Abstract

**Background:** Memory complaint in the absence of organic pathology is a common phenomenon accounting for up to one third of patients presenting to memory clinics. Health anxiety has been specifically linked to dementia worry and repeated presentations to the National Health Service (NHS). Providing reassurance that an individual does not have dementia appears ineffective in reducing presentations to primary and secondary care services.

**Aims:** This study sought to evaluate and establish the effectiveness of a 1-hour pilot training workshop to enhance healthcare professionals knowledge and confidence to those with health anxiety around cognitive decline.

**Method:** The one-session pilot training workshop was developed and informed by previous work and consultation with the 2Gether NHS Foundation Trust Memory Assessment Service staff. The training workshop was then evaluated by employing an idiosyncratic self-report questionnaire. Participants completed the questionnaire prior to and after the training workshop.

**Results:** Pre- and post-training questionnaires revealed that the pilot training workshop was effective in increasing perceived knowledge and confidence in staff responding to patients presenting with health anxiety and co-occurring subjective memory complaints.

**Conclusions:** The findings suggest that healthcare professionals may benefit from training in identifying and addressing health anxious individuals with subjective memory complaints. This may have implications in the provision of psychologically-informed care offered in a memory assessment service. Recommendations are made for further enhancing the effectiveness of staff training and promoting alternative service treatment pathways.

**Keywords:** clinical neuropsychology, memory assessment service, subjective memory complaints, health anxiety, service evaluation
Introduction

Subjective Memory Complaints (SMC) in the absence of organic pathology and objective cognitive impairment is a common phenomenon that accounts for up to one third of patients with a median age of 40, ranging from 37 to 44 years, presenting to memory clinics (Carson et al., 2000). SMCs have often been associated with psychiatric disorders and poor physical health, however SMCs are also reported by healthy individuals. This patient group is the most costly for outpatient clinics in the National Health Service (NHS) with patients repeatedly visiting their General Practitioner up to four times per year, and the cost of hospital appointments and continuous medical investigations significantly larger than for frequent attenders with organic symptoms.

Health anxiety (HA) is characterised by a person’s preoccupation with the belief that they have a serious illness due to an enduring tendency to misinterpret ambiguous bodily sensations as sinister symptoms. HA is reported to affect as many as 24.7% of patients in neurology clinics (Tyrer et al., 2011). One key characteristic of HA is excessive reassurance seeking, which can be problematic in an NHS ‘better safe than sorry’ culture (Daniels et al., 2018) where staff may have a tendency to over investigate where there is diagnostic uncertainty. A recent study identified the reciprocal cycle of reassurance seeking between patients and staff in an emergency department (Daniels et al., 2018) where health anxiety is higher than population norms, reporting that a systemic, multi-disciplinary approach involving clear treatment pathways, screening tools and improving staff confidence in responding to this patient group is needed to target health related anxiety repeat attendance.

Staff training has demonstrated efficacy as in increasing knowledge and confidence within healthcare settings as well as addressing attitudes towards patients with medically unexplained symptoms. A growing body of evidence reports far reaching benefits of training programs, including brief training interventions across some clinical specialties, however, no
studies have developed or tested staff interventions in the neurology setting. This study aims to evaluate the effectiveness of a single-session pilot training health anxiety workshop to increase staff knowledge and confidence.

**Ethical approval**

The study was given favourable opinion by the University of Bath Psychology Research Ethics Committee (ref: 19-168) and the 2Gether NHS Foundation Trust’s Research and Development Team (ref: 19/023/2GTSE).

**Method**

**Design**

A repeated measures pre-post intervention design was used.

**Participants**

All healthcare professionals working within the regional Memory Assessment Service (MAS) were invited to attend the pilot training workshop. Thirty two of 42 professionals attended the training (76%). Participants included Psychiatrists ($n = 12$), Nurses ($n = 6$), Clinical Psychologists ($n = 7$), Trainee Clinical Psychologists ($n = 2$), Assistant Psychologists ($n = 1$) and Occupational Therapists ($n = 4$).

**Materials**

An idiosyncratic self-report questionnaire was purposefully developed to evaluate the effectiveness of the pilot training workshop, specifically rating knowledge and confidence around providing psychologically-informed care to patients presenting with health anxiety on a five point likert scale ($1 = $ little knowledge/confidence; $5 = $ great knowledge/confidence), prior to and after the training workshop.

The questionnaire also provided opportunity for participants to comment on their experience of working with patients with health anxiety both prior to and after the workshop.

**Procedure**
A 1-hour pilot training workshop was developed based on the principles of the Salkovskis & Warwick (1986) model of HA, and informed by the work of Tyrer and colleagues (2011). A consultation process with the service commissioner and representatives from each profession informed the refinement of the workshop to ensure it was addressing staff training needs. A Clinical Neuropsychologist with expertise in this field and an individual with personal experience of health anxiety around cognitive decline were also consulted as part of the development of the training.

Participants were invited to attend the workshop during their monthly team meeting and were asked to complete the self-report questionnaire before and after the workshop.

Data analyses

Kolmogorov-Smirnov tests revealed that the questionnaire data was not normally distributed and therefore did not meet parametric assumptions. Consequently, non-parametric tests were used throughout data analyses. Wilcoxon Signed Ranks tests were used to compare ratings from the questionnaires before and after the training workshop. Thematic analysis was also used to analyse the qualitative data collected and a second researcher completed an analysis to ensure the qualitative trustworthiness of the themes. Any differences were discussed before final themes were agreed upon.

Results

Descriptive statistics

All participants completed the questionnaire before and after training (100% response rate). An increase in mean ratings of knowledge and confidence from pre-workshop to post-workshop was observed across all relevant questionnaire items (Table 1), with mean pre-workshop knowledge and confidence ratings ranging from 3.47 to 3.72 (out of a possible 5) and mean post-workshop knowledge and confidence ratings ranging from 4.06 to 4.41. There
was a decrease in the perceived usefulness of providing reassurance to those experiencing health anxiety from a pre-workshop mean of 3.5 to a post-workshop mean of 2.91.

Inferential statistics

A series of Wilcoxon Signed-Ranks tests revealed statistically significant differences between pre- and post-workshop self-ratings of perceived knowledge and confidence on all relevant items of the questionnaire (Table 1), conveying that the pilot training workshop was effective. Participants self-reported an increase in perceived knowledge of the impact of providing reassurance to those experiencing health anxiety and an increase in perceived confidence in identifying patients with health anxiety, sharing symptomatic diagnoses and signposting patients towards psychological intervention. Participants rated providing reassurance to those with health anxiety as less helpful following the training workshop.

Table 1

Qualitative data

Sixteen of the 32 participants (50%) provided qualitative comments pre-workshop, from two core themes were identified: a) staff reported limited experience of working with health anxiety, plus they also b) expressed attitudes that health anxiety is difficult to work with. Post-workshop, eighteen of the 32 participants (56%) provided a qualitative response from which five themes were identified: staff reported a) the workshop content was helpful, b) increased awareness of health anxiety c) increased awareness of alternative pathways, d) the need for further training, and e) the impact of current resource constraints (see extended report in Supplementary material).

Recommendations

It is evident from this study that services may not be informed about clinical models of health anxiety (including reassurance seeking) and/or the resources available to them. The following recommendations are made:
1) MAS teams should be provided with regular training around responding to patients presenting with anxiety (and specifically health anxiety) within the context of memory difficulties, this would include appropriate pathways and services available;

2) The use of a health anxiety screening tool, such as the Health Anxiety Inventory, should be used to guide clinical decision-making;

3) MAS teams should develop patient information sheets on health anxiety, supporting both staff and patients during memory assessments when screening for health anxiety;

4) Use of the Addenbrooke’s Cognitive Examination III cognitive profile should be considered for use as a tool for informing whether memory difficulties are organic in nature. This involves looking at the pattern of scores within each cognitive domain as opposed to just looking at the scores for each cognitive domain.

5) Patient’s presenting with suspected health anxiety should be reviewed within an MDT team, considering treatment pathways available and a cost-benefit analysis of further investigations, e.g. whether this is necessary or may unnecessarily exacerbate the patient’s health anxiety; and which clinician might be most appropriate to feed this back to the patient.

**Discussion**

This study evaluated and established the effectiveness of a one-session training workshop which aimed to improve knowledge and confidence in health anxiety, both in terms of clinical understanding but with respect to the resources and pathways available to this subset of patients. Recommendations for the development of services in this clinical area are also provided, in line with The National Institute for Health and Care Excellence (NICE) guidelines (2018) which highlight the importance of a psychologically-informed approach to those experiencing a memory impairment and co-occurring anxiety.
Findings reflected that in comparison to baseline measurement, both knowledge and confidence in identifying and assessing individuals that present with health anxiety improved, key factors recognised to positively impact work performance, clinical outcomes and staff attitudes towards patients that present with medically unexplained symptoms. Whilst not measured here or elsewhere, these changes are likely to positively influence on the reciprocal cycle of reassurance giving/seeking between staff and patient; more research is needed to explore the impact further.

Following the provision of screening tools, pathways and training on the stereotypical cognitive profile observed when experiencing health anxiety, staff specifically reported improved confidence in identifying individuals presenting with health anxiety using clinical interviews, screening tools and cognitive assessment. This allows the opportunity to engage in a more informed way to these presenting difficulties, challenging the notion of the ‘challenging’ patient, instead responding by holding in mind and providing to the patient a clinical explanation for their difficulties and the options available to them. Incorporating culturally sensitive aspects into the clinical practice would also be deemed appropriate to guarantee more culturally adapted pathways to minority groups with health anxiety around cognitive decline.

Cognitive Behavioural Therapy (CBT) has demonstrated clinical and cost effectiveness in reducing health anxiety in medical settings (Tyrer et al., 2014); identifying patients with health anxiety around cognitive decline and signposting them towards psychological intervention will be key in reducing patient distress and also reducing service burden.

The training workshop also improved staff insight into how reassurance can exacerbate health anxiety, their role within that, and reflection on whether further investigations are always necessary in the absence of evidence for organic pathology; excess
testing or investigations fuelled by patient or staff anxiety (‘better safe than sorry’) is only likely to fuel the cycle of distress and perpetuate reliance on a medical model. This, aside from the economic impact of over-testing.

**Limitations**

Although the findings of this study are promising with regards to improved knowledge and confidence, it cannot be assumed that these findings will generalise to changes in clinical practice without this being further evaluated. The implementation gap is a known challenge in healthcare settings, plus it must be acknowledged that there are wider systemic constraints on services that may inhibit change in clinical practice. A noted limitation is also the use of an unvalidated measure, however, as this was developed based around clinician need, this was considered to be a good fit. If commonality of need is established, a follow-on multi-site evaluation may benefit the use of validated measures.

**Conclusions**

This study provides evidence of the benefits training may have on healthcare professionals to improve the provision of psychologically-informed care to those presenting with health anxiety in a memory assessment service. Further research is needed to understand the patient experience of this pathway, and whether staff training positively impacts repeat attendance.
Ethical statements

Ethical approval was granted by the Department of Psychology, Research Ethics Committee at the University of Bath (PREC reference number: 19-168). The study was approved by the 2Gether NHS Foundation Trust’s Research and Development (reference number: 19/023/2GTSE). Any necessary informed consent to participate and for the results to be published has been obtained. The authors have abided by the Ethical Principles of Psychologists and Code of Conduct as set out by the BABCP and BPS.
References


controlled trial. *The Lancet*, 883(9913), 219–225. [https://doi.org/10.1016/S0140-6736(13)61905-4](https://doi.org/10.1016/S0140-6736(13)61905-4)