Shortening pain clinic questionnaires?

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Introduction

Paper based self assessment questionnaires are a significant component of measuring the impact of chronic pain on an individuals life when entering a chronic pain service. Repeat administration of the same questionnaires are frequently used to measure progress or to assess treatment outcomes. In Australia, there has been a move to standardize assessment using prescribed, repeated measures (1,2). These prescribed forms include the Depression, Anxiety and Stress Scale (DASS21) and Patient Self Efficacy Questionnaire (PSEQ). Previous work has suggested that short versions of these questionnaires or other shorter questionnaires may provide the same information, with a lesser burden on patients and staff, which may lead to better follow-up completion rates. (ref to previous poster on comparison and coredata with low completion rate).

Methods

The clinic patient database was searched for relevant questionnaires.

All complete PSEQ questionnaires were included for analysis. The PSEQ2 data was extracted from the original PSEQ10, and analysis of the comparative sum scores was undertaken.

All patient data sets that included completed DASS21 and K6 in the same patient were included for analysis. The categorization of emotional distress (mild, moderate, severe) was compared between each instrument.

Analysis was undertaken utilising Microsoft Excel 2016. PSEQ10 and PSEQ2 were compared with Pearson's correlation coefficient. The various domains of the DASS21 were compared with the K6 score, also using Pearson's correlation coefficient.

Results

There were 5282 complete PSEQ10 questionnaires for assessment. The agreement overall scores was 0.946 (Pearson's correlation coefficient). The spread across quartile scores demonstrated a consistent spread of scores across the 2 questionnaires (table 1)

There were 421 patients with concurrent DASS21 and K6 questionnaires. The K6 score was compared with each domain of the DASS21 and the total DASS21 score. The best correlation was between the overall K6 and depression (0.839), which reflected a strong correlation with the overall DASS21 score (0.846). The quartile spread of scores reflected consistent distribution across the K6 and the various domains of the DASS21, in terms of mild, moderate or severe distress. (Table 2)

	PSEQ10	PSEQ2
Ave Score	22.3879547	4.486101579
Standard Deviation	13.88127744	3.131626298
Quartile 1	12	2
Quartile 2	21	4
Quartile 3	30	6
Quartile 4	60	12

Table 1: PSEQ10 v PSEQ2

	Depression	*Anxiety*	*Stress*	*Total*
K6	0.839	0.678	0.767	0.846

Quartile	K6	D	A	S
1	9	3	1	4
2	13	6	3	7
3	18	12	7	12
4	30	21	21	21

TABLE 2: K6 TO DASS21 CORRELATIONS

Discussion

Self-assessment questionnaires are an important measure in pain clinics. Routine measures include instruments related to assessment of emotional distress and of functional capacity. Long questionnaires are a burden to patients, as well as imposing a significant burden to staff where electronic direct data entry and scoring is not available. Repeated long questionnaires also risk responder fatigue in the patient group and may affect the integrity of the information over time.

EMOTIONAL ASSESSMENT

The DASS42 and subsequently DASS21 were developed in the mid-1990s. They are validated instruments in common usage(3,4). The Kessler K6 distress scale was initially validated as a measure of non-specific emotional distress in 2002 and was subsequently validated across a number of settings as a measure of emotional distress(5,6). The K6 was chosen, as our previous work had demonstrated very high correlation with the K10, and the K6 reduced the questionnaire burden. Prev work our poster K6 vK10)

The use of such instruments in chronic pain management allows identification of associated (pre-existing or secondary) emotional distress. Both instruments are screening tools. Neither tool is held up as *a diagnostic instrument as to the specifics of the emotional distress*. Both instruments can group the distress into mild, moderate or severe.

The analysis here indicates a strong correlation between all domains of the DASS21 and the K6 instrument. The quartile spread indicates the broad grouping into mild, moderate and severe emotional distress is maintained by the shorter instrument.

SELF-EFFICACY

The Patient Self Efficacy Questionnaire (PSEQ) was originally developed by Michael Nicholas in the 1980s. More recently. Nicholas has assessed the utility of a 2 question version of the PSEQ. The 2 question version was found to be a reliable measure of self efficacy when compared to the longer instrument(7). This was confirmed by our large sample.

Conclusions

Compared to utilising more traditional measures of emotional distress (DASS21) and self efficacy (PSEQ10), the same clinical information can be achieved with using the K6 and PSEQ2. The reduction in questions without loss of clinical utility has potential benefits for patients and clinics. The reduction in questionnaire fatigue for patients may make for more reliable information at repeated intervals. Reductions in staff time to process the information has financial and efficiency benefits for clinics. These potential benefits appear achievable without losing information important to the clinician.

References

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