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General practice nurse led screening for anxiety in later life in Australian primary care settings

Abstract

Objectives

Test the feasibility of general practice nurse (GPN) led screening for clinically significant symptoms of anxiety (CSSA) in older people and estimate the prevalence of CSSA.

Methods

GPN-led screening for CSSA was undertaken in eight general practices by integrating the 5-item Geriatric Anxiety Inventory – Short Form (GAI-SF) into the annual 75 years and older health assessment (75+ HA). Prevalence rates were calculated and field notes were analysed.

Results

Over 30 months, 736 patients were screened for CSSA, with a detected prevalence rate of 20.1%. The application of the GAI-SF into the 75+ HA was feasible and readily accepted by patients.

Conclusion

The 5-item GAI-SF is an age-appropriate screening tool for CSSA in general practice settings. Further research is warranted, particularly in relation to the development and implementation of evidence informed, general practice-based interventions for CSSA that can be effectively delivered to meet the needs of older people.

Keywords

anxiety, older persons, general practice, nurses

Introduction

Anxiety in later life is a worldwide health concern. Internationally, large population-based surveys have found up to a third of the population experience an anxiety disorder during their lifetime [1]. Anxiety disorders also comprise one of the top causes of non-fatal disability burden [2] and are associated with high health care costs [1]. For older adults, anxiety and the symptoms of anxiety represent a particular concern. Sub-clinical anxiety is a risk factor for a diagnosis of anxiety, a previous history of anxiety or depression is a risk factor for developing anxiety again, and the symptoms of anxiety often precede and are prominent in a range of depressive disorders [3-5]. Associations have been identified between diabetes and anxiety [6], medically unexplained symptoms, and physical and psychiatric disability [7]. Anxiety symptoms in later life have also been linked to cognitive impairment and dementia [3, 8, 9], and are involved in up to 17% of older people who die by suicide [10]. Anxiety in later life is also associated with reduced quality of life (QoL), high rates of disability and increased healthcare utilisation [3, 4].

A number of studies have found that anxiety and the symptoms of anxiety have high prevalence in older people, with the reported prevalence of the symptoms of anxiety ranging from 15% to 56% in clinical settings [2, 11-13]. Reflecting these findings and based on population data from the Australian Bureau of Statistics [14], well over a million Australians aged 65 or over (30%) may experience clinically significant symptoms of anxiety. Consequently, there is a clear need for effective detection and treatment. Unfortunately, the symptoms of anxiety in older people are largely undetected in Australian health care settings, severely restricting access to options for treatment [4, 15]. The presence of chronic and complex physical illness, other mental disorders or medication side-effects can cloud the detection of anxiety symptoms [15-17]. Agitation or restlessness, which are common symptoms of anxiety, may be misinterpreted as symptoms of dementia, particularly in the presence of cognitive decline [18]. Older people may deny feeling anxious and present instead with

insomnia, irritability, agitation and multiple somatic complaints [15]. Alternatively, older people may regard their anxiety as normal and adaptive, given their circumstances, and many clinicians may erroneously agree with them. A further concern may be the presence of ‘therapeutic nihilism’, the feeling that older people are unlikely to benefit from treatment [19]. Without effective detection, options for treatment are unlikely to be offered.

Until recently, however, the available instruments to detect anxiety, even those designed specifically for older populations, have had shortcomings in terms of clinical and/or psychometric utility [20, 21]. Common psychometric problems in self-report instruments have included multiple somatic items, reversed items and complex response scales [17, 22]. In contrast, an Australian-designed instrument, the 5-item Geriatric Anxiety Inventory – Short Form (GAI-SF), is highly accessible and suitable for everyday use in a range of health care settings [20, 21, 23]. Patients are asked to agree or disagree to each of five statements: ‘I worry a lot of the time’, ‘little things bother me a lot’, ‘I think of myself as a worrier’, ‘I often feel nervous’ and ‘my own thoughts often make me nervous’, with the number of ‘agree’ statements being totalled [23]. Developed on the back of validation studies of the 20-item Geriatric Anxiety Inventory in people aged 60 years and older, the GAI-SF was found to have high internal consistency ($\alpha=0.81$); it was highly correlated with State-Trait Anxiety Inventory scores; the score was not associated with age, mini mental state examination score, education level or income adequacy; test-retest reliability was high ($r_s=0.80$); and a score of three or more out of five correctly classified 86% of people with generalised anxiety disorder [23]. In practical terms, a GAI-SF score of 3, 4 or 5 was determined to be indicative of self-reported clinically significant symptoms of anxiety (CSSA). Further information on the GAI-SF is available at <http://gai.net.au/>

General practice (family practice) is an ideal setting for detecting and managing anxiety in older Australians, especially in light of the stigma associated with mental health problems and low levels of mental health literacy in older people [24-26]. Almost 95% of the Australian population aged 65 years

and over, and at least 97% of those aged 75 years and over, visit their General Practitioner (GP) annually [27]. Australian general practice settings provide a unique opportunity to incorporate screening into the annual 75 year and older health assessment (75+ HA), for which a Medicare benefit is payable [28]. The bulk of this health assessment is typically undertaken by a general practice nurse (GPN), either in the general practice or the patient's home, and is becoming more widespread as routine practice in Australian primary care settings [29]. Within the context of the 75+ HA, administration of the GAI-SF to screen for CSSA in older people could be made routine. With accurate screening, general practices could take the lead in reducing the burden of this disease, through early diagnosis and the implementation of appropriate treatment.

The aim of this study, therefore, was to test the feasibility of GPN-led screening of older people presenting to general practices for their annual 75+ HA, and the implementation of a simple referral pathway for follow-up assessment and treatment, where required. Given the variation in reported prevalence rates, a key component of the study was to estimate the prevalence of CSSA amongst this population group across multiple general practice settings.

Methods

The study was conducted over a period of 30 months from December 2015, commencing in three general practices in the Australian Capital Territory (ACT) and then in five general practices in the State of Victoria – four in greater metropolitan Melbourne and one in a regional centre in northern Victoria, where the researchers were based. General practices were recruited based on research team judgements about differing population catchments, general practice size and patient throughputs, and the frequency and characteristics of GPN-led conduct of the annual 75+ HA, which could be conducted in the surgery or in the home. No formal data on these characteristics were

collected, however. The lead researcher was granted a licence to use the GAI-SF for the purposes of this research.

General practices were approached through professional associates and informal contacts, including at meetings and educational sessions by Primary Health Networks and the Australian Primary Health Care Nurses Association, or contacted the research team after hearing about the project. At the first meeting with interested personnel in a General Practice, members of the research team described the purpose and process of adding the GAI-SF instrument into each general practice's existing 75+ HA format, and how to apply a simple clinical protocol for recording the outcome of screening and referring patients to their GP when clinically significant symptoms were detected. They then interviewed the GPNs and practice manager about existing systems and processes related to the conduct of the annual 75+ HA, to identify any barriers or incompatibilities that would hinder adherence to the research protocol. Written information on the project and the research protocol were provided for the GPNs and for distribution amongst general practice personnel. Each participating general practice signed an 'Intention to Participate' document and was offered up to \$600 in instalments for participation, as a small recompense for the time taken to participate in the project.

It was the intention that all patients undergoing the 75+ HA would be asked to agree to screening for symptoms of anxiety. When the GAI-SF was included in the 75+ HA, a brief statement was read to the patient requesting consent to using a new tool with five items, asking about how they had felt in the last week. Consent was recorded with the completed GAI-SF, as was the total score, whether or not this score was clinically significant, if the score was formally recorded in the patient notes and whether or not the patient was referred to their GP on the basis of the score. A copy of the results was available for the patient if they requested it.

Members of the research team regularly collected the completed GAI-SF instruments from the general practices. Feedback on the ongoing progress in integrating the GAI-SF into the 75+ HAs was also obtained, including information related to the utilisation of the screening outcomes by GPs within each practice. The GAI-SF data were entered into an MS Excel spreadsheet. Field notes were made during interviews with GPNs and practice managers at the beginning, during and at the completion of the project. At the commencement of the study, GPNs and Practice Managers were asked to describe their 75+HA system, including feedback on outcomes to their GPs, with probing questions as required. Project completion occurred on or before 150 GAI-SF forms had been completed. The GAI-SF instruments did not contain any identifying information on patients. Simple descriptive analyses of the GAI-SF data were undertaken to determine prevalence rates detected at each practice and overall. Human Research Ethics Committee approval to conduct the study was obtained from the University of Canberra (HREC 15-147) and Monash University (CF16/870).

Results

Across the eight general practices enrolled in the study across the ACT and Victoria, 736 patients aged 75 years and over were screened for CSSA. The number of completed forms collected from participating general practices ranged from 20-150, with a mean of 92. The overall distribution of scores, where scores of three, four or five indicate the presence of CSSA, are detailed in Table 1. Across all practices, 148 (20.1%) patients were identified with CSSA, with a prevalence rate range of 13.6-40.0% across the eight general practices (Figure 1). While some variation is evident and to be expected, two general practices had much higher prevalence rates of CSSA compared to the remaining six practices. The contribution of these practices to the overall prevalence rate of CSSA, however, was just 1.1%.

Across the eight general practices enrolled in the study, 14 GPNs and four practice managers provided feedback on participation in the study. Universally, all personnel reported that integrating

the GAI-SF instrument into the 75+ HA presented no challenges, and took approximately five minutes to complete. They also reported that all patients undergoing the 75+ HA (with just one exception) agreed to participate in the study and all participating patients readily accepted responding to the GAI-SF. What was less clear, in some participating practices, was the response of GPs in terms of their willingness and capacity to utilise the outcomes of screening. Although screening scores were noted in patient records, GPNs in five practices reported that they were unaware or unsure of any follow-up by GPs for people detected with clinically significant symptoms. While the actions of GPs following screening was not the focus of this study, appropriate consideration of the outcomes of screening by the treating practitioner, which underpins the need to improve the detection of CSSA, is an important clinical and ethical issue. In contrast, GPNs in three practices were clear that the patients' GPs actively responded to the screening outcomes. In some cases, it was reported that the screening outcomes confirmed an existing diagnosis and treatment plan, such as GP referral to and follow-up by a psychologist, or 'watch and wait'. GPNs in two practices also reported that some patients were reluctant to engage in any drug treatments or psychological intervention for their symptoms, which was likely related to stigma associated with mental health issues or a downplaying of the significance of the symptoms.

Discussion

The two key aims of this project were to test the feasibility of including the GAI-SF in the 75+ HA, supported by a referral procedure where CSSA were detected, and to obtain an estimate of the prevalence of CSSA in general practice patients aged 75 years and over. Firstly, it was clearly established that integrating the GAI-SF instrument into the 75+ HA, as a screening tool for detecting CSSA was relatively simple and acceptable for GPNs and patients alike, providing important information for the GP, as a basis for undertaking a targeted medical assessment. Secondly, 20.1% of patients aged 75 years or more, who were screened in the ACT and Victoria, were found to have

CSSA. This result is reasonably comparable with the results of a range of studies, but likely to be more precise due to the larger sample size and broader scope compared to other published research [2, 11-13].

Whether or not the detection of CSSA led to any significant patient benefits was neither tested nor able to be determined. Anecdotal evidence from this study, however, suggested that, for some patients, current interventions were warranted. For other patients, their symptoms of anxiety remained untreated. Though speculative, this might be attributed to the lack of acceptability of the interventions currently available or, perhaps in rarer circumstances, a sense of inevitability that the alleviation of such symptoms were pointless or unlikely to be achieved, so-called 'therapeutic nihilism' [19]. The absence of current clinical guidelines on the diagnosis and treatment of anxiety in primary care settings, including for older people, may also be an important contributing factor.

While screening for CSSA can dramatically improve detection rates, it is vitally important to ensure that there is a pathway to treatment and care [30]. Psychological therapies have been recommended as first-line treatments for anxiety in older people [10], but many older Australians face a number of barriers to accessing and engaging in these treatments [31]. These can include the cost of therapies, challenges accessing practitioners and reluctance to engage with mental health providers [31]. An evidence informed, general practice-based intervention delivered by a known and trusted clinician may overcome many of these barriers.

There is a growing evidence base for the efficacy of non-pharmacological therapies for anxiety in older people, particularly those focussing on behavioural and physical symptoms. These include cognitive behaviour therapy (CBT), mindfulness and relaxation [32], and acceptance and commitment therapy (ACT) for later life anxiety [33, 34]. With the exception of CBT, which requires

specialist training, each shows promise for application in the general practice setting, either individually or in an integrated form.

Given the fee-for-service structure of general practice in Australia, GPs are not well-placed to offer treatments that cannot be delivered within the short timeframe of a medical consultation. In contrast, GPNs are uniquely positioned to provide combined screening and therapeutic interventions for older people with CSSA. This is because of the framework of Medicare reimbursements for the 75+ HA in Australia, and other federal government payment structures for general practice nursing services [28].

There are a number of limitations to this study. Firstly, although the sample size for the purpose of determining the prevalence of CSSA was large and the study was conducted across two Australian States, only eight general practices participated in the study. This may limit the generalisation of the findings in relation to the feasibility of utilising the GAI-SF as a screening tool in the context of the 75+ HA. Secondly, there was considerable variation in the CSSA prevalence rates across the general practices. This may be accounted for by factors in different practices such as sample size and characteristics of the older population samples, for example socio-economic status and trauma histories, which were not accounted for in this feasibility study.

Conclusions

Anxiety and the symptoms of anxiety have a major impact on many older Australians and represent a significant public health concern. The accurate assessment of CSSA in older people, which is prevalent in the Australian community, could enable the implementation of early intervention strategies, the earlier implementation of appropriate treatment, and reductions in the risk of developing more serious or longer-term morbidity. The 5-item GAI-SF is an age-appropriate tool that can be used to screen for CSSA as a component of annual health assessments in general practice. Supported by appropriate referral processes and interventions that are accessible and acceptable to older Australians, this could be expected to lead to better mental and physical health outcomes, and improved quality of life for up to a million older Australians. Further research is warranted, particularly in relation to the development and implementation of evidence informed, general practice-based interventions for CSSA that can be effectively delivered to meet the needs of older people.

Impact Statement

This research establishes a prevalence rate for clinically significant symptoms of anxiety (CSSA) in a large sample of community-dwelling older adults. The research also demonstrates the feasibility of integrating an easy to use, age-appropriate tool to screen for CSSA into an established, annual health assessment that attracts a Medicare rebate. In the Australian context, up to a million older Australians may benefit from the widespread adoption of the GAI-SF to detect CSSA.

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Table 1. Distribution of GAI-SF scores (n=736)

Scores	P1	P2	P3	P4	P5	P6	P7	P8	TOTAL
0	79	29	51	10	85	47	72	11	384
1	26	13	14	0	18	20	26	4	121
2	17	5	5	2	14	13	25	2	83
3	12	6	3	4	15	6	11	5	62
4	12	3	4	2	11	7	6	2	47
5	4	2	4	2	7	8	10	2	39
Total	150	58	81	20	150	101	150	26	736

Figure 1. Prevalence of clinically significant symptoms of anxiety by general practice (n=736)