Physician, Patient, and Contextual Factors Affecting Treatment Decisions in Older Adults With Cancer and Models of Decision Making: A Literature Review

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Decision making has been defined as the cognitive process of reaching a decision (Yates, 1990). Often, it involves balancing the risks and benefits among multiple options. In geriatric oncology, balancing risks and benefits generally is difficult because of the lack of data on survival and quality of life (Bennahum, Forman, Vellas, & Albareda, 1997; Repetto, Comandini, & Mammoliti, 2001). In addition, older patients with cancer have among the lowest health literacy and numeracy rates and often suffer from poor physician-patient communication (Amalraj, Starkweather, Nguyen, & Naeim, 2009). Those deficiencies could lead to poor understanding and judgment concerning treatment risk and benefit. The knowledge level of the decision maker, quality of the available options, and potential consequences of a decision also affect the process of treatment decision making. Yates (1990), a cognitive psychologist, defined decision as a commitment to a course of action that is intended to produce a satisfying state of affairs (Yates, Veinott, & Patalano, 2003). For the purpose of this article, treatment decision making in older adults with cancer refers to a complex, multidimensional cognitive process of making a decision regarding cancer treatment options.

The treatment decision-making process in older adults with cancer is not understood clearly, in part because of the limited number of studies that systematically examined the internal (patient-related) and external (physician or system) factors that influence the decision-making process. This unclear understanding of treatment decision making is true particularly for older adults, who are underrepresented in cancer clinical trials (Di Maio & Perrone, 2003). In addition, older patients present with gerontologic issues such as a decision regarding cancer treatment options.

Purpose/Objectives: To review physician, patient, and contextual factors that affect treatment decision making in older adults diagnosed with cancer, and to relate those factors to theoretical models of decision making.

Data Sources: PubMed (1966 to April 2010), PsycINFO (1967 to April 2010) and CINAHL® (1982 to April 2010) databases were searched to access relevant medical, psychological, and nursing literature.

Data Synthesis: Physician factors in treatment decisions included physician’s personal beliefs and values, medical expertise, practice type, perception of lowered life expectancy, medical factors, power, and communication style. Patient factors included personal beliefs and values, ethnicity, decisional control preferences, previous health-related experience, perception of the decision-making process, and personal factors. Contextual factors included availability of caregiver, insurance, financial status, and geographical barrier.

Conclusions: A diverse group of factors were identified, which are likely to form a unique framework to understand clinical decision making and plan future investigations in older adult patient populations. Using longitudinal and prospective designs to examine the real-time interplay of patient, physician, and contextual factors will enable a better understanding of how those divergent factors influence actual treatment decisions.

Implications for Nursing: Oncology nurses can advocate autonomous (patient-driven), shared, or family-controlled treatment decisions, depending on an older patient’s decisional role preference. Nurses can support patient autonomy during treatment decision making by coaching patients to engage in discussion of various evidence-based treatment options and a comprehensive discussion of the probability of success for each option with specialist providers. Oncology nurses may be able to promote treatment decisions that are consistent with a patient’s personal preferences and values, with strong consideration of the patient’s personal contexts.