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Improving implementation of psychological interventions to older adult patients with cancer: Convening older adults, caregivers, providers, researchers*

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Abstract

Introduction: Older adults with cancer (OACs) are a large and growing population.

Psychological distress is prevalent in this population yet few OACs receive evidence-based psychological care. The purpose of this project was to identify barriers and strategies for the implementation of psychological interventions to OACs from the perspective of OACs, OAC caregivers, researchers, clinicians, and advocacy organization members.

Methods: The Cornell Research-to-Practice (RTP) Consensus Workshop Model was used to organize and convene a consensus conference. The one-day conference consisted of small and large group discussions regarding barriers, facilitators, and strategies for the implementation of psychological interventions targeting OACs. A half-day roundtable meeting was subsequently conducted to organize data generated at the conference. Deidentified transcriptions of the small group discussions were uploaded into NVivo 11 software and qualitatively analyzed using standard methods.

Results: Thirty-five participants attended the consensus conference from across stakeholder groups. Three themes related to implementation barriers were identified: lack of knowledge about psychological interventions in patients and providers; personal and social factors associated with being an OAC; and institutional-level factors. Themes related to implementation strategies focused

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on increasing awareness, tailoring interventions for older adults, and modifying institutional-level factors.

Discussion: Effective implementation of psychological interventions to OACs is complex and barriers exist across multiple levels of care. However, this project indicates that implementation can be improved in various ways that include all members of the healthcare system. Further clarification of implementation strategies and rigorous evaluation of their effectiveness is vital to improving care and care outcomes of OACs.

Keywords

Older adult; Cancer; Mental health; Implementation

1. Introduction

Older adults (age ≥ 65 years) comprise 56% of new cancer diagnoses [1,2] and will account for approximately three quarters of all U.S. cancer survivors by 2040 [3]. Over 40% of older adults with cancer (OACs) report elevated distress (e.g., anxiety, depression) [4–9] that is associated with poor quality of life [10,11]; reduced treatment adherence and response [12–14]; longer hospitalizations [15,16]; increased risk of an emergency department visit, overnight hospitalization, and 30-day readmission [17–19]; as well as shorter survival [20,21]. Yet, approximately half of all distressed cancer patients do not receive mental health care [22,23] and only 5% receive evidence-based psychological care [24].

Psychological interventions are efficacious, safe, and cost-effective [25–28]. Despite this, translation of research on psychological interventions into cancer care has been poor and data on effective implementation strategies are scarce [29–31]. Wide-spread implementation of efficacious psychological interventions has the potential to improve the mental health, quality of life, healthcare utilization, and treatment response of the large and growing population of OACs. However, effective implementation requires an understanding of the context in which implementation will occur, including unique characteristics of the target population [32].

The Cornell Research-to-Practice (RTP) Consensus Workshop Model is an evidence-based strategy for bridging the gap between research and practice [32–35]. The RTP model includes clinical practitioners in the traditional consensus conference model to foster discussions between researchers and clinicians on current research-based knowledge and its application to clinical care [36,37]. The RTP model has been successfully applied to topics relevant to older adults and cancer patients including social isolation, elder abuse, and palliative care [37–39]. The current project applied the RTP model to psychological intervention implementation for OACs. The purpose of this project is to identify barriers and strategies for implementation of psychological interventions to OACs from the perspectives of OACs, OAC caregivers, clinicians, researchers, and advocacy organization members.

2. Methods

The RTP model consists of multiple steps employed in the current project as described below. An addition to the RTP model in this project included qualitative analysis of the discussions that occurred at the conference. Study methods were approved by the Weill Cornell Medicine Institutional Review Board and all participants provided informed consent.

2.1. Select a Topic

The topic of barriers, facilitators, and strategies for implementation of psychological interventions to OACs was selected based on research cited above that demonstrates a notable gap in the implementation of evidence-based psychological treatments to OACs.

2.2. Prepare a Nontechnical Literature Review

The project team prepared a written summary of relevant studies using language accessible to lay audiences that was sent to participants prior to the consensus conference. The literature review provided participants with common knowledge on rates and negative implications of distress in OACs, rates of unmet needs for psychological care in OACs, psychological treatments studied in cancer patients, and definitions and models of implementation.

2.3. Select a Panel of Experts and Recruit Conference Participants

A panel of six experts representing all stakeholder groups was selected. The expert panel provided feedback on the literature review and agenda for the consensus conference. Consensus conference attendees were recruited based on their expertise in geriatric mental health, oncology, and psychosocial oncology using strategies from prior consensus conferences [37,38,40].

2.4. Convene the Consensus Conference

The one-day conference consisted of a series of small and large group discussions on barriers, facilitators, and strategies for implementation. Small group discussions were audio-recorded and transcribed verbatim using United States Health Insurance Portability and Accountability Act (HIPAA)-compliant procedures including removal of identifying information. Due to overlap in content generated during discussions of facilitators and strategies, this content was merged into a single list (hereafter referred to as strategies).

2.5. Convene a Follow-up Roundtable

A subset of conference participants who were active during the consensus conference and represented all stakeholder groups were invited to participate in a follow-up roundtable meeting. The purpose of this half-day meeting was to review and collaboratively refine the list of recommendations generated at the conference to create a final list of barriers and strategies.

2.6. Data Analysis

Transcriptions were uploaded into NVivo 11 software and analyzed according to Braun, Clarke, and Terry's six-step process for thematic analysis [41]. This analytic approach is not associated with a particular theoretical orientation or methodology, allowing it to be applied to a range of approaches such as the RTP model [42]. The first step consisted of reading transcripts of the small group discussions to become familiar with the data and determine points of potential analytical interest. The transcripts were then coded with key descriptive phrases and similar codes were grouped into themes [42]. These themes were then reviewed and revised to develop a thematic map. A detailed analysis was conducted in which codes within each theme were reviewed for a coherent pattern. The themes were refined in the context of the entire data set to ensure the thematic map reflected the data set as a whole. Finally, the themes were refined and the scope and content of each were described [42].

2.7. Participants

Thirty-five participants attended the conference and included OACs (n = 3), an OAC caregiver (n = 1), researchers (n = 13), clinicians (n = 10), and advocacy organization members (n = 8). Conference participants were primarily female (80.0%), white (90.0%), and non-Latino (93.3%) with an average age of 47.7 years (SD = 12.40). Multiple disciplines were represented and included physicians (n = 4), social workers (n = 8), psychologists (n = 8), nurse practitioners (n = 2), sociologists (n = 2), and other (n = 4). Clinicians had been working an average of 16.55 years (SD = 10.36) in their selected discipline. The roundtable meeting was attended by ten consensus conference participants and included an OAC (n = 1), researchers (n = 4), clinicians (n = 4), and an advocacy organization member (n = 1).

3. Results

3.1. Barriers

Three key implementation barriers were identified: lack of knowledge about psychological interventions in patients and providers; personal and social factors associated with being an OAC; and institutional factors (see Fig. 1).

3.1.1. Lack of Knowledge—Participants noted that patients are often unaware of the relationship between physical and psychological symptoms and the nature and benefits of psychological interventions. Specifically, patients may have a poor understanding of: (1) the types of psychological interventions available; (2) differences among services provided by psychologists, psychiatrists, and social workers and; (3) that medical and psychological treatment can be provided concurrently. This lack of awareness can manifest uniquely in older adults who may experience psychological conditions as physical symptoms:

You know older people are...more likely to endorse not eating or feeling you know different sorts of...somatic pieces, rather than saying I'm anxious. It's not experienced as a psychological...phenomenon at all (Participant quotation).

Lack of knowledge in both mental health and medical providers that psychological symptoms warrant assessment and treatment and that treatment options are available was

also identified as a barrier. Even when providers are aware of the patient's need for psychological services, they may be uncertain how to communicate with patients about psychological health.

3.1.2. OAC Personal and Social Factors—Personal factors included resistance to psychological interventions that could manifest as failure to respond to overtures from mental health providers and lack of engagement in treatment. Reasons for this resistance may be difficult for patients to articulate but can include a fear of appearing weak, the number of healthcare needs competing for their time, and the physical and financial hardships associated with aging:

I feel like so much of it is the physical hardships of getting to another doctor when you're already having abdominal pain, already having leg swelling. You're already having all these other physical issues. And it's another doctor (Participant quotation).

Social factors associated with being an older adult were also endorsed as important barriers. Family members may discourage older adults from seeking psychological treatment due to the stigma associated with receipt of mental health care or may find the additional appointments to be too onerous:

There's an incredible burden that caregivers experience with an older person...So, if you overlay cancer...Just think about time...All the extra appointments in addition to the appointments that are already there. Then, if you overlay psychological appointments, it's almost impossible to think how caregivers could meet those needs (Participant quotation).

Older adults' difficulty navigating the internet and social media relative to younger adults was also cited as a barrier because it reduces access to information about mental health resources: "...there's a lot of support out there through groups that are connected through the internet. If they're not on the internet, then they're not going to have access to any of that" (Participant quotation).

3.1.3. Institutional Factors—Institutional factors included person, environmental, and administrative factors. Person factors included inadequate staffing and the heavy workloads of providers that can interfere with the identification and treatment of older adults' psychological needs:

...older adults may have a different set of practical needs where the case management piece is really high...there's not time left in the day to be offering empirically supported [psychological] treatments (Participant quotation).

A dearth of mental health providers trained in evidence-based interventions and/or working with older adults was also noted as a barrier. Even when mental health providers are available, insufficient communication within interdisciplinary teams and poor integration of mental health providers into those teams make effective implementation difficult.

Administrative barriers included pressure to meet care quotas and documentation requirements that detract from providers' ability to implement psychological interventions.

Further, frequent reorganization of institutional and reimbursement structures and funding allocations makes sustained implementation difficult. Similarly, staff turnover makes it difficult to justify training providers in evidence-based interventions and providing these interventions consistently over time.

3.2. Strategies

Three themes emerged regarding strategies for improving implementation of evidence-based psychological interventions: increasing awareness, creating interventions more acceptable to older adults, and institutional-level modifications (see Fig. 2).

3.2.1. Increasing Awareness—Strategies for increasing awareness targeted patients, families, providers, and institutions. Strategies identified to improve patient awareness included reframing information on psychological interventions to reduce stigma and increase the acceptability of seeking psychological care:

I was thinking about the paradox between the whole sense of destigmatizing the need for help but yet being a fighter and not needing help...reframe what a fighter is in a large way...getting emotional, psychological support doesn't make you a weeny (Participant quotation).

Educating patients on the benefits of psychological interventions and how to ask for these interventions was also identified as a strategy for improving patient awareness. Strategies for increasing awareness of families were similar to those for patients but also included incorporation of the internet as a platform for sharing information that might be more accessible to younger caregivers (e.g., adult children) than OACs themselves.

Strategies for increasing provider awareness included providing information on the structure, content, and benefits of psychological interventions and strategies for communicating with OACs about these interventions:

To give a referral to go see a psychologist or social worker or nurse practitioner and to say, 'I want you to go see this person because if we can get your anxiety better under control, you are going to manage the symptoms of the chemotherapy'... giving the rationale behind the referral would probably make it more likely that the person would follow through (Participant quotation).

3.2.2. Creating Interventions Acceptable to OACs—Strategies for making psychological interventions more acceptable to OACs included routine integration of psychological services into cancer care as a strategy for normalizing these services. Strategies focused on the interventions themselves included development of a "universal intervention" appropriate for multiple types of distress. Additional strategies included shortening interventions, reducing between session homework exercises, and increasing intervention flexibility to facilitate individual tailoring. In addition to improving acceptability to OACs, these modifications may facilitate efforts to train mental health providers in intervention delivery.

3.2.3. Institutional-level Modifications—The third theme regarding strategies for implementation focused on institutional-level changes. Avoiding labels like “depressed” when describing available psychological services and framing psychological care with a strengths-based perspective may improve OACs’ willingness to accept psychological services:

We’re looking at what’s needed when people need help and something is deficient. But I think another big piece is playing to people’s strengths and not forgetting that part when they have cancer (Participant quotation).

However, participants also recognized that reframing psychological services can cause confusion.

Everywhere I’ve worked we brand our mental health service as supportive care service...I think it contributes to that sense of uncertainty of what am I signing up for (Participant quotation).

Participants suggested that collaboration with networks outside of the healthcare system might also improve implementation. One participant described a collaboration with local senior centers in which healthcare providers conducted information sessions on depression. This type of collaboration might reach distressed older adults directly or indirectly through education of the distressed older adult’s social network.

4. Discussion

The current project used the RTP consensus conference model to identify barriers and strategies for implementation of psychological interventions to OACs through the engagement of OACs, OAC caregivers, researchers, clinicians, and advocacy organization members. The large number of identified barriers and strategies fell across patient, family, and institutional levels of care [43,44]. Prior research identified implementation barriers for cancer patients [45,46] and older adults [47,48] such as lack of perceived need for mental health care and difficulty with transportation and parking. Our inclusion of OACs and their care-givers allowed us to identify additional unique barriers and strategies that provide guidance for improving implementation of psychological interventions for this particular population.

Lack of knowledge about psychological interventions in OACs and their families was identified as a significant implementation barrier, consistent with prior research [45]. However, the consensus findings revealed that providing information to improve knowledge is complicated by stigma regarding psychological services. Negative attitudes toward psychological care in OACs and their families can influence the impact of information about these services on treatment acceptance. Avoiding stigmatizing language and framing psychological interventions as resources for leveraging the lifetime experiences of OACs to manage cancer may be effective strategies providers can implement immediately in their clinical care of patients. A similar strategy has been successfully used in other populations in which mental health stigma is a barrier to care (e.g., men, veterans) [49,50]. These initiatives relied on social marketing principles and feedback from the target population to develop a palatable message. This technique suggests that asking OACs and their caregivers to identify

language regarding mental health that is acceptable and interpretable to them may help improve OAC comfort with psychological care.

Lack of knowledge in oncology providers regarding psychological interventions and the unique needs of OACs was also cited as an implementation barrier. Information for healthcare providers on the benefits of psychological interventions, the unique presentation of mental health problems in older adults, and strategies for communicating effectively with OACs may address this barrier. Communication skills training for oncology providers have addressed topics such as giving bad news, discussing prognosis and transition to palliative care [51–53], responding to patient anger [54], and patient-centered communication [55] and are associated with improved provider self-efficacy and skill acquisition. However, few resources are available for communicating with OACs, a notable gap given the complex treatment decisions, cognitive and sensory deficits, and low health literacy of many OACs [56–58].

Psychological intervention content and structure may also impact widespread implementation. Shortening interventions and the amount of between-session exercises would reduce intervention burden and may increase OACs' willingness to initiate treatment. Brief interventions also require fewer institutional resources, further enhancing implementation. Interventions consisting of five or six sessions have demonstrated efficacy [59,60] with some studies indicating that interventions with as few as three sessions significantly reduce distress [61]. However, a meta-analysis of the effects of psychotherapy interventions for cancer patients indicated that longer interventions were associated with greater sustained improvements [28]. In OACs, research is needed to identify the balance of intervention length and burden that maximizes efficacy and scalability.

Implementing unique manualized interventions for different types of distress (e.g., depression, anxiety) is often not feasible due to limited institutional resources. Interventions with core components effective across types of distress reduce the resources required to implement evidence-based psychological interventions. The American Society of Clinical Oncology recommends cognitive-behavioral therapy for anxiety and depression in cancer patients [62] and research suggests that interventions such as psychoeducation, relaxation, CBT, and expressive-supportive interventions are effective for multiple types of distress in cancer patients [63]. Implementation efforts focused on these interventions may be more responsive to the limited training resources of healthcare institutions.

Due in part to the “double whammy” of cancer and aging, the common method of psychological intervention delivery (i.e., in-person weekly sessions) [28] presents a significant barrier to implementation of interventions for OACs. Further, many OACs rely on caregivers for transportation; weekly mental health appointments in addition to oncology and other medical appointments are often not feasible. Reducing session frequency is one strategy for addressing this barrier [28]. Co-locating and coordinating mental health and oncology appointments and/or delivering psychological interventions over the telephone are additional strategies for minimizing the burden of psychological care. Research suggests these delivery strategies are cost-effective and associated with greater acceptance of and engagement in psychological care in cancer patients and reductions in distress [64–66].

Further, inadequate insurance coverage for mental health services may be an additional barrier to care, particularly if OACs are incurring costs related to their cancer treatment. Reducing the length of efficacious psychological interventions, in addition to improving insurance coverage are potential strategies for ensuring cost is not a barrier to improved mental health in OACs.

Provider limitations were also cited as a notable implementation barrier, in particular the size of the mental health workforce and limited competency in working with older adults. Many cancer care settings rely on social workers to deliver psychological interventions [67,68]. However, interventions delivered by nurses [69] and patient navigators [26,63,70] have demonstrated efficacy and expand the workforce available to deliver psychological interventions [71]. Similarly, the field of palliative care has differentiated between generalist and specialist palliative care providers to address the dearth of palliative care physicians [72,73]. Physicians and mental health providers with formal training in geriatrics (specialists) could support the training and supervision of “generalist” providers with the potential to enhance the geriatrics expertise of the workforce while reserving trained specialists for complex cases.

5. Conclusion

To our knowledge, this project represents the first investigation of barriers and strategies for implementation of psychological interventions to OACs. Strengths of this project include utilization of an evidence-based approach to gain consensus across stakeholder groups and analysis of rich qualitative data. However, this project is limited by a small sample representing primarily academic medical institutions in the New York City area. Identification of implementation barriers and strategies specific to community oncology practices is vital to widespread implementation of psychological interventions to the growing population of OACs. Further, the majority of conference participants were white. Older adults from racial/ethnic minority groups likely experience additional unique barriers to care and may benefit from implementation strategies that consider unique cultural values and beliefs. Few caregivers participated in the conference and barriers and strategies for implementation of psychological interventions to caregivers of OACs were not discussed. Given the importance of informal caregivers to OAC care, future studies of implementation barriers and strategies should include more OAC caregivers and identify strategies for implementing psychological interventions to OAC caregivers in addition to OACs. Finally, the mental health needs of OACs may change over the course of the illness and older adulthood. OACs with a new or early stage diagnosis likely have different mental health needs than OACs at the end-of-life. Similarly, the needs of a 65-year-old OAC are likely different from those of a 95-year-old patient. Additional research on the needs of OACs across the disease trajectory and older adulthood is needed to inform the development and evaluation of targeted psychological interventions that meet these specific needs.

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Fig. 1.
Thematic map for implementation barriers.

Fig. 2.
Thematic map for implementation strategies.