PSYCHLOPS in Polish primary care: how do clients conceptualise their problems on a patient-generated outcome measure?

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ABSTRACT
Background: PSYCHLOPS, a patient-generated mental health outcome questionnaire, invites clients to describe the problem that troubles them most. PSYCHLOPS was utilised in Polish primary care in the context of a brief CBT-based intervention for mild to moderate mental health problems.

Aim: To explore how patients conceptualise their problems and the consequences of these problems with the aid of PSYCHLOPS.

Method: 243 patients were recruited from a primary care setting; 241 completed PSYCHLOPS. Free-text data were obtained from the Problem and Function domains of PSYCHLOPS, blind translated into English and independently analysed using a pre-existing thematic framework. A total of 780 free-text responses were analysed.

Results: The most commonly reported responses to the pre-therapy Problem domain category were “somatic” (denoting responses relating to physical health); the most common responses to the Function domain category were “competence/performance” (denoting responses relating to the respondents’ perceived ability to achieve, cope, function). Compared with pre-therapy Problem 1 domain categories, during-therapy responses revealed a higher proportion of the “interpersonal” category (denoting responses relating to social relationships) and a lower proportion of the “somatic” category.

Conclusions: Despite the brevity of clients’ responses, PSYCHLOPS allowed an insight into patients’ most troubling problems and their consequences. Possible reasons underlying the transition from a somatic to an interpersonal problem reporting during the course of talking therapy are discussed.

1. Introduction

PSYCHLOPS (Psychological Outcome Profiles) is a validated patient-generated outcome measure (Davy et al., 2012; Ashworth et al., 2009), originally designed to capture change during talking therapy for mental health presentations in primary care (Ashworth et al., 2005). PSYCHLOPS is a short one-page questionnaire which encourages patients to identify their most troubling problem and its consequence using freetext and then rate it on a 0 to 5 scale (see Fig. 1).

PSYCHLOPS has been applied in a range of settings, including CBT for psychosis (Kelly et al., 2012), children’s dramatherapy (Godfrey et al., 2018) and global areas of conflict (Rahman et al., 2016). Although patient-generated instruments generally have poor discriminatory function, they are more responsive to change than traditional standardised mental health outcome measures and they capture issues of importance to patients in terms of problems, goals and progress during therapy (Macran et al., 1999; Nelson et al., 2015). Several patient-generated instruments have been developed, including Goal Assessment Scale (GAS) (Kiresuk and Sherman, 1968) and Simplified Personal Questionnaire (Shapiro, 1961). However, PSYCHLOPS remains the only self-complete, patient generated instrument with a focus on “problems”.

PSYCHLOPS was developed to offer a perspective on patient perception of psychological distress and may be classified as a Patient Reported Outcome Measure (PROM). At present, PROMs are only in routine use in the UK within a relatively narrow clinical context although current policy direction aims to expand the range of clinical conditions covered by PROMs to include mental health conditions (Devlins and Appleby, 2010; Kendrick et al., 2016). PSYCHLOPS was also designed to maximise sensitivity to change through the process of individualising change measurement over time (Ashworth et al., 2009). Validation
studies using PSYCHLOPS have found effect sizes of 1.53 (Ashworth et al., 2005) and 1.61 (Ashworth et al., 2009), generally considered a large responsiveness to change for health outcome-based measures. It may therefore be used as a longitudinal PROM, capturing “progress metrics” through patient generated data over time.

In terms of its dominant idiographic element, PSYCHLOPS has been used to provide thematic data from patients engaged in talking therapy in primary care (Robinson et al., 2007). Qualitative data derived from PSYCHLOPS free-text responses lend themselves to being organised into “problem typologies”, which can increase understanding of the range and nature of patient problems encountered in primary care consultations. Such an approach has previously been taken by Robinson and others (2007), who identified common themes contained within the free-text responses of PSYCHLOPS responses, categorising these into eight typologies. Their study recruited 235 patients undergoing various talking therapy interventions in England. The authors concluded that PSYCHLOPS data, when categorised in this way, reveal diverse patient stories within the personal and social contexts in which they are experienced. Subsequent development and piloting of the “during-therapy” version of PSYCHLOPS (Czachowski et al., 2011) provided the opportunity to quantify change in problems during the course of talking therapy. However, previous studies have not included longitudinal analyses of qualitative PSYCHLOPS data.

We therefore set out to address this gap by thematically analysing PSYCHLOPS free-text responses before and during talking therapy, in patients presenting to primary care. In order to maximise sample diversity, we chose a primary care population, with mild to moderate mental health problems. To maximise data capture before and during therapy, we selected a setting in Toruń Poland, where brief CBT-based interventions with high follow up rates were routine practice. The first aim was to identify common themes in the conceptualisations of problems and their consequences and to relate this to the study context. Secondly, we aimed to follow the development of these conceptualisations during the process of talking therapy.

![The PSYCHLOPS questionnaire](image)
2. Method

2.1. Data collection

PSYCHLOPS is a validated instrument. The pre-therapy version of PSYCHLOPS consists of three patient-generated domains eliciting qualitative data – “Problem 1” (P1): “the problem that troubles you most”; “Problem 2” (P2): “another problem that troubles you”; a “Function” question (F1), “one thing that is hard to do because of your problem”. Patients are given the opportunity to rate the extent to which these affect them using a simple 0–5 rating scale. There is a further standardised “Wellbeing” question (W1) rated on a 0 to 5 scale. The “during-therapy” PSYCHLOPS elicits scores for each of the freetext statements offered in the “pre-therapy” version, a further Wellbeing score and generates new freetext data on problems arising during the course of therapy (P3). The “post-therapy” PSYCHLOPS elicits scores for the original freetext statements and a Wellbeing score but generates no new freetext data.

Data consisted of patient freetext responses taken from completed PSYCHLOPS questionnaires before (immediately prior to commencement of the first talking therapy session) and at least once during therapy (at the end of the second or subsequent sessions but not post-therapy). Patients’ qualitative responses were brief, since the freetext boxes only allow responses of one or two sentences.

2.2. Setting

The study was conducted in a routine primary care setting in Toruń, a university town in Poland with a population of just under 200,000. Toruń has an established programme of brief cognitive behavioural therapy (CBT) based talking therapies in primary care (Czachowski et al., 2011). The GPs are trained in the provision of brief intervention CBT. This setting had already been used to provide data for the first validation study of the during-therapy version of PSYCHLOPS.

A total of 35 general practitioners (GPs) were recruited, all single-handed and linked through a postgraduate network to Copernicus University, Toruń. Their practices were predominantly located in urban areas, although seven were in a rural setting. Talking therapy was provided by the GPs themselves and was brief, consisting of three or four, 30-minute sessions. Talking therapy followed the principles of CBT and each participating GP had received postgraduate training in applying brief CBT to routine practice. The GPs incorporated the PSYCHLOPS questionnaire as part of this intervention with their patients.

2.3. Patients

Those eligible for the study were all patients attending participating GP practices who were offered and accepted referral for brief CBT-based interventions during the 6-month study period. Routine practice determined the age range of participants: female patients were aged 18–60 years and males aged 18–65 years. Patients outside these age ranges were referred to other services. Brief CBT was offered to patients diagnosed by their GP with mild to moderate anxiety or depression. Patients were excluded if they had a current history of psychotic illness, substance abuse, an organic illness impairing mental function or were insufficiently literate.

In total, 243 patients were recruited to the study. There were 241 responses to the freetext component of P1 (the first “Problem” domain question); 227 freetext responses to P2 (the second “Problem” domain question); 220 freetext responses to F1 (the “Function” domain question); 92 freetext responses to P3 (the follow-up “Problem” domain question about new problems arising during therapy, re-elicited at each during-therapy session). The total number of qualitative data responses for analysis was 780 of which 688 were elicited prior to starting therapy (see Table 1 for further details).

2.4. Ethics

Ethical permission was granted by the Ethics Committee, Kuyavian-Pomeranian Doctors Chamber, University of Torun, code: OIL-67/KB/589/2008 (October 2008). Written consent to study participation was gathered from each patient.

2.5. Data analysis

The 780 responses were blind translated from Polish into English by MK & SC. There were two stages to the analysis of the translated data. The analysis took a directed approach (Hsieh and Shannon, 2005), whereby previously developed codes were used as a starting framework for analysis. The benefit of using directive content analysis is that it allows for the rigorous identification and categorisation of instances of phenomena. The free-text responses were blind coded by PS & MK using an established method developed in a transferable primary care setting based on eight original codes defined by Robinson et al. (2007):

- interpersonal – relating to relationships, general social interaction
- past event – events in the past as problem
- state of mind – psychological, emotional disquiet
- somatic – health issues
- self-evaluation – how clients felt about themselves
- competence/performance – ability to achieve, cope, function
- material issues – finances & accommodation
- resolution & progression – ability to move on.

In line with directive content analysis, the development of new data-driven codes where data could not be categorised using the initial coding scheme was permitted, along with rejection of unused codes. This allowed for an inductive/deductive hybrid approach to analysis, combining data-driven (Boyatzis, 1998) and templated methodologies (Crabtree and Miller, 1999). Further, this method enabled a possibility of discovering themes unique to Polish respondents versus the English primary care sample of Robinson and others.

Coding was tested for inter-rater reliability using Cohen’s kappa coefficient to quantify the level of agreement.

3. Results

Inter-coder consensus was high for all responses: the mean inter-rater agreement was 88% and overall kappa, 0.78.

Table 1

The coding of PSYCHLOPS Problem and Function domain responses into thematic categories.

<table>
<thead>
<tr>
<th>Thematic categories</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-therapy ‘Problem 1’</td>
</tr>
<tr>
<td>competence/</td>
<td>1 (0.4%)</td>
</tr>
<tr>
<td>performance</td>
<td></td>
</tr>
<tr>
<td>interpersonal</td>
<td>22 (9.1%)</td>
</tr>
<tr>
<td>material issues</td>
<td>2 (0.8%)</td>
</tr>
<tr>
<td>self-evaluation</td>
<td>2 (0.8%)</td>
</tr>
<tr>
<td>somatic</td>
<td>179 (74.3%)</td>
</tr>
<tr>
<td>state of mind</td>
<td>35 (14.5%)</td>
</tr>
<tr>
<td>Total patients</td>
<td>241 (100%)</td>
</tr>
</tbody>
</table>

1 Test-retest reliability: intra-class correlation coefficient, 0.70 (Evans et al., 2010); internal reliability: alpha scores, 0.81 pre-therapy, 0.85 during therapy and 0.83 post-therapy (Czachowski et al., 2011); convergent validity: Spearman’s rho, 0.61 (comparison with CORE-OM) (Ashworth et al., 2005); Spearman’s rho, 0.47 (comparison with HADS) (Ashworth et al., 2009).
In the first analysis, responses were allocated into eight thematic categories (see Table 1 for details). Responses could not be allocated to two of the thematic categories: “resolution & progression” and “past event”. Of the remaining six thematic categories reported in the pre-therapy “Problem domain” (P1 or P2), “somatic” was the most common accounting for over 74% (P1) and 67% (P2) of all responses. During therapy, new Problem domain responses (P3) were reported by 38% of all patients. However, there were differences in the proportions of thematic categories derived from pre-therapy and during-therapy responses. During-therapy responses revealed a higher proportion of the “interpersonal” category (32% vs 9%, respectively) and a lower proportion of the somatic category (41% vs 74%, respectively).

In the Function domain, the most common thematic category was “competence/performance” (60% of all responses); the “somatic” category accounted for 17% of responses.

3.1. Stage 1: initial coding

The frequencies of each thematic category, derived from free-text PSYCHLOPS responses, are displayed in Table 1.

3.2. Patient generated responses

Excerpts are presented from freetext responses to illustrate the most commonly reported thematic categories.

3.3. “Somatic” (405 responses)

The responses categorised as “somatic” were often expressions of bodily discomfort or what was perceived to be physical pathology experienced by the respondents (see Box 1):

3.4. “State of mind” (111 responses)

These responses pertained to respondents’ perceptions and expressions of their own mental and psychological states (see Box 2):

3.5. “Interpersonal” (99 responses)

Several respondents voiced the problems in their family and personal relationships which were affecting them negatively (see Box 3):

The proportions of thematic categories differed according to whether they were responses to the Problem domain or Function domain; in the latter, the highest proportion of responses were in the “competence/performance” thematic category (Fig. 1). Proportions also differed pre-therapy and during-therapy. A higher proportion of problems were categorised as “interpersonal” during therapy than preceding therapy. The most common change was from pre-therapy responses in the “somatic” category to during-therapy responses in the “interpersonal” category. Illustrative examples of the ‘interpersonal’ responses of patients initially presenting with somatic problems are displayed in Box 4.

4. Discussion

4.1. Summary of main findings

This study was designed to gain an understanding of the way in which patients in primary care conceptualise their problems and the consequences of these problems. Of eight available thematic categories of response, almost three quarters of all study participants cited a “somatic” response category. These responses were elicited by PSYCHLOPS, a patient-generated mental health outcome measure which provided self-
report qualitative data within “Problem” and “Function” domains. The method of thematic categorisation used in this study has not been applied to other patient-generated measures, although it is likely that since these other measures are either interviewer-led or focus on the “Goal” domain, their use may have generated different findings. The study produced a summary of findings in patients referred for talking therapy but was not able to provide a context of the relative proportions of thematic categories in all patient presentations with somatic and psychological symptoms in Polish primary care. In the “Function” domain, the conceptualisation of the consequences of these problems was mainly within the “competence/performance” category, reported by 60% of respondents. Since “competence/performance” was the most functionally orientated of the thematic categories, this finding supports the face-validity of this PSYCHLOPS domain. In contrast, only one patient (0.4%) gave a “competence/performance” response to the “Problem” domain question, again providing face-validity to the domain structure of PSYCHLOPS.

During-therapy responses offered a different perspective on how patients conceptualise their problems. In the context of this study, “during-therapy” responses would have been elicited after the second or third CBT session. Just over a third of patients reported a new problem during talking therapy. The proportions of responses in each thematic category changed markedly from the pre-therapy responses. “Somatic” category responses fell (from 74% to 41%) whilst the proportion of “interpersonal” responses rose substantially (from 9% to 32%). The cohort of patients reporting “somatic” response pre-therapy and “interpersonal” responses during-therapy form a cohort of particular interest. The freetext responses of this cohort displayed some of the strongest descriptions of distress (see Box 4) although our qualitative study was not designed to test severity scores of each thematic category.

4.2. Comparison with the literature

In a comparable study based on a primary care population in England, the preponderance of “competence/performance” responses to the Function domain of PSYCHLOPS was also noted (Robinson et al., 2007). A study of patients referred for psychiatric care or addiction problems in Portugal found that just over half of problems reported on PSYCHLOPS were “relational”, a category similar to the “interpersonal” category utilised in the current study (Sales et al., 2017). Problems characterised as “somatic” were only reported by 3% of the sample in the Portuguese study although broadening this narrowly defined category to include “sleep”, “eating” and “sexual” problems increased the total “somatic” responses to 8%. Though there have been few reported analyses of qualitative data produced by patient-generated instruments, a study of Patients Questionnaire (Antunes et al., 2018) found that the content assisted in defining therapeutic goals and contributing to clinical utility.

The reasons why patients may first have declared a somatic problem, then conceptualised their problem as “interpersonal” may lie in features of the setting of the current study, specifically that patients accessed CBT through their GP rather than direct referral to a mental health service. Patients may have perceived that presentation with a physical symptom was more acceptable than with a psychological or social problem (Kroenke et al., 1994), or that psychological and social symptoms lacked legitimacy within a health service setting (Van Ravenzwaaij et al., 2010). Talking therapy itself may have provided insight that there were more psychological and social causes to the patient’s somatic symptoms (Holforth et al., 2007). Another interpretation is that this Polish population expressed their mental health problems through physical manifestation (Bobak et al., 2006).

4.3. Strengths, limitations and further work

Use of an established methodology and pre-specified thematic coding categories did not enable further study of the transition process in patients who declared new “interpersonal” problems, or who continued to declare “somatic” problems, during therapy. Although qualitative studies do not aim to be generalisable, the findings of this study, produced from a dataset larger than is typical in qualitative studies, may hold transferability to similar settings. However, GP administered brief CBT of just three or four sessions is not typical of the provision of CBT in most European countries (Woelbert, 2015). Further work is needed to determine whether transition from “somatic” to “interpersonal” responses are directly related to the content of the therapist-patient dialogue during therapy sessions and whether insights gained into a more psychological underlying cause of their problems are related to improved psychological recovery rates. Research into the patient perceptions of the process of re-defining “somatic” and “interpersonal” problems through talking therapy is also required; and whether our thematic categories capture changes in perception attributable to talking therapy, reflect “acceptability” or “non-acceptability” of psychological symptoms, or whether talking therapy provided the language to re-conceptualise distress (McDougall, 1989).

5. Conclusion

Patients referred for CBT in the setting of primary care in Poland reported predominantly “somatic” problem responses, prior to therapy. During the course of talking therapy, an increased proportion of patients reported “interpersonal” responses. We offer several interpretations of our findings, particularly the possibility that through talking therapy, patients might develop a greater awareness of psychological distress and the causes of psychological distress. Further work is needed to explore the relationship between changes in PSYCHLOPS reported problems and the process of re-defining somatic and interpersonal problems through talking therapy.

Declarations

MA chaired the research group which originally devised PSYCHLOPS. None of the authors have any financial interest in PSYCHLOPS. PSYCHLOPS is available free of charge to all users.

Author contribution statement

M. Kordowicz: Conceived and designed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.
S. Czachowski: Conceived and designed the experiments; Performed the experiments; Wrote the paper.
P. Schofield: Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.
M. Ashworth: Conceived and designed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.
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Competing interest statement

The authors declare the following conflict of interest: Mark Ashworth chaired the research group which originally devised PSYCHLOPS. None of the authors have any financial interest in PSYCHLOPS. PSYCHLOPS is available free of charge to all users.
Additional information

No additional information is available for this paper.

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