

Allied Healthcare Professionals' experiences of addressing the psychological needs of people with cancer.

Olivia Bryant

D.Clin.Psy. Thesis (Volume 1), 2024

University College London

UCL Doctorate in Clinical Psychology

Thesis declaration form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

Name: Olivia Bryant

Date: 13/06/2024

Overview

The Stepped Care Model from the National Institute for Health and Care Excellence (NICE, 2004) recommends all health and social care staff be involved in assessing and responding to the psychological needs of cancer patients. Despite vast literature exploring medical healthcare professionals' experiences of working with distress in cancer care, there is minimal research exploring this in other disciplines, such as Allied Healthcare Professionals (AHPs).

Part I is a systematic review exploring all oncology professionals' ability and confidence in recognising and responding to psychological distress in cancer patients. This chapter includes three sub-sections: how healthcare professionals recognise and respond to distress; their ability to do so; and their confidence. The review recommends ways services can support staff awareness of national psychological guidelines in cancer care. Guidance for future research to address methodological discrepancies in the current literature are also included.

Part II includes an empirical paper exploring fifty-nine AHPs' experiences of addressing the psychological needs of people with cancer. A mixed method approach, a survey followed by focus groups, found insufficient training, supervision, and dissemination of NICE guidelines acted as systemic barriers for AHPs working with psychological distress. Despite this, AHPs showed some awareness and confidence in working with distress. Recommendations for future clinical and research practise are included.

Part III presents a critical appraisal of the research. This includes reflections on various processes throughout the project, how the researcher's personal characteristics and attitudes impacted the research, and what the researcher learnt.

Impact Statement

Part one of this thesis provides a systematic review exploring healthcare professionals' ability and confidence in addressing psychological distress in people with cancer. The review revealed many healthcare professionals struggled to accurately recognise psychological distress and use effective and supportive techniques to respond to this. Furthermore, some healthcare professionals, such as nurses, reported low confidence in their ability to address cancer patients' psychological needs. On the other hand, doctors reported high confidence but demonstrated low ability to adequately address these needs.

To our knowledge, this is the only systematic review exploring this topic in the last 20 years. This review brings together the most up to date research evidence of healthcare professionals' abilities of working with psychological distress and evaluates these findings. By doing so, this guides future research to address gaps in the literature, such as limited research in Allied Healthcare Professionals, and address methodological discrepancies. From a clinical perspective, this review is of particular importance given the worldwide implementation of guidelines encouraging all healthcare professionals to support the psychological needs of cancer patients within the last 20 years. This review highlighted a lack of ability and confidence to address these needs, including a lack of awareness of national psychological guidelines, avoidance in approaching psychological discussions, and limited use of recommended standardised mental health screening tools. These findings can be used to inform future dissemination of national guidelines and psychological training needs for medical healthcare professionals.

Part two includes an empirical paper of a study exploring Allied Healthcare Professionals' (AHPs) experiences of addressing the psychological needs of people with cancer within seven NHS trusts in the United Kingdom (UK). The study suggests many AHPs come up against systemic barriers to appropriately address cancer patients' psychological needs and meeting national guidelines for psychological care in oncology services. These barriers include a lack of psychology informed training, supervision, and dissemination of guidelines. Despite this, AHPs show awareness of working with patients' psychological needs and a willingness to do so.

To our knowledge, limited research has addressed AHPs experiences of working with psychological distress over the last 20 years. When this has been addressed, studies have used very small samples of AHPs, or have only addressed very specific areas of psychological need. By broadly addressing AHPs experiences, the present study highlights areas in need of more thorough investigation, such as, ways AHPs can provide psychological support in the face of limited resources. Furthermore, these findings inform oncology services of barriers to meeting the psychological needs of their patients. The findings can advocate for greater dissemination of national guidelines for working with psychological distress in oncology settings and greater provision of psychology informed training and supervision for AHPs.

Table of Contents

Thesis Declaration form	2
Overview	3
Impact Statement	4
Acknowledgements	9
Part I: Systematic Review	10
Abstract	11
Introduction	12
Cancer and psychological distress	12
How multi-disciplinary teams (MDTs) address psychological distress.....	13
What training and supervision is offered to the wider oncology MDT?	14
How are MDTs expected to recognise distress in oncology?	15
How are MDTs expected to respond to distress in oncology?.....	16
Review Aim	17
Methods	18
Results	24
How professionals recognise and respond to distress	24
Professionals' ability to recognise and respond to distress	39
Professionals' confidence in working with distress.....	53
Discussion	59
How they recognise and respond to distress	60
Ability	62
Confidence.....	64
Methodological limitations	65
Review limitations	66
Research recommendations	68
Clinical recommendations	68
Conclusion	69
References	71
Part II: Empirical paper	84
Abstract	85
Introduction	87
Prevalence of psychological distress in cancer	87
Psychological interventions for distress in cancer care.....	87
Psychological integration into oncology services	89
Delivery of psychological interventions by nurses.....	91
Allied Healthcare Professionals' roles in cancer care.....	91

Aim	92
Methods	93
Study Design.....	93
Participants and Setting	94
Procedure	97
Measures	98
Data analysis	100
Reflexivity.....	101
Ethics	101
Results	102
Survey.....	102
Focus groups	107
Discussion	121
Main findings.....	121
Limitations.....	125
Clinical implications.....	127
Conclusion	128
References	129
Part III: Critical Appraisal	136
Introduction	137
Why I chose this topic	137
Study Design	138
Developing Materials	139
Research governance and ethics	142
Survey Recruitment	143
Focus Group Recruitment	145
Analysis and Interpreting Findings	146
Reflexivity	147
Dissemination	149
Conclusion	150
References	151
Appendix A: Recruitment email	154
Appendix B: Participant Information Sheet	155
Appendix C: Consent forms	159
Appendix D: Survey	163

Appendix E: Focus group questions	171
Appendix F: UCL ethics approval letter	172
Appendix G: Health Research Authority (HRA) approval letter	174
Appendix H: Example of transcript coding	178
Appendix I: Examples of codes in themes/subthemes	181

Tables

Systematic Review

Table 1. How professionals recognise and respond to distress	25
Table 2. Professionals' ability to recognise distress	40
Table 3. Professionals' ability to respond to distress	44
Table 4. Professionals confidence in working with distress	54

Empirical Paper

Table 1. Survey participants' demographics	96
Table 2. Survey: Training and supervision received by participants	103
Table 3. Survey: Psychological needs participants encounter and support they provide for such needs	104
Table 4. Barriers to identifying and addressing psychological needs.....	107

Figures

Systematic Review

Figure 1. PRISMA diagram illustrating search strategy used for inclusion of papers in review	22
--	-----------

Empirical Paper

Figure 1. Focus group themes and sub-themes	108
--	------------

Acknowledgement

I would like to start by thanking my incredibly supportive and understanding fiancé. No matter what I have thrown at you, you have always supported me through my career and life outside of the Doctorate. At times when I have found it hard to believe in myself you have built my confidence up. You have provided me with a space to take a step back from my studies and find balance.

To my mum, thank you for helping me get to where I am. Your ongoing guidance of kindness and selflessness has made me proud of the person I have become.

To my dad, thank you for checking in with me throughout the doctorate. Your consistent phone calls helped me feel held at times when I was feeling overwhelmed.

To my late stepfather who not only had a huge impact on helping me feel confident enough to pursue a career in psychology but also inspired me to explore research in oncology.

Thank you so much to my supervisors Professor Katrina Scior and Dr Caroline Dancyger for not only inspiring this thesis but walking alongside me through every step of the way. I am incredible thankful for your support, particularly during challenging times early in the project.

Lastly, I would like to thank all the Allied Healthcare Professionals who took part in the project. I am in awe of not only all the hard work you do but also the enthusiasm you show to improving the psychological wellbeing of the people you work with.

Part I: Systematic Review

Healthcare Professionals' ability and confidence in recognising and responding to psychological distress in cancer patients.

Abstract

Background: People with cancer often experience high levels of psychological distress and healthcare providers from diverse disciplines are expected to support recognition and response of psychological distress in cancer patients. Although training in emotional support is provided to practitioners, many professionals report difficulties implementing these skills.

Aim: To explore healthcare professionals' ability and confidence in recognising and responding to psychological distress in cancer patients.

Method: A literature search was conducted across four databases, Medline, CINAHL, PsycInfo, and Web of Science, in November 2023. The search explored the four concepts of cancer, healthcare professionals, psychological distress, and responding. Reference lists of included studies were searched for further papers. The quality of studies included in the review were assessed using a validated quality assessment tool (QualSyst).

Results: Forty papers were eligible for inclusion in the review. Professionals used a variety of tools and techniques to support their recognition and response to psychological distress. However, many professionals reported not using standardised measures to assess distress, waiting for patients to initiate conversations about distress, and limited time and space to explore psychological distress when emotional cues arose. Individual healthcare professionals varied in their confidence in working with distress. Many studies included in the review demonstrated methodological limitations.

Conclusion: Healthcare professionals may struggle to assess and respond to distress in cancer patients accurately and confidently. Further research addressing methodological discrepancies in the current literature is needed to confirm these findings.

Introduction

Cancer and psychological distress

People diagnosed with cancer exhibit elevated levels of psychological distress, with approximately 52% of patients reporting high distress when sampled across all tumour groups (Mehnert et al., 2018). Psychological distress is high across many stages of the cancer journey, such as early diagnosis, treatment, and acute hospital admissions (Singer, Das-Munshi, & Brahler, 2010). There are a variety of reasons for this increase in distress, such as unpleasant physical symptoms, changes to mind, body and identity, and uncertainty about the future (Bennion & Molessiotis, 2013). Distress appears to negatively impact quality of life, treatment adherence, and survival outcomes (Chida, Hamer, Wardle, & Steptoe, 2008; Colleoni et al., 2000; Kim et al., 2017; Skarstein, Aass, Fossa, Skovlund, & Dahl, 2000). In addition to time spent during cancer diagnosis and treatment, cancer survivors also display higher than average long-term psychological distress following completion of cancer treatment. One explanation for this distress is the long-standing side effects of treatment, such pain, weakness, and fatigue as well as difficulties in cognitive and sexual functioning (Stein, Syrjala, & Andrykowski, 2008). Hoffman, McCarthy, Recklitis, and Ng's (2009) United States (US) national survey of survivors of adult-onset cancer found psychological distress was significantly higher in cancer survivors compared to people who had never had a cancer diagnosis. Furthermore, Maass et al. (2019) found long-term breast cancer survivors showed significantly higher symptoms of severe depression and anxiety than matched control participants who had never received a diagnosis of cancer. Thus, cancer patients and people living beyond cancer show significantly greater risk of experiencing psychological distress.

Fortunately, psychosocial interventions, such as psychological therapies and collaborative care models, show significant benefit in supporting the psychological needs of people with cancer (Breitbart et al., 2021). This care appears to improve mental health outcomes as well as overall quality of life (Lang-Rollin & Berberich, 2018). However, Singer et al. (2013) found in their prospective cohort study that many cancer patients with mental health needs did not receive early enough care. Of all participants within this study who met criteria for a mental health diagnosis, only 9% received a consultation with a mental health professional in the first three months following cancer diagnosis. Therefore, many services may not provide adequate psychosocial care to people in need of psychological support. One contributing factor is the lack of mental health specialists in oncology services in many countries worldwide (Singer et al., 2010).

How do multi-disciplinary cancer teams (MDTs) address psychological distress?

In the last 20 years numerous guidelines have been published to support the early detection and treatment of psychological distress in cancer services. The UK recommended Stepped Care Model (NICE, 2004) and the USA's National Comprehensive Cancer Network's (NCCN) (Riba et al., 2019) recommendations endorse routine distress screening for all cancer patients. The guidelines recommend all healthcare professionals working in cancer services should be responsible for psychological distress recognition and response.

In addition to medical staff, such as oncologists, surgeons, and nurses, allied healthcare professionals (AHPs) are also becoming increasingly more prominent in addressing the holistic needs of people in cancer care (Fleissig, Jenkins, Catt, & Fallowfield, 2006). AHPs are taking more of a leading role in prehabilitation and

rehabilitation for cancer patients, supporting patients to improve their physical and psychological health through the cancer care pathway using lifestyle interventions (Macmillan Cancer Support, 2019). This process, therefore, likely encourages conversations around distress and patient concerns, providing an optimal time to recognise and respond to patients' psychological needs.

What training and supervision is offered to the wider oncology MDT?

Training programmes, such as Advanced Communication Skills and Cognitive Behavioural Therapy (CBT) skills, have been shown to improve nurses' recognition and response to psychological distress (Fukui, Ogawa, Ohtsuka, & Fukui, 2009; Moorey et al., 2009). When Turner et al. (2018) delivered training in tailored psychotherapy interventions to frontline cancer care staff, including nurses, physiotherapists, radiographers, and occupational therapists (OTs), they found frontline staff implementing this learning into day-to-day work and felt more confident to address patients' psychological needs.

Despite promising work on the benefits of delivering psychologically informed training to the wider workforce, research still predominately focuses on training for oncology nurses. This is despite many nurses highlighting the difficulty of implementing training techniques due to competing professional demands and being able to find private space to discuss sensitive topics (Turner et al., 2018). This may suggest the profession most likely to receive psychologically informed training may struggle to implement these skills. This impacts the wider workforce's ability to identify and support the psychological needs of people with cancer.

How are MDTs expected to recognise distress in oncology?

Healthcare professionals appear to show poor detection of psychological distress in general practice (Garrido-Elustondo et al., 2016). Therefore, it is important to consider the use of evidence-based measures that can quickly and accurately detect the presence of distress. A wide variety of psychological screening tools with high sensitivity and specificity have been developed for use in oncology settings (Vodermaier, Linden, & Siu, 2009). One widely used visual tool is the distress thermometer (DT) (Roth et al., 1998), a single item with a suggested cut-off of four indicating a need for further distress screening (Donovan, Grassi, McGinty, & Jacobsen, 2014; Jacobsen et al., 2005; Riba et al., 2019). The DT has become an important part of recognising psychological distress in the Holistic Needs Assessment used in cancer services in the United Kingdom (Biddle et al., 2016; Macmillan Cancer Support, 2023). This assessment helps identify cancer patients, physical, practical, emotional, social, spiritual, and informational concerns and create a personalised care plan to support their individual needs (Macmillan Cancer Support, 2023).

To allow recognition of distress across the wider multi-disciplinary team (MDT), it is important to consider how screening tools can be used by professionals specialising outside of mental health. In Hughes, Sargeant, and Hawkes' (2011) study exploring the acceptability of distress screening tools during cancer helpline conversations, nurses and AHPs reported screening tools to be useful in conversations about emotions and coping as well as to support decisions for ongoing wellbeing support. However, a lack of time, comfort, and ease as well as differences in patient culture, language, and literacy have been reported as barriers to using screening tools (Hughes et al., 2011; Lo, Ianniello, Sharma, Sarnacki, & Finn, 2016).

This suggests distress screening alone may not be the most effective process in supporting the recognition of psychological distress. Furthermore, training and tools alone do not acknowledge innate skills of recognising emotions using clinical judgement and communicating with people in distress.

How are MDTs expected to respond to distress in oncology?

The psychological needs of people with cancer can vary hugely depending on where they are in the cancer care pathway. For example, in early diagnosis patients are more likely to need support to reduce the intensity of distressing emotions after receiving upsetting news. Alternatively, people living beyond cancer may wish to manage uncertainty caused by fear of cancer recurrence (Breitbart et al., 2021). Fortunately, a variety of psychological interventions have demonstrated effectiveness in treating psychological distress in people with cancer, such as CBT, mindfulness-based interventions, and acceptance and commitment therapy (ACT) (Breitbart et al., 2021).

Training in psychotherapy techniques for professionals specialising outside of mental health have also shown improvements in patients' mental health outcomes. For example, Moorey et al. (2009) found nurses who received training in CBT skills showed greater improvement in their patients' anxiety within an oncology department. Furthermore, Pitceathly et al. (2009) found oncology nurses trained in CBT skills showed improved ability to prevent depression and anxiety in patients perceived to be at high risk of developing these conditions. This demonstrates feasibility in the wider workforce's ability to respond to patients' distress using evidence-based psychological intervention.

Previous reviews

Ryan et al. (2005) conducted a review exploring how healthcare professionals recognised and responded to distress. They found some clinicians, in particular doctors without psychology informed training, were not able to adequately assess psychological distress. Doctors and nurses did however report using appropriate techniques to recognise and respond to distress, such as, active listening, using a patient-centred approach, and using open questions during routine patient-clinical interactions. The findings of this review were helpful in understanding clinician experience of addressing psychological distress. However, it was conducted prior to changes in psychological distress screening guidelines in oncology, such as the Stepped Care Model (NICE, 2004) and NCCN (Riba et al., 2019). Furthermore, Ryan et al.'s (2005) review did not provide a structured quality assessment of studies included. Therefore, it would be helpful to explore and evaluate literature following the implementation of these national guidelines to see if there have been any changes in how healthcare professionals address cancer patients' psychological needs.

Review Aim

Given the barrier nurses reported in addressing psychological needs and the more prominent role various healthcare professionals are taking in addressing the holistic needs of cancer patients, it is helpful to explore the broader workforces' skills in recognising and responding to cancer patients' psychological needs. As previous reviews were conducted prior to the implementation of distress screening guidelines, a review of recent studies is warranted.

A systematic review was chosen to provide greater transparency and structure in study selection, data extraction, and quality assessment of included

studies. This has not been seen in previous reviews on this topic. A comprehensive systematic review is the most equipped review form to inform and implement clinical guidelines by incorporating a larger pool of evidence and reducing study selection bias (Aromataris & Pearson, 2014). Therefore, this comprehensive approach felt particularly importance given the lack of reviews in this area following the implementation of national guidelines, such as the NICE (2004) Stepped Care Model and NCCN guidelines (Riba, 2019). Thus, providing opportunity to evaluate and further inform clinical guidelines. Therefore, a systematic review of the literature from January 2004 to November 2023 was conducted to address the question: What are healthcare professionals' ability and confidence in recognising and responding to psychological distress in cancer patients?

Method

Developing the review

The SPIDER framework (Cooke, Smith, & Booth, 2012) was used as an acronym to shape the research question and design of this review. This framework was used as it can be adapted across quantitative, qualitative, and mixed methods studies. It uses a structured approach to highlight focused elements to include in the review. These elements were incorporated into the research question, inclusion and exclusion criteria, and search string to make them more clearly defined. The acronym was used as highlighted below:

- **Sample**
 - Healthcare professionals working in cancer healthcare settings.
 - Working with adult cancer patients.

- Not including mental health professionals.
- **Phenomenon of Interest:**
 - Healthcare professionals experience of recognising and responding to psychological distress in cancer patients.
 - Not including physical or social distress.
 - Not including tools, training, or guidelines to recognise and respond to distress.
- **Design:**
 - All study designs except case reports/studies.
- **Evaluation:**
 - Confidence and ability both perceived and measured.
- **Research type:**
 - Qualitative, quantitative, & mixed methods.

Search Strategy

Relevant studies were identified searching the databases detailed for the given time windows:

- Medline (2004 – November 10th, 2023)
- Cumulative Index to Nursing and Allied Health (CINAHL) (2004 – November 10th, 2023)
- PsycInfo (2004 – October Week 5 2023)
- Web of Science (2005 – November 10th, 2023)

Terms used for the search contained the four main concepts of cancer, healthcare professionals, psychological distress, and responding. The search was

conducted within the search fields of title, abstract, and key words. The following search string was used:

Oncology OR Cancer

AND

“Psychological distress” OR “psychosocial distress” OR “emotional distress” OR
“mental health” OR “mental wellbeing” OR “emotional wellbeing” OR “mental illness”
OR “emotional expression”

AND

“Healthcare professionals” OR staff OR AHP OR Doctors OR Nurses OR
Physiotherapists OR “Occupational Therapists” OR “speech and language
therapists” OR dietitians OR radiographers OR surgeons OR consultant OR
oncologists OR “healthcare assistants” OR physicians

AND

recognise OR respond* OR recognising OR recognition OR confidence OR identif*
OR screen OR detect*

Inclusion and Exclusion Criteria

Studies were included if they: 1) explored healthcare professionals’ experiences of recognising and/or responding to psychological distress in cancer care, including how they recognise and respond to distress, their ability, and confidence. Papers that primarily recruited patients as participants were also included if their healthcare professionals’ abilities or confidence were explored. 2)

Solely focused on psychological distress as opposed to physical or social distress. 3) Relating specifically to adult cancer patients. 4) Explored staff who worked in healthcare settings. 5) Used quantitative, qualitative or mixed methods approaches. 6) Were published between 2004 and the date of the search (10th November 2023). 7) Were published in English in a peer reviewed journal.

Studies were excluded if they: 1) focused solely on recognising or responding to psychological distress when using a specific screening tool, training, or hospital guideline, 2) used settings outside of healthcare, such as third sector organisations or charities, 3) explored staff who specialised in mental health, or 4) were case reports or case studies.

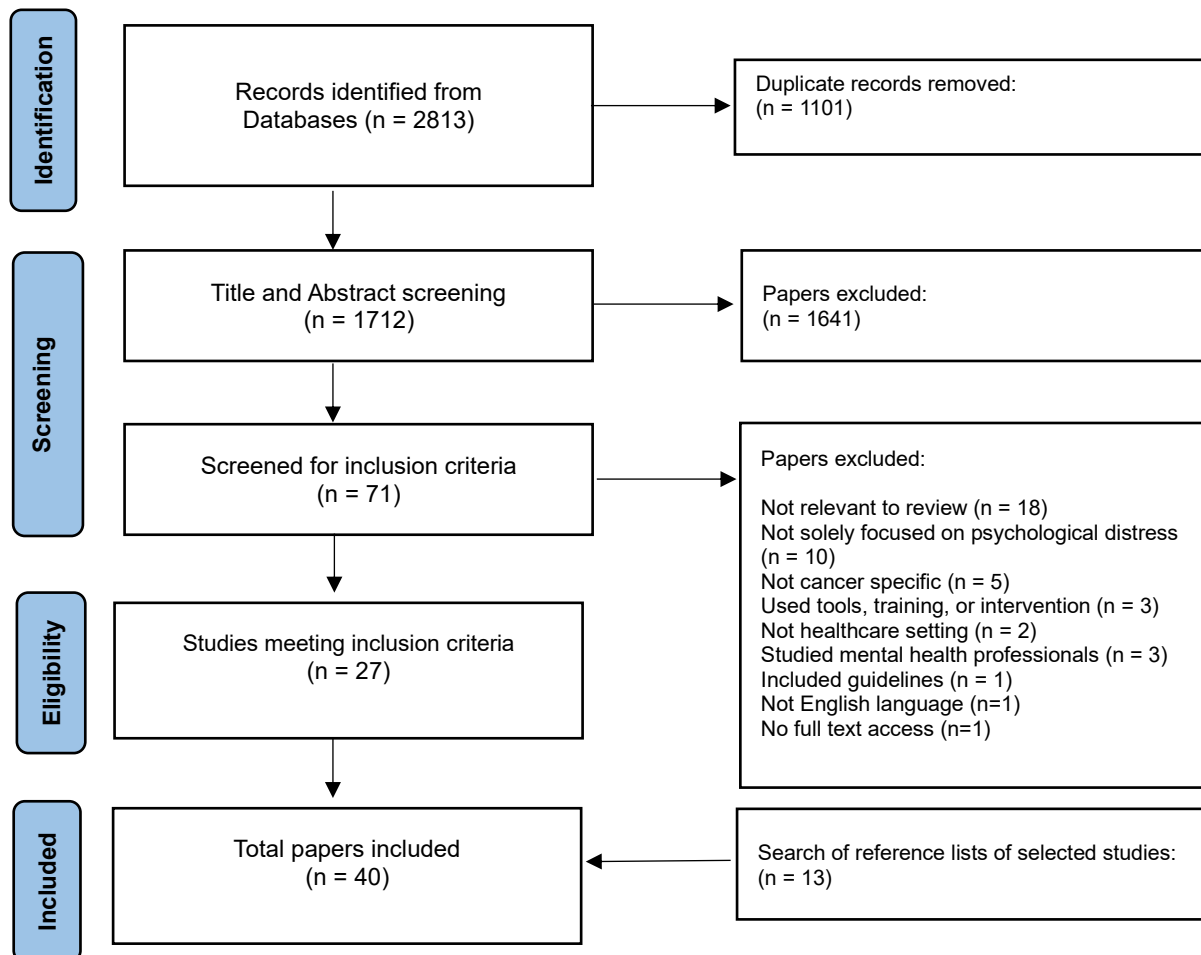
Prospero Registration

On the 11th of October 2023, prior to the database search, a protocol for the review was registered on the Prospero database. The protocol included an outline of the review question, data search process, studies' inclusion and exclusion criteria, data extraction, quality assessment, and data synthesis.

Study selection and data extraction

Figure 1.

PRISMA diagram illustrating search strategy used for inclusion of papers in the review.



Results from the initial search were exported to Endnote and duplications were removed. The papers were then screened for eligibility by title and abstract using the inclusion and exclusion criteria. The remaining full text papers were then screened by a researcher (OB) for eligibility. A second researcher (KS) also reviewed the full papers to validate the included studies. Following this the reference lists of included studies were searched for additional literature. See Figure 1 for a PRISMA diagram of the study selection process.

Data Synthesis

Narrative Synthesis was used to synthesise the studies. This method highlights key findings from each study and summarises these in written format (Barnett-Page & Thomas, 2009). This was used to synthesise findings across research designs, including quantitative, qualitative, and mixed methods approaches (Barnett-Page & Thomas, 2009).

Quality assessment

QualSyst (Kmet et al., 2004) was used to assess study quality. This tool was utilised as it applies to both quantitative and qualitative studies. It comprises of a 14-item checklist for quantitative studies and 10 items for qualitative studies. As the mixed methods studies in this review consisted of predominantly quantitative findings, mixed methods studies were assessed using the quantitative checklist. A percentage score is obtained from the total of these items that can be compared across study designs. The checklists explore various areas of study design and report quality, such as, participant recruitment, sample size, reporting of results, reflexivity account in qualitative papers, and more. Based on Kmet et al.'s (2004) recommendations for study inclusion thresholds the following percentage ranges were assigned to classify study quality: low quality for 55% or less; medium quality for 56-75%; and high quality for 76% or higher.

Two raters conducted quality assessments on a sub-sample of the papers to compare scores. Any quality assessment scores that vastly differed between the two raters were revisited by OB. Unfortunately, due to time constraints it was not possible for the two reviewers to discuss any discrepancies.

Results

Two thousand eight hundred and thirteen studies were initially identified and exported to Endnote; 1101 duplications were then removed. After title and abstract screening 74 remained and were screened by full text. Following this, 27 met inclusion criteria (see Figure 1). The reference lists of the included papers were searched yielding a further 13 papers. These studies used terms such as, “emotional cues”, “suicide”, “emotional issues”, and “assessment” which were not included in the initial search string and therefore lead to these studies remaining undetected in the initial search. A total of 40 papers were included in the final review.

Study Description

An overview of the studies is presented in Table 1. Studies were categorised into three sub-sections exploring how professionals recognised and responded to emotional distress, their ability to do so, and their confidence. Many studies explored more than one of these themes. Twenty-four of the studies used quantitative methods, nine qualitative, and seven mixed methods. The studies included were nine observational studies, one prospective study, seven diagnostic accuracy studies, three experimental studies, eleven survey studies, and nine semi-structured interviews.

How professionals recognise and respond to distress

Twenty papers explored how professionals recognised and responded to psychological distress. Sixteen explored recognising and twelve responding to distress (see Table 1). These studies included surveys, surveys with case vignettes, interview studies, observational studies, and experimental studies.

Table 1.

How professionals recognise and respond to distress: Descriptive table of study characteristics and quality assessment.

Reference	Country	Healthcare Setting	Participants (n)	Age = Mean (SD)	Gender % Male (n)	How recognise distress? (%)	How respond to distress?	Qualsyst Rating (%) & category
<i>Survey Studies</i>								
Galindo Vazquez et al. (2022)	Mexico	Nationwide	Oncologists (231)	38 (DNS)	58% (133)	<ul style="list-style-type: none"> • Never assess distress (26%) • Asking direct questions (55%) • Through patient history (26%) • Talking to family (37%) • Noting mood (45%) • Getting patients to meet with MH professional (23%) • Tools/questionnaires (8%) 	<ul style="list-style-type: none"> • Refer to MH support (89%) • Refer to social support (9%) • Refer to support group (32%) • Treat patient directly (23%) • Psychiatric medication (7%) • Keep observing patient (10%) 	78% High
Mitchell et al. (2008)	UK	Nationwide	Doctors (50) Nurses (170) Miscellaneous AHPs (6)	DNS	DNS	<ul style="list-style-type: none"> • Always assess distress (63%) • Wait for patient to address distress (13.7%) • Screening measures (6%) • Use clinical judgement (62%) • Ask 2 simple questions (PHQ2) (Kroenke et al., 2003) (30%) • 72% nurses & 40% doctors use "clear detection method" • 10.3% palliative care & 1.4% medical oncology staff preferred using formal 		60% Medium

						questionnaires to detect distress		
Nash (2017)	Ireland	Nationwide	Nurses (n=136)	DNS	DNS	<ul style="list-style-type: none"> Assessing suicide risk (13%) Assessing self-harm risk (10%) 	<ul style="list-style-type: none"> Providing reassurance & emotional support (50%) Giving counselling themselves (32%) Consulting MH professionals (23%) Mental health promotion (16%) Relaxation techniques (8%) 	72% Medium
Pirl et al. (2007)	USA	Multicentre	Oncologists (448)	50.26 (9.62)	76% (334)	<ul style="list-style-type: none"> Asking direct questions (61%) Observing mood (57%) Through patient history (53%) Talking to family (44%) Screening measures (14%) Getting patients to meet with MH professional (7%) 		80% High
Senf et al. (2019)	Germany	Hospital	Physicians (102)	36.7 (8.9)**	48% (45)**	<ul style="list-style-type: none"> Most favoured as reported on 6-point Likert scale (M, SD): Screening measures (4.24, 0.81). On average, covered psycho-oncology issues with 43% of patients. 		82% High
Thewes et al. (2014)	Australia	Nationwide	Clinical Health Professionals (77)	DNS	DNS		<ul style="list-style-type: none"> For FCR Providing information (92%) Referral to psychosocial support (88%) 	78% High

Surveys – case vignette								
Little et al. (2005)	USA	Palliative Care	Nurses (71)	49.1 (8.5)	DNS	<ul style="list-style-type: none"> • Have used Tools/questionnaires (28%) • 72% had never used a depression scale. 	<ul style="list-style-type: none"> • Consult with other professionals (44%) 	60% Medium
Valente et al. (2004) & Valente et al. (2010)	USA, Canada & Puerto Rico	Nationwide	Nurses (454)	DNS	8.6% (DNS)		Nurses Intervention <ul style="list-style-type: none"> • Listening (96.6%) • Supporting physical health (91.2%) • Informing MDT (74.7%) • Referral psychiatric evaluation (42.8%) • Take precautions for suicide (74.7%) • Remove suicidal methods (26.4%) • Further evaluate risk (64.8%) • Inform family (13%) • Grant assisted suicide (60.4%) • 17.5% evaluate if choice is rational. 	83% & 78% High
Valente et al. (2007) & Valente et al. (2010)	USA, Canada & Puerto Rico	Nationwide	Nurses (454)	DNS	8.6% (DNS)	<ul style="list-style-type: none"> • Assess social and family support (48.3%) • Assess suicidality risk (27.9%) • Depression assessment (25.8%) • Pain assessment (20.4%) • Assess “feelings” (18.3%) • Assess spirituality (10.7%) • Assess finances (13.9%) 	Goals for suicidal patient <ul style="list-style-type: none"> • Pain management (40.8%) • Social support (13.9%) • Refer for psychiatric assessment (12.8%) • Take precautions & further explore intent (17.1%) • Financial support (11.8%) <p>See above for repeated findings from same study</p>	61% & 78% Medium & High

						<ul style="list-style-type: none"> Ask about suicidal ideation (17.1%) Ask about suicide plan (17.1%) 		
<i>Semi structured Interviews</i>								
Absolom et al. (2011)	UK	Hospitals & Cancer Centres	CNSs (6) Ward sisters (5) Oncologists (8) Surgeons (4)	DNS	0% (0) 0% (0) 50% (4) 100% (4)	<ul style="list-style-type: none"> Using communication skills (acknowledging, listening, open questions). Oncologists and surgeons do not routinely explore unless influences treatment or patient discloses. Getting to know patient. 	<ul style="list-style-type: none"> Provide information Involve patient in action planning Consult with wider MDT Refer to other HCPs (psychology, psychiatry, counselling, GP, palliative care). Doctors would refer patients on. Nurses more likely to manage distress themselves. Provide personal patient support (including talking with patient) Offer home or telephone visits (CNSs specifically) Advice on available services (ward sisters specifically) 	85% High
Carolan & Campbell (2016)	Scotland	GP Surgeries	GPs (7)	DNS	57% (4)	<ul style="list-style-type: none"> Assessing distress as part of an MDT Using doctor-patient relationship Using communication skills 		90% High
Dreismann et al. (2022)	Germany	Medical School & Hospital	Nurses (15)	48.67 (12.83)	33% (5)	<ul style="list-style-type: none"> Screening measures Using verbal, emotional, or behavioural indicators. 	<ul style="list-style-type: none"> Providing information (psycho-oncology services) 	70% Medium

						<ul style="list-style-type: none"> Using clinical judgement. 	<ul style="list-style-type: none"> Arranging psycho-oncology consults Consult with wider MDT Consult with psycho-oncology 	
Granek et al. (2018a)	Israel	Cancer Centre	Oncologist (23)	45.7 (11.3)	30% (7)	<ul style="list-style-type: none"> Using affective & verbal indicators Observing physical appearance Listening to patients report of physical symptoms (with no organic cause) Enquiring directly (asking questions). Getting to know patient. Use own judgement Through patient history 		70% Medium
Granek et al. (2019a)	Israel	Cancer Centre	Nurses (20)	51.2 (9)	5% (1)	<ul style="list-style-type: none"> Talk about their feelings. 	<ul style="list-style-type: none"> Being emotionally available (listening and talking through problems) Provide practical support Treat physical symptoms Refer to MH support Offering palliative care (when patient nearing end of life). 	65% Medium
Granek et al. (2019b)	Israel	Cancer Centre	Nurses (20)	51.2 (9)	5% (1)	<ul style="list-style-type: none"> Using emotional, behavioural, & verbal indicators. Inquiring directly (asking direct questions). 		65% Medium

Granek et al. (2018b)	Israel	Cancer Centre	Oncologists (23)	45.7 (11.3)	30% (7)		<ul style="list-style-type: none"> • Creating supportive relationship • Tailor response to patient needs • Maintaining stability of care • Calm patients (listen, talking & reassuring) • Focusing on the positive • Normalising distress • Providing hope • Prescribing psychiatric medication • Referring to HCPs (psychiatry, psychology, social workers, GPs, pain clinic, supportive care). 	65% Medium
Granek et al. (2018c)	Israel	Cancer Centre	Oncologists (23) Nurses (20) Social workers (18)	45.7 (11.3) 51.2 (9) 39.5 (8.3)	Overall: 15% (9)	<ul style="list-style-type: none"> • Using affective & verbal indicators • Explicit actions (relating to suicidal ideation) • Recognising cancer type & patient characteristic risk factors for distress. 	55% Low	
Karchoud et al. (2021)	Netherlands	Hospital	Oncologists (8) Nurses (6)	Overall: 46.4 (9.1)	Overall: 21% (3)	<ul style="list-style-type: none"> • Using emotional, behaviour or physical indicators. • Monitoring (i.e. note taking, observing). • Consider risk & protective factors (history of distress, patient characteristics, social support, cancer type and treatment). 	<ul style="list-style-type: none"> • Allowing time to adjust (to diagnosis & treatment) • Referring to MH support 	75% Medium

Prospective study								
Martensson et al. (2010)	Sweden	Hospital – 5 oncologic-hematologic wards	Nurses (52) Patients (90)	38.6 (12.3) 61 (11.5)	4% (2) 57% (51)		<ul style="list-style-type: none"> • Provide support. • Provide information. • Consult with other professionals. 	77% High
RCT baseline questionnaires & observations								
Taylor et al. (2011)	UK	Hospitals & Cancer Centres	Physician (36) Patients (212)	35 (DNS) 58.9 (13.78)	58% (21) 31% (65)	Self-assessed questionnaires <ul style="list-style-type: none"> • Initiate discussions about emotions (75%) • Wait for patient to initiate discussion about emotions (25%) 	Study recording Observations <ul style="list-style-type: none"> • Discuss depression/anxiety further (to diagnose). • Discuss medication prescriptions/modifications. • Discuss referrals to psychological support. 	86% High

*Patient factors include being too unwell to discuss distress, not wanting to discuss distress, not wanting to accept help.

**Nine participants did not provide information about their age and 8 their gender.

DNS: Did not specify; CNSs: Community Nurse Specialists.

PHQ-2: Patient Health Questionnaire - 2

Screening measures: using standardised tools/questionnaires; Patient factors: Denial, physical fragility, stoicism, family presence, reluctance to share or receive care for suicidal ideation, reluctance to receive care due to mental health stigma, patient concealing distress, did not want help for distress, patient shows no warning signs for suicidality, not coming to appointment.

References: Kroenke, K., Spitzer, R. L., & Williams, J. B. (2003). The Patient Health Questionnaire-2: validity of a two-item depression screener. *Medical care*, 41(11), 1284-1292.

Survey Studies

Six studies sought professionals' direct opinion on how they felt they recognised and responded to distress. The surveys reported responses from doctors (n=831), nurses (n=306), and unspecified healthcare professionals (n=83). These studies either recruited nationally online or via a multicentre approach allowing a large sample size.

Five studies reported ways healthcare professionals recognised distress (Senf, Fettel, Demmerle, & Maiwurm, 2019; Galindo Vazquez et al., 2022; Mitchell, Kaar, Coggan, & Herdman, 2008; Nash, 2017; Pirl et al., 2007; Senf, et al., 2019). Across professions, standardised tools and questionnaires and getting patients to meet with mental health professionals for an assessment were some of the lesser reported techniques used to assess distress. A higher percentage of Palliative care staff reported formal questionnaires as their preferred use to assess distress (10.3%) compared to staff working in medical oncology (1.4%) (Mitchell et al., 2008), suggesting palliative care staff are more likely to use evidence-based approaches to assessing distress than medical oncology. Nevertheless, standardised questionnaires use in palliative care was still low. Many doctors who reported not using standardised tools also reported not being aware of national guidelines that recommended the use of such tools in cancer care (Pirl et al., 2007; Galindo Vazquez et al., 2022). Furthermore, some professionals reported waiting for patients to raise distress (Mitchell et al., 2008). This finding was explored broadly across professionals with no sub-group analysis based on professional role. Therefore, no comparison could be made to explore which professions were more or less likely to wait for patients to raise distress.

Across professions, using clinical judgement was a widely reported method for recognising distress. The most widely used techniques among doctors included asking direct questions about distress, observing the patient's presenting mood, consulting the patient's mental health history, and talking with the patient's family. A small proportion of doctors reported never assessing psychological distress. Data specifically for nurses was limited to two medium quality studies. Nash (2017) discovered a small percentage of nurses (10-13%) would consider assessing suicide risk and self-harm. Mitchell et al. (2008) showed some comparison between nurses and doctors with 72% of nurses reporting using a "clear detection method" compared to 40% of doctors. Further information on the meaning of "clear detection method" was not provided to clarify this response.

Three studies reported ways healthcare professionals responded to psychological distress once it had been recognised (Thewes et al., 2014; Nash, 2017; Galindo Vazquez et al., 2022). The most widely used responses were providing information, providing support, and facilitating referrals for psychosocial support. Less widely used responses were providing mental health advice or counselling themselves, providing psychiatric medication, or continuing to observe the patient. Galindo Vazquez et al. (2022) found many doctors reported referring to mental health support when responding to distress (89%) with only 23% reporting they would treat patient distress directly. However, only some nurses in Nash's (2017) study reported consulting with mental health professionals (23%) with many reportedly providing reassurance and emotional support themselves (50%) or counselling (32%). This suggests nurses are more likely to provide psychological support themselves whereas doctors are more likely to consult with or refer to mental health professionals. No studies provided information on how professionals responded

based on the healthcare setting they worked in. Therefore, no comparison using healthcare settings was explored.

The two survey studies specifically exploring nurses were lower quality than the other surveys exploring how professionals recognised and responded to distress. This was due to a lack of transparency in various areas of their methodology, such as study design and analysis, making it is hard to identify potential sources of bias. However, these findings were deemed useful to include in the review due to a lack of other survey research exploring nursing in this area.

Surveys with case vignette

A further two survey studies used a case vignette with nurses (n=525) to explore how participants recognised and intended to respond to distress. One study was reported across three papers (Valente & Saunders, 2004; Valente, 2007, 2010). While Valente and Saunders (2004) and Valente (2007, 2010) broadly recruited oncology nurses, Little et al. (2005) recruited solely palliative care nurses. Beyond this, no further information was provided regarding the healthcare settings these nurses worked within. The studies explored nurses' ability to recognise and respond to a case vignette of one patient with symptoms of depression and another expressing suicidal ideation.

Valente and Saunders (2004) and Valente (2007; 2010) found oncology nurses used a wide range of psychosocial assessments to recognise emotional distress. These included assessments of social and family support, suicidality risk, depression, pain, "feelings", spirituality, and finance. No standardised measures were reported to clarify how these areas were assessed. Little, Dionne, and Eaton (2005) found only a small proportion of palliative care nurses used recommended

standardised questionnaires when assessing depression. Although this study was reported as medium quality, it was supported by Mitchell et al.'s (2008) survey findings suggesting a low preference in using standardised questionnaires among palliative care nurses, enhancing its reliability.

Oncology nurses in Valente and Saunders (2004) and Valente's (2007, 2010) study reported they would use a wide variety of approaches and planned interventions when responding to the case vignette. In free text response, nurses reported they would listen, support physical health, consult with the MDT, refer to mental health professionals, and respond to suicide risk either through preventative methods or consider assisted suicide if the patient was terminally ill. Some lesser used responses included informing the patient's family of their distress and provide social and financial support. The sample size for this study was large, recruiting 454 nurses across the US, Canada and Puerto Rico. Therefore, providing greater generalisability to the wider population of nurses across North America.

Interview Studies

Nine papers based on semi-structured interviews were included in the review (see Table 1). All explored how professionals recognised and responded to distress. Five papers resulted from one wider project and reported on the same participants across multiple papers. Therefore, in total only 120 participants were sampled across all interview studies. These studies sampled a variety of healthcare professionals working in hospitals, cancer centres, medical schools, and GP surgeries across Europe and Israel.

Eight of the nine papers reported how healthcare professionals recognised distress. Healthcare professionals reported paying close attention to emotional,

physical, behavioural, and verbal indicators and using their own clinical judgement to assess distress. They reported getting to know the patient, their personality, and cancer characteristics to assess distress and risk. This was particularly important for GPs who reported using the doctor-patient relationship as a main tool (Carolan & Campbell, 2016). Like the survey studies, participants also reported asking direct questions about distress, exploring patients' mental health history, observing the patient's mood, and using communication skills such as listening and acknowledging. Participants also reported using screening measures which largely differed from their lesser reported use in the survey findings. As interviews use smaller samples than surveys this may not be as generalisable as the survey findings and more susceptible to social desirability bias due to a lack of anonymity within interview studies. Therefore, this finding should be treated with caution.

Absolom et al. (2011) reported that oncologists and surgeons did not routinely assess distress unless it directly influenced treatment or the conversation was initiated by the patient, supporting survey findings. Doctors from GP surgeries reported assessing distress as part of a wider multi-disciplinary team (MDT) (Carolan & Campbell, 2016). It is important to note Absolom et al. (2011) and Carolan and Campbell's (2016) studies were the only two studies scored as high quality. These studies were also the only two to report doctors waiting for patients to initiate conversations about distress. Therefore, given the high-quality rating of these papers, it is possible they represent a more reliable representation of the passive approach doctors took in assessing psychological distress.

Five studies reported how healthcare professionals responded to distress (Absolom et al., 2011; Dreismann, Goretzki, Ginger, Zimmermann, 2022; Granek, Nakash, Ben-David, Shapira, & Ariad, 2018b; Granek, Nakash, Ariad, Shapira, &

Ben-David, 2019a; Karchoud et al, 2021). Both doctors and nurses reported being emotionally available and providing a supportive relationship to calm and support patients. This included offering additional appointments as well as offering home and telephone visits from Clinical Nurse Specialists (CNSs). In one paper by Granek et al. (2018b), oncologists working in a cancer centre in Israel reported trying to focus on the positive with patients, instilling hope, and normalising distress. Professionals as a whole reported providing informational and practical support, tailoring their responses to patients' needs, involving patients in decision making, and allowing patients time to adjust to diagnosis and treatment. However, in contrast to these findings of more communicative sources of support, doctors and nurses across two papers derived from the same study, reported using medical approaches to support patients' psychological wellbeing, such as treating physical symptoms, offering palliative care when needed, and prescribing psychiatric medication (Granek et al., 2018b; Granek et al., 2019a). One common response reported across all five papers included referring on or arranging a consultation for mental health support when psychological distress was recognised. This response was reported across doctors, nurses and social workers, and a variety of clinical settings, including hospitals, cancer centres, and medical schools.

Only one of these interview studies (Absolom et al., 2011) was assessed as high quality. Absolom et al. (2011) provided a clearer sampling strategy that recruited across different healthcare services and professions. As the same methods and interview questions were used for all participants, this allowed direct comparison of professions and settings. In this study, although all together professionals reported referring patients on to a range of psychosocial services, they found doctors felt this was more within their role while nurses felt they should manage distress themselves.

This supports previous survey findings, where doctors reported often referring on and nurses providing psychological support themselves.

Prospective study

One prospective study explored Swedish nurses' working in oncologic-hematologic wards response to distress (Martensson, Carlsson, & Lampic, 2010).

Martensson et al. (2010) found nurses reported developing intervention plans of providing emotional support through listening and encouraging patients, providing further information of cancer treatment, and collaborating with other healthcare professionals. However, it is important to note nurses' perception of the occurrence and implementation of these interventions were different from the patients' perception. Therefore, patients may not have received the care intended by nurses. This study was assessed as high quality increasing the credibility of these findings. However, only a small sample was used reducing its generalisability.

Experimental study

The baseline data from one experimental study reported how physicians responded to distress during a consultation (Taylor et al., 2011). Only baseline observations were used for the purpose of this review.

On a self-administered questionnaire, 75% of physicians across hospitals and cancer centres reported they would initiate discussions about emotions as opposed to 25% reporting they would wait for the patient to initiate, contradicting previous survey and interview findings. During observational baseline consultations when responding to patient distress, physicians were observed discussing depression and anxiety in some detail, discussing medication, and instigating referrals to

psychological support. Physicians appeared to provide medical approaches to responding to distress by discussing medication and diagnostic symptoms.

This study was assessed as high quality, with transparent and clear study design, use of measures, and analysis. However, potential variables outside of the physician role may have impacted how physicians responded. For example, these consultations were conducted at the beginning of patients' chemotherapy. During this time there is likely a higher emphasis on discussing medical concerns like chemotherapy toxicities. This focus may have encouraged a more medical response to psychological distress.

Professionals' ability to recognise and respond to distress

Twenty-three studies explored professionals' ability to recognise and respond to distress. These included observational studies, a prospective study, experimental studies, diagnostic accuracy studies, and surveys including case vignettes.

Table 2.

Professionals' ability to recognise distress: Descriptive table of study characteristics and quality assessment.

Reference	Country	Healthcare Setting	Participants (n)	Age = Mean (SD)	Gender % Male (n)	Inclusion criteria	Key findings	Qualsyst rating (%) & category
<i>Diagnostic Accuracy Studies</i>								
Cruzado et al. (2022)	Spain	Hospital – Thoracic Surgery Department	Patients (98)	67.9 (15.8)	57% (56)	Patients: 18+, good cognitive function, no record of severe cognitive impairment or psychiatric disorder.	<ul style="list-style-type: none"> Physicians often underestimate need for mental health support however showed good detection for those who do not need it (sensitivity 0.32, specificity 0.84). 	86% High
Keller et al. (2004)	Germany	Hospital – Surgical oncology wards	Surgeons (26) Nurses (45) Patients (189)	DNS 59.3% were 51-70 26.5% were 31-50	83% (DNS) 18% (DNS) 60% (114)	Patients: 18+, in hospital for suspected or proven malignancy, have physically and mental capacity to complete questionnaire & participate in a psychiatric interview.	<ul style="list-style-type: none"> Surgeons (sensitivity 77%; specificity 53%) and nurses (sensitivity 75%, specificity 57%) performed better at recognising distress in patients meeting DSM-IV (APA,2000) criteria for a mental health diagnosis. Surgeons (sensitivity 64%; specificity 48%) and nurses (sensitivity 72%; specificity 57%) performed better at recognising patients reporting psychological distress from the HADS (Zigmond & Snaith, 1983) than those who did not. Only 41% of patients with a DSM-IV diagnosis or who reported distress on the HADS received a referral to the psychosocial liaison service. 	80% High

Lelorain et al. (2014)	France	Hospitals & Institutes	Physicians (28) Patients (201)	46.8 (7.8) 62 (11.5)	36% (DNS) 27% (DNS)	Physicians: work in cancer or palliative care. Patients: 18+, metastatic cancer. Patients: had 3+ consultation with physician already.	<ul style="list-style-type: none"> Physicians generally over reported patient distress. Higher patient distress associated with greater recognition of distress by physician. 	70% Medium
Mitchell et al. (2011)	UK	Hospital	CNSs (61) Patients (401)	DNS	DNS	DNS	<ul style="list-style-type: none"> CNSs' own judgement showed a sensitivity of 50.5% and specificity 80% in identifying distress, showing difficulty identifying distress when present but great ease in identifying when it is not. 	73% Medium
Rhondali et al. (2015)	France	Multicentre	Oncologists (DNS) Patients (99)	DNS 78 (5)	DNS 0% (0)	Patients: 70+, stage 3 or 4 ovarian cancer, no previous chemo, 3+ month life expectancy.	<ul style="list-style-type: none"> Oncologists vastly underestimated presence of depression in their patients (sensitivity 0.13; specificity 0.82). 	80% High
Singer et al. (2011)	Germany	Hospital - inpatient	Patients (329)	60 (DNS)	59% (194)	Patients: newly diagnosed cancer, 18+, good physical and mental health to complete the study.	<ul style="list-style-type: none"> HADS (Zigmond & Snaith, 1983) showed better performance in detecting patient depression (sensitivity 0.96, specificity 0.50) compared to physicians (sensitivity 0.54, specificity 0.38) and nurses (sensitivity 0.68, specificity 0.48). 	73% Medium
Van Linde et al. (2020)	Netherlands	Hospital	Patients (185)	63.4 (12.2)	61% (112)	Patients: Starting chemotherapy, not receiving other systemic anticancer treatment, 3+ month	<ul style="list-style-type: none"> Clinical assessment by doctors and nurses showed 0.54 sensitivity and 0.64 specificity when using emotional distress as a reference standard. 	91% High

						life expectancy, age 18-85, no head & neck cancer, not participating in TES-trial.	<ul style="list-style-type: none"> Clinical assessment accuracy when need for professional healthcare was reference standard showed 0.85 sensitivity and 0.63 specificity. Clinical assessment was more accurate when distress necessitated mental health referral. 	
<i>Experimental - RCT</i>								
Merckaert et al. (2008)	Belgium	DNS	Physicians (56) Patients with CW (27) Patients without CW (29)	43 (7) 61.1 (11.1) 61 (11.5)	57% (32) 41% (11) 45% (13)	Patient: receiving breaking news, 18+, no cognitive dysfunction.	<ul style="list-style-type: none"> physicians vastly differed in being able to recognise patients' and relatives' distress. Physicians generally underestimated distress. 	85% High
<i>Surveys – Case vignette</i>								
Little et al. (2005)	USA	Palliative Care	Nurses (71)	49.1 (8.5)	DNS	Nurses: working in palliative care, part of Oncology Nursing Society.	<ul style="list-style-type: none"> In case vignette of a depressed patient, on average nurses rated depression as the most important issue to be addressed out of 12 health-related issues. 	65% Medium
Valente & Saunders, (2004), Valente, (2007) & Valente, (2010)	USA, Canada & Puerto Rico	Nationwide	Nurses (454)	DNS Most between age of 30-49 (73.5%)	8.6% (DNS)	Nurses: 30%+ of time working in oncology & member of the Oncology Nursing Society.	<ul style="list-style-type: none"> On average, nurses recognised 4.8 of the 9 suicide risk factors in case vignette. 49.4% miscalculated suicide risk in the case vignette, 40.4% rating the risk as higher than it was. 	83%, 61% & 78% High, Medium & High
Valente, (2010)	USA, Canada & Puerto Rico	Nationwide	Nurses (454)	DNS Most between	8.6% (DNS)	Nurses: 30%+ of time at work in oncology & member of the	<ul style="list-style-type: none"> Most nurses correctly identified widower (69.8%), wishing death (82.8%), giving away possessions (79.6%) as suicide risk factors. 	78% High

				age of 30-49 (73.5%)		Oncology Nursing Society.	<ul style="list-style-type: none"> • Only some nurses identified ethnicity, age, and sex as a risk (13-16%). • Some incorrectly reported worries and fears (42.8%), refusing cancer treatment 23.1%), crying (40.6%), bone metastasis, sitting or not doing anything (14-46%) as risk factors. 	
--	--	--	--	----------------------	--	---------------------------	--	--

DNS: Did not specify; CW: consolidation workshop.

DSM-IV: Diagnostic and Statistical Manual – IV; HADS: Hospital Anxiety and Depression Scale.

Reference: American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: American Psychiatric Association.

Reference: Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavica*, 67(6), 361-370.

Table 3.

Professionals' ability to respond to distress: Descriptive table of study characteristics and quality assessment.

Reference	Country	Healthcare Setting	Participants (n)	Age = Mean (SD)	Gender % Male (n)	Inclusion criteria	Key findings	Qualsyst Rating (%) & category
<i>Observational studies</i>								
Bittencourt Romeiro et al. (2021)	Brazil	Hospital	Physicians (8) Patients (12)	63.25 (15.7) 42.88 (8.39)	33% (4) 86% (7)	Only routine outpatient treatment consultations were used, no diagnosis consultation. Patients: undergoing 1+ type of treatment (i.e. chemotherapy).	<ul style="list-style-type: none"> 34.3% of physician responses explicitly reduced space for patients to elaborate on emotional cues. 28.2% non-explicitly reduced space. The remaining 37.5% used providing space responses. 	80% High
Bittencourt Romeiro et al. (2023)	Brazil	Hospital	Oncologists (8) Patients (12)	42.88 (8.39) 63.25 (15.7)	88% (7) 33% (4)	Only routine outpatient treatment consultations were used, no diagnosis consultation.	<ul style="list-style-type: none"> Oncologists reduced space for elaborating on patients' emotional cues when patient expressed stressful experiences, repeated cues multiple times, or discussed physiological symptoms. Oncologists provided more space when patients expressed non-verbal cues, such as, crying, or facial expressions. Displayed more empathy to patients just starting treatment. 	73% Medium
Lin et al. (2017)	Taiwan	DNS	Nurses (110)	34 (6.4)	100% (110)	Nurses: not in first 3 months of probation period.	<ul style="list-style-type: none"> 83% of nurses used distancing strategies when responding to patients' emotional cues. When cues were more explicit, nurses used more acknowledgement strategies. Prior communication training, education level, and length of clinical practice appeared to explain some variance in nurses' response. 	82% High
Malhoutra et al. (2018)	Singapore	Cancer Centre & Institutes	Oncologists (30) patients (96)	38.4 (7.9) 59.3 (12.7)	57% (17) 49% (47)	Patients: 21+, diagnosed stage IV cancer.	<ul style="list-style-type: none"> 12% of negative emotions expressed were responded to with empathy from the oncologist during consultation, despite 92% of oncologists declaring confidence in demonstrating empathy. Oncologists' empathetic response was not affected by their confidence or positive attitudes towards expressing empathy. 	64% Medium

Oguchi et al. (2011)	Australia	Hospital	Nurses (13) Patients (51)	34.59 (7.87) 59.6 (13.6)	46% (6) 41% (21)	Nurses: deliver chemotherapy education. Patients: no prior chemotherapy or radiotherapy, 18+ & no cognitive or psychotic disability.	<ul style="list-style-type: none"> Nurses provided space for patients to elaborate on emotional cues 35% of the time in chemotherapy education sessions. Providing space related to decrease in number of patients' cues. 	82% High	
Pollak et al. (2007)	USA	Medical Centre & Universities	Oncologists (51) Oncology patients (270)	44.7 (8.4) 60.4 (12.9)	80% (DNS) 49% (DNS)	Patients: receiving primary oncology care; had access to a telephone.	<ul style="list-style-type: none"> 27% of responses by oncologists provided space for patients to acknowledge and elaborate on verbal expression of emotions. 73% reduced space for these cues. 41% of oncologists never provided space in response to patients' emotional cues. 	75% Medium	
Sheldon et al. (2011)	USA	Cancer Centre	Providers (DNS) Patients (20)	DNS 52.5 (12.9)*	DNS 39% (12)*	DNS DNS	<ul style="list-style-type: none"> Providers provided space to explore 26% of cues further. They acknowledge but reduced space for 55%. Used distancing strategies for 21%. 	67% Medium	
Taylor et al. (2011)	UK	Hospitals & Cancer Centres	Physician (36) Patients (212)	35 (DNS) 58.9 (13.78)	58% (21) 31% (65)	Patients: starting cancer treatment (review of 1 st , 2 nd , 3 rd chemo cycle), had attended clinic before.	<ul style="list-style-type: none"> Physicians responded to 22% of emotional cues by discussing depression/anxiety further, discussing medication (prescriptions & modifications) and discussing referrals to psychological support. 	86% High	
Zhou et al. (2014)	UK	Hospital – Head & Neck Cancer	Consultant (4) patients (43)	DNS 62.86 (15.1)	100% (4) 44% (19)	Patients: Head and Neck Cancer Survivors.	<ul style="list-style-type: none"> 55.26% of emotional cues were responded to with reducing space. Reduced space responses were not dependent on type of cues (i.e. verbal, non-verbal). Reduced space responses were more distinct as the consultation progressed but reduced after 6 minutes. 	80% High	
<i>Prospective study</i>									
Martensson et al. (2010)	Sweden	Hospital – 5 oncologic-hematologic wards	Nurses (52) patients (90)	38.6 (12.3) 61 (11.5)	4% (2) 57% (51)	Nurses: work on ward for 3+ months, due to work 3 consecutive days. Patients: 18+, newly admitted, in hospital for 3+ days.	<ul style="list-style-type: none"> Nurses identified a variety of emotional needs and planned interventions. Patient and nurses' perception of nurses' planned intervention and caring behaviour were weakly correlated. 	77% High	
<i>Experimental Studies</i>									
Sheldon et al. (2009)	USA	Nationwide	Nurses (70)	45.9 (9.6)	3% (2)	Nurses: 1+ years of oncology experience.	<ul style="list-style-type: none"> Nurses provided approaching responses (i.e. concern, empathy, reassurance, psychosocial support) for 41% of emotional cues from stooge patients as opposed to instrumental responses (i.e. opinion, orient, medical response) or other (i.e. disapproval, laughing, transition words). 	75% Medium	

							<ul style="list-style-type: none"> • Provided more affective responses to cues of sadness than anger. 	
Uitterhoeve et al. (2007)	Netherlands	Hospital – oncology inpatient clinic	Nurses (5)	DNS Range (40-48)	0% (0)	Nurses: 0.6-1 job assignment to oncology nursing.	<ul style="list-style-type: none"> • Half of nurses' responses to a stooge patients' emotional cues included exploration and acknowledgement (i.e. checking, clarifying) as opposed to distancing responses (i.e. changing focus). 	91% High

DNS: Did not specify

* one participant was included in demographics but excluded from data analysis.

Diagnostic Accuracy Studies

Seven diagnostic accuracy studies were included in this section (see Table 2). These studies all took place in hospitals and institutes within Europe. They assessed the varying ability of doctors, nurses, and surgeons in recognising psychological distress.

The studies showed a broad range in professionals' ability to recognise psychological distress with sensitivity ranging from 0.13-0.85 and specificity from 0.38-0.84. Among the studies that separated recognition by profession there was some mild discrepancy between specialities. Doctors (0.13-0.54) showed less sensitivity in their detection of distress compared to nurses (0.50-0.75). However, doctors appeared to show a similar specificity (0.38-0.84) to nurses (0.48-80) suggesting a similar ability, or lack thereof, to recognise when distress was not present.

Doctors' specificity generally appeared higher and more consistent (0.82-0.84) than nurses (0.57) when only high-quality papers were explored. Doctors continued to show lower sensitivity (0.13-0.32) than nurses (0.72-0.75) regardless of study quality, but this sensitivity was even lower for doctors compared to nurses in high quality papers. There appeared to be no commonality in healthcare setting, country, or patients' cancer site or stage in these high-quality papers. Furthermore, the traits that made these studies good quality largely differed between each study, making it is hard to assess the reason for this variation in sensitivity and specificity.

One paper (Keller et al., 2004) explored the sub-group of surgical doctors. In this paper surgical doctors showed sensitivity ranging from 0.64-0.77 and specificity ranging from 0.48-0.53. This suggests surgical doctors' overall sensitivity in detecting

distress was higher than both nurses and doctors more broadly. This paper was the only study reporting surgical doctors' ability to recognise distress compared to multiple papers for doctors and nurses which could explain the smaller range in scores and suggest reduced reliability in these results as they were not confirmed by further research.

Van Linde et al. (2020) explored medical oncologist and nurses' accuracy in recognising distress depending on the method used to confirm the presence of distress outside of healthcare providers clinical judgement. Self-reported measures using the DT (Roth et al., 1998) and Problem List (Brennan, Gingell, Brant, & Hollingworth, 2012) and patients' reported need for psychological support were used to confirm the presence of distress. Accuracy changed depending on if healthcare providers clinical judgement was compared to results of the distress thermometer and problem list (sensitivity 0.54, specificity 0.64), or patient reported need for psychological support (sensitivity 0.85, specificity 0.63). This study was reported as high-quality. However, oncologists' and nurses' accuracy were reported together with no sub-group analysis of profession. Therefore, no exploration was provided for how individual professions' sensitivity and specificity was affected by the different methods used to confirm distress.

Surveys with case vignette

Two case vignette survey studies, reported across four papers, were included in this section (see Table 2).

Little et al. (2005) found on average palliative care nurses correctly scored depression as the most important issue out of a total of 12 health-related issues to be addressed within the vignette. On the other hand, Valente and Saunders (2004)

and Valente (2007, 2010) found on average oncology nurses identified under five of nine possible risk factors associated with suicide, such as wishing death and giving away possessions. Only a small proportion of nurses correctly identified age, ethnicity, and sex as a risk factor for suicide (13-16%). Furthermore, roughly half miscalculated the risk of suicide with the vast majority rating the risk as higher than it was (40.4%). This was likely due to nurses incorrectly attributing crying, fear, refusing cancer treatment, and doing less as suicide risk factors. Palliative care nurses appeared better able to correctly recognise psychological distress (Little et al., 2005). However, oncology nurses in Valente and Saunders (2004) and Valente's (2007, 2010) study showed an overestimation of suicide risk.

Valente and Saunders (2004) and Valente (2010) were assessed as high-quality papers. Although Valente (2007) was assessed as medium quality, this lower mark was primarily due to a lack of transparency in the reported methodology. This lacking information was provided in more detail in Valente and Saunders (2004) and Valente's (2010) reporting of the same study; therefore Valente's (2007) study itself would suggest a high-quality study despite lower quality methodology reporting. Little et al.'s (2005) paper also displayed a medium quality score, due to a lack of methodology transparency, for example, there was no mention of the analysis used to analyse qualitative data in this mixed methods research. Although this does not specifically suggest a poor-quality study with unreliable findings, this cannot be ruled out without further confirmation of the analysis used. Therefore, Little et al.'s (2005) qualitative findings were not reported in the present review.

Observational Studies

Nine observational studies explored ability to respond to psychological distress (see Table 3). These studies predominantly sampled doctors ($n = 137$) and nurses ($n = 123$) who worked in hospitals or cancer centres. One paper (Sheldon, Hilaire, & Berry, 2011) did not specify the healthcare profession being investigated, referring to them as “providers”.

All studies found, in response to expression of emotional cues, that professionals mostly limited time and space to explore emotional cues when they arose, provided inadequate responses, did not use empathetic responses, used distancing strategies, or used terminating responses. This appeared consistent across hospital and cancer centre settings these professionals worked in. One paper noted (Taylor et al., 2011) when patients’ observed emotional cues were acknowledged and elaborated on by physicians, physicians would discuss symptoms of distress, discuss medication, and refer on for psychological support, suggesting a more medical approach to responding to distress.

Four studies used the Verona Coding Definitions of Emotional Sequences (VR-CODES) (Del Piccolo et al., 2011) to categorise professionals’ responses into providing space and reducing space for elaboration of emotional cues. Three of these studies provided percentages for how often reduced space was employed. They found professionals reduced space in 55-65% of instances when emotional cues were expressed and provided space in 35-45% of such instances, with consultants providing the most space (45%), followed by physicians (37.5%) and then nurses (35%). This vastly contradicts the previous themes findings where nurses reported they would try to support and listen when responding to

psychological distress. Furthermore, oncologists appeared to provide more space in response to emotional cues when patients provided non-verbal cues such as crying and had recently started treatment (Bittencourt Romeiro et al., 2023).

All three studies that used VR-CODES and reported percentage for instances of provided and reduced space were assessed as high quality. Use of the VR-CODES as a standardised measure to code professionals' responses to distress provided greater consistency in how responses were assessed across studies. This allowed easier comparison to confirm the reliability of these findings, improving the trustworthiness of results. High levels of reduced space and distancing response also appeared in studies that did not use the VR-CODES.

Prospective Study

Only one prospective study was used in the review (see Table 3) exploring Swedish nurses' ($n = 52$) ability to plan and implement interventions for distressed patients in oncologic-hematologic inpatient wards (Martensson et al., 2010), as discussed in the previous theme.

The nurses identified a variety of patients' psychological needs and planned interventions for these needs, such as providing more information regarding cancer treatment, listening to and encouraging patients, and consulting with other healthcare professionals. However, when explored further, no significant correlation was found between patients' and nurses' perceived occurrence of these personalised interventions. This suggests patients may not have received this appropriate individualised care planned by nurses. Additionally, nurses did not alter the amount of care provided to patients based on distress severity, further supporting the findings that individualised care may not have been delivered to these patients.

This difference in perceived occurrence of psychological intervention between patients and nurses was only found within this specific prospective study of 52 nurses. Therefore, without further research confirming these results across other professions and settings, this cannot be generalised beyond this specific setting.

Experimental Studies

Two of the three experimental studies explored nurses' responses to emotional cues from simulated patients. Sheldon et al. (2009) explored nurses' response to videotaped expressions of neutral, angry, and sad expressions of emotion. While Uitterhoeve et al. (2008) observed nurses' all completing seven scripted conversations with an actor. These studies explored nurses' responses using healthcare provider and patient interaction measures, such as the Roter interaction analysis system (Roter, 1995) and the Medical Interview Aural Rating Scale (Heaven & Green, 2001).

These studies showed similar results to the observational studies in this theme with a significant proportion of nurses using distancing or instrumental responses to emotional cues as opposed to acknowledging and providing space to elaborate. Nurses from Uitterhoeve et al.'s (2008) study primarily worked in an oncology inpatient clinic at a hospital. Whereas Sheldon et al.'s (2009) study did not provide a specific breakdown of where participating nurses worked, only where they were recruited from including hospices, nursing graduate schools, national oncology nurse meetings, and settings broadly defined as "oncology services". Therefore, findings were not compared across healthcare settings.

Uitterhoeve et al.'s (2008) study was assessed as high quality while Sheldon et al. (2009) was assessed as medium. Uitterhoeve et al.'s (2008) high quality score

was reflected in transparent and thorough reporting of its methodology and results. However, the sequence of the seven scripted conversations were the same for all participants. Therefore, leaving the study open to potential negative impact of order effect on internal validity. Subsequently, despite being medium quality, Sheldon et al.'s (2009) findings were included in the review as they randomised nurse participants to different orders in which they viewed the various videotaped expressions of emotions. However, these results should still be treated with caution as the method of randomisation used was not reported.

The baseline results of one randomised control trial (RCT) were included in the review (see Table 2). Merckaert et al. (2008) explored Belgium doctors' ability to detect cancer patients' distress. As just baseline data was used, this study was not used to directly explore cause and effect under controlled conditions. Nevertheless, it still provided valuable insight into how well doctors detected distress within a medical setting. The results showed physicians underestimated distress in their patients, however this did appear to vary between participating physicians. It was not clear in which medical setting participants were recruited from, hindering the generalisability of these findings.

Professionals' Confidence in working with distress

Six studies explored self-perceived confidence in recognising and responding to distress. These included observational studies, surveys, and diagnostic accuracy studies.

Table 4.

Professionals' confidence in working with distress: Descriptive table of study characteristics and quality assessment.

Reference	Country	Healthcare Setting	Participant (n)	Age: Mean (SD)	Gender % Male (n)	Confidence	Qualsyst Rating (%) & Category
<i>Observational studies</i>							
Malhoutra et al. (2018)	Singapore	Cancer Centre & Institutes	Oncologists (30) Patients (96)	38.4 (7.9) 59.3 (12.7)	57% (17) 49% (47)	<ul style="list-style-type: none"> 92% of oncologists declaring confidence in demonstrating empathy. 12% responded with empathy to distress in observed consultation. Oncologists' empathetic response was not affected by their confidence. 	64% Medium
Pollak et al. (2007)	USA	Medical Centre & Universities	Oncologists (51) Patients (270)	44.7 (8.4) 60.4 (12.9)	80% (DNS) 49% (DNS)	<ul style="list-style-type: none"> On a 5-point Likert scale (5 = high confidence), oncologists reported high confidence (mean = 4; SD = 0.6) in attending to patients concerns. On a scale of 0-100, oncologists reported feeling comfortable with discussion psychosocial factors (Mean = 84.5; SD = 9.9). 	75% Medium
<i>Survey Studies</i>							
Kaneko et al. (2013)	Japan	Medical training centre	Nurses (88)	DNS range from 20s-50s with 47.2% in 30s.	2% (2)	<ul style="list-style-type: none"> 50% very concerned with assessing anxiety & depression. 20% extremely concerned with caring for depression & anger. 	73% Medium
Mitchell et al. (2008)	UK	Nationwide	Doctors (50) Nurses (170) Miscellaneous AHPs (6)			<ul style="list-style-type: none"> 13% reported low personal skills or confidence as a barrier to screening for distress. 	60% Medium
<i>Survey – case vignette</i>							
Valente et al. (2004) & Valente et al. (2010)	USA, Canada, Puerto Rico	Nationwide	Nurses (454)	DNS Most between age of 30-49 (73.5%)	8.6% (DNS)	<ul style="list-style-type: none"> 14.6% of nurses reported having good to very good knowledge, skills, & comfort in assessing suicidality. 1.1% reported very good comfort & expertise in suicidality prevention skills. 	83% & 78% High & High
<i>Diagnostic Accuracy Study</i>							
Lelorain et al. (2014)	France	Hospital & Institutes	Physicians (28) Patients (201)	46.8 (7.8) 62 (11.5)	36% (DNS) 27% (DNS)	<ul style="list-style-type: none"> On a 7-point Likert scale assessing physician confidence in detecting distress (0 strongly disagree with feeling confident – 7 strongly agree). On average physicians scored 5.2 (SD = 0.9) suggesting somewhat confident. 	70% Medium

DNS: Did not specify

AHPs: Allied Healthcare Professionals

Observational studies

Two observational studies used self-reported confidence measures for oncologists working with psychological distress.

Malhotra et al. (2018) found 92% of participating oncologists working in cancer centres and institutes in Singapore reported confidence in their ability to demonstrate empathy with patients. Furthermore, Pollak et al. (2007) found oncologists working in other healthcare settings, such as medical centres and universities in the United States, reported high levels of confidence in discussing psychosocial topics and their ability in attending to patients' concerns (see Table 4). This suggests oncologists display high confidence in their ability to respond to psychological distress across various clinical healthcare settings. Despite this confidence, many oncologists did not display empathy and used distancing and reducing space responses to emotional concerns during observed consultations. Therefore, confidence may not be a reliable predictor of ability to assess and respond to distress.

Both studies were assessed as medium quality. Neither paper provided the exact survey questions that were used to assess confidence. However, both papers reported similar findings enhancing their reliability and were therefore included in the review.

Survey studies

Two survey studies explored healthcare professionals' confidence in working with distress.

Kaneko et al. (2013) found a significant proportion of Japanese nurses (50%) were very concerned with their ability to assess anxiety and depression. Additionally,

20% were extremely concerned caring for someone with depression or anger. Furthermore, Mitchell et al. (2008) found, from a broad sample of medical and allied healthcare professionals within the United Kingdom, that 13% reported low confidence and skills in assessing psychological distress (see Table 4). No sub-group analysis of profession or healthcare setting were provided in this study. Furthermore, the setting nurses worked within was not provided in Kaneko et al.'s (2013) study.

Both studies were assessed as medium quality. However, Mitchell et al. (2008) survey allowed participants to complete the study anonymously not otherwise possible in other observational and diagnostic accuracy studies in this confidence theme. These findings are less likely to be affected by social desirability bias, potentially producing more honest self-perceived confidence data and were therefore included in the review. Kaneko et al.'s (2013) did not specify if participants could complete their survey anonymously. Furthermore, nurses' self-reported confidence data was collected immediately after completing a mental health training course, opening the study up to potential sampling bias. Therefore, Kaneko et al.'s findings should be treated with less weight than other studies exploring nurses' confidence in this section.

Surveys using case vignettes

One case-vignette survey explored confidence to assess and provide interventions for a patient with suicidal ideation among oncology nurses (n=454) within the United States, Canada, and Puerto Rico. This study was reported over two papers (Valente & Saunders, 2004; Valente, 2010). Only a small minority of nurses (14.6%) reported good or very good skills, knowledge, and comfort in assessing

suicidality, with an even smaller percentage reporting this for interventions, such as using prevention skills (1.1%).

Little et al. (2005) also explored nurses' confidence in treating an oncology patient with depression using a case vignette. However, participants were not informed the patient was depressed and therefore may have reported confidence in other areas of clinical practice they felt relevant to the case, such as, pain control, respiratory issues, and fatigue. Therefore, this study was not included in the confidence section of this review.

Diagnostic accuracy study

One diagnostic accuracy study conducted in hospitals and institutes within France, described physicians reporting themselves to be somewhat confident in their ability to detect distress (Lelorain et al., 2014). Despite this, these physicians generally over-reported distress in patients. Like the observational study designs within this theme, the mix of self-reported confidence data alongside observational ability allowed direct comparison of oncologists self-perceived confidence to their ability. However, as opposed to the observation studies, this study held more of a focus on confidence in recognising distress as opposed to responding. These findings vastly differ from the reportedly low confidence to recognise and respond to distress reported by nurses in the survey studies (Valente & Saunders, 2004; Valente, 2010). This suggests higher self-confidence in doctors compared to nurses in their ability to both recognise and respond to distress.

Lelorain et al.'s (2014) study was assessed as medium quality. This study did not recruit the predicted sample size of 50, recruiting 28, increasing the chance of a type two error. Furthermore, this study stated physicians overreported distress as

opposed to the underestimation reported in the other high-quality diagnostic accuracy studies. Therefore, despite providing valuable insight into physicians' confidence in recognising distress this paper should be treated with less weight than the other papers exploring physicians' ability and confidence in working with psychological distress.

Study Design Balance

Different study designs yielded different conclusions providing broader depth and richness to the review. The survey studies explored professionals' self-reported experience where they reported using a variety of informational and supportive strategies to help assess and respond to distress. Surveys also reported low confidence in working with distress across a variety of professionals, excluding doctors. These studies provided a large sample increasing their generalisability but also acted as a broad starting point to further explore this topic. Diagnostic accuracy studies provided direct observation of professionals' ability to recognise distress, suggesting a low sensitivity particularly among physicians. The remaining quantitative and mixed methods studies provided clear behavioural observations of professionals' inappropriate response to distress across time, using prospective findings, as well as in controlled and contextual settings, using the experimental and observational studies to improve internal and ecological validity.

The theme of "how professionals recognise and respond to distress" was the only theme to include qualitative studies, in the form of interviews, as well as quantitative and mixed methods studies. In addition to providing generalisable standardised data from the quantitative findings, this theme provided additional insight into healthcare professionals' decision making when recognising and

responding to patients' distress. For example, interview studies confirmed survey findings that doctors were more likely to refer patients on when responding to distress but also added doctors did this because they felt it was part of their role. This provided greater richness to the quantitative findings in this theme.

Ability and confidence provided more quantitative studies and in turn quantifiable data. Quantifiable values allowed easier comparison between sub-groups, such as profession and setting. Although some comparisons of these groups were made in the "how professionals recognise and respond to distress" theme the quantifiable data explored in "ability" and "confidence" used more direct standardised measures, providing a more reliable comparison.

All themes displayed a breadth of study design within each theme. However, it is important to note themes with less studies of the same design, such as the "confidence" theme, made it harder to confirm their reliability through lesser availability of replicable studies to verify these results.

Discussion

Overview

The current review summarised research exploring healthcare professionals' ability and confidence in recognising and responding to psychological distress in patients with cancer. The current review explored findings of studies reported between 2004 and late 2023.

How they recognised and responded to distress

Many studies reported healthcare professionals, particularly physician, used clinical judgement, knowledge of patient history, observations, and direct questions to assess distress. These findings largely differ from the techniques Ryan et al. (2005) suggested that practitioners should be using to help identify psychological distress, such as using open and direct questions together and uninterrupted patient talk time. The use of direct questions, patients' medical history, and clinical judgement may reduce opportunities to identify distress particularly when practitioners are not expecting it. Furthermore, only a small proportion of participants across all studies in the present review appeared to use standardised measures to assess psychological distress. Previous research has reported several barriers identified by healthcare professionals to using these tools, such as a lack of time and comfort (Hughes et al., 2011). It is possible, these barriers may have prompted a low use of screening tools in the present review, suggesting a need for further training and time to build professionals comfort in using these tools in their day-to-day work.

Furthermore, many participants reported waiting for patients to initiate conversations about psychological distress. This markedly contradicts psychology care guidelines that state all staff should approach conversations about distress throughout cancer patients' journeys and use standardised measures to do so (NICE, 2004; Riba et al., 2019). Nevertheless, some professionals, particularly nurses, appeared to take holistic approaches to evaluating psychological distress by assessing various social, physical, spiritual, and financial factors (Valente & Saunders, 2004; Valente, 2007; Valente, 2010). This aligns with the Institute of Medicine's report on the standards and recommended practice of psychosocial care for cancer patients (Adler & Page, 2008).

Many healthcare professionals reported providing some level of psychological support in response to distress. This included providing mental health information, listening, providing a reassuring relationship, supporting decision making within care, and referring to specialist mental health staff when needed. These findings support Ryan et al.'s (2005) suggested techniques for responding to psychological distress, for example, by using active listening, shared decision making, and providing a reassuring relationship through empathetic comments. These results also mostly align with national recommendations for responding to psychological distress in cancer care (NICE 2004; Riba et al., 2019), suggesting these professionals may have had some awareness of the appropriate way to respond to psychological distress.

Some differences were highlighted between professions in how they felt they responded to distress. Doctors appeared more likely to refer patients on for further psychological support. Whereas nurses were more likely to support patients' psychological needs themselves. When physicians did report directly supporting patients' psychological needs they described using medical techniques, such as discussing depression and anxiety diagnoses and prescribing psychiatric medicine. Psychiatric medication has been shown to be a good tool in assisting an integrated approach to supporting the mental health of people with cancer (Grassi, Caruso, Hammelef, Nanni, & Riba, 2014). However, this review has also indicated that doctors generally overestimate their ability to detect psychological distress. Without accurate assessment of psychological distress, this could result in inappropriate prescriptions of psychiatric medication among people with cancer.

Ability

Findings broadly differed between studies exploring professionals' ability to recognise distress, particularly in diagnostic accuracy and case vignette surveys. For example, when assessing nurses' diagnostic accuracy of distress, Mitchell et al. (2011) found a sensitivity rate of 55%, however, Keller et al. (2004) found sensitivity of 75%. It is possible these differences in findings were impacted by extraneous factors, such as the methods used to verify patient distress. These findings support previous research, such as, Cepoiu et al.'s (2008) meta-analysis which found physicians' sensitivity in recognising depression in the general population ranged from 27.9% to 44.8%. Like this review, the studies in Cepoiu et al.'s (2008) meta-analysis broadly differed in the methods used to verify distress. However, Cepoiu et al. (2008) conducted a test of heterogeneity to explore any sensitivity difference based on the diagnostic tool used to verify distress, finding no statistically significant effect. This suggests the methods used to verify patient distress may not be the sole reason for this broad range in results. It is possible other extraneous variables in the present review, such as differences in study quality and location, may have impacted this broad range of sensitivity scores. Therefore, generalisable conclusions in professionals' ability to recognise distress cannot be made from these studies alone.

On the other hand, there appeared to be consensus on healthcare professionals' response to distress. Clinicians, particularly doctors and nurses, appeared to reduce time and space to explore emotional cues further when they arose in consultations, preventing patients from elaborating on any distress they may experience, and it being further addressed. This largely differed from doctors high self-perceived ability to demonstrate empathy and attend to patients' concerns (Malhotra et al., 2018; Pollak et al., 2007). This finding supports Ryan et al.'s (2005)

paper where distancing techniques were also used by professionals, particularly when they felt less comfortable working with psychological needs, or it was not deemed part of their role. Reduced space for exploring psychological distress could result in missed opportunities to address cancer patients' mental health needs. By not exploring psychological needs when they arise, many patients could experience delayed psychological support.

Professionals appeared to provide more space when patients exhibited non-verbal cues such as crying and were more explicit with their cues (Bittencourt Romeiro, Kern de Castro, & Figueiredo-Braga, 2023; Lin, Lee, Chou, Liu, & Tang, 2017). Therefore, professionals may be overly reliant on patients' demonstrated signs of distress as opposed to actively enquiring about psychological distress. An overreliance on patients' demonstrated signs of distress were also demonstrated in Ryan et al.'s (2005) review where clinicians reported expecting patients would ask for psychological help when needed. This was despite patients reportedly wanting to discuss their psychological needs but not initiating this conversation. Therefore, opportunities to support patient's psychological wellbeing may be missed due to differing expectations on who should initiate this discussion. Furthermore, clinical presentations of distress can vary widely across different cultures (Bhugra & Mastrogianni, 2004). Therefore, an overreliance on recognising demonstrated signs of distress could lead to distress being missed in those who do not display distress in the manner expected by their healthcare professionals. This can perpetuate inequalities in care based on cultural background.

When distress was recognised and nurses planned appropriate interventions to respond to distress, the perceived occurrence of these interventions differed between nurses and patients (Martensson et al., 2010). This suggests these

interventions may not have been affectively implemented or communicated to patients. In previous qualitative literature, nurses have described the act of delivering psychosocial care in oncology settings as challenging (Guner, Hicdurmaz, Yildirim, & Inci, 2018). They reported difficulties in defining psychosocial care for cancer patients whose presentations were often complex. In addition to this, further research suggests nurses do not communicate effectively when providing psychosocial care (Tay, Hegney, & Ang, 2011). The different perceptions of what psychological care was delivered between patients and nurses in the present findings may have resulted from these difficulties in defining and communicating psychosocial care. Upskilling nurses in psychological care is a potential way to overcome these barriers. Psychological and communication skills training has previously shown improvements in nurses' recognition and response to psychological distress (Fukui et al., 2009; Moorey et al., 2009). Therefore, providing protected time and space to attend such training, away from the competing demands of their role, could allow upskilling and improve delivery of psychosocial care from nurses.

These ability findings suggest the current wider oncology workforce is unable to appropriately address the psychological needs of people with cancer as outlined in NICE and NCCN guidelines (NICE, 2004; Riba et al., 2019). This lack of appropriate recognition and response to psychological distress contradicts the holistic models outlined within these guidelines.

Confidence

A significant proportion of nurses within this review reported low confidence and high concern in their ability to assess and respond to distress (Kaneko et al.,

2013; Valente & Saunders, 2004; Valente, 2010). One possible explanation may be systemic barriers, such as multiple competing demands for nurses, negatively affecting their perceived capacity to implement psychological skills (Turner et al., 2018). On the other hand, doctors reported higher confidence in ability, however demonstrated poor recognition and response towards psychological distress (Lelorain et al., 2014; Malhoutra et al., 2018; Pollak et al., 2007). Therefore, confidence does not appear to be an accurate predictor of ability to support mental health in cancer patients.

Methodological limitations

A lack of consistency between studies in relation to setting, healthcare professions, study design, measures, and methods used to validate distress, makes it hard to generalise findings from the review. Additionally, the review highlighted several methodological limitations across the papers.

Most studies included in the review had small sample sizes increasing the likelihood of type two error. Many papers across all study designs did not provide adequate or appropriate reporting of the sampling strategy, such as inclusion criteria or how participants were approached. This makes it impossible to replicate these studies to confirm the reliability of their findings. Furthermore, potential sampling bias was introduced in one survey by asking nurses to report their confidence in working with psychological distress directly after completing voluntary mental health training (Kaneko et al., 2013). Due to the nature of the training, it is highly likely these nurses had greater awareness of psychological distress compared to nurses without training. Roughly half the papers reported conclusions not supported or only partly supported by the findings, claimed generalisability in conclusions with no supportive

evidence, or had no clear conclusion section. This could indicate risk of bias when reporting the results and lead to potential misinterpretation of these findings.

Review limitations

A systematic review format was used to provide greater transparency and structure to the review as well as inform clinical guideline implementation. However, given the broad scope in topic, study design, participant population, and healthcare settings used within the review, a scoping review may have been a more suitable format. A scoping review would have provided a better framework to categorise and map the broad variety of study design, population, and setting. This mapping could have highlighted a more specific topic or sub-group of studies that warranted deeper exploration using a systematic review.

Some studies combined results from various healthcare professionals or did not state specific professional roles in their findings (Sheldon et al., 2011; Thewes et al., 2014), making it harder to explore professional differences. Despite some studies reporting individual professional results, it is difficult to generalise findings due to the various intersects of the healthcare settings, participant population, study design, and national origin of the research. Additionally, this makes it harder to fully integrate findings across studies.

Psychological and social support is often combined in oncology care with many services providing psychosocial support as opposed to purely psychological support. To make findings more specific to psychological distress, the review inclusion criteria incorporated papers solely focused on psychological distress as opposed to physical or psychosocial. However, it is important to note the wide impact cancer has on co-existing physical, social, and psychological factors (Costa,

Mercieca-Bebber, Rutherford, Gabb, & King, 2016). It was noted during title and abstract screening that many papers reporting physical and psychosocial distress, also reported professional experience in assessing and responding to psychological distress. Therefore, it is possible that some valuable findings may have been lost due to this inclusion criterion.

There was a wide range in sensitivity and specificity findings of professionals' ability to recognise distress between diagnostic accuracy studies. One possible explanation is the use of different methods of validating distress across studies. Some examples of these methods include psychological interviews, the Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983), and the distress thermometer (Roth et al., 1998). Despite this reportedly not having a significant impact on previous review findings (Cepoiu et al., 2008), it is still possible this alongside various other study intersects, such as, profession and setting, could have impacted this review, particularly as a test of heterogeneity was not performed. Therefore, it is hard to pull together conclusive findings of diagnostic accuracy from these studies, due to the broad difference in intersecting variables between studies.

A final limitation is the lack of papers exploring this topic in professionals outside of medical specialities. Allied healthcare professionals are now taking a more active role in oncology care (Fleissig et al., 2006) and will therefore likely be exposed to patient distress as much as doctors and nurses. Only one study included in this review specifically explored experiences of allied healthcare professionals, such as Speech and Language Therapists, Occupational Therapists and Dietitians (Mitchell et al., 2008). However, the sample size was small and grouped together making it hard to draw any conclusions from these findings regarding these individual disciplines.

Research recommendations

Further research is needed to explore the diagnostic accuracy of healthcare professionals using a consistent method of confirming distress prior to exploring healthcare professionals' ability to recognise this distress. This could allow reduced variability between study findings. By providing more consistent and replicable results, the reliability of findings can be further assessed.

The studies within this review primarily took place in Western, high-income countries. Many low resource settings do not command the same level of healthcare resources as the countries included in this review (Garrett, 2017). Therefore, it is likely these findings cannot be generalised to much of the developing world. Further research should explore healthcare professionals' experiences of recognising and responding to psychological distress in middle and low income countries to see if these findings are applicable here.

The present review puts into question reasons why healthcare professionals reduce space and time for psychological distress discussion. One potential explanation maybe that they are not accurately recognising distress in the first place to know how to respond. At present it is hard to assess this hypothesis as much of the existing research explored ability either to recognise or to respond. Further research exploring healthcare professionals' ability to both recognise and then respond to distress could help explore why professionals respond in this way.

Clinical recommendations

Many professionals appear to avoid approaching conversations of psychological distress and do not use recommended tools and questionnaires to assess this. This goes against national and organisational guidelines on responding

to psychological distress in cancer care with some professionals highlighting lacked awareness of such guidelines (Pirl et al., 2007; Galindo Vazquez et al., 2022). Therefore, it is imperative to raise this awareness. A potential means to doing so could be implementing these guidelines into healthcare mandatory training and induction. When psychological training has been provided to healthcare professional in previous literature, an increase in confidence as well as ability to recognise and respond to psychological distress was found (Fukui et al., 2009; Moorey et al., 2009; Turner et al., 2018). Therefore, it is imperative that healthcare professionals be provided with allocated time to attend psychologically informed training to adequately address cancer patients' psychological needs, in line with these guidelines.

Professionals' own wellbeing and self-awareness play a key role in how they interact with patients. Amutio-Kareaga, Garcia-Taboada, Delgado, Hermosilla, and Martinez-Taboada (2017) conducted a review exploring mindfulness practice use for physicians across various healthcare settings. They found mindfulness-based strategies improved practitioners' wellbeing but also their ability to communicate and empathise with patients. This included their ability to build clinician-patient rapport, engage in active listening, and discuss psychosocial topics. Therefore, encouraging oncology professionals to engage in self-care, such as mindfulness could help improve their ability to discuss psychological topics with their patients, and in turn provide better psychological care.

Conclusion

Despite extensive evidence demonstrating heightened prevalence of psychological distress in people with cancer and the publication of national guidelines recommending all healthcare professionals should support the

identification and treatment of psychological distress, many healthcare professionals struggled to appropriately assess and respond to the psychological needs of people with cancer in this review. Confidence in ability to address the psychological needs of patients generally varied between professions. Those that reported high confidence generally presented with lower ability to address psychological needs. However, many studies within the review presented with methodological limitations, questioning the reliability of these findings. Moving forward, large studies using consistent outcome measures, methods of validating distress, and transparency are needed to confirm the findings of this review.

References

- Absolom, K., Holch, P., Pini, S., Hill, K., Liu, A., Sharpe, M., ... & NCRI COMPASS Supportive and Palliative Care Research Collaborative. (2011). The detection and management of emotional distress in cancer patients: the views of health-care professionals. *Psycho-oncology*, 20(6), 601-608.
- Adler, N. E., & Page, A. E. K. (Eds.). (2008). *Cancer Care for the Whole Patient: Meeting Psychosocial Health Needs*. The National Academies Press.
- Amutio-Kareaga, A., García-Campayo, J., Delgado, L. C., Hermosilla, D., & Martínez-Taboada, C. (2017). Improving communication between physicians and their patients through mindfulness and compassion-based strategies: a narrative review. *Journal of clinical medicine*, 6(3), 33.
- Aromataris, E., & Pearson, A. (2014). The systematic review: an overview. *AJN The American Journal of Nursing*, 114(3), 53-58.
- Barnett-Page, E., & Thomas, J. (2009). Methods for the synthesis of qualitative research: a critical review. *BMC Medical Research Methodology*, 9(1), 59. doi:10.1186/1471-2288-9-59
- Bennion, A. E., & Molassiotis, A. (2013). Qualitative research into the symptom experiences of adult cancer patients after treatments: a systematic review and meta-synthesis. *Supportive Care in Cancer*, 21, 9-25.
- Bhugra, D., & Mastrogianni, A. (2004). Globalisation and mental disorders: overview with relation to depression. *The British Journal of Psychiatry*, 184(1), 10-20.
- Biddle, L., Paramasivan, S., Harris, S., Campbell, R., Brennan, J., & Hollingworth, W. (2016). Patients' and clinicians' experiences of holistic needs assessment using a

cancer distress thermometer and problem list: A qualitative study. *European journal of oncology nursing: the official journal of European Oncology Nursing Society*, 23, 59–65.

Bittencourt Romeiro, F., Felizardo, D. D. F., Kern de Castro, E., & Figueiredo-Braga, M. (2021). Physicians privilege responding to emotional cues in oncologic consultations: a study utilizing Verona Coding Definitions of Emotional Sequences. *Journal of Health Psychology*, 26(12), 2220-2230.

Bittencourt Romeiro, F., Kern de Castro, E., & Figueiredo-Braga, M. (2023). How physicians respond to the emotional expressions of people with cancer. *Psicooncologia*, 20(1).

Breitbart, W., Butow, P., Jacobsen, P., Lam, W., Lazenby, M., & Loscalzo, M. (2021). *Psycho-Oncology* (Fourth edition). Oxford University Press.

Brennan, J., Gingell, P., Brant, H., & Hollingworth, W. (2012). Refinement of the distress management problem list as the basis for a holistic therapeutic conversation among UK patients with cancer. *Psycho-Oncology*, 21(12), 1346-1356.

Carolan, C. M., & Campbell, K. (2016). General practitioners' 'lived experience' of assessing psychological distress in cancer patients: an exploratory qualitative study. *European Journal of Cancer Care*, 25(3), 391-401.

Cepoiu, M., McCusker, J., Cole, M. G., Sewitch, M., Belzile, E., & Ciampi, A. (2008). Recognition of depression by non-psychiatric physicians—a systematic literature review and meta-analysis. *Journal of general internal medicine*, 23, 25-36.

Chida, Y., Hamer, M., Wardle, J., & Steptoe, A. (2008). Do stress-related psychosocial factors contribute to cancer incidence and survival? *Nature Clinical Practice. Oncology*, 5(8), 466–475.

- Colleoni, M., Mandala, M., Peruzzotti, G., Robertson, C., Bredart, A., & Goldhirsch, A. (2000). Depression and degree of acceptance of adjuvant cytotoxic drugs. *The Lancet (British Edition)*, 356(9238), 1326–1327.
- Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO: the SPIDER tool for qualitative evidence synthesis. *Qualitative health research*, 22(10), 1435-1443.
- Costa, D. S., Mercieca-Bebber, R., Rutherford, C., Gabb, L., & King, M. T. (2016). The impact of cancer on psychological and social outcomes. *Australian Psychologist*, 51(2), 89-99.
- Cruzado, J. A., Martínez-García, V., González, I. P., Gutiérrez, V. S., Jarabo-Sarceda, J. R., Calatayud-Gastardi, J., ... & Hernando-Trancho, F. (2022). Preoperative detection and evaluation of the need for psychological intervention in cancer and non-cancer patients referred to thoracic surgery. *Cirugia Espanola*, 100(6), 359-366.
- Del Piccolo, L., De Haes, H., Heaven, C., Jansen, J., Verheul, W., Bensing, J., ... & Finset, A. (2011). Development of the Verona coding definitions of emotional sequences to code health providers' responses (VR-CoDES-P) to patient cues and concerns. *Patient Education and Counseling*, 82(2), 149-155.
- Donovan, K. A., Grassi, L., McGinty, H. L., & Jacobsen, P. B. (2014). Validation of the distress thermometer worldwide: state of the science. *Psycho-oncology*, 23(3), 241-250.
- Dreismann, L., Goretzki, A., Ginger, V., & Zimmermann, T. (2022). What if... I asked cancer patients about psychological distress? Barriers in psycho-oncological screening from the perspective of nurses—A qualitative analysis. *Frontiers in Psychiatry*, 12, 786691.

- Fleissig, A., Jenkins, V., Catt, S., & Fallowfield, L. (2006). Multidisciplinary teams in cancer care: are they effective in the UK?. *The Lancet Oncology*, 7(11), 935-943.
- Fukui, S., Ogawa, K., Ohtsuka, M., & Fukui, N. (2009). Effect of communication skills training on nurses' detection of patients' distress and related factors after cancer diagnosis: a randomized study. *Psycho-Oncology*, 18(11), 1156–1164.
- Galindo Vázquez, O., Rivera, S., Lerma, A., Calderillo Ruiz, G., Espinoza Bello, M., Meneses, A., & Lerma, C. (2022). Detection of psychosocial distress in cancer patients: A survey of Mexican oncologists. *Journal of Psychosocial Oncology*, 40(6), 708–723.
- Garrett, L. (2017). The challenge of global health. In *Global Health* (pp. 525-548). Routledge.
- Garrido-Elustondo, S., Reneses, B., Navalon, A., Martin, O., Ramos, I., & Fuentes, M. (2016). Ability to detect psychiatric disorders by the family physician. *Atención Primaria*, 48(7), 449–457.
- Granek, L., Nakash, O., Ariad, S., Shapira, S., & Ben-David, M. (2018a). Oncologists' identification of mental health distress in cancer patients: strategies and barriers. *European Journal of Cancer Care*, 27(3), e12835.
- Granek, L., Nakash, O., Ariad, S., Shapira, S., & Ben-David, M. (2019a). Strategies and barriers in addressing mental health and suicidality in patients with cancer. *Oncology Nursing Forum*, 46(5).
- Granek, L., Nakash, O., Ariad, S., Shapira, S., & Ben-David, M. (2019b). Mental health distress: Oncology nurses' strategies and barriers in identifying distress in patients with cancer. *Clinical Journal of Oncology Nursing*, 23(1).

- Granek, L., Nakash, O., Ben-David, M., Shapira, S., & Ariad, S. (2018b). Oncologists' treatment responses to mental health distress in their cancer patients. *Qualitative Health Research, 28*(11), 1735-1745.
- Granek, L., Nakash, O., Ben-David, M., Shapira, S., & Ariad, S. (2018c). Oncologists', nurses', and social workers' strategies and barriers to identifying suicide risk in cancer patients. *Psycho-Oncology, 27*(1), 148-154.
- Grassi, L., Caruso, R., Hammelef, K., Nanni, M. G., & Riba, M. (2014). Efficacy and safety of pharmacotherapy in cancer-related psychiatric disorders across the trajectory of cancer care: a review. *International Review of Psychiatry, 26*(1), 44-62.
- Güner, P., Hiçdurmaz, D., Yıldırım, N. K., & İnci, F. (2018). Psychosocial care from the perspective of nurses working in oncology: A qualitative study. *European Journal of Oncology Nursing, 34*, 68-75.
- Heaven, C. M., & Green, C. (2001). *Medical Interview Aural Rating Scale*. [Unpublished manuscript, Psychological Medicine Group, Christie Hospital, Stanley House, Manchester, United Kingdom].
- Hoffman, K. E., McCarthy, E. P., Recklitis, C. J., & Ng, A. K. (2009). Psychological distress in long-term survivors of adult-onset cancer: results from a national survey. *Archives of Internal Medicine, 169*(14), 1274-1281.
- Hughes, K. L., Sargeant, H., & Hawkes, A. L. (2011). Acceptability of the Distress Thermometer and Problem List to community-based telephone cancer helpline operators, and to cancer patients and carers. *BMC Cancer, 11*, 1-8.
- Jacobsen, P. B., Donovan, K. A., Trask, P. C., Fleishman, S. B., Zabora, J., Baker, F., & Holland, J. C. (2005). Screening for psychologic distress in ambulatory cancer

patients: a multicenter evaluation of the distress thermometer. *Cancer*, 103(7), 1494-1502.

Kaneko, M., Ryu, S., Nishida, H., Tamasato, K., Shimodaira, Y., Nishimura, K., & Kume, M. (2013). Nurses' recognition of the mental state of cancer patients and their own stress management—a study of Japanese cancer-care nurses. *Psycho-Oncology*, 22(7), 1624-1629.

Karchoud, J. F., de Kruif, A. J. T. C., Lamers, F., van Linde, M. E., Van Dodewaard-de Jong, J. M., Braamse, A. M., ... & Dekker, J. (2021). Clinical judgment of the need for professional mental health care in patients with cancer: a qualitative study among oncologists and nurses. *Journal of Cancer Survivorship*, 1-10.

Keller, M., Sommerfeldt, S., Fischer, C., Knight, L., Riesbeck, M., Löwe, B., ... & Lehnert, T. (2004). Recognition of distress and psychiatric morbidity in cancer patients: a multi-method approach. *Annals of Oncology*, 15(8), 1243-1249.

Kim, G. M., Kim, S. J., Song, S. K., Kim, H. R., Kang, B. D., Noh, S. H., ... & Rha, S. Y. (2017). Prevalence and prognostic implications of psychological distress in patients with gastric cancer. *BMC Cancer*, 17, 1-8.

Kmet, L. M., Cook, L. S., & Lee, R. C. (2004). Standard quality assessment criteria for evaluating primary research papers from a variety of fields.

Lang-Rollin, I., & Berberich, G. (2018). Psycho-oncology. *Dialogues in clinical neuroscience*, 20(1), 13–22.

Lelorain, S., Bredart, A., Dolbeault, S., Cano, A., Bonnaud-Antignac, A., Cousson-Gelie, F., & Sultan, S. (2014). How can we explain physician accuracy in assessing patient

distress? A multilevel analysis in patients with advanced cancer. *Patient Education and Counseling*, 94(3), 322-327.

Lin, M. F., Lee, A. Y., Chou, C. C., Liu, T. Y., & Tang, C. C. (2017). Factors predicting emotional cue-responding behaviors of nurses in Taiwan: An observational study. *Psycho-Oncology*, 26(10), 1548-1554.

Little, L., Dionne, B., & Eaton, J. (2005). Nursing assessment of depression among palliative care cancer patients. *Journal of Hospice & Palliative Nursing*, 7(2), 98-106.

Lo, S. B., Ianniello, L., Sharma, M., Sarnacki, D., & Finn, K. T. (2016). Experience implementing distress screening using the National Comprehensive Cancer Network distress thermometer at an urban safety-net hospital. *Psycho-Oncology (Chichester, England)*, 25(9), 1113–1115.

Maass, S. W. M. C., Boerman, L. M., Verhaak, P. F. M., Du, J., de Bock, G. H., & Berendsen, A. J. (2019). Long-term psychological distress in breast cancer survivors and their matched controls: a cross-sectional study. *Maturitas*, 130, 6-12.

Macmillan Cancer Support. (2019). *Integrated Care System Guidance for Cancer Rehabilitation: : A guide to reducing variation and improving outcomes in cancer rehabilitation in London*.

Macmillan Cancer Support. (2023). *Holistic Needs Assessment: Planning Your Care and Support*.

Malhotra, C., Kanavar, R., Krishna, L., Xiang, L., Kumarakulasinghe, N. B., Tan, S. H., ... & Pollak, K. I. (2018). Oncologists' responses to patient and caregiver negative emotions and patient perception of quality of communication: results from a multi-ethnic Asian setting. *Supportive Care in Cancer*, 26, 957-965.

- Martensson, G., Carlsson, M., & Lampic, C. (2010). Do oncology nurses provide more care to patients with high levels of emotional distress? *Oncology Nursing Forum*, 37(1), E34–E42.
- Mehnert, A., Hartung, T. J., Friedrich, M., Vehling, S., Brähler, E., Härter, M., ... & Faller, H. (2018). One in two cancer patients is significantly distressed: prevalence and indicators of distress. *Psycho-oncology*, 27(1), 75-82.
- Merckaert, I., Libert, Y., Delvaux, N., Marchal, S., Boniver, J., Etienne, A. M., ... & Razavi, D. (2008). Factors influencing physicians' detection of cancer patients' and relatives' distress: can a communication skills training program improve physicians' detection?. *Psycho-Oncology: Journal of the Psychological, Social and Behavioral Dimensions of Cancer*, 17(3), 260-269.
- Mitchell, A. J., Hussain, N., Grainger, L., & Symonds, P. (2011). Identification of patient-reported distress by clinical nurse specialists in routine oncology practice: a multicentre UK study. *Psycho-Oncology*, 20(10), 1076-1083.
- Mitchell, A. J., Kaar, S., Coggan, C., & Herdman, J. (2008). Acceptability of common screening methods used to detect distress and related mood disorders—preferences of cancer specialists and non-specialists. *Psycho-Oncology: Journal of the Psychological, Social and Behavioral Dimensions of Cancer*, 17(3), 226-236.
- Moorey, S., Cort, E., Kapari, M., Monroe, B., Hansford, P., Mannix, K., ... & Hotopf, M. (2009). A cluster randomized controlled trial of cognitive behaviour therapy for common mental disorders in patients with advanced cancer. *Psychological Medicine*, 39(5), 713-723.
- Nash, M. (2017). Mental healthcare training needs of oncology nurses in Ireland. *Cancer Nursing Practice*, 16(1).

NICE. Guidance on Cancer Services: Improving Supportive and Palliative Care for Adults with Cancer. (2004). Available at:

<https://www.nice.org.uk/guidance/csg4/resources/improving-supportive-and-palliative-care-for-adults-with-cancer-pdf-773375005>

Oguchi, M., Jansen, J., Butow, P., Colagiuri, B., Divine, R., & Dhillon, H. (2011). Measuring the impact of nurse cue-response behaviour on cancer patients' emotional cues. *Patient Education and Counseling*, 82(2), 163-168.

Pirl, W. F., Muriel, A., Hwang, V., Kornblith, A., Greer, J., Donelan, K., ... & Schapira, L. (2007). Screening for psychosocial distress: a national survey of oncologists. *J Support Oncol*, 5(10), 499-504.

Pitceathly, C., Maguire, P., Fletcher, I., Parle, M., Tomenson, B., & Creed, F. (2009). Can a brief psychological intervention prevent anxiety or depressive disorders in cancer patients? A randomised controlled trial. *Annals of Oncology*, 20(5), 928-934.

Pollak, K. I., Arnold, R. M., Jeffreys, A. S., Alexander, S. C., Olsen, M. K., Abernethy, A. P., ... & Tulsky, J. A. (2007). Oncologist communication about emotion during visits with patients with advanced cancer. *Journal of Clinical Oncology*, 25(36), 5748-5752.

Rhondali, W., Freyer, G., Adam, V., Filbet, M., Derzelle, M., Abgrall-Barbry, G., ... & Falandry, C. (2015). Agreement for depression diagnosis between DSM-IV-TR criteria, three validated scales, oncologist assessment, and psychiatric clinical interview in elderly patients with advanced ovarian cancer. *Clinical Interventions in Aging*, 1155-1162.

Riba, M. B., Donovan, K. A., Andersen, B., Braun, I., Breitbart, W. S., Brewer, B. W., ... & Darlow, S. D. (2019). Distress Management, Version 3.2019, NCCN Clinical Practice

Guidelines in Oncology. *Journal of the National Comprehensive Cancer Network J Natl Compr Canc Netw*, 17(10), 1229-1249.

Roter, D. L. (1995). *The Roter method of interaction process analysis. RIAS manual*. Baltimore: The Johns Hopkins University.

Roth, A. J., Kornblith, A. B., Batel-Copel, L., Peabody, E., Scher, H. I., & Holland, J. C. (1998). Rapid screening for psychologic distress in men with prostate carcinoma: a pilot study. *Cancer: Interdisciplinary International Journal of the American Cancer Society*, 82(10), 1904-1908.

Ryan, H., Schofield, P., Cockburn, J., Butow, P., Tattersall, M., Turner, J., Girgis, A., Bandaranayake, D., & Bowman, D. (2005). How to recognize and manage psychological distress in cancer patients. *European Journal of Cancer Care*, 14(1), 7-15.

Senf, B., Fettel, J., Demmerle, C., & Maiwurm, P. (2019). Physicians' attitudes towards psycho-oncology, perceived barriers, and psychosocial competencies: Indicators of successful implementation of adjunctive psycho-oncological care?. *Psycho-oncology*, 28(2), 415-422.

Sheldon, L. K., Hilaire, D., & Berry, D. L. (2011). Provider verbal responses to patient distress cues during ambulatory oncology visits. *Oncology Nursing Forum*, 38(3), 369–375.

Sheldon, L. K., Ellington, L., Barrett, R., Dudley, W. N., Clayton, M. F., & Rinaldi, K. (2009). Nurse responsiveness to cancer patient expressions of emotion. *Patient Education and Counseling*, 76(1), 63-70.

- Singer, S., Brown, A., Eienkel, J., Hauss, J., Hinz, A., Klein, A., ... & Brähler, E. (2011). Identifying tumor patients' depression. *Supportive Care in Cancer*, *19*, 1697-1703.
- Singer, S., Das-Munshi, J., & Brähler, E. (2010). Prevalence of mental health conditions in cancer patients in acute care—a meta-analysis. *Annals of Oncology*, *21*(5), 925–930.
- Singer, S., Szalai, C., Briest, S., Brown, A., Dietz, A., Eienkel, J., Jonas, S., Konnopka, A., Papsdorf, K., Langanke, D., Löbner, M., Schiefke, F., Stolzenburg, J.-U., Weimann, A., Wirtz, H., König, H. H., & Riedel-Heller, S. (2013). Co-morbid mental health conditions in cancer patients at working age - prevalence, risk profiles, and care uptake. *Psycho-Oncology*, *22*(10), 2291–2297.
- Skarstein, J., Aass, N., Fosså, S. D., Skovlund, E., & Dahl, A. A. (2000). Anxiety and depression in cancer patients: relation between the Hospital Anxiety and Depression Scale and the European Organization for Research and Treatment of Cancer Core Quality of Life Questionnaire. *Journal of Psychosomatic Research*, *49*(1), 27–34.
- Stein, K. D., Syrjala, K. L., & Andrykowski, M. A. (2008). Physical and psychological long-term and late effects of cancer. *Cancer*, *112*(S11), 2577-2592.
- Tay, L. H., Hegney, D., & Ang, E. (2011). Factors affecting effective communication between registered nurses and adult cancer patients in an inpatient setting: a systematic review. *International Journal of Evidence-Based Healthcare*, *9*(2), 151-164.
- Taylor, S., Harley, C., Campbell, L. J., Bingham, L., Podmore, E. J., Newsham, A. C., ... & Velikova, G. (2011). Discussion of emotional and social impact of cancer during outpatient oncology consultations. *Psycho-oncology*, *20*(3), 242-251.

- Thewes, B., Brebach, R., Dzikowska, M., Rhodes, P., Sharpe, L., & Butow, P. (2014). Current approaches to managing fear of cancer recurrence; a descriptive survey of psychosocial and clinical health professionals. *Psycho-Oncology*, 23(4), 390-396.
- Turner, J., Mackenzie, L., Kelly, B., Clarke, D., Yates, P., & Aranda, S. (2018). Building psychosocial capacity through training of front-line health professionals to provide brief therapy: lessons learned from the PROMPT study. *Supportive Care in Cancer*, 26, 1105-1112.
- Uitterhoeve, R., De Leeuw, J., Bensing, J., Heaven, C., Borm, G., DeMulder, P., & Van Achterberg, T. (2008). Cue-responding behaviours of oncology nurses in video-simulated interviews. *Journal of Advanced Nursing*, 61(1), 71-80.
- Valente, S. M. (2007). Oncology nurses' teaching and support for suicidal patients. *Journal of Psychosocial Oncology*, 25(1), 121-137.
- Valente, S. M. (2010). Oncology nurses' knowledge of suicide evaluation and prevention. *Cancer Nursing*, 33(4), 290-295.
- Valente, S., & Saunders, J. M. (2004). Barriers to suicide risk management in clinical practice: A national survey of oncology nurses. *Issues in Mental Health Nursing*, 25(6), 629-648.
- van Linde, M. E., Braamse, A. M., Collette, E. H., Hoogendoorn, A. W., Snoek, F. J., Verheul, H. M., & Dekker, J. (2020). Clinical assessment of emotions in patients with cancer: diagnostic accuracy compared with two reference standards. *Psycho-Oncology*, 29(4), 775-780.

Vodermaier, A., Linden, W., & Siu, C. (2009). Screening for Emotional Distress in Cancer Patients: A Systematic Review of Assessment Instruments. *JNCI: Journal of the National Cancer Institute*, 101(21), 1464–1488.

Zhou, Y., Humphris, G., Ghazali, N., Friderichs, S., Grosset, D., & Rogers, S. N. (2015). How head and neck consultants manage patients' emotional distress during cancer follow-up consultations: a multilevel study. *European Archives of Oto-Rhino-Laryngology*, 272, 2473-2481.

Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavica*, 67(6), 361-370.

Part II: Empirical Paper

Allied Healthcare Professionals' experiences of addressing the psychological needs of people with cancer.

Abstract

Introduction: The Stepped Care Model of psychological care delivery for adults with cancer (NICE, 2004) recommends all health and social care staff be involved in assessing distress and delivering psychological techniques. Allied Healthcare Professionals (AHPs) are becoming increasingly prominent in supporting patients throughout the cancer care pathway. Therefore, the present study aimed to explore AHPs' experiences of addressing the psychological needs of people living with cancer.

Methods: A mixed methods approach was employed using an online survey followed by two focus groups. Participants were recruited across two Cancer Alliances in England and included therapeutic radiographers, physiotherapists, occupational therapists, speech and language therapists, and dietitians. Descriptive summaries and content analysis (Krippendorff, 2004) were used to analyse survey data and Braun and Clarke's (2006, 2021) method of thematic analysis used for the focus groups.

Results: Fifty-nine AHPs participated in the survey and 10 in the focus groups. AHPs reported recognising patients' psychological distress in day-to-day work during routine conversations and formal assessments. In response to this they would listen to patients, employ psychological tools, and refer patients for specialist psychological support. A lack of awareness of NICE guidelines was reported by many in addition to limited access to psychological training and supervision. Organisational barriers to addressing psychological distress were also reported. AHPs reported that confidence in working with psychological distress came from experience and time.

Conclusion: AHPs show some awareness and confidence in working with the psychological needs of people living with cancer. However, greater dissemination of guidelines and increased access to psychological training and supervision are needed to meet NICE recommendations.

Introduction

Prevalence of psychological distress in cancer

Psychological distress is often expected following a cancer diagnosis, given the various challenges people living with cancer face, including changes to the body, unexpected physical symptoms, uncertainty about the future, and sudden changes in identity (Bennion & Molassiotis, 2013). However, distress can persist beyond initial diagnosis and treatment with many cancer survivors experiencing long-term psychological distress lasting five or more years following diagnosis (Stein, Syrjala, & Andrykowski, 2008). Furthermore, long-term cancer survivors appear to show higher prevalence of psychological distress than the general population (Hoffman, McCarthy, Recklitis, & Ng, 2009).

Roughly 16% of people with cancer show symptoms of major depressive disorder, 22% of a minor depressive disorder, and 10% of an anxiety disorder (Mitchell et al., 2011). This psychological distress has been associated with poorer treatment engagement, longer stays in hospital, and higher physical pain perception (Colleoni et al., 2000; Fitzgerald et al., 2015). Consequently, this affects treatment outcome, individuals' quality of life, and increases demand on healthcare providers. Therefore, efficient recognition of, and response to, distress should be provided for people who have received a diagnosis of cancer to minimise the potential impact and length of psychological suffering.

Psychological interventions for distress in cancer care

Individuals with cancer show improvements in physical health, psychological health, and overall quality of life following psycho-oncology support (Lang-Rollin & Berberich, 2018). Tatrow and Montgomery (2006) conducted a meta-analysis

exploring distress and pain in breast cancer patients who received cognitive behavioural therapy (CBT). When compared to a control group, of no treatment or standard care, participants who received CBT had significantly lower levels of both distress and pain. Psychological interventions have also shown effectiveness across different cultures, tumour groups, and therapeutic approaches. For example, Sheikhzadeh, Zanjani, and Baari (2021) found significant reductions from pre to post depression and anxiety scores in Iranian cancer patients diagnosed with breast, colon, or lymphoma cancer who received eight weekly sessions of CBT or mindfulness-based cognitive therapy (MBCT). This decrease was greater than wait-list participants who displayed no significant reduction in scores over time. These findings indicate benefit in delivering therapeutic interventions for people with cancer experiencing distress.

Early and proactive psychological interventions have shown to be effective in reducing depression, anxiety, and PTSD in cancer patients (Kangas, Milross, Taylor, & Bryant, 2013). Pitceathly et al. (2009) found a brief three session CBT intervention, when compared to usual care, was effective in minimising depression and anxiety development in participants perceived to be at high risk of developing distress prior to cancer treatment. Furthermore, Vos, Visser, Garssen, Duivenvoorden, and de Haes (2006) found group psychosocial interventions for breast cancer patients were more effective in reducing distress at six-month follow-up when started earlier after surgery. Therefore, early recognition and response to symptoms of psychological distress are important in reducing patient distress.

Psychological integration into oncology services

Psychological care is becoming increasingly integrated into oncology services through healthcare guidelines worldwide. For example, the National Comprehensive Cancer Network (NCCN) recommends promoting regimented screening of distress in all cancer patients (Riba et al., 2019).

The Stepped Care Model for addressing the psychological needs of people affected by cancer is used widely across NHS trusts in the United Kingdom (UK) as recommended in the 2004 National Institute for Health and Care Excellence Improving outcomes guidance (NICE IOG) (NICE, 2004). This model allows early and appropriate detection of distress and psychological intervention at every step in the cancer care pathway by making psychological wellbeing everyone's responsibility regardless of profession. It accommodates for different levels of distress with distress complexity, cancer prognosis, and cancer care pathway stage all impacting the level at which the service user is placed.

Level one of the Stepped Care Model (NICE, 2004) focuses on providing general emotional care to all service users provided by all health and social care staff. This involves the recognition of psychological distress by encouraging kind and compassionate communication with service users. Information giving and signposting to relevant support services is also provided at this level. Level two supports service users experiencing acute distress at key stages in the cancer care pathway, such as diagnosis and the beginning of treatment. This is provided by health and social care staff with additional expertise, such as staff who attend training in the assessment and support of patients' psychological needs. There are no current guidelines to specify the content of training needed to undertake Level

two work and this often varies between NHS trusts (Stevenson, Munro, & Barrington, 2020). This training is often provided by psycho-oncology professionals who decide the content and who can attend locally (National Cancer Action Team, 2010a). Practitioners working at Level two should receive a minimum of one hour supervision per month from a Level three or four practitioner to uphold continuous learning from training (National Cancer Action Team, 2010a). At Level two assessment of distress at key cancer care pathway stages and delivery of brief psychological techniques during acute distress can be provided (NICE, 2004), such as problem solving and breathing techniques. Care can be stepped up to Level three with an accredited psychological professional when significant psychological distress has been identified or diagnosed, such as depression or anxiety. At this stage, accredited practitioners can assess the severity of such distress and continue an intervention with service users experiencing mild to moderate symptoms, using brief psychological interventions, such as anxiety management. If a service user is decided to have severe or enduring mental health needs, or psychological distress is significantly affecting engagement with cancer care treatment then they are referred and assessed at Level four. Level four support is delivered by a qualified mental health professional (NICE, 2004) using psychotherapy interventions, such as Cognitive Behavioural Therapy (CBT).

The NICE (2004) guidelines state it may not always be possible to clearly distinguish between Levels in the model. The guidelines suggest it is local NHS cancer services and trusts' responsibility to provide local guidelines to help staff distinguish between different levels. It is not specified which professionals are responsible for providing these guidelines. The NICE (2004) guidelines do not

provide any information to state how service users are informed of which Level they are at.

Delivery of psychological interventions by nurses

Clinical Nurse Specialists (CNSs) play a predominant role in the delivery and development of Level two work, most likely due to their holistic care approach, presence in oncology services, and role as a key worker for coordinating individual patient care (National Cancer Action Team, 2010b; Stevenson et al., 2020). Using a randomised controlled trial, Moorey et al. (2009) found oncology nurses who received CBT training, compared to those who continued usual practice, showed greater reduction in their patients' anxiety scores on the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983). This suggests better outcome for symptoms of anxiety in patients whose nurses are trained in CBT. Furthermore, Pitceathly et al. (2009) found individuals with cancer who were at higher risk of developing anxiety or depression were less likely to develop this after receiving a psychological intervention from a nurse or support worker trained in CBT skills, when compared to usual care. This demonstrates effective delivery of psychological techniques in oncology services from practitioners with additional training but without specialisation as psychologists. Furthermore, Kubota et al. (2016) found receiving psycho-oncology training improved oncology nurses' self-reported confidence to provide psychological care.

Allied Healthcare Professionals' roles in cancer care

Although there is substantial research exploring oncology nurses' experiences of training and confidence in delivering psychological techniques, there is little research exploring this for Allied Healthcare Professionals (AHPs). Over the years

multidisciplinary teams involved in cancer care have expanded to include AHPs, such as Occupational therapists (OTs), Dietitians, and Physiotherapists (Fleissig, Jenkins, Catt, & Fallowfield, 2006). Furthermore, there is increasing drive in rehabilitation of cancer in the NHS, particularly using prehabilitation in which AHPs take a leading role (Macmillan Cancer Support, 2019). Prehabilitation aims to improve treatment outcomes using lifestyle interventions to increase physical and psychological health early in the care pathway (Macmillan Cancer Support, 2019). This prepares for future treatment and the effects of cancer. As a result, AHPs can take a leading role in providing initial emotional support to patients during treatment and often have more contact with patients following treatment in rehabilitation when compared to other healthcare professionals, such as doctors and nurses (Macmillan Cancer Support, 2020). Furthermore, people living with cancer will frequently, often daily, see Therapeutic Radiographers during treatment (McKittrick, Sheperd, & Gilleece, 2021). Therefore, it would be helpful to understand AHPs' experiences of addressing people with cancer's psychological needs as they will likely play a large role in aiding emotional resilience.

Aims

The present study sought to explore AHPs' experiences in addressing the psychological needs of people with cancer, across seven NHS trusts in London and the South-West of England. The study also explored AHPs' understanding of the Stepped Care Model; their perceived confidence and ability to deliver psychological support; and barriers they face in delivering this. It is hoped the findings will help inform resource and support needs for the wider oncology workforce and allow better implementation of the Stepped Care Model.

Methods

Study Design

Mixed method approaches combine quantitative and qualitative research methodology. While quantitative elements can provide large samples with more generalisable findings, qualitative data can add richness to findings by providing a deeper understanding of participants' experiences and views (Tariq & Woodman, 2013). This allows greater understanding of a research topic with a broad and complex aim. A mixed methods approach addresses multifaceted topics often seen in healthcare. Furthermore, this method uses larger samples allowing more robust findings needed to influence healthcare policy and service development (Tariq & Woodman, 2013). This method lent itself well to the present study by providing a large sample to inform policy surrounding the stepped care model (NICE, 2004), as well as richness to explore this multifaceted topic. This richness in understanding was of particular importance given the lack of research explore AHPs' experience of working with psychological distress in cancer care and need to understand this topic given this ever-expanding workforce.

A mixed-methods sequential explanatory design was used where exploratory quantitative data was collected followed by qualitative (Katz-Buonincontro, 2024). The rationale for collecting data in this order was to first provide a clearer understanding of this under researched topic by gathering a broad sample of data which could highlight specific issues or areas of agreement between practitioners not yet explored in previous research. The qualitative data could then be used to help explain and understand AHPs' initial responses to issues highlighted in the quantitative phase adding further understanding and refinement to these findings.

Using this approach the present study consisting of an initial online survey followed by two independent focus groups. The initial survey allowed a broad and accessible collection of data. This data was then used to guide the focus groups content and structure to elaborate on findings from the survey, gaining a richer understanding of the meaning behind survey responses.

Participants and Setting

Cancer Alliances were used to support recruitment. They bring together local oncology healthcare services, health and social care organisations, and clinical and managerial leads to support the smooth transition and coordinated care of patients across the cancer care pathway (NHS England, 2016). NHS staff were recruited from seven NHS trusts within two Cancer Alliances. These included three North-East London Cancer Alliance trusts and four Somerset, Wiltshire, Avon, and Gloucestershire (SWAG) Cancer Alliance trusts. Using both urban and rural localities allowed for pattern emergence across trusts that could be generalised more widely regardless of population density, workforce disparities, area coverage, and funding differences between trusts (Palmer, Appleby, & Spencer, 2019).

Participants were included if they met the following inclusion criteria: 1.) worked with cancer patients on a day-to-day basis, 2.) worked within one of the seven trusts involved in the study, 3.) held the profession of either a Therapeutic Radiographer, Physiotherapist, Occupational Therapist (OT), Speech and Language Therapist (SLT) or Dietitian. The five AHP roles included in the study were chosen as they have regular and often repeated patient contact and do not specialise in psychological treatment or therapy. Participants were excluded if they did not complete the full survey.

Participants were offered the option to enter two prize draws following completion of the study. Participants were taken to a separate platform to provide a contact email for the draw so their responses could not be matched to their identity. The winners of the draws had the option of a £50 retail voucher or donation in their name to the Macmillan Cancer Support charity.

A 27-54.5% participant response rate was predicted based on previous survey response rates among NHS staff (Ike et al., 2021; Pinder, Greaves, Aylin, Jarman, & Bottle, 2013). Leads from both Cancer Alliances involved in the study reported 500 AHPs working across the recruiting trusts. Based on the minimum predicted response rate of 27% of 500 an expected participant sample of 135 was predicted for the initial survey.

Sixty-seven respondents engaged with the survey. Of these, eight did not complete the full survey. Therefore, 59 were included in the final data analysis. This included 20 Therapeutic Radiographers, 12 Physiotherapists, nine OTs, nine SLTs, and nine Dietitians. Twenty-one participants were from a trust in the North-East London Cancer Alliance and 38 from the SWAG Cancer Alliance. Participants worked across a range of tumour groups, healthcare contexts, and stages in the cancer care pathway. See Table One for participants' demographics.

Table 1.**Survey Participants' Demographics**

Sample	N (%)
Gender	
<i>Male</i>	5 (8.5%)
<i>Female</i>	53 (89.8%)
<i>Non-Binary</i>	1 (1.7%)
Ethnicity	
<i>White British, Irish, or other Background</i>	55 (93.2%)
<i>Black British, Caribbean, or African</i>	1 (1.7%)
<i>Asian or Asian British</i>	1 (1.7%)
<i>Mixed or Multiple Ethnic Group</i>	1 (1.7%)
<i>Other Ethnic Group</i>	1 (1.7%)
Age	
18-24	2 (3.4%)
25-39	35 (59.3%)
40-54	15 (25.4%)
55+	7 (11.9%)
Role	
<i>Therapeutic Radiographer</i>	20 (33.9%)
<i>Physiotherapist</i>	12 (20.3%)
<i>Occupational Therapist</i>	9 (15.3%)
<i>Speech and Language Therapist</i>	9 (15.3%)
<i>Dietitian</i>	9 (15.3%)
Healthcare context*	
<i>Cancer Centre</i>	34 (57.6%)
<i>Acute Hospital</i>	26 (44.1%)
<i>Outpatient Care</i>	23 (39.0%)
<i>Community Team</i>	2 (3.4%)
<i>Primary Care</i>	1 (1.7%)
<i>Palliative Care</i>	6 (10.2%)
Tumour Group*	
<i>No specific group</i>	37 (62.7%)
<i>Brain</i>	7 (11.9%)
<i>Breast</i>	5 (8.5%)
<i>Colorectal</i>	3 (5.1%)
<i>Gynaecological</i>	1 (1.7%)
<i>Head and Neck</i>	7 (11.9%)
<i>Hepato-pancreato-biliary (HPB)</i>	1 (1.7%)
<i>Lung</i>	2 (3.4%)
<i>Sarcoma</i>	1 (1.7%)
<i>Skin</i>	1 (1.7%)
<i>Spinal</i>	2 (3.4%)
<i>Upper Gastrointestinal</i>	3 (5.1%)
<i>Urological</i>	3 (5.1%)
Years working in cancer care	
<1	1 (1.7%)
1-5	19 (32.2%)
5-10	23 (39.0%)
10+	16 (27.1%)

*some participants provided more than one answer

Procedure

All staff working in AHP roles in the seven included NHS trusts were invited to take part in the initial survey. Participants were recruited via internal NHS emails from Cancer Alliance Leads, AHP representatives, and Psychologists within their trust. Participants were sent an initial invitation email (see Appendix A) followed by two further reminder emails. A link within the email guided participants to the survey which included an online information sheet (Appendix B) outlining the study's aims and procedure and a consent form (Appendix C) to complete if they wished to take part. Informed consent was implied by agreeing with statements on the consent form and proceeding to the survey. At the end of the survey participants were asked if they would like to participate in a follow-up focus group by providing their email. Participants were made aware if they wished to participate in the focus groups and provide their email their survey would no longer be pseudonymised to the research team. As prize draw emails were collected using a separate link, participants could choose to remain anonymous by not taking part in the focus group but still be entered into the prize draw. Purposive sampling was used to select focus group participants with a breadth of views highlighted in the survey and these were contacted to schedule groups. Forty-eight (81.36%) survey participants reported being happy to take part in one of the focus groups. Of these, 10 participants took part, six therapeutic radiographers, two physiotherapists, one SLT, and one dietitian.

Two focus groups were conducted, one including just therapeutic radiographers and the other including the remaining four AHP disciplines. Groups were divided in this way owing to differing roles and patient contact between therapeutic radiographers and the other four AHP roles, such as shorter but more frequent appointments and more medical approaches in radiography. Participants

were emailed a link to the focus group, a copy of the initial information sheet, and an electronic consent form to complete prior to the group. The focus groups were held on Microsoft Teams and recorded for later analysis. The focus groups were facilitated by the lead researcher (OB) who completed this study as part of their clinical psychology doctorate.

Measures

Survey

Initial topics to include in the survey were first discussed with the field supervisor and North-East London Cancer Alliance Lead. These topics included understanding of The Stepped Care Model (NICE, 2004), types of distress AHPs most often face, and their experiences of psychology informed training and supervision. From here, previous studies exploring other healthcare professionals' experiences of working with psychological distress were reviewed to further inform the structure and content. Previous studies using multiple-choice answers had recruited 136-141 participants (Thewes et al., 2014; Nash, 2017), exceeding our predicted 135 sample. By making questions quicker and simpler to answer we hoped to recruit a similar sample. Some themes of questioning were also replicated, for example, what strategies professionals used to help patients manage cancer related distress (Thewes et al., 2014) and what obstacles they often encountered in delivering psychological support (Guner et al., 2018). This content was included to help understand if any strategies AHPs reported aligned with the psychological support recommended in The Stepped Care Model (NICE, 2004) and if previous reported barriers by other healthcare professionals, such as a lack of time, staff, and support (Guner et al., 2018) were also applicable to AHPs.

Once an initial draft of the survey was created, AHP representatives were approached via Cancer Alliance meetings and email for a one-to-one meeting to comment on the initial survey. Changes from review feedback during these meetings were incorporated into the final survey, including adding a question on what tumour groups participants worked with. This felt appropriate as the literature suggests levels of distress significantly vary depending on cancer site (Zabora, Brintzenhofesoc, Curbow, Hooker, & Piantadosi, 2001). Furthermore, mental health first aid training and e-learning were added as answer options for what training AHPs had received in their current role.

The survey consisted of 24 questions. Most of the survey used questions with either multiple choice answers or answers on a 5-point Likert scale (e.g never, a little, somewhat, quite a bit, very much). Some questions included the option to elaborate using follow-up questions or free text responses. The survey initially collected participant demographics including gender identity, ethnicity, age range, job role, NHS trust they worked within, NHS banding, years of experience working in current role, years of experience working in oncology, and if they worked with a specific tumour group. Participants were then asked a series of questions about their understanding of the NICE guidelines, experience of working with psychological distress, experience of psychological training and supervision, perceived confidence and ability in working with psychological distress, and any barriers they faced in working with psychological distress. The survey took approximately 20 minutes to complete and was distributed using the online survey platform Qualtrics. Survey data were collected from December 2023-April 2024. See Appendix D for the full survey.

Focus Groups

Focus group questions were derived from survey findings to elaborate on common answers given within the survey. This included questions on how psychological distress presented, how participants saw their role in working with psychological distress, how equipped participants felt to work with distress, psychological training and supervision, and NICE guidelines understanding and implementations. Both focus groups were conducted in March 2024 and lasted one hour each. See Appendix E for full focus group questions.

Data analysis

Survey

The survey data were analysed and reported using descriptive summaries and content analysis (Krippendorff, 2004). Descriptive summaries were used to present percentages of quantitative responses from the survey. Content analysis (Krippendorff, 2004) was used to explore specific characteristics and patterns within the survey data. This approach allows researchers to make inferences from data which could be investigated further using alternative methodology. In the present study, content analysis was used to explore certain themes in answers across both closed ended and free text responses.

Focus groups

The focus groups were transcribed to Microsoft Word using Microsoft Teams transcription tool. Participants were pseudonymised in the transcripts prior to data analysis. The transcripts were then analysed using Braun and Clarke's method of inductive thematic analysis (Braun & Clarke, 2006, 2021) to explore themes and patterns that were identified in the qualitative data as opposed to findings based on

pre-existing ideas or concepts. This approach can be used to explore subjective experiences and opinions. It promotes reflexivity and an iterative approach to the analysis process.

The lead researcher (OB) first immersed themselves and became familiar with the data. Codes were then generated from the transcripts by OB. A portion of the transcripts was coded by the academic supervisor to explore inter-coder agreement and support the primary researcher in refining their codes. Themes were generated from collated codes, and these themes reviewed by the wider research team and further defined and named. Using this approach to analysis employed a bottom-up approach to help further understand staff experience. This also allowed generation of themes for AHPs' experiences to guide further research and service implementation.

Reflexivity

The lead researcher (OB) completed a reflective log throughout data collection and analysis to improve methodological transparency and reflexivity. She met often with their academic supervisor (KS) to discuss emerging codes and themes to ensure validity and consistency in their findings. Furthermore, these discussions promoted self-reflection to minimise interpretation bias during data analysis.

Ethics

Prior to completing the study and focus groups, participants were provided with an information sheet and consent form outlining the purpose of the study and methods that would be used. Participation in the study was completely voluntary. Participants were given the right to withdraw at any point during the study by exiting the online browser and were given the option to remove their data up to four weeks

after completing the survey by contacting the research team, however no participants requested this. Participants were informed they would be unable to withdraw focus group data following completion of the focus group. Participants were able to speak with the lead research and were provided mental health and cancer care support helplines in the event they experienced any undue distress during the study. The study was approved by the University College London Research Ethics Committee (Ref: 24779/001) and the NHS Health Research Authority (Ref: 23/HRA/3504). Local Capability and Capacity approval was gained from the Research and Development Office of each trust prior to data collection. All data were collected and stored in line with UCL data protection regulations. See Appendix F for UCL ethical approval letter and Appendix G for HRA approval.

Results

NICE Guidelines

In total, 25.4% of respondents (n = 15) reported being aware of the NICE Stepped Care Model. Of this sub-group, just under half (n = 7) reported feeling unsure of what level they were currently working at within the model. The remaining participants reported working at Level one (n = 2), Level two (n = 3), and Level three (n = 3).

Training and Supervision

Out of all respondents, 54.2% reported having received psychological skills or mental health training as part of their current role, while two participants reported feeling unsure if they had received such training. Participants received a variety of training, including Motivational Interviewing, SAGE and THYME® communication

workshops (Setting, Ask, Gathering, Empathy and Talk, Help, You, Me, End) (Connolly et al., 2010) to support listening and conversations with patients, Mental Health First Aid, and Advanced Communication Skills training. The most widely reported training was Level 2 Psychological Skills training reportedly received by 33.9% of participants. See Table 2 for further details.

Twelve respondents (20.3%) reported receiving psychology supervision monthly, nine (15.3%) received supervision every two to three months, and two (3.4%) less than every three months. Out of the remaining participants, nine (15.3%) reported only receiving supervision as a one-off consultation and 27 (45.8%) reported receiving no supervision at all. Of the 32 who received supervision or a one-off consultation, almost two thirds (64.1%) reported receiving supervision from a psychologist. Peer supervision was reported as the second most common format of supervision (20.5%). 69.7% accessed supervision in person. See Table 2 for further details.

Table 2.
Training and supervision received by participants

Training & Supervision	N (%)
Training*	
<i>Level 2 Psychological Skills Training</i>	20 (33.9%)
<i>Motivational Interviewing</i>	12 (20.3%)
<i>NHS E-learning</i>	9 (15.3%)
<i>Communication Skills</i>	6 (10.2%)
<i>CBT Skills</i>	5 (8.5%)
<i>Mental Health First Aid Training</i>	5 (8.5%)
<i>SAGE and THYME workshop</i>	4 (6.8%)
<i>Other**</i>	3 (5.1%)
Supervision frequency	
<i>No supervision</i>	27 (45.8%)
<i>< than 3 monthly</i>	2 (3.4%)
<i>Every 2-3 months</i>	9 (15.3%)
<i>Monthly</i>	12 (20.3%)
<i>Weekly</i>	0

<i>1-off consultation</i>	9 (15.3%)
Supervisor	
<i>Psychologist</i>	25 (42.4%)
<i>Peer Supervision</i>	8 (13.6%)
<i>Counsellor/Psychotherapist</i>	1 (1.7%)
<i>Clinical Nurse Specialist</i>	1 (1.7%)
<i>Mental Health Nurse</i>	1 (1.7%)
<i>Physiotherapist</i>	1 (1.7%)
<i>Occupational Therapist</i>	1 (1.7%)

*Participants could provide more than one answer

**Other training included Acceptance and Commitment Therapy, IPM & Neuropsychology.

Psychological distress encounters and response

Participants reported encountering a variety of psychological needs when working with people with cancer. The most common reported needs were anxiety, worry, and stress with over half of participants reporting these needs. See Table 3 for more details.

When working with the psychological needs of people with cancer, participants typically reported providing emotional support, signposting to additional psychological support, and referring to psychology services. See Table 3 for more details.

Table 3.

Psychological needs participants encounter and support they provide for such needs

Encounters and response	N (%)
Encounter*	
<i>Anxiety</i>	58 (98.3%)
<i>Stress</i>	52 (88.1%)
<i>Worry</i>	54 (91.5%)
<i>Sleep Difficulties</i>	47 (79.7%)
<i>Depression</i>	45 (76.3%)
<i>Reduced Motivation</i>	42 (71.2%)
<i>Fear of Recurrence</i>	40 (67.8%)
<i>Adjustment Difficulties</i>	35 (59.3%)
<i>Hopelessness</i>	30 (50.8%)
<i>Panic/Panic Attacks</i>	21 (35.6%)
<i>Procedural Anxiety</i>	22 (37.3%)

<i>PTSD</i>	13 (22.0%)
<i>Other**</i>	5 (8.5%)
Typical support provided*	
<i>Providing emotional support</i>	53 (89.8%)
<i>Signposting to psychology support</i>	51 (86.4%)
<i>Referring to psychology services</i>	44 (74.6%)
<i>Providing brief psychological skills</i>	37 (62.7%)
<i>Referring to psycho-oncology services</i>	34 (57.6%)
<i>Assessing Psychological distress in hospital</i>	28 (47.5%)
<i>Providing psychoeducation</i>	13 (22.0%)
<i>Assessing psychological distress in the community</i>	11 (18.6%)
<i>Providing mental health advice</i>	11 (18.6%)
<i>Other***</i>	1 (1.7%)

*Some participants provided more than one answer

** Other encounters included suicidal thoughts, delirium, denial and processing difficulties, body image/role, & noncompliance with medication.

***Other support provided included reflecting on life and values and discussions around suicide/Dignitas.

Thirty-eight respondents (64.4%) reported “often” or “always” discussing patients’ psychological needs with other professionals, with no participants reporting “never” discussing these with colleagues. Participants reported discussing these needs with a variety of professionals. Nineteen participants reported in free text responses that they would discuss this with their wider team or colleagues. The most widely reported professional roles to discuss psychological needs with were psychologists (24 responses), nurses (23 responses), and doctors (14 responses). Only four (6.8%) reported having never referred a patient for additional psychological support, with 26 (44.1%) having referred 11 or more times. In follow-up free text response, participants reported these referrals were most often for depression (13 responses) or anxiety (17 responses). Six responses specified anxiety of cancer recurrence, four not coping with diagnosis, and a further four for adjustment difficulties. The referrals were most often to psychology services or psychologists both within and outside their service (33 responses).

Experience and Confidence

Twenty participants (33.7%) reported having “very much” or “quite a bit” of experience working with the psychological needs of people with cancer. Thirty-seven participants (62.7%) reported having “a little” or “somewhat” of experience. Two (3.4%) reported having no experience.

Eleven participants (18.6%) reported feeling “very much” or “quite a bit” confident in assessing psychological distress. Thirty-eight (64.3%) reported feeling “a little” or “somewhat” confident. Ten (17%) reported feeling “not at all” confident in assessing distress.

Twelve (20.3%) reported feeling “very much” or “quite a bit” confident in working with the psychological needs of people with cancer, such as discussing mental health and delivering psychological tools and interventions. Thirty-seven (62.7%) reported feeling “a little” or “somewhat” confident and the remaining ten (17%) reported feeling “not at all” confident.

Barriers/Challenges

Participants reported experiencing several challenges in being able to identify and address the psychological needs of people with cancer. Most reported challenges included not enough time, not feeling confident, and a heavy workload. See Table 4 for further details.

Table 4.*Barriers to identifying and addressing psychological needs*

Barriers	N (%)
<i>Not enough time</i>	41 (69.4%)
<i>Not feeling confident</i>	33 (55.9%)
<i>Heavy workload</i>	32 (54.2%)
<i>High level of patient psychological distress</i>	29 (49.2%)
<i>Lack of psychology supervision</i>	28 (47.5%)
<i>Waiting time for psychology services</i>	28 (47.5%)
<i>Understaffing</i>	26 (44.1%)
<i>Fear of opening up a “can of worms”</i>	26 (44.1%)
<i>Addressing hopelessness</i>	20 (33.9%)
<i>Difficultly accessing psychological training</i>	20 (33.9%)
<i>Lack of confidential space to discuss psychological needs</i>	20 (33.9%)
<i>Lack of mental health support for staff</i>	15 (25.4%)
<i>Lack of psychology service provision when distress is identified</i>	14 (23.7%)
<i>Waiting time for cancer treatment</i>	10 (16.9%)
<i>Lack of support from trust</i>	9 (15.3%)
<i>Other*</i>	6 (10.2%)

Some participants provided more than one answer

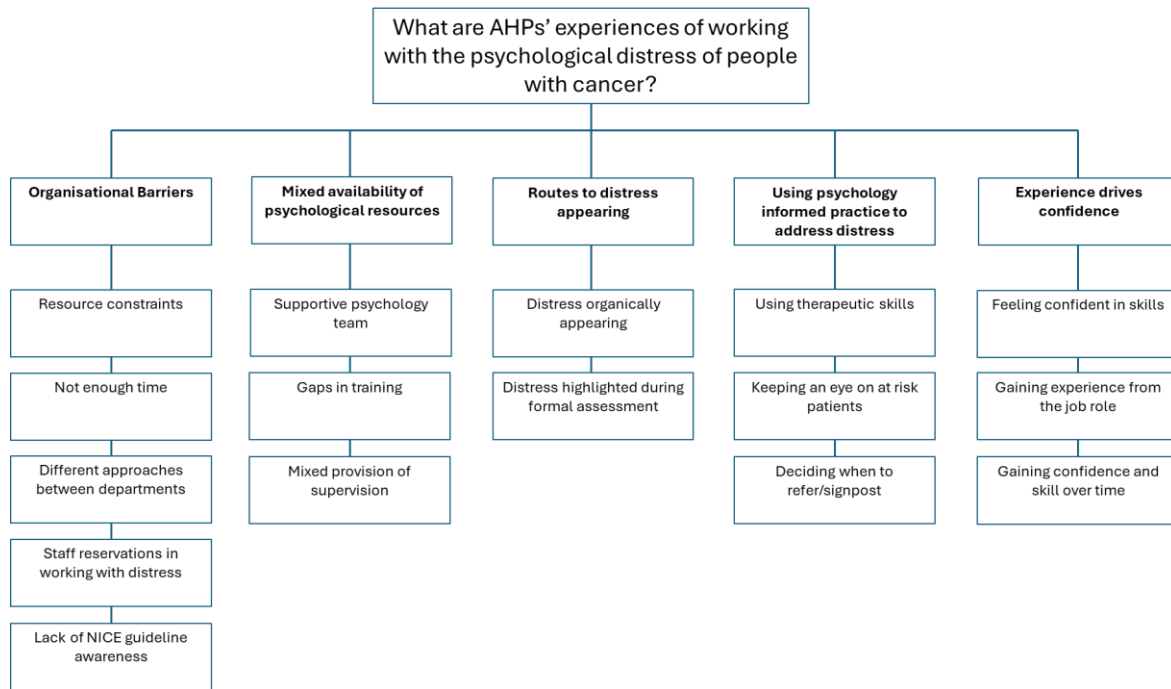
*Other barriers included patient not wanting psychological input, high thresholds for support services, no service to refer to, long gaps between training and employing skills, and not feeling confident to give advice from first line management.

Focus Groups

Due to time constraints in meeting the thesis deadline, the analysis for both focus groups was performed as one. Five themes were identified in the focus group transcripts: “Organisational barriers”, “Mixed availability of psychological resources”, “Routes to distress appearing”, “Using psychology informed practice to address distress”, and “Experience drives confidence”. These and their constituent sub-themes expanded on the survey findings and provided a more in-depth picture of AHPs’ experiences of working with the psychological distress of cancer patients. See Figure 1 for more detail.

Figure 1.

Focus group themes and sub-themes



Organisational barriers

Resource constraints. Participants reported unpredictable and limited funding and resources impacting their ability to deliver good psychological care. They reported a lack of funding leading to reduced psychology resources including psychology informed training and supervision.

TR6 (referring to training) “sometimes residences can't afford to do these extra things now”

Dietitian1 (referring to supervision) “the psychology team have had quite a bit of issues with funding, so that has been taken away”

One participant described needing to make a “*big effort to try and go*” to clinical discussion supervision groups to avoid this resource being reallocated. Furthermore, participants viewed a need for further resources to meet organisational guidelines and provide better care. Staff highlighted a need for more staff including psychologists.

SLT1 “we need more psychologists to be able to support them (patients)”

Not enough time. Participants reported not having enough time to attend to patients’ psychological needs due to clinical pressures, busy hospital settings, and limited time for appointments, particularly among therapeutic radiographers.

TR2 “I’m lucky if I have an hour with my patient”

TR5 “People go, I don’t really know what to do. I haven’t got time to sort that out.”

Furthermore, participants reported difficulty attending training and supervision due to time constraints. Participants reported feeling increased stress and guilt for taking time away from their clinical work to attend training.

Physio1 “takes away time from seeing patients that your list that builds up the stress”

Physio2 “you’ll find it difficult that people get time off to attend”

One participant reported patients’ awareness of NHS time constraints acted as a barrier to patients disclosing distress.

TR6 “patients when we’re asking how they’re doing, have been more aware of the time constraint from the NHS, so I’ve had a lot of answers say “Oh no, you’re busy. Don’t worry””

Different approaches between departments. Therapeutic radiographers reported noticing different attitudes and resources to supporting psychological distress depending on their work setting. Two radiographers reported noticing a lack of awareness and training particularly on the “*shop floor*”.

TR6 “there’s not much training to do on the shop floor”

Staff reservations in working with distress. Participants reported patients coming with many different or unexpected psychological needs, making it “*tricky to navigate*”.

TR5 “you just ask one question and then all of a sudden it all comes out.”

One participant spoke of the emotional toll working with patients’ psychological needs took on staff, made harder by limited staff wellbeing support.

SLT1 “I got to a point last year I was like, I could do it. Not seeing as many patients like this for a little bit ... support for staff, which included support from psychology and some people from a different team. But that’s all been taken away.”

Despite this, participants reported still wanting to approach patients’ psychological needs to provide better care. One participant said this is something they would at least “*touch upon*”.

Lack of NICE guideline awareness. As in the survey results, many participants reported having no or limited awareness of NICE guidelines, with some confusion regarding which level of the Stepped Care Model they were expected to work at.

TR2 “I’ve not heard of step care.”

Physio1 “is this Level 2 where you would expect us to sit? Or should there be people who are dealing with issues a lot that go up to Level 3”

Participants reported needing clearer guidelines of referral pathways so they wouldn't “waste so much time” referring for additional support. However, one participant later contradicted this by reporting having a good referral and signposting system. One participant asked whose responsibility it was to disseminate and implement these guidelines, while others stated this should be the responsibility of their trust.

TR1 “staff that they've spoken to ends up going all around the houses to try and figure out how they refer that patient ... we know who to refer to and when to refer and I think that's been really helpful.”

TR2 “Is it our responsibility within our own department to create a pathway ... is it something that the trust should develop?”

Moving forward, participants reported NICE guidelines should be made more visible and embedded early in professional training. They felt wider dissemination of guidelines would build confidence and patients “won't go missing”, especially as psychological needs regularly come up as part of their role.

TR1 “if it was just a much smoother process that everyone was aware of even if we just had like a sheet up in each room”

TR5 “Any guidance provides confidence.”

Despite most participants reporting little knowledge of NICE guidelines, two therapeutic radiographers reported knowing the guidelines. They said this was due to working with a psychologist and taking on psychologically informed work.

TR4 "I know about the guidelines, but only because I work with the psychologist"

Furthermore, one physiotherapist reported knowing when to refer for further psychological support due to a "guide" their psychology team had provided.

Mixed availability of psychological resources

Supportive psychology team. Many participants reported having a responsive and supportive psychology team that they felt able to seek support from. This included psychology support from internal and external organisations, such as the Maggie's Centre. By receiving this support, they felt more confident in working with psychological distress and felt able to refer to the psychology team when needed.

Dietitian1 (contacting psychology team) "I can just email them about particular patients or whatever I might need and I think knowing that I've got that backup if needed also gives me a bit of confidence"

Physio 2 "I also often refer to our, we got specialist oncology psychology team"

Participants also reported receiving "useful" training from psychologists and felt they benefited from working jointly with them.

TR4 "work quite closely with the psychologists. Who've trained us to Level 2 psychology and then we run workshops."

Gaps in training. Many participants reported finding training "useful", particularly in upskilling and building confidence and said, "everyone should have some more training". In line with the survey findings, many participants reported receiving Advanced Communication Skills and Level 2 Psychology Skills training which allowed them to approach conversations differently. Participants also reported

receiving additional bespoke and Continual Professional Development (CPD) training.

TR1 "I've done some level 2 counselling training and I now approach conversations in a completely different way"

TR6 "through CPD, lots of learning through your career development, that's where the skills are honed"

Despite receiving initial training, participants reported a "radiating" gap in training between post registration and later in their career when taking on advanced roles. Apart from one physiotherapist, participants generally reported having no top up or refresher training which they felt would be helpful.

Physio2 "would be quite meaningful to have like an annual refresher"

Participants reported several barriers to receiving training, including training being cancelled or offered infrequently, training becoming predominantly online, having a lot of training requirements, not having enough time, psychology training not being valued, Advanced Communication Skills training not being mandatory, and staff having to proactively seek training.

Physio2 "a hell of a list of things you need to fulfil and a lot of that where I work is now online"

Physio2 "you'll find it difficult that people get time off to attend or it's been valued and courses get cancelled communication skills not being considered all that mandatory or in need of constant nurturing"

TR6 "there's not much training to do on the shop floor in house unless the radiographer seeks to do it"

Mixed provision of supervision. Some participants reported receiving supervision from a psychologist while others did not. Those that did not receive supervision reported having received it in the past but it since having been taken away. Supervision that was received was predominantly group supervision or clinical discussion groups.

Physio2 “the key word is ... ‘used to have’; I think it was monthly or six-weekly as sort of a group supervision”

Participants generally reported supervision as helpful, particularly to “get together”, “discuss”, and “get closure”. Participants also reported that supervision helped them gain knowledge and feel held in a safe space.

TR1 “I’ve gained so much knowledge from those sessions”

Dietitian1 “it really does feel like a safe space”

Participants reported that it may not be equitable for all professionals to receive supervision, due to pre-existing work commitments and clinical pressures.

Physio1 “obviously with clinical pressures, inevitably people can’t always make it.”

Those who did not receive routine supervision from a psychologist reported finding supervision through other means, such as, one-off consultations with the psychology team and other professionals, such as their manager.

Physio2 “if I feel like I’m struggling with that sort of as a long-term thing we got in house support from psychology as well to sort of if you like supervise us”

Dietitian1 “We do now have some clinical supervision within dietetics. So, it’s more just my manager”

Routes to distress appearing

Distress organically appearing. Participants reported often hearing about patients' psychological needs organically in day-to-day work. They reported this coming up naturally in conversation or spontaneously at the end of appointments. Participants reported this could be due to them being the first person to enquire about patients' mental health or the person patients spend the most time with.

TR3 "Quite often it comes out in conversation."

SLT1 "you are kind of the first person to say, to check and say are you okay?"

Participants reported patients were more likely to "open up" organically if given more time.

Physio2 "we've got an hour for new patients ... it just brings a lot more things out"

Distress highlighted during formal assessment. Most participants reported assessing or approaching conversations about psychological needs with patients. Many reported exploring patients' psychological needs during holistic needs assessments and while exploring mental health history.

TR1 "we'll go through physical effects, but also the emotional aspects of treatment"

TR3 "we do take a medical history ... you establish that they've had a previous history of anxiety or mental health."

Only one participant reported using a formal tool to assess psychological distress, in the form of a referral tool created by their psychology team. Other participants reported having no formal tool to use.

Physio 1 "I'll ask them to elaborate and pick apart kind of what they're struggling with and then our screening tool that we use obviously is around kind of this"

Dietitian1 "We also don't have at all like a psychological assessment tool"

Using psychology informed practice to address distress

Using therapeutic skills. Participants predominantly reported listening to patients when responding to psychological distress. One participant reported using therapeutic skills learnt in Level 2 Psychology Skills training.

TR3 "it's about them knowing that you're listening"

Physio1 "You support them through the course and you know, use some of those Level 2 strategies"

Keeping an eye on at risk patients. One participant reported keeping an eye on patients more likely to struggle with their mental health following treatment, due to treatment side effects. Participants said they will often provide post-treatment follow-up contact for these patients.

TR1 "The breast cancer patients as well, that they're going to be contacting because that their physical side effects longer term in the couple of weeks after they finish, not longer term, but can cause some serious anxiety."

Deciding when to refer/signpost. Participants reported a variety of reasons for deciding to signpost or refer patients for additional psychological support. This included if patients' mood was impacting day-to-day life, did not shift or escalated, if they appeared overly anxious, showed low motivation, or were trying but not coping.

Dietitian1 “they’re not motivated to change ... anxieties are getting in the way of doing anything that I suggest that would sometimes prompt me to refer ... Are they managing to do their day-to-day things?”

Physio2 “if it just sort of does not shift. And I think that's and when I think, OK, this is not something I can contain ... if it sort of has this sense of deterioration, escalation and being just too overwhelming”

One participant reported not referring on if they felt the distress was “*normal*” in the circumstances.

Physio2 “it's just normal at this point to be completely distraught and upset. I wouldn't then jump to a referral.”

Participants stated the importance of knowing when they could work with patients' psychological needs themselves and when they reached their professional limits and needed to refer on or signpost. When this happened participants would discuss this with patients and provide referral options. If patients appeared reluctant, professionals would try encouraging patients to engage with psychology support by providing more information.

TR1 “I'm not equipped to deal with this, I know where to signpost”

Physio2 “opening up that there is psychology and there is help out there of sorts whether it's formal therapy or more kind of open support groups ... if someone is completely reluctant, then often I think OK, that's all the more worth introducing something”

Experience drives confidence

Feeling confident in skills. Many participants reported feeling well equipped to work with psychological distress and reported this is impacted by how “*proactive*” the professional is.

TR2 “I do feel very, very well equipped”

Physio1 “You've got the skills to do it”

However, many reported feeling other professionals may not know how to approach psychological distress.

TR1(referring to working with distress) “staff were like, we just didn't really know how to handle that situation.”

One participant reported they had the tools but were held back by a lack of confidence. Another participant reported an improvement in confidence by taking a proactive approach to using their skills and receiving positive feedback.

TR1 “actually just having a few tools and a little bit of knowledge? Yes, I would have been able to handle it. I just lacked the confidence.”

Physio1 “the confidence just starts to kind of spiral because you think actually I did it once, it wasn't awful. I'll keep. I'll keep trying it.”

Gaining experience from the job role. Many therapeutic radiographers reported feeling equipped and experienced in working with psychological distress from their individual role. Radiographers reported having more experience working with psychological distress in review roles and roles away from the routine delivery of radiotherapy treatment.

TR1 *"I tend to find it's more in my review role. I guess that I deal with patients talking about mental health a lot more."*

TR4 *"I didn't have that awareness while I was a radiographer working on the floor."*

Other AHPs reported their role as being *"crucial"* to supporting psychological needs. Two participants compared their role to that of a *"gatekeeper"* by being a point of contact who first recognises distress and refers on where indicated.

Physio2 *"I'm sort of that gatekeeper role where often pick up on anxieties and fears coming with the diagnosis."*

Dietitian1 *"a gatekeeper as well, referring onto our psychology services available as and when needed"*

Gained confidence and skill over time. Most participants reported that confidence and skill were gained over time.

Dietitian1 *"a lot of it is just experience and like your confidence in being a clinician"*

TR5 *"everything I've learnt about referring has been learnt on the job"*

Some participants reported noticing junior staff were less confident and felt ill-equipped to support patients' psychological needs. They reported junior staff would often seek support from more experienced colleagues.

TR6 *"more of the younger staff feel less equipped"*

SLT1 *"They often thankfully would seek support as needed ... they seek advice from, you know, experienced team members"*

Participants reported that they would encourage junior staff to attend training to increase their skills. One participant felt the onus should be on academic and clinical departments to work together in training new staff.

Physio1 (referring to training) "I would put more onus on the newer staff coming through oncology with fewer years experience to maybe attend that and try and use that structure to upskill"

TR6 "we need to really push for departments to recognise both academics and clinical working together in the training"

Results Summary

In the survey, AHPs reported encountering a variety of psychological needs when supporting the recognition of psychological distress in their work. However, a lack of awareness of The Stepped Care Model (NICE, 2004) was evident among participants. They used a variety of supportive and psychologically informed methods to address psychological concerns, with focus group participants reporting a knowledge of when they had reached their capacity and needed to refer on. Most participants reported feeling "a little" or "somewhat" experienced and or confident in working with psychological distress, reporting confidence came with time. AHPs highlighted several barriers in delivering psychological support, such as, not having enough time and resources. Furthermore, just under half of participants reported not received psychology informed training. Less than half received supervision with only 20.3% receiving at least monthly supervision.

Discussion

The present study explored AHPs' experiences of addressing the psychological needs of people with cancer. This included their understanding of national psychological guidelines in cancer care, their ability and confidence to address psychological needs, and any barriers they may have faced to address these needs.

A survey was used to explore a large sample of AHPs' experiences to generate initial broad findings. These findings included low awareness of The Stepped Care Model (NICE, 2004), encountering a variety of psychological needs in practice, little to somewhat experience and confidence in working with psychological distress, and a variety of barriers to addressing patients' psychological needs. These findings were then used to guide question topics for follow-up focus groups which compared and elaborated on survey data to gain a richer understanding. The following themes emerged after qualitative analysis of focus group data: "Organisational barriers", "Mixed availability of psychological resources", "Routes to distress appearing", "Using psychology informed practice to address distress", and "Experience drives confidence".

AHPs predominantly reported a lack of awareness of the Stepped Care Model guidelines (NICE, 2004) across both the survey and focus groups. This shows similar findings to the low awareness of national psychological care guidelines reported by oncologists in previous research across North America (Pirl et al., 2007; Galindo Vazquez et al., 2022). However, not only does the present study go beyond these findings by observing this phenomenon in AHPs it also provides valuable insight into how AHPs believe awareness could be improved. In the present study's focus groups, AHPs reported potential facilitators for increasing awareness of these

guidelines, such as making guidelines more visible and embedded them early in professional training.

Although AHPs reported finding training and supervision they had received helpful, a significant proportion reported receiving no training or top-up training. Few AHPs reported receiving monthly supervision recommended for professionals working at Level 2 (National Cancer Action Team, 2010a) with just under half receiving no supervision. A lack of training and supervision for AHPs is particularly concerning given AHPs' prominent role in supporting cancer patients' psychological needs along the cancer care pathway (MacMillan Cancer Support, 2019).

Implementation science frameworks, such as, the Behaviour Change Wheel (Mitchie, Van Stralen, & West, 2011), suggest that capability is needed alongside opportunity and motivation for change to take place, in this case AHPs increasing their involvement in assessing and responding to psychological distress. For AHPs to have the capability to assess and respond to psychological distress they need the relevant knowledge and skills. The Behaviour Change Wheel (Mitchie et al., 2011) suggests this can be gained from education and training. Furthermore, Moorey et al.'s (2009) study suggests oncology nurses who received CBT training, compared to nurses that did not, showed greater reduction in patients' anxiety scores. Therefore, training may act not only as a facilitator to AHPs engagement in addressing patients' psychological needs but also their success in improving psychological wellbeing.

AHPs reported providing a variety of psychological forms of support when they recognised distress during formal assessments and day-to-day practice, such as, listening to patients, providing brief psychological interventions, and signposting and referring patients for additional psychology support. In the focus groups, they described an awareness of when they had reached their capability limits and needed

to refer on. Although AHPs reported poor awareness of NICE guidelines, this consideration between supporting patients themselves and referring on suggests some awareness of escalation policy in the Stepped Care Model (NICE, 2004). Local service guidelines based on broader NICE guidelines are often employed in the early stages of NICE guideline implementation (Spyridonidis & Calnan, 2011). Therefore, it is possible, AHPs awareness of escalation policy may have resulted from local policies based on the Stepped Care Model (2004) rather than NICE guidelines themselves. This promotes the ongoing need to incorporating broader NICE guidelines into local policy and procedure.

In the survey, most participants reported feeling “a little” or “somewhat” experienced and confident in both recognising and responding to psychological distress. Previous literature reports similar findings in nurses who reported low confidence in their ability to address psychological distress (Kaneko et al., 2013; Valente & Saunders, 2004; Valente, 2010). Therefore, low confidence may be present for many healthcare professionals who are expected to support cancer patients’ psychological needs. In the present study’s focus groups, participants reported feeling well equipped through experience gained in their role and over time. They stated junior staff were less confident and equipped to deal with psychological needs and would encourage them to seek further training. This supports recommendations from previous research where psycho-education training improved practitioners’ confidence in working with psychological concerns (Kubota et al., 2016). Further suggesting the importance of providing psychology informed teaching early in professionals’ occupational journey.

AHPs reported experiencing many barriers to addressing the psychological needs of patients. The most widely reported barrier was not having enough time and

resources. While the Stepped Care Model (NICE, 2004) acknowledges a need for further time and resources to recruit Level three and four practitioners to deliver care and run Level two training it neglects time and resources needed at lower levels of the model. This includes easier access to training for Level two practitioners when it is delivered and more time during clinical appointment to address patients' psychological concerns.

Participants also reported a lack of funding as a barrier to meeting guidelines in both the survey and focus groups. This supports previous research in which service managers from a variety of community health services reported a lack of consideration into the affordability of implementing NICE guidelines, with local funding not providing enough money to meet NICE recommendations (Owen-Smith, Coast, & Donovan, 2010). Despite AHPs willingness to approach patients' psychological needs, financial barriers may impact their ability to provide NICE recommended care. Therefore, more discussion on affordability of NICE guidelines is needed among senior teams within NICE and the NHS to address the impact of limited funding on services' ability to implement NICE guidelines.

The present findings provide a variety of potential facilitators and barriers to implementing The Stepped Care Model (NICE, 2004) guidelines into routine oncology care. Many of these facilitators and barriers, such as a lack of available knowledge and resources at an inner service level and a willingness and motivation to support psychological needs at an individual level among AHPs, can be mapped onto the Consolidation Framework for Implementation Research (CFIR) (Damschroder, Reardon, Widerquist, & Lowery, 2022). This framework can be used to evaluate potential facilitators and barriers that impact the implementation of new innovations, such as guidelines. Therefore, as many of the points raised in this study

already map onto this framework, it would be helpful for the Stepped Care Model to be more directly evaluated by the CFIR in future research to identify further facilitators that can be utilised and compensate for any barriers.

Limitations

One limitation of this study is the small sample size which did not reach the expected survey sample of 135. Furthermore, a small sample size was observed among specific AHP sub-groups, and low numbers of men and participants from ethnic minority backgrounds. AHPs were grouped together in their responses, however some professional sub-groups only had nine survey participants. Given the breadth of possible experiences, particularly within professional subgroups and the wider participant cohort, the present findings may be hard to generalise to the wider context. Further research focusing on specific areas of these findings, for example, knowledge of NICE guidelines, as well as recruiting a larger sample, could supply more generalisable findings.

All AHPs within the participating seven trusts used were invited to take part in the survey. Participants were given the option to opt into the focus groups. This may have presented potential self-selection bias, with AHPs who view patients' psychological needs as important perhaps more likely to take part. Furthermore, the current study noted some disparities in participants' self-perceived confidence. Focus group participants reported generally feeling confident while only 18.6% of survey participants reported feeling "very much" or "quite a bit confident" in assessing distress and 20.3% in working with psychological needs. It is possible participants who agreed to take part in the focus groups may have felt more confident in their

ability to address and discuss these issues, particularly as the survey was pseudonymised to help less confident participants feel safe in not being identified in their response. Another possibility is focus group data may have been impacted by social desirability bias, in participants overstating self-confidence to appear more acceptable to the group. Therefore, these findings may not be representative of the wider oncology AHP workforce, particularly AHPs who feel less comfortable discussing psychological concerns. Nevertheless, the focus groups still provided valuable feedback on what AHPs felt helped build confidence.

Due to time constraints in meeting academic deadlines, both focus groups analyses were performed as one. If more time had allowed, a sub-group analysis would have been performed and reported for the two groups, adding greater nuance by highlighting themes between disciplines that may have been missed in the broader analysis. In the present findings there appears to be some themes where therapeutic radiographers were more prominent than other AHPs. For example, not having enough time in appointment to discuss psychological distress, as opposed to not having time to attend training and supervision highlighted by other AHPs, in the sub-theme of “Not enough time”. Further research on this topic, including on the current dataset, would benefit from sub-group analysis between disciplines to explore nuance between these professional roles.

A further limitation of the study is the focus on AHPs and a lack of oncology patients’, families’, or carers’ voices. Previous research suggests even when physicians reduce space for patients to elaborate on emotional cues, patients still report overall satisfaction with their physician (Bittencourt Romeiro, Kern de Castro, & Figueiredo-Braga, 2023). This implies that patients may not always want their practitioner to address psychological concerns during their appointments. It would be

helpful to clarify what patients themselves want from AHPs regarding their psychological needs.

Clinical Implications

Participants showed a willingness to engage in supporting patients' psychological needs and attending training. However, they highlighted a lack of knowledge of NICE guidelines for delivering psychological support for people living with cancer. Ways to improve guideline awareness could be making sure key items from the NICE guidelines are disseminated more widely within trusts or imbedding early in professional training.

From the present findings it appears not all trusts provide regular psychological training and supervision to AHPs to support ongoing Level two psychology skills learning. Furthermore, when training and supervision is provided this may not be accessible to all. AHPs would benefit from access to regular supervision from a mental health professional. To reduce resource need and funding, this could be delivered as group supervision. This would be particularly helpful for those who have already engaged in Level two psychology skills training with the expectation of working as a Level two practitioner.

Lastly, participants reported a lack of time and resources as a systemic barrier to addressing psychological distress. A lack of funding to oncology services can reduce access to resources needed to adequately address The Stepped Care Model (NICE, 2004) guidelines. Further discussion is needed among executive team members in NICE and the NHS, as well as costing and commission leads to assess

the affordability of implementing NICE guidelines in the NHS and how to manage funding barriers when they arise.

Conclusions

The present study explored AHPs' experiences of addressing the psychological needs of people with cancer. AHPs highlighted a gap in dissemination of NICE guidelines however often showed indirect awareness of escalation guidelines. They reported psychological distress could present at any point in routine conversations and formal assessment and confidence in working with distress came with time and experience. AHPs reported coming up against systemic barriers, such as a lack of time and resources. Future clinical practice should include wider dissemination of the Stepped Care Model guidelines (NICE, 2004). To meet these guidelines, routine training and supervision with a Level three or four specialist healthcare professional should be provided to support AHPs' ongoing skills in address the psychological needs of people with cancer.

References

- Aggarwal, A., Choudhury, A., Fearnhead, N., Kearns, P., Kirby, A., Lawler, M., Quinlan, S., Palmieri, C., Roques, T., Simcock, R., Walter, F. M., Price, P., & Sullivan, R. (2024). The future of cancer care in the UK—time for a radical and sustainable National Cancer Plan. *The Lancet Oncology*, *25*(1), e6–e17.
- Bennion, A. E., & Molassiotis, A. (2013). Qualitative research into the symptom experiences of adult cancer patients after treatments: a systematic review and meta-synthesis. *Supportive Care in Cancer*, *21*, 9-25.
- Bittencourt Romeiro, F., Kern de Castro, E., & Figueiredo-Braga, M. (2023). How physicians respond to the emotional expressions of people with cancer. *Psicooncologia*, *20*(1).
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77-101.
- Clarke, V., & Braun, V. (2021). *Thematic analysis: a practical guide*. SAGE Publications Ltd.
- Colleoni, M., Mandala, M., Peruzzotti, G., Robertson, C., Bredart, A., & Goldhirsch, A. (2000). Depression and degree of acceptance of adjuvant cytotoxic drugs. *The Lancet*, *356*(9238), 1326-1327.
- Connolly, M., Perryman, J., McKenna, Y., Orford, J., Thomson, L., Shuttleworth, J., & Cocksedge, S. (2010). SAGE & THYME™: A model for training health and social care professionals in patient-focussed support. *Patient Education and Counseling*, *79*(1), 87–93.
- Damschroder, L. J., Reardon, C. M., Widerquist, M. A. O., & Lowery, J. (2022). The updated Consolidated Framework for Implementation Research based on user feedback. *Implementation science*, *17*(1), 75.

- Fitzgerald, P., Lo, C., Li, M., Gagliese, L., Zimmermann, C., & Rodin, G. (2015). The relationship between depression and physical symptom burden in advanced cancer. *BMJ Supportive & Palliative Care*, 5(4), 381-388.
- Fleissig, A., Jenkins, V., Catt, S., & Fallowfield, L. (2006). Multidisciplinary teams in cancer care: are they effective in the UK?. *The Lancet Oncology*, 7(11), 935-943.
- Galindo Vázquez, O., Rivera, S., Lerma, A., Calderillo Ruiz, G., Espinoza Bello, M., Meneses, A., & Lerma, C. (2022). Detection of psychosocial distress in cancer patients: A survey of Mexican oncologists. *Journal of Psychosocial Oncology*, 40(6), 708–723.
- Guner, P., Hicdurmaz, D., Yildirim, N. K., & Inci, F. (2018). Psychosocial care from the perspective of nurses working in oncology: A qualitative study. *European Journal of Oncology Nursing: The Official Journal of European Oncology Nursing Society*, 34, 68–75.
- Hoffman, K. E., McCarthy, E. P., Recklitis, C. J., & Ng, A. K. (2009). Psychological distress in long-term survivors of adult-onset cancer: results from a national survey. *Archives of Internal Medicine*, 169(14), 1274-1281.
- Ike, I. D., Durand-Hill, M., Elmusharaf, E., Asemota, N., Silva, E., White, E., & Awad, W. I. (2021). NHS staff mental health status in the active phase of the COVID-19 era: a staff survey in a large London hospital. *General Psychiatry*, 34(2).
- Kaneko, M., Ryu, S., Nishida, H., Tamasato, K., Shimodaira, Y., Nishimura, K., & Kume, M. (2013). Nurses' recognition of the mental state of cancer patients and their own stress management—a study of Japanese cancer-care nurses. *Psycho-Oncology*, 22(7), 1624-1629.

- Kangas, M., Milross, C., Taylor, A., & Bryant, R. A. (2013). A pilot randomized controlled trial of a brief early intervention for reducing posttraumatic stress disorder, anxiety and depressive symptoms in newly diagnosed head and neck cancer patients. *Psycho-Oncology*, 22(7), 1665-1673.
- Katz-Buonincontro, J. (2024). Sequential mixed methods designs. In *How to Mix Methods* (pp. 57–72). American Psychological Association.
- Krippendorff, K. (2004). *Content analysis: an introduction to its methodology*. Sage.
- Kubota, Y., Okuyama, T., Uchida, M., Umezawa, S., Nakaguchi, T., Sugano, K., ... & Akechi, T. (2016). Effectiveness of a psycho-oncology training program for oncology nurses: a randomized controlled trial. *Psycho-Oncology*, 25(6), 712-718.
- Lang-Rollin, I., & Berberich, G. (2018). Psycho-oncology. *Dialogues in Clinical Neuroscience*, 20(1), 13–22.
- Macmillan Cancer Support. (2019). *Integrated Care System Guidance for Cancer Rehabilitation: A guide to reducing variation and improving outcomes in cancer rehabilitation in London*.
- MacMillan Cancer Support. (2020). *Cancer Rehabilitation Pathways Guidance*.
- McKittrick, G., Shepherd, P., & Gilleece, T. (2021). Management of breast cancer: an overview for therapeutic radiographers. *Journal of Radiotherapy in Practice*, 20(1), 99–107.
- Mitchell, A. J., Chan, M., Bhatti, H., Halton, M., Grassi, L., Johansen, C., & Meader, N. (2011). Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative-care settings: a meta-analysis of 94 interview-based studies. *The Lancet Oncology*, 12(2), 160-174.

- Mitchell, A. J., Kaar, S., Coggan, C., & Herdman, J. (2008). Acceptability of common screening methods used to detect distress and related mood disorders—preferences of cancer specialists and non-specialists. *Psycho-Oncology: Journal of the Psychological, Social and Behavioral Dimensions of Cancer*, 17(3), 226-236.
- Michie, S., Van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science*, 6, 1-12.
- Moorey, S., Cort, E., Kapari, M., Monroe, B., Hansford, P., Mannix, K., ... & Hotopf, M. (2009). A cluster randomized controlled trial of cognitive behaviour therapy for common mental disorders in patients with advanced cancer. *Psychological Medicine*, 39(5), 713-723.
- Murray, E., Treweek, S., Pope, C., MacFarlane, A., Ballini, L., Dowrick, C., ... & May, C. (2010). Normalisation process theory: a framework for developing, evaluating and implementing complex interventions. *BMC medicine*, 8, 1-11.
- Nash, M. (2017). Mental healthcare training needs of oncology nurses in Ireland. *Cancer Nursing Practice*, 16(1).
- National Cancer Action Team. (2010a). *Manual for Cancer Services 2008: Psychological Support Measures*.
- National Cancer Action Team. (2010b). *Excellence in Cancer Care: The Contribution of the Clinical Nurse Specialist*.
- NHS England. (2016). *Delivering World-Class Cancer Outcomes: Guidance for Cancer Alliances and the National Cancer Vanguard*.

NICE. Guidance on Cancer Services: Improving Supportive and Palliative Care for Adults with Cancer. (2004). Available at:

<https://www.nice.org.uk/guidance/csg4/resources/improving-supportive-and-palliative-care-for-adults-with-cancer-pdf-773375005>

Owen-Smith, A., Coast, J., & Donovan, J. (2010). The usefulness of NICE guidance in practice: different perspectives of managers, clinicians, and patients. *International journal of technology assessment in health care*, 26(3), 317-322.

Palmer, B., Appleby, J., & Spencer, J. (2019). Rural Health Care. Retrieved March 17, 2024, from <https://www.nuffieldtrust.org.uk/sites/default/files/2019-01/rural-health-care-report-web3.pdf>

Pirl, W. F., Muriel, A., Hwang, V., Kornblith, A., Greer, J., Donelan, K., ... & Schapira, L. (2007). Screening for psychosocial distress: a national survey of oncologists. *J Support Oncol*, 5(10), 499-504.

Pinder, Greaves, F. E., Aylin, P. P., Jarman, B., & Bottle, A. (2013). Staff perceptions of quality of care: an observational study of the NHS Staff Survey in hospitals in England. *BMJ Quality & Safety*, 22(7), 563–570.

Pitceathly, C., Maguire, P., Fletcher, I., Parle, M., Tomenson, B., & Creed, F. (2009). Can a brief psychological intervention prevent anxiety or depressive disorders in cancer patients? A randomised controlled trial. *Annals of Oncology*, 20(5), 928-934.

Riba, M. B., Donovan, K. A., Andersen, B., Braun, I., Breitbart, W. S., Brewer, B. W., ... & Darlow, S. D. (2019). Distress Management, Version 3.2019, NCCN Clinical Practice Guidelines in Oncology. *Journal of the National Comprehensive Cancer Network J Natl Compr Canc Netw*, 17(10), 1229-1249. Retrieved Nov 10, 2023, from <https://doi.org/10.6004/jnccn.2019.0048>

- Sheikhzadeh, M., Zanjani, Z., & Baari, A. (2021). Efficacy of mindfulness-based cognitive therapy and cognitive behavioral therapy for anxiety, depression, and fatigue in cancer patients: A randomized clinical trial. *Iranian Journal of Psychiatry, 16*(3), 271.
- Spyridonidis, D., & Calnan, M. (2011). Opening the black box: a study of the process of NICE guidelines implementation. *Health Policy, 102*(2-3), 117-125.
- Stein, K. D., Syrjala, K. L., & Andrykowski, M. A. (2008). Physical and psychological long-term and late effects of cancer. *Cancer, 112*(11), 2577-2592.
- Stevenson, Munro, H., & Barrington, M. (2020). Review and developments in level 2 psychological support skills training for oncology clinical nurse specialists. *British Journal of Healthcare Management, 26*(7), 201–207.
- Tariq, S., & Woodman, J. (2013). Using mixed methods in health research. *JRSM Short Reports, 4*(6), 2042533313479197.
- Tatrow, K., & Montgomery, G. H. (2006). Cognitive behavioral therapy techniques for distress and pain in breast cancer patients: a meta-analysis. *Journal of Behavioral Medicine, 29*, 17-27.
- Thewes, B., Brebach, R., Dzidowska, M., Rhodes, P., Sharpe, L., & Butow, P. (2014). Current approaches to managing fear of cancer recurrence; a descriptive survey of psychosocial and clinical health professionals. *Psycho-Oncology (Chichester, England), 23*(4), 390–396.
- Valente, S. M. (2010). Oncology nurses' knowledge of suicide evaluation and prevention. *Cancer Nursing, 33*(4), 290-295.

- Valente, S., & Saunders, J. M. (2004). Barriers to suicide risk management in clinical practice: A national survey of oncology nurses. *Issues in Mental Health Nursing, 25*(6), 629-648.
- Vos, P. J., Visser, A. P., Garssen, B., Duivenvoorden, H. J., & de Haes, H. C. (2006). Effects of delayed psychosocial interventions versus early psychosocial interventions for women with early stage breast cancer. *Patient Education and Counseling, 60*(2), 212-219.
- Zabora, J., BrintzenhofeSzoc, K., Curbow, B., Hooker, C., & Piantadosi, S. (2001). The prevalence of psychological distress by cancer site. *Psycho-Oncology: Journal of the Psychological, Social and Behavioral Dimensions of Cancer, 10*(1), 19-28.
- Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavica, 67*(6), 361-370.

Part III: Critical Appraisal

Introduction

The following section includes a critical reflection of my experience at various stages in the empirical research process. First, I will discuss my reasons behind choosing the topic of healthcare professionals' experiences of working with psychological distress in cancer care. I will then proceed to reflect on key stages of the research process, such as using a mixed methods approach, developing study materials, applying for research governance and ethics, recruitment, and analysis. These reflections will include challenges and learning points I experienced during these processes. I will discuss some of the difficulties I faced in remaining reflexive throughout the project and finally the benefits of disseminating the empirical findings.

Why I chose this topic

Prior to and during clinical psychology training, I worked with many physical healthcare professionals in multidisciplinary teams. Seeing the enthusiasm of my interdisciplinary colleagues in addressing the psychological needs of their patients, highlighted to me an opportune resource to broaden a psychology informed workforce to address psychological needs during routine care. In both my personal and professional life, I have also witnessed firsthand the devastating affect physical illness can have on a person's mental health. Over my professional career, I have frequently supported people in mental health services who have reported physical illness and pain as a trigger and maintaining factor in the deterioration of their mental health. This, therefore, prompted me to explore a research topic in physical health to proactively support peoples' psychological needs in areas of healthcare outside of mental health service.

Cancer is pervasive and affects many aspects of peoples' physical, social, and psychological experiences (Bennion & Molassiotis, 2013). Thus, oncology services employ a vast network of healthcare professionals to support these needs (Fleissig, Jenkins, Catt, & Fallowfield, 2006). Therefore, the present project felt like the perfect context to bring together by passions of building resources to help support a psychology informed workforce and supporting peoples' mental health in physical healthcare.

Study Design

For many years there was reluctance in combining quantitative and qualitative approaches due to their perceived incompatibility in practical approach and epistemology (Howe, 1988). However, in recent years mixed methods approaches that combine both quantitative and qualitative elements are becoming increasingly popular, particularly within healthcare research (Tariq & Woodman, 2013). This is largely due to its ability to address multifaceted healthcare topics, whilst providing greater generalisability through larger samples to influence healthcare policy and service development (Tariq & Woodman, 2013). The present study looked to explore the multifaceted experience of healthcare professionals working with psychological distress in oncology. The study hoped to inform resource needs to meet NICE guidelines for the delivery of psychological support in cancer care by all health and social care staff. This multifaceted topic and hope to inform service provision therefore lent itself well to a mixed methods approach.

In the initial stages of the project, I initially favoured a qualitative approach. This was likely due to my experience of working predominantly with this method and how comfortable I felt with it. However, through further exploration of the literature on

this topic, I noticed very limited research exploring Allied Healthcare Professionals' (AHPs) experiences. Therefore, a mixed methods approach felt more appropriate to generate a larger sample size using quantitative methods. It felt imperative to have this data first so this evidence could inform the focus group schedules. This meant we were exploring topics that appeared applicable to the wider population and not just the subjective experience of a small focus group sample.

The process of using a mixed methods approach sometimes left me feeling like I was conducting two separate studies. At times it was easy to draw these elements together, for example, when developing the focus group questions based on the survey findings. However, at other points I found myself treating the quantitative and qualitative elements of the project as two separate entities. Space to reflect on both approaches together was made harder due to time constraints in meeting the thesis deadline. This was particularly noticeable when initially writing my results section. Consequently, I feel these elements were mostly drawn together when writing the discussion and conclusion section of the empirical paper, when I felt I had more time to reflect on the overall data, and amendments were subsequently made to the results section then. I feel with more time I could have provided more comprehensive findings by better intertwined the quantitative and qualitative data throughout the whole research process. I hope to apply this in any future mixed methods research I do.

Developing Materials

Survey Materials

When developing the survey, I started by having a conversation with my external supervisor, and North-East London Cancer Alliance Lead, on topics we

should cover. This included AHPs' understanding of The Stepped Care model (NICE, 2004), psychology informed training and supervision, and the type of psychological distress AHPs most often encounter. I then looked at previous survey studies exploring medical healthcare staffs' experiences of using psychology approaches in healthcare. The survey methods and findings from these studies informed sections on perceived confidence, ability, and barriers to addressing psychological concerns (Guner, Hicdurmaz, Yildirim, & Inci, 2018; Nash, 2017; Thewes et al., 2014). Lastly, I attended a Cancer Alliance meeting with AHP and cancer patient representatives. I presented the proposed study and asked for feedback on what should be included in the survey. Attendees suggested including questions on the type of psychological support AHPs offer.

Focus Group Materials

To develop the focus groups, I started by looking through survey responses. This was initially planned to take place after the survey was closed but, due to delays in starting recruitment, I completed this process earlier to meet the thesis deadline. Forty-six of the 59 survey responses were already received by this point and still reflected the findings from the total responses once these were received. In the survey, I noticed key areas of interest, such as, low awareness of NICE guidelines, barriers to working with psychological distress, and a variety of psychological needs AHPs worked with. From here I developed initial questions for the focus groups, such as, "When does psychological distress come up in appointments?". These findings and questions were discussed with my academic supervisor and a first draft of the focus group schedule was created. This was shared with my external supervisor, before agreeing on a final format.

AHP consultation

I met with two AHP representatives, one physiotherapist and one dietitian, to evaluate the initial survey structure and content. The representatives suggested adding a question to explore which tumour groups participants worked with. This was added to the survey as the literature also suggested overall distress could significantly vary between patients with differing cancer diagnoses (Zabora, Brintzenhofeszoc, Curbow, Hooker, & Piantadosi, 2001). They also suggested adding mental health first aid training and e-learning to the list of potential answers for the training participants had received in their current role. This felt appropriate to provide participants with more response cues for this question. Following the development of the focus group questions, I considered if it would be beneficial to include AHPs in reviewing the focus group schedule. Upon further reflection I decided against this, as I felt the focus groups needed to be objectively informed by the survey data, to elaborate directly on the survey findings.

There appeared pros and cons to including AHP consultation when developing the initial survey. The added survey response options for what training AHPs received, generated four responses for mental health first aid training and nine for E-learning. This suggests these response options were helpful and relevant in answering this question and lead to further exploration of AHP training resources in the analysis. On the other hand, I feel including tumour groups participants worked with was not required, particularly as I did not conduct any sub-group analysis and therefore did not use this information in the findings. In hindsight, I think it would have been helpful for me to have weighed up individual suggestions from the AHP representatives to make sure they were relevant to the research aim and methods.

Unfortunately, due to time constraints in applying for research governance and meeting the thesis deadline, I was only able to consult with AHPs at two points when developing the survey. Previous literature suggests having NHS staff involved in research can support the recognition of research topics in need of prioritising and making sure research aims and methods remain relevant to healthcare professionals (Marjanovic et al., 2019). However, in this project a clear and relevant aim was already developed in collaboration with my external supervisor. She had already gained a clear picture of the topic in need of prioritising from discussions with the wider oncology workforce. However, without my external supervisor, and in turn, access to the wider workforce's views, I feel AHP representation throughout the project would have been necessary to gain this insight. Therefore, in future work I would like to use AHP consultation earlier to support the development of a study, and not just for reviewing study materials.

Research Governance and Ethics

Due to the nature of the project, in particular recruiting NHS staff, I found myself having to apply for UCL ethics, HRA approval, and Capability and Capacity approval for nine NHS trusts. UCL ethical approval was approved in two months, however, HRA and Capability and Capacity approval took 12 months to complete. This included continual contact with the University College London (UCL) Joint Research Office (JRO), completing an Integrated Research Application System (IRAS) form, completing an extensive twenty-six-page protocol, creating a local information pack for each NHS site, recruiting Principal Investigators (PIs) for all sites, securing Capability and Capacity approval with the Research and Development teams for all sites, and disseminating study materials to PIs.

Unfortunately, due to individual site restrictions, research and development staff leave, and time constraints I was unable to secure two NHS sites.

I would attribute this process to being my most challenging experience in doctoral training. The endless back and forth and feeling out of my depth, contributed to a reduction in my productivity, particularly when I felt overwhelmed. This was made harder by having to tolerate uncertainty of not knowing if the project would be approved and when this would be. Despite the knock backs and challenges I faced during this time; this process provided me with insight into setting up healthcare research. I feel I now have an in-depth knowledge of applying for research governance in the NHS and if I were to do it again, I would feel more aware of who to turn to, what to do, and how long this would take.

I would attribute having a healthy work life balance as the main contributor to supporting myself through this process. I noticed in the weeks where I was putting more pressure on myself to try and speed this process up, I was finding it harder to concentrate and complete this work. Once I started taking regular breaks away from the process, even if only for an hour or to address other demands in doctoral training, I was more able to tackle the governance process when I came back to it.

Survey recruitment

AHPs were recruited via PIs within each trust. The PIs were made up of five Clinical Psychologists, one of which was a Cancer Alliance Lead for North-East London, one Physiotherapist, and one Research Nurses. The PIs were responsible for sending a pre-templated recruitment email with the survey link to all AHPs within their trust. AHPs could then choose to take part by following the link to the survey.

Unfortunately, we were unable to meet the expected survey sample of 135 with only 59 participants. This expected sample was based off a 27-54.5% response rate seen in previous literature using similar survey distribution among NHS staff (Ike et al., 2021; Pinder, Greaves, Aylin, Jarman, & Bottle, 2013). Cancer Alliance Leads in North-East London and Somerset, Avon, Wiltshire and Gloucestershire (SWAG) stated roughly 500 AHPs worked within the two Alliances. Therefore, based on a minimum 27% response rate we calculated an expected sample of 135.

Unfortunately, we received a response rate of 11.8%. This small sample holds to questions the generalisability of these findings. In addition to a small sample size, some localities and AHP professions were underrepresented. For example, only two Occupational Therapists (OTs) from trusts in the North-East London Cancer Alliance participated. Given the expanding roles of OTs in cancer care (Fleissig, Jenkins, Catt, & Fallowfield, 2006), it is unlikely this was a true representation of OTs within these trusts.

I have considered whether having a dedicated PI from each profession (i.e. radiographer, OT, etc) would have aided recruitment, particularly in underrepresented disciplines. The trust in which the Physiotherapist PI worked, recruited one of the largest samples of Physiotherapists. This suggests having AHP representatives from the disciplines being recruited, may encourage participation of these roles. Although Therapeutic Radiographers were the largest participant sample, they were also reported to be the largest AHP population within these trusts by the Cancer Alliance Leads. The final participant sample did not appear representative of the Therapeutic Radiographer population. Furthermore, PIs reported difficulty in reaching Therapeutic Radiographers to distribute the initial survey email. On reflection, having a Therapeutic Radiographer PI to help distribute

the survey, could have helped access this harder to reach disciplines during recruitment.

Focus Group Recruitment

Focus group participants were recruited via the survey. At the end of the survey, participants had the option to indicate if they would like to take part in a focus group by providing a contact email. Forty-eight out of the 59 survey participants indicated they would like to take part. I had initially planned to complete five focus groups, one for each profession, however due to time constraints we were only able to recruit to two groups.

Overall interest in the focus groups was high. This differed from previous research that showed greater difficulty in recruiting healthcare professionals for focus groups, especially when this was not face to face (Tausch & Menold, 2016). However, this research also suggested healthcare professionals were more likely to take part in focus groups when they had greater incentive and interest in the topic. Given the willingness and enthusiasm seen by professionals to address psychological needs in the present study, this could suggest greater interest in the topic may have impacted high interest in the focus groups. It is also likely those that took part in the initial survey had greater interest in this topic to begin with.

There appeared several challenges to recruiting a representative sample for the focus groups. Firstly, it was hard to find a time all participants could attend, despite distributing a doodle poll to help decide a date and time among potential participants. Due to potential participants having varying working patterns or being on annual leave, only six of the 11 radiographers invited to the first focus group made it, and four of the 13 remaining AHPs. This reminded me of the barrier of being

unable to take time off to attend training, reported by AHPs in this study. I wondered if this was playing out in AHPs being unable to attend the focus groups. Secondly, very few OTs agreed to take part in the focus groups. One OT was expected to take part however was on sick leave the day of the group, resulting in no OT representation. Subsequently, certain professional voices may have been lost, particularly in the focus groups where greater richness was generated from the initial survey findings.

If I had more time to plan the focus groups further in advance, I feel this would have allowed more participants to carve out time in their working day. However, it is also important to consider not leaving too large of a gap between survey completion and the focus groups. If this gap were increased too much, then this could have resulted in poorer recollection and reflection of the survey during focus group discussion.

Analysis and Interpreting findings

I found reporting descriptive statistics from the survey easy, however had greater difficulty with analysing the qualitative element of the focus groups. As a result, I attempted to follow the literature on Braun and Clarke's (2006, 2021) method of inductive thematic analysis as close as possible throughout this process. This involved generating initial codes, bringing codes together to form themes and subthemes, and then describing and naming these themes with the wider research team. I employed the support of my academic supervisor at key stages throughout this process to inform and support the analysis. For example, at the start of coding, we explored intercoder agreement on a small section of the transcripts between myself and my supervisor. At this point it became apparent my codes were too vague

and needed to be more specific. I made sure to employ more specific codes to the rest of the transcripts.

At first, I was concerned the initial themes generated from the focus groups were simply repeating findings from the survey. Following a discussion with my supervisor, we discussed making themes more specific to add depth to these findings and elaborate on the initial survey. For example, instead of using a broad sub-theme of “training needs” this was made more specific to “gaps in training” reported repeatedly in the focus groups. By doing this we were able to highlight the need for more top-up training post qualification. This approach of making themes more specific allowed me to develop richer findings to elaborate and clarify answers given in the survey.

Using thematic analysis allowed me to draw findings directly from the data. However, I wondered if using a different method of qualitative analysis would have been more appropriate, for example, framework analysis. This could have involved creating a framework of predefined themes from the survey findings and arranging focus group findings according to these themes. This form of analysis could have more closely addressed findings from the survey using a structured approach. However, key themes found within this study may have been lost using framework analysis, such as how distress appeared in AHPs’ work, both during informal conversations and formal assessment, which was not highlighted in the initial survey.

Reflexivity

I completed a reflective log to promote reflexivity throughout the research journey (Clarke & Braun, 2013). This involved meticulously logging key decisions made during the study, justifying why I made them, and what I learnt from this. I

included entries when developing the research topic, creating the study procedure and materials, during data collection, analysis, and in writing the final report. This allowed me to reflect on my decisions and any biases I may have held. For example, as I worked closely with The Stepped Care Model (NICE, 2004) on this project, I thought AHPs had a good awareness of these guidelines. This was despite the survey results suggesting otherwise. Consequently, I was initially going to go straight into focus group questions about how NICE guidelines could be implemented in services. However, by considering this decision in the log, and discussing this with my external supervisor, we agreed it would be beneficial to provide an overview of the guidelines before proceeding with these questions. Challenging my assumptions on AHPs awareness of these guidelines and adding this overview may have contributed to more informed discussion of these guidelines in the focus groups.

I was also supported in remaining reflexive by having regular meetings with my academic supervisor. In these meetings I was able to acknowledge blind spots I brought to the research process. For example, during initial coding I predominantly focused on objective information that was being provided, such as statements about not having enough time. By reflecting on my codes with my supervisor, I realised I had been neglecting the language being used, such as, describing working with distress as “tricky to navigate” and like “opening up a can of worms”. By acknowledging this language, I was able to recognise participants’ reservations to working with distress. This led to the development of the focus group sub-theme “staff reservations in working with distress” that I would not have recognised had I not had this space.

The process of using reflective tools highlighted to me how much of myself I bring to my work. I have come to appreciate how important reflexivity is in not letting

personal beliefs, assumptions, and ways of working impact the research process, limit participant voices, or distort findings. However, I have also seen how qualitative research can never be completely objective, for example, when comparing differences in codes and themes between myself and my academic supervisor I could see differences in the conclusions we pulled from the focus group transcripts. Hence, I believe it is unlikely two researchers could ever draw the exact same conclusions from raw qualitative data, without the use of a predefined framework, given the broad differences in beliefs and assumptions we all share. Therefore, it is imperative to be transparent in how researchers impact their findings, to give readers a more accurate perception of the research that took place and improve scientific integrity when using a subjective framework.

Dissemination

Throughout the study I met a lot of AHPs, Service Leads, and Psychologists working in oncology. All the staff I met during this process showed enthusiasm and interest in the study and its potential findings. This passion shown by staff further motivated me through this project. Given the time AHPs put into taking part, despite the challenges of not having enough time as reported in the study findings, it felt imperative to make sure participants receive feedback from their contribution through dissemination of the findings.

Following initial discussion of survey findings with my external supervisor, and North-East London Cancer Alliance Lead, regular group supervision has already been requested for Level two trained AHPs in the North-East London Cancer Alliance. This further highlighted to me how the dissemination of these findings could

improve the provision of psychology informed resources to the wider oncology workforce.

Conclusion

This project has allowed me to develop a greater understanding of using mixed methods research in a healthcare context. I have been able to consider ways I would approach empirical research differently in future work, through some of the challenges I faced in completing this project. Despite these challenges, I remain confident that the dissemination of these findings will encourage greater provision of psychology informed resources to help AHPs support people with cancer.

References

- Bennion, A. E., & Molassiotis, A. (2013). Qualitative research into the symptom experiences of adult cancer patients after treatments: a systematic review and meta-synthesis. *Supportive Care in Cancer, 21*, 9-25.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.
- Clarke, V., & Braun, V. (2013). *Successful Qualitative Research: A Practical Guide for Beginners*. SAGE Publications Ltd.
- Clarke, V., & Braun, V. (2021). *Thematic Analysis: A Practical Guide*. SAGE Publications Ltd.
- Fleissig, A., Jenkins, V., Catt, S., & Fallowfield, L. (2006). Multidisciplinary teams in cancer care: are they effective in the UK?. *The Lancet Oncology, 7*(11), 935-943.
- Guner, P., Hicdurmaz, D., Yildirim, N. K., & Inci, F. (2018). Psychosocial care from the perspective of nurses working in oncology: A qualitative study. *European Journal of Oncology Nursing: The Official Journal of European Oncology Nursing Society, 34*, 68–75.
- Howe, K. R. (1988). Against the Quantitative-Qualitative Incompatibility Thesis or Dogmas Die Hard. *Educational Researcher, 17*(8), 10–16.
- Ike, I. D., Durand-Hill, M., Elmusharaf, E., Asemota, N., Silva, E., White, E., & Awad, W. I. (2021). NHS staff mental health status in the active phase of the COVID-19 era: a staff survey in a large London hospital. *General Psychiatry, 34*(2).

- Marjanovic, S., Ball, S., Harshfield, A., Dimova, S., Prideaux, R., Carpenter, A., ... & Simmons, R. (2019). *Involving NHS staff in research*. The Healthcare Improvement Studies Institute.
- Nash, M. (2017). Mental healthcare training needs of oncology nurses in Ireland. *Cancer Nursing Practice*, 16(1).
- NICE. Guidance on Cancer Services: Improving Supportive and Palliative Care for Adults with Cancer. (2004). Available at: <https://www.nice.org.uk/guidance/csg4/resources/improving-supportive-and-palliative-care-for-adults-with-cancer-pdf-773375005>
- Pinder, Greaves, F. E., Aylin, P. P., Jarman, B., & Bottle, A. (2013). Staff perceptions of quality of care: an observational study of the NHS Staff Survey in hospitals in England. *BMJ Quality & Safety*, 22(7), 563–570.
- Tariq, S., & Woodman, J. (2013). Using mixed methods in health research. *JRSM Short Reports*, 4(6), 2042533313479197.
- Tausch, A. P., & Menold, N. (2016). Methodological aspects of focus groups in health research: results of qualitative interviews with focus group moderators. *Global qualitative nursing research*, 3, 2333393616630466.
- Thewes, B., Brebach, R., Dzikowska, M., Rhodes, P., Sharpe, L., & Butow, P. (2014). Current approaches to managing fear of cancer recurrence; a descriptive survey of psychosocial and clinical health professionals. *Psycho-Oncology (Chichester, England)*, 23(4), 390–396.
- Zabora, J., BrintzenhofeSzoc, K., Curbow, B., Hooker, C., & Piantadosi, S. (2001). The prevalence of psychological distress by cancer site. *Psycho-Oncology*:

*Journal of the Psychological, Social and Behavioral Dimensions of
Cancer, 10(1), 19-28.*

Appendices

Appendix A: Recruitment Email Template

We are currently recruiting for research Exploring Allied Healthcare Professionals' experiences of addressing the psychological needs of people with cancer.

The research will involve completing an initial online survey. We will also be recruiting for a follow-up focus group for anyone who wishes to participate and has completed the initial survey. The survey will take no longer than 20 minutes in total.

You will need to meet the below inclusion criteria if you wish to take part:

- Your main job role falls under one of the following five AHP roles: Therapeutic Radiographer, Physiotherapist, Occupational Therapist, Speech and Language Therapist or Dietitian.
- Your role includes day-to-day contact with patients with a diagnosis of cancer that contributes to a significant component of your work.
- You work in a trust that falls under the North-East London or Somerset, Wiltshire, Avon and Gloucestershire Cancer Alliances.

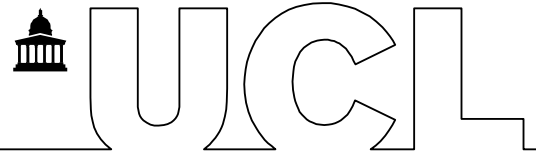
If you meet all the above inclusion criteria and would like to take part, please follow the below link to the online survey.

(survey link)

Many thanks,

Olivia Bryant

RESEARCH DEPARTMENT OF CLINICAL, EDUCATIONAL
AND HEALTH PSYCHOLOGY



Participant Information Sheet For Allied Healthcare Professionals

UCL Research Ethics Committee Approval ID Number: 24779/001

**Exploring Allied Healthcare Professionals' Experiences of Addressing the
Psychological Needs of People with Cancer?**

Department:

Clinical, Education and Health Psychology

Name and Contact Details of the Researcher(s):

Olivia Bryant Email:

Dr Caroline Darcyger

Dr Davina Moses

Name and Contact Details of the Principal Researcher:

Dr Katrina Scior Email:

1. Invitation Paragraph

You have been invited to take part in the above research project. Before deciding to take part, it is important to understand why the research is being conducted and what participation will involve. Please read the following information sheet. If anything is unclear or you have any questions prior to taking part, please email

2. What is the project's purpose?

The NICE (2004) stepped care model for psychological care delivery for adults with cancer recommends all health and social care staff be involved in signposting to psychological support, assessing psychological distress and delivering psychological techniques at step 1 and 2 of the model. Multidisciplinary teams in oncology services have expanded over the years however research has primarily focused on nurses' roles in addressing the psychological needs of people with cancer with minimal research into AHPs' experiences. Therefore, University College London has sponsored the present study to explore AHPs' experiences of addressing the psychological needs of people with cancer.

3. Why have I been chosen?

We are contacting all NHS allied healthcare professionals (AHPs) who meet the below inclusion criteria to ask to take part in the present study.

Inclusion - To take part your job role will need to fall under one of the following AHP roles: Therapeutic Radiographer, Physiotherapist, Occupational Therapist, Speech and Language Therapist or Dietician. Your role will need to include day-to-day contact with patients with a diagnosis of cancer and include a significant component of your work. You will also need to work in a trust that falls under either the North-East London or Somerset, Wiltshire, Avon and Gloucestershire Cancer Alliance.

Exclusion – You will be unable to take part if you do not meet the inclusion criteria stated above.

4. Do I have to take part?

Participation is completely voluntary. Prior to completing the survey, you will be asked for an individual identifier number. If you wish to withdraw your data any time in the first four weeks following the survey, you can do so by emailing your identifier number and a withdraw request to research@nhs.uk. You will not be asked to give a reason for the withdrawal. You will also be able to withdraw your answers during the survey itself by exiting the browser window before you submit your answers. You can let the researcher know if you wish to stop or withdraw at any point during the focus group. Unfortunately, we will be unable to withdraw any answers given once the group has finished.

5. What will happen to me if I take part?

Prior to participating in the survey, you will be asked to read the present information sheet and sign an online consent form. If you sign up to and are chosen to take part in a focus group, you will be provided with the information sheet again and a new consent form to sign via email. The research team will be unable to monitor continued capacity to consent following completion of the consent form, therefore continued capacity will be assumed.

Initial Survey

The study will involve completing an initial online survey exploring your experience of addressing the psychological needs of people with cancer in your work. Some demographical information about you, your role and any mental health training you have completed will also be asked. The survey should take roughly 15 minutes to complete. At the end of the survey, you will be asked if you would like to be selected to take part in a follow-up online focus group to further expand on collective answers given in the initial survey. If you agree to take part, you will be asked to provide an NHS contact email. We will then select a sample of participants to take part in the focus groups. If you are chosen to take part, we will contact you following the survey with a date and time as well as a Microsoft Teams link for the focus group.

Focus group

If you are chosen to take part in the focus group, you will be placed in a group with other participants of the same professional role as you. You will be asked further questions to discuss as a group aimed to elaborate on collective answers given in the survey and any reasoning for these answers. You may also be asked to discuss topics to help inform new ideas for future service delivery and development. The focus group should take roughly an hour and will be audio recorded for later data analysis. Prior to taking part in the focus group on the day, you will have the opportunity to ask the researcher present any questions.

6. Will I be recorded and how will the recorded media be used?

Audio recordings from the focus groups will be used for analysis and to present written findings only. Once the audio recordings have been transcribed for analysis the original recording will be destroyed. Some pseudonymised written extracts from the recordings may be used to present findings in the final research report. Only researchers directly involved in the study will be allowed access to the audio recordings.

7. What are the possible disadvantages and risks of taking part?

Minimal risk is envisioned from taking part in the study. However, if you do experience any distress or have any concerns, please do not hesitate to contact Olivia Bryant on the email above. We have also included helpline numbers below should you require immediate support.

Macmillan Support Line: 0808 808 00 00
Samaritans: 116 123
Shout: Text 'SHOUT' to 85258 for 24/7 text support

8. What are the possible benefits of taking part?

All participants who take part in the survey will be given the option to enter two prize draws. At the end of the survey you will be provided with the option to enter the draw and asked to provide an NHS email to contact you on if you win. The winners of the prize draws will be offered to choose between a £50 shopping voucher or £50 donation to the Macmillan Cancer Charity in their name. It is hoped the study will directly benefit AHPs by exploring their experience of supporting psychological distress and in so doing inform resource and support needs for AHPs within oncology services. Furthermore, it is hoped this will allow better implementation of NICE guidelines to support patient care.

9. What if something goes wrong?

If you experience any adverse events or have a complaint relating to the study, please contact Dr Katrina Scior on the above email. If you feel your concern or complaint has not been handled satisfactorily, please contact the UCL Research Ethics Committee on

10. Will my taking part in this project be kept confidential?

All survey answers and transcripts of audio recordings will be pseudonymised including in any subsequent research reports or publications. All completed surveys and recordings will be kept confidential on a password protected shared drive in line with the Data Protection Act (2018). All survey and transcript data will be destroyed following a five-year waiting period and when no longer needed for the present research. During this time, your data may be used by others for future research.

11. Limits to confidentiality

If you agree to take part in the focus group, you will be asked to provide an NHS email to contact you on. As NHS emails often include full names, in some incidences it may be possible for researchers to match your name to survey answers. You will also be asked to include your gender, ethnicity, age range, job role, work area/department, NHS trust you work in and pay banding, this may also increase your identifiability. However, we will endeavour to reduce identification wherever possible.

You will be placed in a focus group with other participants of the same role as you. Therefore, it is possible you may know some of your fellow group members. It will be made clear any discussion or answers given may not be discussed outside of the focus group.

Confidentiality will be respected subject to legal constraints and professional guidelines. If there is any legitimate reason to breach confidentiality, such as a concern for participant safety or evidence of wrongdoing/potential harm is uncovered then we will inform you of this decision.

12. What will happen to the results of the research project?

Your answers and some pseudonymised written extracts from your survey and/or focus group may be used in a subsequent research report. This report will be submitted as a major research project to the Doctorate in Clinical Psychology training course at UCL and may later be put forward for publication. If the project is published an email including the paper will be made available to you via internal NHS emails from local AHP and Cancer Alliance Leads.

13. Local Data Protection Privacy Notice

Notice:

The controller for this project will be University College London (UCL). The UCL Data Protection Officer provides oversight of UCL activities involving the processing of personal data, and can be contacted at

This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information can be found in our 'general' privacy notice: For participants in health and care research studies, click [here](#)

The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices.

The categories of personal data used will be as follows:

Name, Gender, Ethnicity, Age Range, Job Role, NHS Pay Banding, Work Site, NHS email (if participating in focus groups)

The lawful basis that will be used to process your personal data is: 'public task' and 'research purposes' will be the lawful basis for processing special category data.

Your personal data will be processed so long as it is required for the research project. If we are able to anonymise or pseudonymise the personal data you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible.

If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at

14. Who is organising and sponsoring the research?

University College London (UCL) will be sponsoring the research.

15. Contact for further information

Please contact Olivia Bryant at
information.

if you require any further

Thank you for reading this information sheet and for considering to take part in this research study.

**RESEARCH DEPARTMENT OF CLINICAL, EDUCATIONAL
AND HEALTH PSYCHOLOGY**



CONSENT FORM FOR SURVEY

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: Exploring Allied Healthcare Professionals' experiences of addressing the psychological needs of people with cancer.

Department: Clinical, Education and Health Psychology

Name and Contact Details of the Researcher(s): Olivia Bryant ; Dr Caroline Dancyger;
Dr Davina Moses

Name and Contact Details of the Principal Researcher: Dr Katrina Scior

Name and Contact Details of the UCL Data Protection Officer: Alexandra Potts

This study has been approved by the UCL Research Ethics Committee: Project ID number: 24779/001

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in.

I confirm that I understand that by ticking/initialling each box below I am consenting to this element of the study. I understand that it will be assumed that unticked/initialled boxes means that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element that I may be deemed ineligible for the study.

		Tick Box
1.	I confirm I have read and understood the Information Sheet for the above study. I have had an opportunity to consider the information and what will be expected of me. I have had the opportunity to ask questions which have been answered to my satisfaction.	
2.	I understand participation is voluntary and I can withdraw my data without giving a reason up to 4 weeks after completing the survey by email Olivia Bryant with my individual identifier number. Any data provided up until this point will then be deleted.	
3.	I understand that my personal information (i.e. gender, ethnicity, age range, job role, work area/department, NHS pay banding, NHS trust and NHS email) will be used for the purposes explained to me and I give consent for this data to be used. I understand that according to data protection legislation, 'public task' will be the lawful basis for processing, and 'research purposes' will be the lawful basis for processing special category data.	
4.	I understand my data gathered in this study will be stored anonymously and securely in line with the Data Protection Act (2018). All personal information will remain confidential, and all efforts will be made to ensure I cannot be identified in any written reports or publications. However, broader demographics may be connected to specific answers.	

	<i>Confidentiality may be breached if there is any lawful or professional constraints, such as concerns for participant safety or evidence of wrongdoing or harmful behaviour.</i>	
5.	I understand my information may be subject to review by responsible individuals from UCL for monitoring and audit purposes.	
6.	I understand the potential risks of participating and the support that will be available to me should I become distressed during the course of the study.	
7.	I understand the direct/indirect benefits of participating.	
8.	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study.	
9.	I understand I will not receive direct compensation for taking part in the study but will be given the option to enter a prize draw.	
10.	I agree that my pseudonymised research data may be used by others for future research.	
11.	I understand the information I have submitted may be published as a report and I will be sent a copy through my local AHP or Cancer Alliance Lead.	
12.	I hereby confirm that: (a) I understand the inclusion and exclusion criteria as detailed in the Information Sheet and explained to me by the researcher; and (b) I do not fall under the exclusion criteria.	
13.	I am aware of who I should contact if I wish to lodge a complaint.	
14.	I voluntarily agree to take part in this study.	
15.	I would be happy for the data I provide to be archived at UCL and understand that other authenticated researchers will have access to my pseudonymised data.	

Name of participant

Date

Signature

Researcher

Date

Signature



CONSENT FORM FOR FOCUS GROUP

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: Exploring Allied Healthcare Professionals’ experiences of addressing the psychological needs of people with cancer.

Department: Clinical, Education and Health Psychology

Name and Contact Details of the Researcher(s): Olivia Bryant ; Dr Caroline Dancyger; Dr Davina Moses

Name and Contact Details of the Principal Researcher: Dr Katrina Scior

Name and Contact Details of the UCL Data Protection Officer: Alexandra Potts

This study has been approved by the UCL Research Ethics Committee: Project ID number: 24779/001

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

I confirm that I understand that by ticking/initialling each box below I am consenting to this element of the study. I understand that it will be assumed that unticked/initialled boxes means that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element that I may be deemed ineligible for the study.

		Tick Box
16.	I confirm that I have read and understood the Information Sheet for the above study. I have had an opportunity to consider the information and what will be expected of me. I have had the opportunity to ask questions which have been answered to my satisfaction.	
17.	I understand participation is voluntary and I can let the researcher know if I wish to stop or withdraw at any point during the focus group. However, I will be unable to withdraw any answers given once the group has finished.	
18.	I understand that my personal information (i.e. gender, ethnicity, age range, job role, work area/department, NHS pay banding, Work trust and NHS email) will be used for the purposes explained to me and I give consent for this data to be used. I understand that according to data protection legislation, ‘public task’ will be the lawful basis for processing, and ‘research purposes’ will be the lawful basis for processing special category data.	
19.	I understand my data gathered in this study will be stored anonymously and securely in line with the Data Protection Act (2018). All personal information will remain confidential, and all efforts will be made to ensure I cannot be identified in any written reports or	

	publications. However, some broader demographics may be connected to specific written extracts/quotes. <i>Confidentiality may be breached if there are any lawful or professional constraints, such as concerns for participant safety or evidence of wrongdoing or harmful behaviour.</i>	
20.	I understand my information may be subject to review by responsible individuals from UCL for monitoring and audit purposes.	
21.	I understand the potential risks of participating and the support that will be available to me should I become distressed during the course of the research.	
22.	I understand the direct/indirect benefits of participating.	
23.	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study.	
24.	I understand that I will not receive direct compensation for taking part in the focus group apart from the option to enter a prize draw following completion of the initial survey.	
25.	I agree that my pseudonymised research data may be used by others for future research.	
26.	I understand that the information I have submitted will be published as a report and I can be sent a copy through my local AHP and Cancer Alliance Lead.	
27.	I consent to the focus group being audio recorded and understand that the recordings will be destroyed immediately following transcription.	
28.	I hereby confirm that: (c) I understand the inclusion and exclusion criteria as detailed in the Information Sheet and explained to me by the researcher; and (d) I do not fall under the exclusion criteria.	
29.	I am aware of who I should contact if I wish to lodge a complaint.	
30.	I voluntarily agree to take part in this study.	
31.	I would be happy for the data I provide to be archived at UCL understand that other authenticated researchers will have access to my pseudonymised data.	

Name of participant

Date

Signature

Researcher

Date

Signature

Survey

What are Allied Healthcare Professionals' (AHPs') Experiences of Addressing the Psychological Needs of People with Cancer?

Section 1: Demographics

1. What is your gender identity?

Female

Male

Non-binary

Other (Please specify)

2. What is your ethnicity? (Categories have been kept broad to reduce identifiability of participants)

Asian or Asian British

Black, Black British, Caribbean or African

Mixed or multiple ethnic groups

White British, White Irish, Any other White Background

Other ethnic group

3. What age group are you in?

18-24

25-29

30-34

35-39

40-44

45-49

50-54

55-59

60-64

65+

4. Which NHS trust do you work in?

Barts Health NHS Trust

Homerton Healthcare University Trust and Hospital

Barking, Havering and Redbridge NHS Trusts

Gloucestershire Hospital NHS Foundation Trust

North Bristol NHS Trust

University Hospitals Bristol & Weston NHS Foundation Trust

Royal United Hospitals Bath NHS Foundation Trust

Salisbury Hospital NHS Foundation Trust

Somerset NHS Foundation Trust

5. What healthcare context do you work within? (tick all that apply)

Cancer Centre

Acute Hospital

Outpatient Care

Community Team

Primary Care

Palliative Care

Other (please specify below)

6. Where in the cancer pathway do you see patients with cancer? (tick all that apply)

Pre-Diagnosis

Prehabilitation

During Treatment

Rehabilitation

Palliative Care

Other (please specify below)

7. Do you work with a specific tumour group?

Yes No

If yes, please tick all that apply

Brain

Breast

Colorectal

Gynaecological

Haematological

Head and Neck

Lung

Sarcoma

Skin

Upper Gastrointestinal

Urological

Other (please specify below)

8. What is your profession?

Physiotherapist

Occupational Therapist

Speech and Language Therapist

Dietitian

Therapeutic Radiographer

9. How many years have you worked within this role?

0-1

1-2

2-3

3-4

5-10

10+

10. What NHS banding do you currently work at?

Below 3 4 5 6 7 8a 8b 8c 8d 9

11. How many years have you worked with people with cancer?

0-1 1-2 2-3 3-4 5-10 10+

Section 2: NICE (2004) Stepped Care Model for Delivering Psychological Support to Adults Affected by Cancer

12. Are you aware of the NICE (2004) 4 level stepped care model for delivering psychological support for adults affected by cancer?

Yes No

13. If you answered Yes to Question 12 which step of the stepped care model do you feel you are currently working at?

Level 1 Level 2 Level 3 Level 4 Unsure None

14. Have you ever received any psychological skills/mental health training as part of your current role?

Yes No Unsure

If Yes, what training did you receive?

Level 2 Psychological Skills Training

Motivational Interviewing

SAGE and THYME workshop

Mental Health First Aid Training

CBT Skills

NHS E-Learning

Other (please specify below)

15. Do you have access to any psychology supervision to help you support the psychological needs of adults with cancer?

Yes No

If Yes, how often is this?

< 3 months

1-3 months

Monthly

Fortnightly

Weekly

> Weekly

One off consultation

If Yes, who do you receive supervision from?

Psychiatrist

Psychologist

Counsellor/Psychotherapist

Doctor

Clinical Nurse Specialist

Mental Health Nurse

Peer Supervision

Other (Please specify below)

If Yes, how do you access the supervision?

In person

Video Call

Telephone

Email

Other (Please specify below)

16.To what extent do you have experience of identifying and intervening/working with the psychological needs of adults with cancer?

Not at all A little Somewhat Quite a bit Very much

Section 3: Clinical work

17. What are some of the typical situations you encounter where you work with the psychological needs of adults with cancer? (tick all that apply)

Assessing psychological distress in hospitals

Assessing psychological distress in the community

Providing psychoeducation for patients

Providing mental health advice for patients

Providing emotional support

Providing brief psychological skills interventions (i.e. relaxation techniques, worry management, problem solving, etc)

Delivering full psychological interventions/therapy

Signposting for additional psychological support

Making a referral to psychology services

Making a referral to psycho-oncology services

Other (please specify below)

18.What psychological needs do you most often encounter in adults with cancer? (tick all that apply)

Depression

Anxiety

Stress

Worry

Panic/Panic Attacks

Procedural Anxiety

Fear of Recurrence

Post-Traumatic Stress Disorder (PTSD)

Adjustment Difficulties

Sleep Difficulties

- Reduced Motivation
- Feelings of Hopelessness
- Other (please specify below)

19.To what extent do you feel confident in working with the psychological needs of adults with cancer (i.e. discussing mental health, delivering psychological techniques such as problem solving and relaxation techniques, etc)?

Not at all A little Somewhat Quite a bit Very much

20.To what extent do you feel confident in assessing psychological distress?

Not at all A little Somewhat Quite a bit Very much

21.How often do you discuss patients' psychological needs with other health care professionals?

Never Sometimes Often Always

Who do you discuss these needs with?

22.How many times have you referred patients for additional psychological support?

Never 1 or 2 2-10 10+

What have these referrals been for and where were they to?

23. What are some of the challenges you face in being able to identify and address the psychological needs of adults with cancer? (tick all that apply)

High level of patient psychological distress

- Not feeling confident to address psychological needs
- Fear of opening up a 'can of worms' and not knowing what to do with it
- Addressing hopelessness
- Heavy workload
- Not enough time
- Understaffing
- Lack of support from trust
- Difficulty accessing psychological needs training
- Lack of psychology supervision
- Patient waiting time for cancer treatment
- Patient waiting time for psychological support
- Lack of psychological service provisions if distress identified
- Lack of space to discuss patients' psychological needs confidentially
- Lack of mental health support for staff
- Other (please specify below)

24. Would you be happy to potentially take part in a follow-up focus group to discuss the results of the present survey and what they may mean for future service delivery? (if yes, please provide a contact email below)

Yes No

25. Is there anything else you think would be helpful for us to know about your experiences of working with psychological distress in adults affected by cancer?

Appendix E: Focus Group Schedule

1. How do you see your role in working with psychological distress?
2. What about patients' characteristics/demographics would make you more likely to address distress?
3. When does psychological distress come up in appointments? At what point and how?
4. What do you think is likely to happen if you were to respond/acknowledge distress?
5. How equipped do you feel to manage this?
6. What training have you had and how helpful have you found this?
7. How would you access psychological supervision/support? What does this look like?

Researcher clarifies NICE guidelines.

8. What would have to happen to implement these guidelines? How could we make people more aware?
9. Do you have a sense of when you would manage distress by yourself and when you would refer on?
10. What barriers do you face in working with psychological distress?

Appendix F: UCL Ethical Approval Letter

RESEARCH AND INNOVATION SERVICES



Dr Kristina Scior
Clinical, Education and Health Psychology
UCL

Cc: Olivia Bryant

31 May 2023

Dear Kristina and Olivia,

Notification of Ethical Approval

Project ID/Title: 24779/001 / Exploring Allied Healthcare Professionals' experiences of addressing the psychological needs of people with cancer

I am pleased to confirm that your study has been ethically approved by the UCL Research Ethics Committee (UCL REC) until 30 September 2024.

Ethical approval is subject to the following conditions:

HRA Approval

If any changes are made to the research methods or the research question as a result of HRA review and approval, please submit an amendment to this application.

Notification of Amendments to the Research

Please seek Chair's approval for proposed amendments (to include extensions to duration) to the research for which this approval has been given. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing an 'Amendment Approval Request Form' <https://www.ucl.ac.uk/research-ethics/responsibilities-after-approval>

Adverse Event Reporting – Serious and Non-Serious

It is your responsibility to report to the REC any unanticipated problems or adverse events involving risks to participants or others. The REC should be notified of all serious adverse events via the Research Ethics Service (ethics@ucl.ac.uk) immediately the incident occurs. Where the adverse incident is unexpected and serious, the Joint Chairs will decide whether the study should be terminated pending the opinion of an independent expert.

For non-serious adverse events, the Joint Chairs should again be notified via the Research Ethics Service within ten days of the incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Joint Chairs will confirm that the incident is non-serious and report to the REC at the next meeting. The final view of the REC will be communicated to you.

Research Ethics Service
Research and Innovation Services
University College London
ethics@ucl.ac.uk
www.ucl.ac.uk/research-ethics/

Final Report

At the end of the data collection element of your research we ask that you submit a very brief report (1-2 paragraphs will suffice) which includes issues relating to the ethical implications of the research i.e., any issues obtaining consent, participants withdrawing from the research, confidentiality, protection of participants from physical and mental harm etc.

In addition, please:

- ensure that you follow all relevant guidance as laid out in [UCL's Code of Conduct for Research](#);
- note that you are required to adhere to all research data/records management and storage procedures agreed as part of your application. This will be expected even after completion of the study.

With best wishes for the research.

Yours sincerely

Appendix G: HRA Approval Letter

**HRA and Health and Care
Research Wales (HCRW)
Approval Letter**

Study title: Exploring Allied Healthcare Professionals' experiences of addressing the psychological needs of people with cancer.

IRAS project ID: 317310

REC reference: 23/HRA/3504

Sponsor UCLH/UCL Joint Research Office

I am pleased to confirm that [HRA and Health and Care Research Wales \(HCRW\) Approval](#) has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further relating to this application.

Please now work with participating NHS organisations to confirm capacity and capability, in line with the instructions provided in the "Information to support study set up" section towards the end of this letter.

How should I work with participating NHS/HSC organisations in Northern Ireland and Scotland?

HRA and HCRW Approval does not apply to NHS/HSC organisations within Northern Ireland and Scotland.

If you indicated in your IRAS form that you do have participating organisations in either of these devolved administrations, the final document set and the study wide governance report (including this letter) have been sent to the coordinating centre of each participating nation. The relevant national coordinating function/s will contact you as appropriate.

Please see [IRAS Help](#) for information on working with NHS/HSC organisations in Northern Ireland and Scotland.

How should I work with participating non-NHS organisations?

HRA and HCRW Approval does not apply to non-NHS organisations. You should work with your non-NHS organisations to [obtain local agreement](#) in accordance with their procedures.

What are my notification responsibilities during the study?

The "[After HRA Approval – guidance for sponsors and investigators](#)" document on the HRA website gives detailed guidance on reporting expectations for studies with HRA and HCRW Approval, including:

- Registration of Research
- Notifying amendments
- Notifying the end of the study

The [HRA website](#) also provides guidance on these topics and is updated in the light of changes in reporting expectations or procedures.

Who should I contact for further information?

Please do not hesitate to contact me for assistance with this application. My contact details are below.

Your IRAS project ID is 317310. Please quote this on all correspondence.

Yours sincerely,

List of Documents

The final document set assessed and approved by HRA and HCRW Approval is listed below.

Document	Version	Date
Confirmation of any other Regulatory Approvals (e.g. CAG) and all correspondence [UCL ethics approval]	1.0	31 May 2023
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Verification of Insurance]	1.0	
IRAS Application Form [IRAS_Form_25082023]		25 August 2023
Letter from sponsor [Sponsorship confirmation email]	1.0	08 August 2023
Letters of invitation to participant [Recruitment Email template]	1.0	09 August 2023
Organisation Information Document [PIC Agreement]	1.0	09 August 2023
Participant consent form [Survey Consent Form]	1.0	09 August 2023
Participant consent form [Focus Group Consent Form]	1.0	09 August 2023
Participant information sheet (PIS) [PIS]	1.0	09 August 2023
Research protocol or project proposal [Protocol]	1.0	07 July 2023
Summary CV for Chief Investigator (CI) [Chief Investigator's CV]	1	09 August 2023
Summary CV for student [Student CV]	1.0	09 August 2023
Summary CV for supervisor (student research) [Supervisor CV]	1.0	
Validated questionnaire [Survey]	1.0	09 August 2023

Information to support study set up

The below provides all parties with information to support the arranging and confirming of capacity and capability with participating NHS organisations in England and Wales. This is intended to be an accurate reflection of the study at the time of issue of this letter.

Types of participating NHS organisation	Expectations related to confirmation of capacity and capability	Agreement to be used	Funding arrangements	Oversight expectations	HR Good Practice Resource Pack expectations
Activities at NHS organisations will involve PIC activity only, including the identification of participants, database searches and the mailing out of study documentation.	Research activities should not commence at participating NHS organisations in England or Wales prior to their formal confirmation of capacity and capability to deliver the study in accordance with the contracting expectations detailed. Due to the nature of the activities involved, organisations will be expected to provide that confirmation to the sponsor Within 35 days of receipt of the local information pack After HRA/HCRW Approval has been issued. If the organisation is not able to formally confirm capacity and capability within this timeframe, they must inform the sponsor of this and provide a justification. If the sponsor is not satisfied with the justification,	The sponsor has provided the appropriate model non-commercial PIC agreement that it intends to use as a subcontract between participating organisations and NHS organisations acting as their Participant Identification Centres (PICs).	Sponsor is not providing funding to PICs.	The Chief Investigator will be responsible for all study activities performed at PICs.	Where an external individual will be conducting any of the research activities that will be undertaken at this site type then they would be expected to hold a Letter of Access. This should be issued be on the basis of a Research Passport (if university employed) or an NHS to NHS confirmation of pre-engagement checks letter (if NHS employed).

	then the sponsor may escalate to the National Coordinating Function where the participating NHS organisation is located.				
--	--	--	--	--	--

Other information to aid study set-up and delivery

<i>This details any other information that may be helpful to sponsors and participating NHS organisations in England and Wales in study set-up.</i>
The applicant has indicated they do not intend to apply for inclusion on the NIHR CRN Portfolio.

Appendix H: Example of Transcript Codes

<p>TR2 Yep, that's right. And I'm I'm I consider myself actually quite lucky. In the field of therapy, radiography in the terms of the training that I've had for offering patients psychological support. So I was originally a review radiographer. Now I'm late effects radiographer. So I've had a lot of advanced communication skills training. I've done level 2 psychological support and then had a bespoke course offered by our psychology team, which is kind of upskilled me between a Level 2 and Level 3 specifically for managing my patient group and a lot of the CPD that I do is around supporting patients psychologically, so. Some of that has been offered to me because of because of my career pathway. Some of that I've gone out and found, but I've also done The Institute of Psychosocial psychosexual Medicines Introductory course so, but I don't think that's necessarily considered normal for therapy radiographers. I know that I would argue that therapy radiographers are practising at a particularly high level as soon as they're qualified anyway and that formal level 2 training should be a prerequisite for and and not just for the patients, but for the staff themselves so that they're not the situation is they can't can't handle but. So my point of view, I do feel very, very well equipped and also I'm lucky enough to have support mechanisms in clinical supervision as well, which again, I know that not everybody is in their roles. <i>Researcher</i> <i>Thank you, [TR1].</i></p>	<p>Luck to have received training</p> <p>Had communication skills training</p> <p>Had L2 psychological skills training</p> <p>Received bespoke training</p> <p>Do CPD for psychology support</p> <p>Proactive and reactive role in seeking training</p> <p>L2 psychology training should be offered to all radiographers</p> <p>Feel well equipped</p> <p>Support from supervision</p> <p>Not everyone has support from supervision</p>
--	---

<p>TR1</p> <p>So yeah, sort of carrying on from what [TR2] was saying. Prior to doing my review training, I think if I look back a lot of the conversations, I now feel more equipped to have. I didn't feel as equipped to have with patients then. I think I've done some level 2 counselling training and I now approach conversations in a completely different way and having conversations with staff on treatment for all. Very recently there was a very distressed patient. I was asked to see how the next day and the staff were like, we just didn't really know how to handle that situation. And literally all she really needed was me to just listen and and that was that was all I did. But having that experience and that knowledge and that training was really, really beneficial. So I think actually I feel I do feel a lot more equipped now than I did before I went into a review based role. You can spot things so much easier. Know how to approach conversations. You know how to probe a lot, a lot easier. And on top of that, it's been good because I've been able to try and disseminate some of that knowledge to the rest of my team. But I still think I agree they should. Everyone should have some more training and how to have these difficult conversations with people because that patient didn't necessarily need to have seen me. If just some time was taken to just listen to what her concerns are and I appreciate on treatment floor, it can be really busy but there usually is someone around that can sit in and go through things. So yeah, I think that has helped. I think clinical supervision has helped once a month that's so helpful to get together, go through that we've all been in as part of a review team and then we will discuss it and just have in that environment that safe environment to be able to talk and to learn like we're always continuously learning. And I've gained so much knowledge from those</p>	<p>Feel more equipped than in the past</p> <p>After L2 training approach conversations differently</p> <p>Staff didn't know how to handle situation</p> <p>Training and experience beneficial</p> <p>Feel more equipped than in the past</p> <p>Disseminating psychology knowledge to team</p> <p>Everyone should have training</p> <p>Time should be taken to listen to patient concerns</p> <p>Someone is usually around to talk to patients</p> <p>Supervision helpful</p> <p>Helpful to get together</p> <p>Supervision = safe space</p> <p>Gained knowledge from supervision</p>
---	---

<p>sessions as well. So, I found they've been helpful and if there's a situation that I think actually I'm not equipped to deal with this, I know where to signpost to now. I think that has been really pushed throughout on treatment floor. So people do know where to go. I think we've got quite a good signposting system on treatment for here. So we know who to refer to and when to refer and I think that's been really helpful. But yeah, I think probably some more training would just be that.</p>	<p>Know where to signpost</p> <p>Helpful knowing where to signpost</p>
---	--

Appendix I: Examples of Codes in themes/subthemes

Theme	Sub-themes	Examples of codes
Mixed availability of psychological resources	Supportive Psychology Team	<p>Useful working with psychologist</p> <p>Responsive psychology team</p> <p>Can seek psychologist support through relational links</p> <p>Email support from psychology</p> <p>Psychologist train staff to L2</p> <p>Psychologists provide good L2 psychology skills training</p> <p>Helpful to have training with psychologist</p> <p>Can refer to psychologist</p> <p>Refer to psychology team</p> <p>Joint work with psychology</p> <p>Work with psychology team</p>
	Gaps in training	<p>Gap in training</p> <p>“radiating” gap in training</p> <p>No option of refresher training</p> <p>No option of L2 top up</p> <p>Needs to be refresher training</p>

		<p>Everyone should have training</p> <p>“Malaise in the system” = not having time to provide training</p> <p>Not much training on shop floor</p> <p>Communication skills training not mandatory</p> <p>Psychology training not valued</p> <p>Top up training important</p>
	<p>Mixed provision of supervision</p>	<p>Supervision helpful</p> <p>“Helpful to get together”</p> <p>Lucky to have supervision</p> <p>Receiving team supervision</p> <p>Have clinical discussion groups</p> <p>Receiving supervision from manager</p> <p>Not everyone has support from supervision</p> <p>Not everyone can attend supervision</p> <p>No supervision from psychology</p> <p>Use to receive supervision</p> <p>Don't have psychology supervision anymore</p>