

Assessing the Strength and Integrity of an Intervention

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Purpose/Objectives: To evaluate the strength and integrity of a pilot behavioral intervention designed to assist mothers with breast cancer and their children.

Research Approach: A single-group analysis of the strength and integrity characteristics of an intervention developed for a pilot research study.

Setting: Homes of study participants in an urban area.

Participants: Seven households with a mother and father and one household with a single mother.

Methodologic Approach: Observer-reported checklists, audiorecorded intervention session data, and structured interview data obtained from study participants.

Main Research Variables: Strength of the intervention included dimensions such as the theoretical foundation, competence of the interventionist, and specificity to the breast cancer experience in the family. Intervention integrity consisted of adherence by the interventionist and participants to the intervention plan.

Findings: The strength of the intervention was determined to be an asset. Careful planning had included a framework, a defined set of scripted sessions, a competent interventionist, and content specific to the breast cancer experience. In regard to integrity, the protocol content was delivered as scripted. Improvements in the dosage and purity dimensions were found to be needed. Homework assignments and in-session skill-building approaches with the mothers were refined.

Conclusions: An intervention can be examined carefully for strength and integrity with established criteria to determine improvements needed.

Interpretation: A clinical research protocol can be improved through an assessment of an intervention's strength and integrity.

Key Points . . .

- ▶ An analysis of the strength and integrity of an intervention assists the researcher and clinician in learning what works about the intervention and what needs improvement.
- ▶ When an intervention is monitored to ensure that it is provided uniformly and treatment errors are reduced, the consumer obtains a more consistently delivered intervention.
- ▶ Standards of care that evolve through careful planning and evaluation of interventions will ensure a better match of an intervention to the needs of the designated population.

experienced. Strength indicators include whether the type, number, and duration of sessions needed to integrate the theory into practice were considered during the planning phase, as well as what skills are needed by interventionists. Through analysis of these elements of strength, the specifications of the intervention are understood more clearly by the study researchers. Having an estimate of the strength of an intervention assists in the interpretation of study results (Scott & Sechrest, 1989).

Questions such as the following are relevant to the analysis of the strength of an intervention: Was the content developed with a theoretical framework as a guide? Was a plan developed for the number and duration of sessions? What

Each year, thousands of children's life experiences are changed as a result of the diagnosis and treatment of maternal breast cancer. Case-intensive interview studies have revealed that many children have fears that their mothers will die and that they have little help in managing information about breast cancer (Shands, Lewis, & Zahlis, 2000; Zahlis, 2001; Zahlis & Lewis, 1998). A pilot study of a behavioral intervention was developed to help mothers respond to their school-age children's cancer-related concerns and enhance the quality of mother-child relationships (Lewis, Casey, Brandt, Shands, & Zahlis, 2004). The purpose of this article is to summarize the methods used to analyze the strength and integrity of that intervention and to report the results obtained.

What does the strength of an intervention mean? An intervention that has characteristics of strength is one that has been constructed with a theoretical foundation and directly addresses concerns of the study population or is specific to the situation

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