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Bridging the gap between aging research and practice: A new strategy for enhancing the consensus workshop model

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Abstract

Objectives.—The Cornell Research-to-Practice (RTP) Consensus Workshop Model is a strategy for bridging the gap between aging research and practice but lacks a technique for evaluating the relative importance of ideas. This project assessed the feasibility of adding a quantitative survey to the RTP model to address this gap.

Methods.—Older adults with cancer (OACs), OAC caregivers, researchers, clinicians, and advocacy organization representatives participated in a RTP workshop on implementing psychological interventions for OACs. Following an in-person workshop, participants completed surveys assessing the relative importance of barriers and strategies for psychological intervention implementation.

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Declaration of conflicting interests

The authors do not have conflicting interests to report. The authors had full access to all of the data in this study and take complete responsibility for the integrity of the data and the accuracy of data analysis.

Results.—Seventeen of 35 participants completed the survey, the majority of which were likely clinicians. Barriers and strategies to implementation rated as having the greatest impact were associated with the care team and institutional factors.

Conclusions.—Quantitative ratings add novel information to the RTP model that could potentially enhance the model's impact on aging research and practice.

Keywords

Older adult; Aging; Cancer; Mental health; Implementation

The Cornell Research-to-Practice (RTP) Consensus Workshop Model (hereafter referred to as the RTP model) is a strategy for bridging the gap between aging research and practice through the integration of the traditional consensus conference with community-based participatory research (CBPR) principles (Black et al., 1999; Brownson, 2012). The original RTP model added clinical practitioners to the traditional consensus conference to foster discussions between researchers and clinicians on current research-based knowledge and its application to clinical care. This model has been successfully applied to a wide variety of topics relevant to older adults (Pillemer et al., 2011; Pillemer, Chen, Riffin, Prigerson, & Reid, 2015).

Available consensus conference models either do not include an approach for evaluating the perceived importance of generated ideas (Black et al., 1999; Hurria, Cohen, & Extermann, 2010); utilize informal approaches such as having participants select their top five ideas (Sabir et al., 2006); or use approaches requiring advanced analysis and graphing capabilities not typically available (Anderson, Day, & Vandenberg, 2011; Anderson & Slonim, 2017). Without structured quantitative data, identifying the best starting point for future work can be difficult. The current project applied the RTP model to the problem of poor implementation of psychological interventions for older adults with cancer (OACs). This report describes the impact of adding a simple method for collecting quantitative data on the relative importance of RTP model recommendations.

METHOD

A brief description of the methods for this RTP conference (Sabir et al., 2006) is presented here. A full report on the conference methods and results is presented elsewhere (Trevino et al., in press). The methods for the RTP model are also available online (http://citra-rpcw.human.cornell.edu/). Professional consensus conference participants were selected by the study team based on their expertise in geriatric mental health, oncology, and psychosocial oncology using previously reported strategies (Pillemer et al., 2015). Older patients and caregivers were selected based on their personal experience with cancer.

Thirty-five individuals participated in the conference, including OACs (n=3), an OAC caregiver (n=1), researchers (n=13), clinicians (n=10), and advocacy organization representatives (n=8). Seventeen participants completed the electronic survey. Demographic information was not collected on survey respondents to preserve anonymity. However, 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 others (n=4); n=7 participants did not respond to this item. Participants reported working an average of 16.55 years (SD=10.36) in their discipline.

During the one-day conference, participants engaged in small- and large-group discussions of barriers, facilitators, and strategies for implementation. Each small group created a written list of generated ideas. Due to overlap in content regarding implementation facilitators and strategies, this content was merged (hereafter referred to as strategies). The study team reviewed the lists and organized them into themes. These themes were then grouped by levels of Bronfenbrenner's Ecological Systems Theory which organizes the environment into five levels that differ in proximity to the individual: individual, microsystem, mesosystem, exosystem, and macrosystem (Bronfenbrenner, 1977). The identification and grouping of themes was achieved through study team member discussions until consensus was reached.

Surveys were created and sent to participants via a link in an email approximately six months after the conference.

Following the conference, surveys assessing perceived relative importance of identified barriers and strategies were created. Each survey item asked participants to rate the impact of an implementation barrier or strategy relative to the other barriers or strategies in the thematic group ("Relative to the other barriers in the following table, rate the degree to which each barrier interferes with older adult cancer patients' access to psychological services" (1=Interferes not at all, 5=Interferes a great deal). After rating the relative impact of barriers and strategies within each theme, participants rated the relative impact of the themes within each level of Bronfenbrenner's Ecological Systems Theory. Relative rankings were chosen to provide institutions with data on how to allocate limited resources to maximally improve implementation. The total survey consisted of 64 items on barriers and 89 items on strategies.

Descriptive statistics (mean, standard deviation) were used to quantify the relative impact of barriers/strategies within and across themes. Study methods were approved by the institution's Institutional Review Board and all participants provided informed consent.

RESULTS

Barriers

Mean relative importance ratings of themes within levels of Bronfenbrenner's Ecological Systems Theory for barriers are described below. Data on the relative importance of barriers within each theme are presented in Tables 1-4 (supplemental material). Individual-level barriers were grouped into four themes: limited patient resources, lack of patient knowledge, negative patient beliefs about mental health care, and difficulty with role changes. Limited patient resources were rated as interfering most with the implementation of psychological interventions relative to the other themes (Mean=4.25, SD=.75) and included barriers such

as limited financial and social support resources and functional limitations. The themes of lack of patient knowledge (Mean=3.56, SD=.86), negative patient beliefs about mental health care (Mean=3.38, SD=1.11), and difficulty with role changes (Mean=3.13, SD=1.11) were rated as interfering with implementation to a moderate or slightly greater degree.

Within the microsystem level, medical team factors were rated as interfering most with implementation relative to other themes (Mean=3.94, SD=.73) and included competing demands on providers' time, lack of physician training in mental health issues and communication, and medical teams' lack of awareness of the importance of mental health treatment. Additional microsystem factors included family/caregiver barriers (Mean=3.53, SD=.78) such as caregiver burden and mental health treatment factors such as treatment complexity (Mean=3.47, SD=.92). The mesosystem included two themes rated similarly regarding interference with implementation: poor care coordination (Mean=4.29, SD=.75) and poor medical team communication (Mean=3.88, SD=.96). Poor care coordination included poor integration of mental health providers into the care team and provision of oncologic and mental health services in different locations. Poor communication was noted to occur across care teams, between the care team and patients' families, and within a single care team.

Barriers within the exosystem and macrosystem levels were combined due to a small number of barriers within the macrosystem. The exosystem/macrosystem level included inadequate system resources (Mean=4.35, SD=.76), healthcare system characteristics (Mean=4.35, SD=.76), societal stigma regarding mental illness (Mean=3.53, SD=1.19), and research gaps (Mean=2.94, SD=.80) in the area of psychotherapy for OACs. Barriers within the theme of inadequate system resources included a shortage of mental health services and providers and inadequate transportation services for patients. Healthcare system characteristics included lack of institutional support for mental health services and poor collaboration between healthcare institutions and community services.

Strategies

Quantitative ratings of the relative impact of themes of implementation strategies are described below. Data on the relative importance of strategies within each theme are presented in Tables 5-7 (supplemental material). Strategies within the individual and microsystem levels were combined due to the small number of themes within the individual level. Strategies for improving psychological treatment delivery (Mean=4.53, SD=.62) were rated as having the largest potential impact on implementation and included providing psychological interventions in locations convenient for patients and increased flexibility with the course of treatment. Additional themes within the individual and microsystem levels included strategies for educating and incentivizing providers (Mean=4.07, SD=1.18) such as by integrating mental health treatment in medical school training, improving treatment content (Mean=4.00, SD=.82) and distress screening (Mean=3.87, SD=1.09) such as through content simplification, providing patient education (Mean=3.73, SD=1.00) and supporting families (Mean=3.71, SD=.88).

Strategies within the mesosytem included improvements to care coordination (Mean=4.47, SD=.62) and medical team communication (Mean=4.07, SD=.93). Strategies for improving

care coordination included integrating mental health providers into oncology teams and including mental health screening and care options in standardized care plans. Strategies for improving medical team communication included improving the mental health referral process and communication between families and staff.

Finally, strategies within the exosystem and macrosystem levels were combined due to a small number of strategies within the macrosystem. Strategies for improving implementation within the exosystem/macrosystem included changes to the healthcare system (Mean=4.20, SD=.91), developing a larger geriatric workforce (Mean=4.13, SD=1.09), increasing advocacy and policy resources (Mean=4.00, SD=.73), normalization of mental health treatments (Mean=3.93, SD=1.18) such as through avoidance of stigmatizing language, and developing research initiatives that promote data sharing, examine cost effectiveness, and study implementation processes (Mean=3.80, SD=.98). Strategies to improve the healthcare system included making access to mental health services a quality measure and connecting mental health service provision to accreditation. Strategies for developing a geriatric workforce included expanding training programs for geriatric oncology, mental health, and psychosocial oncology providers.

DISCUSSION

This project describes the addition of surveys to the RTP model to quantitate the relative importance of ideas generated by conference participants. This new method was applied to a workshop on barriers to and strategies for the implementation of psychological interventions to OACs. Consensus workshop discussions generated a large number of barriers and strategies. Quantitative ratings of the relative impact of identified barriers and strategies informed organization and interpretation of these ideas.

This project suggests that ratings of the relative impact of conference ideas adds unique and helpful information to the RTP model. The simple approach used in this project allowed for greater differentiation between barriers and strategies, providing more specific information on which barriers and strategies to pursue. Specifically, these ratings provide guidance regarding the implementation barriers and strategies to target first to have the greatest impact on OAC mental health. Further, these data were collected using an electronic survey that was easy to administer and complete, thus the additional information collected was worth the minimal burden of the surveys. Therefore, adding quantitative surveys to future RTP workshops could increase the impact these workshops have on closing the gap between aging research and practice.

Barriers to implementation rated as having the greatest impact were associated with the care team and institutional factors rather than on characteristics of patients and their families. Similarly, strategies rated as most likely to improve implementation focused on modifications to intervention structure and delivery, integration of mental health providers and services into care teams and treatment plans, and increasing the size of the geriatric workforce. These findings suggest that changes to psychological interventions and the settings in which they are offered may have the greatest impact on OACs' access to psychological services.

When identifying themes, the study team combined some levels of Bronfenbrenner's theoretical framework due to a small number of items in a particular level (e.g., small number of barriers within the macrosystem). A priori application of Bronfenbrenner's theory may have prompted identification of items within each level by conference participants. However, levels with fewer items may also be less relevant to intervention implementation.

Only 50% of participants completed the survey. This completion rate is lower than expected which may be attributable to the length of the survey but is consistent with, if not better than, response rates for electronic surveys in the literature (Cook, Heath, & Thompson, 2000; Sheehan, 2001). Further, it is important to note that the current project did not include strategies for maximizing response rates such as financial incentives. Future RTP workshops should include techniques for increasing response rates.

The allocation of barriers and strategies into levels of Bronfenbrenner's Ecological Systems Theory was achieved through discussions among the study team rather than a formal sorting procedure, precluding determination of the reliability of these allocations. In addition, due to the small sample size, statistical analysis of mean differences was not conducted. The addition of formal sorting procedures and statistical comparison of means will improve the rigor and interpretability of future studies.

The generalizability of the barriers and strategies identified in this study is limited by a small sample recruited from primarily academic medical institutions in the New York City area. In addition, demographic data were not available on survey respondents to ensure anonymity within the small group of conference participants. Given that the majority of conference participants were mental health providers, the survey results largely reflect the perspective of this group. These limitations preclude strong conclusions regarding barriers and strategies for implementation of psychological interventions to OACs.

In summary, this project suggests that the integration of quantitative surveys into the RTP Consensus Workshop Model may enhance the interpretability of conference results and provide more specific guidance for future work at the interface of aging research and clinical care.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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