigate potential divergences of perception between veterans and their partners. Presumably, to provide adequate support, the spouse must be able to understand the experiences and symptomatology of the veteran. Clinicians also need to understand the problems from both veteran and spouse perspectives in order to be appropriately responsive and to develop a treatment strategy that takes adequate account of the veteran’s needs.

The current study provides a unique opportunity to investigate self-reported problems in a large sample of help-seeking Vietnam veterans and to compare the veterans’ own views with clinician and spouse perspectives. Specifically, the study aims to gauge first, whether veterans are reporting problems that actually accord with their clinical PTSD diagnosis and second, to determine the degree of convergence between veteran, spouse, and clinician reports in order to determine levels of consensus that may impinge on treatment outcomes. In these aspects there is the potential to inform clinical practice.

2. Method

2.1. Participants

Participants were selected from a group of male Vietnam veterans consecutively admitted to one of fifteen comprehensive treatment programs for combat-related PTSD (see Creamer et al., 1999 for a description of program structure, content, and outcome). All participants met criteria for a diagnosis of PTSD, confirmed using the Clinician Administered PTSD Scale (CAPS; Blake et al., 1995) administered by trained clinical staff. The sample for this study comprised all veterans for whom a complete problem data set existed (i.e. clinicians, veterans, and their partners) at intake to the treatment program (N=459). The mean CAPS severity score for this sample was 83.04 (SD=16.35), their mean age was 51.91 (SD=4.69), and all were, by definition, either currently married (96%) or in a de facto relationship (4%). The sample did not differ significantly from the larger treatment population on any of these indices except marital status.

2.2. Procedure and measures

Participants provided written informed consent prior to completing the Personal Problem Definition rating scale (PPD; Devilly, Spencer, & Rapee, 1998). The PPD is a 5-item rating scale designed to elicit a subjective perspective of current life problems. The following instructions are used: ‘Please list any current emotional or social problems you have. Put the most severe problem at the top of the list. Indicate how severe the problem is by rating how much it interferes with your normal activities, or causes you distress, using the following scale’. Problem severity is rated on an 8-point Likert-type scale where 2=‘some of the time/a little distressing’; 4=‘a lot of the time/moderately distressing’; 6=‘most of the time/very distressing’; and 8=‘all of the time/extremely distressing’. Space is allowed for five specific problems and their severity ratings. The PPD was completed also by assessing clinicians and the veterans’ spouses. For spouses the words ‘you have’ (at the end of the first sentence of PPD instruction) are replaced with ‘you
think your partner has’. For clinicians the instructions read: ‘Generate a problem list, in descending order of priority, that identifies clinical problems that require intervention or management. The problem list should not be a restatement of the diagnoses, but rather should describe in practical terms what problems require treatment. Please make an assessment of severity according to the following scale’. Severity rating instructions for both clinician and spouse are the same as for the veteran above.

Clinicians completed the PPD as part of a formal pre-program interview and assessment protocol which included the CAPS, as well as general history and diagnostic questions. The PPD was completed after the clinical interview process but before administration of the CAPS. Veterans completed the PPD, as part of a battery of measures, upon entry to an accredited PTSD program; thus, there was sometimes a small delay between the clinical assessment and veteran self-report. Where possible, spouses completed the PPD at approximately the same time as, but separately from, the veterans. However, in a few cases where the spouse was not able to be present at the program intake, the veteran was instructed to take the spouse questionnaire home. The importance of independent spouse responses was stressed.

2.3. Data analysis

First, the problems recorded by clinicians, veterans, and spouses were collapsed into 12 categories that represented the most frequently occurring problem areas: alcohol, anger and aggression, anxiety, social withdrawal and avoidance, cognitive deficits, depression, intrusive memories, interpersonal and relationship, occupational and financial, physical health, sleep, and other. The categorization of initial problems was carried out by two raters using criteria established by the authors, based on the number and range of reported problems. In order to check inter-rater reliability, 185 problems were randomly selected and then independently categorized by both raters. Inter-rater reliability was found to be high (95% agreement).

The second stage of data analysis, that of determining levels of concordance between raters, is somewhat complex. First, expected frequencies for agreement and disagreement between clinician, veteran, and spouse dyads were calculated according to the null hypothesis that there was no relationship between clinicians, veterans, and spouses in their nomination of problems. In our sample (N=459), participants were selected on the basis that the veteran, as well as the respective clinician and spouse, had nominated at least three different problem categories (there were too few cases in which all three had nominated four or five problems). Expected frequencies were calculated using the following method. Consider the clinician–veteran pairing on the ‘alcohol’ problem category. If 131 clinicians and 111 veterans (each of a possible 459) endorsed the category, then Pr(C=1), or the probability that any particular clinician endorsed the category, is 131/459=0.285. Correspondingly, Pr(C=0), or the probability that a particular clinician did not endorse the category, is (1−0.285)=0.715. Similarly, for the veterans, Pr(V=1)=111/459=0.242 and Pr(V=0)=1−0.242=0.758. Using these figures, the expected probability that both a clinician and a veteran would endorse the problem is: Pr(C=1, V=1)=0.285×0.242=0.069. Hence, for the sample as a whole (N=459), the number of times that both clinician and veteran would be expected to endorse the alcohol problem category by chance alone — Pr(Null Hypothesis) — is 0.069×459=31.67. Using a similar strategy, expected frequencies for disagreements, as well as for mutual non-endorsements, between clinicians and veterans can be calculated. Thus, the prob-
ability of a clinician not endorsing the alcohol category when a veteran does so is \( \Pr(C=0, \ V=1)=0.715 \times 0.242=0.173 \) and the expected frequency is \( 0.173 \times 459=79.41 \). This method of calculating expected probabilities and frequencies was applied to all rater pairs across all 12 problem categories. The expected frequencies were then compared with the agreement/disagreement frequencies actually observed in the sample.

3. Results

3.1. Levels of endorsement

Table 1 shows the results for a number of parameters within each problem category; each will be discussed in turn. First, within each category, the level of endorsement for each rater is indicated. The problems most commonly endorsed by veterans were anger, followed (in descending order) by anxiety, depression, avoidance symptoms, and interpersonal problems. Clinicians were also most likely to nominate anger, anxiety, and depression, but followed by intrusive thoughts and alcohol. For spouses, the rank order of endorsement was anger, depression, avoidance symptoms, interpersonal problems, and anxiety. Thus, for all raters, the highest percentage endorsement was for the anger problem category.

Significant differences in endorsement rate are displayed in Table 2. The largest significant overall endorsement disparity, considering all three rater pairs across all problem categories, occurred with intrusive thoughts. This was followed in rank order by the avoidance, interpersonal, and physical problem categories. Considering the raters pair-wise, the greatest overall endorsement disparities occurred between the clinician and spouse, followed by the veteran and spouse. The largest disparities between clinicians and veterans occurred for physical problems, followed by intrusive thoughts. For the clinician and spouse it was intrusive thoughts followed by avoidance symptoms and for the veteran and spouse it was interpersonal problems followed by a range of categories displaying similarly significant levels of endorsement disparity.

3.2. Agreement statistics

The next set of information in Table 1 displays the number of observed raters who fell into each of the ‘agreement’ categories, followed by the numbers expected (by chance) in each agreement category. Interpretation of these figures requires consideration of the category Chi-squared, as well as the total Chi-squared, values. The category Chi-squared values indicate the proportion to which the total Chi-squared value is contributed to by: (1) positive agreement — when a problem is nominated by both raters in a pair; or (2) disagreement — when one rater nominates a problem category and the other does not; or (3) negative agreement — when both raters fail to nominate the problem.

Considering alcohol as an example, it is clear that, for all three rater combinations, the significant total Chi-squared statistics are primarily a function of the direct agreement category, followed by less than expected numbers of disagreements. The negative agreements — or non-endorsements — have only a minor effect on the total Chi-squared statistic. With the exception of anger, this pattern is repeated across all problem categories. There is a general trend for veteran and
Table 1
Endorsement rates and agreement statistics by problem category and rater (N=459)

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(continued on next page)
Table 1 (continued)

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* C=Clinician, V=Veteran, S=Spouse, 1=Endorsement, 0=Non-endorsement
Table 2
Significant differences in endorsement rates by rater pair (N=459)

<table>
<thead>
<tr>
<th>Problem category</th>
<th>Chi-square statistics (DF=1)</th>
<th>Clinician veteran</th>
<th>Clinician spouse</th>
<th>Veteran spouse</th>
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</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>4.27*</td>
<td>0.38</td>
<td>8.03**</td>
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<tr>
<td>Anger/aggression</td>
<td>0.43</td>
<td>0.43</td>
<td>0.00</td>
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<tr>
<td>Anxiety</td>
<td>1.28</td>
<td>12.87***</td>
<td>22.00***</td>
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<tr>
<td>Avoidance symptoms</td>
<td>12.11***</td>
<td>76.69***</td>
<td>23.39***</td>
<td></td>
</tr>
<tr>
<td>Cognitive</td>
<td>11.21***</td>
<td>1.79</td>
<td>2.80</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>1.58</td>
<td>2.39</td>
<td>0.08</td>
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<tr>
<td>Interpersonal</td>
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<td>26.96***</td>
<td>36.27***</td>
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<tr>
<td>Intrusive thoughts</td>
<td>30.36***</td>
<td>98.75***</td>
<td>25.71***</td>
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<tr>
<td>Occupational/financial</td>
<td>0.04</td>
<td>2.43</td>
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<tr>
<td>Other</td>
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<td>10.29**</td>
<td>4.74*</td>
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<tr>
<td>Physical</td>
<td>34.80***</td>
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<td>Sleep</td>
<td>12.91***</td>
<td>8.86**</td>
<td>0.46</td>
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</table>

* p<0.05, **p<0.001, ***p<0.0001.

spouse to record the highest overall levels of agreement across problem categories and for clinician and spouse to record the lowest.

The highest agreement within all rater pairs relates to alcohol (indicated by the highest total Chi-squared values of all problem categories), with strongest agreement between veteran and spouse. For the clinician/veteran dyad — following alcohol — highest levels of agreement occur for anger, intrusive thoughts, and anxiety. For the clinician/spouse dyad, highest agreement following alcohol occurs for physical, anger, and occupational problems. For the veteran/spouse rater pair, following alcohol, intrusive thoughts, depression, and physical problem categories attract the highest agreement levels.

For some cells, the Chi-squared statistic must be interpreted cautiously. When dealing with low numbers — for example, only one expected and five observed in the clinician/spouse physical problem agreement category — the Chi-squared statistic may be disproportionately influenced by single participants. Where greater numbers are involved, one or two participants more or less will have only a minor effect on the statistic.

3.3. Severity ratings

Severity ratings for each problem category are shown in Table 3. The number of cases in some problem categories are relatively low due to the fact that each of the three raters must have first nominated a particular problem as one of their top three, then provided a severity rating. As the groups are of different sizes across problem categories (thus possibly representing different people) comparisons may only be made within a problem category, not between categories. Nevertheless, severity ratings are generally high, mostly between ‘most of the time/very distressing’ to ‘all of the time/extremely distressing’. Overall, veterans (mean=6.5) and spouses (mean=6.6) rated problem severity higher than did clinicians (mean=5.8).
Table 3
Mean severity rating by rater and problem category

<table>
<thead>
<tr>
<th>Problem category</th>
<th>Mean severity rating (range 1–8)</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Clinician</td>
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<tr>
<td>Alcohol</td>
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</tr>
<tr>
<td>Anger/aggression</td>
<td>5.9</td>
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<td>Anxiety</td>
<td>5.9</td>
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<td>Avoidance symptoms</td>
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<td>Cognitive</td>
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<td>Depression</td>
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<td>Interpersonal</td>
<td>5.7</td>
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<tr>
<td>Intrusive thoughts</td>
<td>5.9</td>
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<tr>
<td>Occupational/financial</td>
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<td>Other</td>
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<td>Physical</td>
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<td>Sleep</td>
<td>5.9</td>
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</tbody>
</table>

4. Discussion

The results indicate that treatment-seeking veterans with PTSD, when given an unstructured opportunity to nominate their primary problem areas, tend to select categories that are part of, or closely associated with, the core PTSD symptom profile. The most pressing problem reported by veterans was anger, a view shared by both spouses and clinicians. This is consistent with anecdotal reports that anger is the precipitant for many veterans to seek treatment. In the same vein, both veterans and spouses were also likely to endorse interpersonal problems. The other pressing problems nominated by veterans were (in order) anxiety, depression, intrusive thoughts, alcohol, and sleep. This is encouraging, since most of these areas are specifically addressed in the PTSD treatment programs to which these veterans were presenting (Creamer et al., 1999). Equally, it does suggest that some areas — notably anger management and interpersonal problems — may benefit from a higher profile in the program structure if treatment is to more accurately reflect the veterans’ perceived needs.

Depression was the third most likely category to be endorsed after anger and anxiety. Indeed, spouse endorsements in this category were second only to anger. Interestingly, while agreement between veteran and spouse regarding depression was high, there was little agreement between clinician and spouse. Although both groups endorsed depression frequently as a problem area, it appears that they were applying it to different veterans. It may be speculated that what spouses were picking up as depression in their partners was not necessarily what clinicians were observing — a problem, perhaps, of different meanings being applied to the same term. A similar agreement disparity also exists for interpersonal problems. It is possible that clinicians may focus more on core PTSD symptoms (such as intrusive thoughts or anxiety) while the spouse, having little knowledge of the underlying pathology, simply endorses a manifestation of these symptoms in the form of interpersonal problems. Of interest also was the fact that veterans nominated physical health problems significantly more than either clinicians or spouses. This is consistent with
previous findings that veterans tend to over-endorse physical health problems (e.g. Litz et al., 1992). Such differences of opinion and interpretation may lead patients to feel that their core problems are not being acknowledged or adequately addressed in treatment.

It is clear that the simple endorsement rates shown in Table 1 are hard to interpret in isolation, since they do not necessarily reflect the same pairs of raters. It is possible, for example, that the spouses who nominated a particular problem area were not the partners of the veterans who nominated the same problem. Thus, the second stage of the study was designed to investigate the extent to which clinicians, veterans, and partners were actually in agreement regarding what constituted the major problem areas. This information is important in determining the extent to which professional and naturally occurring support networks understand the veterans’ needs. Interpretation of these agreement statistics, however, is a complex task requiring considerable caution.

The highest levels of agreement were recorded for alcohol problems, notably between veteran and spouse. Indeed, this level of agreement is the highest of all categories and rater combinations. A substantial proportion of veterans with PTSD use alcohol as a form of self-medication and alcohol problems are presumably highly observable, with the spouse often being a direct witness. This highlights the distinction between directly observable symptoms (such as alcohol problems) and less directly observable symptoms (such as intrusive thoughts and arousal). In Gallagher et al.’s (1998) study, observable symptoms attracted higher levels of agreement than non-observable symptoms. In the current study, anxiety (a largely non-observable phenomenon) shows a lower level of agreement between veteran and spouse than is generally the case for other problem areas, while spouse endorsement rates of more observable problems such as anger and avoidance behaviour are higher than clinician or veteran levels. Indeed, spouse endorsement rates are substantially lower only within the problem categories of anxiety and intrusive thoughts.

It is surprising, therefore, that in the current research intrusive thoughts (an apparently non-observable symptom) attracted high levels of agreement between veteran and spouse — second only to alcohol problems. However, it is equally notable that very few spouses endorsed this category — 11%, compared with 21% of veterans and 36% of clinicians — suggesting that spouses were not picking up on this problem as often as they might have done. It may be speculated that spouses will only endorse intrusive thoughts as a problem when the veteran himself indicates their presence. Inferences by the spouse from veteran behaviour in this area may, instead, be construed as anger, avoidance, or anxiety. This postulation may explain the relatively low spouse endorsement levels in conjunction with high agreement levels and highlights the complexities inherent in interpretation of such data. The clinical implication, however, is that spouses may be able to inform third parties about such ‘hidden’ veteran symptoms only to the extent that they, themselves, have been informed by the veteran. Thus, informant information must be used cautiously by clinicians since it is likely to be mediated by the veteran’s own perceptions and willingness to disclose. The results have implications also in terms of spouses’ ability to provide appropriate support. There may be a need to explain non-observable symptoms and their consequences to significant others in the veteran’s life in order to facilitate improved understanding and support.

As a final caveat on this approach to inquiring about problems, it is important not to assume that, because a problem was not nominated, it was not relevant for that veteran. It is not possible to comment on whether a non-endorsed category was actually not a problem, or whether it was simply not prioritized among the first three. Nevertheless, the endorsement rates are, presumably,
indicators of priority problems and are directly comparable across, and between, clinician, veteran, and spouse raters.

It appears that spouses and veterans tend to rate symptom severity higher than clinicians (Table 3). This is, perhaps, not surprising given the impairment and distress caused by these symptoms for both veteran and spouse. In the absence of prior treatment, sufferers and their families may have had little opportunity to compare their circumstances with others and to place their problems into perspective. Clinicians, on the other hand, may see similar cases routinely and, thus, may be more likely to moderate estimates of severity.

In summary, this study demonstrates a unique approach to the analysis of unstructured self-reported problem data. While such data sets have benefits in terms of avoiding pre-conceived conceptualizations of patients’ problems, analysis and interpretation is complex. The findings, however, demonstrated good convergence between veterans’ perceptions of their most pressing problems and the content of PTSD treatment programs. When given an unstructured opportunity to nominate their most pressing problems, veterans, their spouses, and their clinicians are all likely to rate anger and aggression as a high priority, indicating that treatment needs to adequately address this aspect of pathology. Spouses are likely to nominate more observable behavioural problems such as interpersonal difficulties and avoidance, while clinicians are more likely to nominate indications of psychopathology, such as anxiety, depression, and intrusive thoughts. Despite this, agreement across raters was generally good, especially for observable symptoms such as alcohol problems.

5. Acknowledgements

The authors would like to thank veterans and staff from PTSD programs around Australia for their assistance with this research.

References


