The Seasonal Health Questionnaire is more effective at detecting seasonal affective disorder than the Seasonal Pattern Adjustment Questionnaire

Thompson C, Thompson S, Smith R. Prevalence of seasonal affective disorder in primary care; a comparison of the seasonal health questionnaire and the seasonal pattern assessment questionnaire. *J Affect Disord* 2004;**78**:219–26.

Q Is the Seasonal Health Questionnaire or the Seasonal Pattern Adjustment Questionnaire a better tool to screen for seasonal affective disorder?

METHODS

Design: Prospective cohort study.
Setting: Two general medical practices, Southampton, UK; December 2000 to March 2001.
Patients: 803 people, aged >26 years, randomly selected at morning or evening clinics. People unable to speak English were excluded.
Test: Seasonal Pattern Assessment Questionnaire (SPAQ); Seasonal Health Questionnaire (SHQ). Seasonal affective disorder was diagnosed automatically from completed questionnaires according to ICD-10, DSM-III-R, and DSM-IV criteria.
Diagnostic standard: Structured Clinical Interview for DSM-III-R (SCID). A trained psychiatrist blinded to the study results assessed 56 participants.
Outcomes: Sensitivity and specificity of tests; positive and negative predictive value; prevalence of seasonal affective disorder.

MAIN RESULTS

The SHQ has greater sensitivity, specificity, and positive and negative predictive value when screening for seasonal affective disorder than the SPAQ (see table). The prevalence of seasonal affective disorder

Table Sensitivity, specificity, positive and negative likelihood ratios for each test

	SPAQ	SHQ
Sensitivity % (95% CI)	38 (0.2 to 0.6)	59 (0.4 to 0.8)
Specificity % (95% CI)	79 (0.6 to 0.9)	97 (0.9 to 1.0)
Positive predictive value % (95% CI)	53 (0.3 to 0.8)	93 (0.7 to 1.0)
Negative predictive value % (95% CI)	67 (0.5 to 0.8)	79 (0.6 to 0.9)

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predicted using the SHQ was lower than predicted with the SPAQ (SHQ: 5.6, 95% CI 4.2 to 7.4; SPAQ: 10.7, 95% CI 8.6 to 13.1).

CONCLUSIONS

SHQ is more appropriate than SPAQ for identifying people with seasonal affective disorder.

Commentary

Diagnoses similar to seasonal affective disorder (SAD) were made literally thousands of years ago, and the diagnosis was resurrected by Rosenthal *et al* in 1984.¹ Rosenthal's group published the Seasonal Pattern Assessment Questionnaire² (SPAQ) three years later, largely based on their own diagnostic criteria. Since then, the SPAQ has been by far the most commonly used screening instrument for SAD. Much of what we think we know about the epidemiology of SAD derives from population screening studies using the SPAQ. The SPAQ's low specificity in diagnosing SAD is its major weakness, with less than half of SPAQ cases satisfying more rigorous diagnostic criteria in most studies. The SPAQ has thus contributed to an overestimation of the prevalence of SAD and through this, almost certainly, to its being taken less seriously than it merits by professionals working in psychiatry.

In this context, the Seasonal Health Questionnaire (SHQ) constitutes a step forward. It has identified a much more realistic prevalence of SAD among primary care attenders than the SPAQ which it out performs in both specificity and sensitivity in this study. The original publication of the SHQ³ found the SPAQ to be more sensitive when compared against diagnoses by experienced clinicians. In the current study, the gold standard diagnosis was through a SCID interview, which is based on DSM-III-R diagnostic criteria. As the SHQ is also partly based on DSM-III-R, its superior performance might be regarded as something of a self-fulfilling prophecy. Its basis upon sensible, narrow diagnostic criteria is, of course, also one of the instrument's major strengths. Although the SHQ is more complex than the SPAQ, patients do not seem to have difficulty completing it³ and in the present study 78% of patients managed to do so while waiting to see their general practitioner.

The case for the SHQ now becoming the primary screening tool for SAD has been adequately made. Currently, SAD very often goes unrecognised and untreated⁴; a more robust screening instrument which diagnoses a more realistic prevalence of sufferers may help to improve this situation.

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