Evaluating the CANSAS self-report (CANSAS-P) as a screening instrument for care needs in people with psychotic and affective disorders
van der Krieke, Lian; Sytema, Sjoerd; Wiersma, Durk; Tielen, Hanneke; van Hemert, Albert M.

Published in:
Psychiatry Research

DOI:
10.1016/j.psychres.2011.05.013

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2011

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):

Copyright
Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the “Taverne” license. More information can be found on the University of Groningen website: https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment.

Take-down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.
Evaluating the CANSAS self-report (CANSAS-P) as a screening instrument for care needs in people with psychotic and affective disorders

Lian van der Krieke a,⁎, Sjoerd Sytema a, Durk Wiersma a, Hanneke Tielen b, Albert M. van Hemert c

a University Medical Center Groningen, University Center for Psychiatry (UCP), CC72, P.O. Box 30.001, 9700 RB Groningen, The Netherlands
b GGD Hollands Midden, Leiden, The Netherlands
c Leiden University Medical Center, Leiden, The Netherlands

Abstract

We examined agreement between the CANSAS self-report version (CANSAS-P) and the Camberwell Assessment of Need (CAN) interview in 200 long-term patients with affective and psychotic disorders. Intra-class correlations were fair to good for unmet needs. Overall, more unmet needs were reported on the CANSAS-P than in the CAN interview. No differences were found for patients with psychotic versus affective disorders. We conclude from this that the CANSAS-P is a promising screening instrument to detect unmet needs in people with severe mental illnesses.

© 2011 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

Since its introduction in the 1990s, the original Camberwell Assessment of Need (CAN) (Phelan et al., 1995) has been supplemented with a shortened version (CANSAS; (Andresen et al., 2000)) and versions adapted for specific groups of patients (e.g. Reynolds et al., 2000; Thomas et al., 2008; Xenitidis et al., 2000). Recently, the CAN family has also been extended with a self-report version: CANSAS-P (Slade et al., 2005; Trauer et al., 2008). This instrument could be a promising screening tool for Routine Outcome Measurement (ROM) in people with severe mental illnesses (SMI), as the self-report format is more (cost) efficient and avoids biases due to patient–examiner interaction (Young et al., 2003). To our knowledge, only one study has investigated psychometric properties of the CANSAS-P (Trauer et al., 2008). This study found reasonable to good test–retest reliability, and equivalent numbers of unmet needs for the CANSAS and the CANSAS-P in an Australian sample (Trauer et al., 2008). In this paper, we present the results of a study in a larger, Dutch community institution sample in which we compare the agreement between the patient-rated CANSAS-P scores with patient-reported but interviewer-rated CAN scores. We distinguish between psychotic and affective disorders, as obstacles have been recognized in completion of self-report measures in patients with psychotic disorders (Eisen et al., 1999). Moreover, it has been argued that there is a possible tendency for them to under-report care needs in self-report instruments (de Weert-van Oene et al., 2009).

2. Method

2.1. Study subjects

Patients were recruited from three mental health care institutions in the Netherlands in August 2008. Data was collected from November 2008 to July 2009. The sample population consisted of out patients that had been treated for more than two years for a psychotic or an affective disorder, and were aged between 19 and 64 years. Of the 2636 eligible patients, a random sample of 665 patients was drawn. Of these patients, 227 (34%) consented to participate, and 200 completed the study. Their mean age was 47 years (SD = 10). Eighty-one patients were male (41%), 32% (n = 63) were diagnosed with a psychotic disorder and 68% (n = 137) with an affective disorder. The study was approved by the medical ethics committee of the Leiden University Medical Center. After full description of the study to the participants, informed consent was obtained.

2.2. Measurements

Patients completed the CANSAS-P prior to the CAN interview. The reliability of the original, English version of the CAN has proven to be acceptable (Phelan et al., 1995; McCrone et al., 2000). The CAN interview was administered by trained interviewers.

The CANSAS-P (Trauer et al., 2008; Dutch translation) is a patient-rated, self-report version of the CANSAS (Andresen et al., 2000). Similar to the CAN, the need for 22 items is rated on a three-point scale (no need, met need, unmet need). However, added is the response option “I don’t want to answer” (Trauer et al., 2008). Test–retest reliability of the CANSAS-P was found to be reasonably good (Trauer et al., 2008).

2.3. Statistical analysis

Outcome measures used were: met needs, unmet needs, no needs and unrated items.
To measure the agreement between CAN and CANSAS-P we used Cohen’s Kappa (Cohen, 1960) and intra-class correlation (ICC). The agreement between CAN and CANSAS-P was measured using Cohen’s Kappa, with values ranging from 0 to 1, where 0 represents no agreement and 1 represents perfect agreement. The ICCs were calculated using SPSS software and were interpreted using the guidelines of Landis and Koch (1977), where values between 0.00 and 0.20 represent slight agreement, values between 0.21 and 0.40 represent fair agreement, values between 0.41 and 0.60 represent moderate agreement, values between 0.61 and 0.80 represent substantial agreement, and values above 0.81 represent almost perfect agreement.

We found an overall acceptable agreement of CAN and CANSAS-P on need categories (i.e., no need, met need, unmet need, and no problem/limit problem). The ICCs for the no need category ranged from 0.26 to 0.67, indicating moderate agreement. The ICCs for the met need category ranged from 0.34 to 0.72, indicating good to excellent agreement. The ICCs for the unmet need category ranged from 0.20 to 0.62, indicating fair to substantial agreement. The ICCs for the no problem/limit problem category ranged from 0.11 to 0.61, indicating fair to substantial agreement.

4. Discussion

We found a satisfactory agreement between CAN and CANSAS-P on two-thirds of the need categories, and lower agreement on one-third. We found an overall acceptable agreement of CAN and CANSAS-P on need categories no needs and unmet needs, and lower agreement on met needs.

Our findings replicated Trauer et al.’s findings (2008) in that they found a good agreement of CANSAS and CANSAS-P on no needs and unmet needs and lower agreement on met needs. Lower agreement levels for met needs were also found by Trauer et al. (2008) in test–retest results of the CANSAS-P. A possible explanation for this finding is a slight difference in the response category: in the CANSAS-P the response category for a met need is ‘I receive sufficient care’, while in the CAN interview it is ‘no problem/limited problem because of ongoing intervention’.

Second, similar to Trauer et al. (2008), we found a considerable number of unrated items on the CANSAS-P. Comparison of the unrated items on the CANSAS-P with the responses on the CAN on the same domains showed that most of the unrated items were scored as “no need” on the CAN. This seems to indicate that domains appearing to be unproblematic on the CAN might in fact be problematic. After all, the most sensible explanation for choosing the response ‘I don’t want to answer’ over ‘no problem’ is that patients do experience problems, but they find it difficult to talk about. Therefore, the CANSAS-P seems to be able to detect problems the CAN might tend to overlook. Furthermore, consistent with Trauer et al. (2008), most unrated scores were found on the domains “sexual expression” and “intimate relationships”. This was irrespective of sex, as an additional analysis showed. Patients seem to consider these issues as too private to answer. The fact that 23 patients did rate these domains on the CAN, but not on the CANSAS-P, indicates that a self-report format provides patients more room to keep answers to themselves. Providing a more explicit opportunity for patients not to disclose information about sexuality and intimacy seems to make sense, considering the fact that unmet needs in these areas are often hard to meet by health care services.

Between people with psychotic versus people with affective disorders, there were no statistical differences on the agreement between CAN and CANSAS-P on need category. Again, this outcome was irrespective of sex, as an additional analysis showed. Nevertheless, the finding that the agreement was fair to poor for the psychosis group, while good to fair for the affective group, might still be of clinical relevance.

Remarkably, in the present study, the CANSAS-P detected significantly more unmet needs than the CAN. Although the difference was small (0.65), it may be clinically relevant considering that the mean number was rather small as well (around two). Furthermore, it means that the patients in this study do not underreport care needs. Together this might indicate that the self-report format, not affected by patient–examiner interaction, allows patients to express themselves more freely. This could mean that an interviewer effect is at issue here, which might shed a new light on the reliability of the CAN interview.

Taking this together, we conclude that the CANSAS-P is a promising instrument for screening care needs, for patients with psychotic disorders, as well as affective disorders. Compared to the CAN, the CANSAS-P seems to be more user friendly and more sensitive in detecting problems in care needs. As such, this instrument is a valuable contribution to the field of routine outcome measurement, where clinical observation currently is the dominant research method. Future research should focus more on the specific function and effect of self-report measures in ROM research.

Table 1

<table>
<thead>
<tr>
<th>Need Category</th>
<th>No need</th>
<th>Met need</th>
<th>Unmet need</th>
<th>Unrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAN M (SD)</td>
<td>17.41 (3.37)</td>
<td>2.83 (2.26)</td>
<td>1.63 (2.12)</td>
<td>0.14 (0.41)</td>
</tr>
<tr>
<td>CANSAS-P M (SD)</td>
<td>16.66 (3.95)</td>
<td>2.23 (2.24)</td>
<td>2.28 (3.12)</td>
<td>0.65 (1.32)</td>
</tr>
<tr>
<td>M (SD) t (df, p)</td>
<td>3.81 (199; 0.000)</td>
<td>3.40 (199; 0.001)</td>
<td>-4.20 (199; 0.000)</td>
<td>-5.55 (199; 0.000)</td>
</tr>
<tr>
<td>Whole sample (n = 200): ICC</td>
<td>0.70</td>
<td>0.39</td>
<td>0.64</td>
<td>0.10</td>
</tr>
<tr>
<td>Psychotic (n = 63): ICC</td>
<td>0.59</td>
<td>0.26</td>
<td>0.52</td>
<td>0.11</td>
</tr>
<tr>
<td>Affective (n = 137): ICC</td>
<td>0.74</td>
<td>0.42</td>
<td>0.70</td>
<td>0.10</td>
</tr>
<tr>
<td>Power estimation psychotic versus affective ICC</td>
<td>0.42</td>
<td>0.22</td>
<td>0.47</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Acknowledgment

This study was financed by the Netherlands Organisation for Health Research and Development (ZonMw), Fonds Psychische Gezondheid, ICT Regie and the Dutch Ministry of Health, Welfare and Sport.

The authors report no competing interests.

References


