An integrative framework to support the assessment function of Quebec’s pivot nurses in oncology

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ABSTRACT

In Quebec, one of the key functions of pivot nurses in oncology (PNOs) is assessing the needs of people living with cancer and their families. An integrative framework is proposed to support and guide this function. This framework has been constructed from recommendations by health organizations, scientific communities and theoretical models of nursing. It was then commented upon and improved with articles about oncology nursing practice. The proposed integrative framework includes six dimensions: assessment goals, assessed individuals, assessment time points, assessment context, assessment process, and utilization of results. This is an innovative framework that structures all of the elements required for PNOs’ assessment practice.

Key words: pivot nurse in oncology (PNO), assessment, overall needs, theoretical model, cancer

INTRODUCTION

In 1998, to act upon international recommendations (World Health Organization, 1995), the Quebec government started its cancer control program (Ministère de la Santé et des Services sociaux [MSSS] & Caris, 1997). It was then suggested that an expert and easily accessible resource person be identified to support the individual living with cancer and their loved ones throughout the disease continuum. To achieve this, it designated and defined the pivot nurse in oncology (PNO) concept (MSSS, De Serres, & Beauchesne, 2000), which was quickly deployed to reach 252 PNOs in the province by 2011 (MSSS, Loutfi & Laflamme, 2011).

PNOs work within cancer control interdisciplinary teams. Their role includes four functions: 1) needs assessment of the cancer patient and their family; 2) education and information regarding the disease and treatments, as well as symptom management and available resources; 3) physical and psychological support of clients, and; 4) coordination and continuity of actions among care professionals and environments (MSSS, Lévesque-Boudreau, & Champagne, 2008). Although these functions are all inextricably linked to ensure optimal quality of life for patients (Fillion et al., 2010), the assessment plays a deciding role in implementing interventions that are timely, efficient and centred on cancer patients’ needs (Hébert & Fillion, 2011).

Although the French name “infirmière pivot en oncologie (IPO)” is particular to Quebec, there are similar health care professionals in other parts of Canada, the United States, Australia and Europe. These professionals have similar functions but their jobs have different names: Nurse Navigator (Bowman & Grim 2008), Nurse Case Manager (Fawcett, Schutt, Gall, Cruz, & Woodford, 2007), Professional Cancer Navigator (Fillion et al., 2011), Patient Navigator Nurse (Fillion et al., 2006), Oncology Nurse Navigator (Hébert & Fillion, 2011), and Cancer Nurse Coordinator (Jackson, 2008).

To guide the assessment practice of oncology nurses, several proposals have been established by various health organizations, clinical practice guidelines and theoretical models of nursing (Canadian Association of Nurses in Oncology [CANO], 2006; Fitch, Porter, & Page, 2008; Howell et al., 2009; Larson et al., 1994; MSSS & Caris, 1997; MSSS, Loutfi & Laflamme, 2011; MSSS, De Serres, & Beauchesne, 2000; MSSS, Lévesque-Boudreau, & Champagne, 2008; Rebalance Focus Action Group, 2005; Wright & Leahy, 2007). However, few attempts have been made to sum up and unify the content of the proposals. Moreover, no framework specific to the PNO’s assessment role has been developed to guide the performance of this obviously central function in the management of the oncology population.
Thus, this article aims to put forward an integrative framework to support the assessment function of PNOs in Quebec and inform the assessment practice of other health care professionals with similar roles with oncology patients.

METHODOLOGY

A qualitative descriptive design was selected to obtain a narrative synthesis of the data available in the literature on the PNOs’ assessment function. Firstly, the recommendations made by various national health care organizations regarding needs assessment for the oncology population and clinical practice guidelines for oncology nurses were consulted. Documents from the following five main organizations were summarized to describe the different components and/or characteristics pertaining to assessment: the PQLC (i.e., Quebec Cancer Control Program) (MSSS & Caris, 1997; CANO 2006), the CCIO (i.e., the Oncology Nurses Advisory Committee for Quebec) (MSSS, Lévesque-Boudreau, & Champagne, 2008), the Canadian Partnership Against Cancer, and the Canadian Association of Psychosocial Oncology (Howell et al., 2009), the Psychosocial Oncology Committee of DQLC (i.e., Quebec Cancer Control Branch) (MSSS, Loutfi & Lafllamme, 2011).

Finally, three theoretical models guiding the oncology nursing practice were explored and integrated: the Larson et al. (1994) symptom management model, the Calgary Family Systems Nursing Approach (Wright & Leahey, 2007), the Fitch et al. supportive care model, (2008). Content extraction and preliminary analyses of the consulted documents were completed by the first author (BF) according to Strauss and Corbin’s approach (1990). The other research team members (SS, LF & A-MV) were continually involved in validating the selected elements and categories to ensure data saturation and process validity. Six categories or dimensions clustering the various characteristics of the assessment function thus emerged: goals, target population, time points, content, process and assessment utilization.

Secondly, a systematic review of the literature regarding the assessment of the oncology population by PNO-type nurses was completed in order to refine and enrich the content for various selected dimensions. The databases PubMed, CINAHL and EMBASE were consulted for the period 2002 to 2011 to that effect. All the terms associated with the PNO designation (for a complete list, see Fournier, 2011) were combined with search terms linked to the assessment [assessment or follow-up or measurement] and to cancer [neoplasm(s) or oncology or cancer or palliative]. The selection of relevant articles was guided by the following criteria: a) presence of some elements (i.e., content, target population, strategy, function) or of some outcomes helping to describe the assessment process specific to the oncology population, and; b) assessment completed by a PNO or a nurse dedicated to an oncology population at any time during the disease trajectory. This process yielded 38 articles (for a list, see Fournier, 2011). While none of these articles dealt specifically with the PNOs’ assessment function, they helped describe the performance of this function in the practice setting and determine the main characteristics that seem to generate consensus. The same information extraction and validation strategy was used for this step, as well. Information present in at least two different sources or references was selected. Extracted data helped refine the content of the various dimensions previously identified, but no other dimension emerged.

FINDINGS

The resulting integrative reference model is presented in Table 1. It sums up the main elements in assessing the overall needs of the oncology population grouped under six dimensions: 1) assessment goals; 2) assessed individuals; 3) assessment time points; 4) assessment content; 5) assessment process, and; 6) utilization of assessment results. These dimensions are described then discussed in the light of nursing practice.

Assessment goals generate consensus and focus primarily on identifying the overall needs of assessed individuals according to various needs categories: physical, emotional, informational, psychosocial, spiritual and practical. This objective is consistent with the definition of the PNOs’ assessment function, as put forward by the DQLC (Québec Cancer Control Branch) (MSSS, Lévesque-Boudreau, & Champagne, 2008), i.e., the determination of needs. Another important goal of the initial assessment is screening for signs of psychological distress. In 2005, a working group of the Canadian Strategy for Cancer Control identified distress as the sixth vital sign in oncology and recommended that systematic screening be implemented with this population (Rebalance Focus Action Group, 2005). Several scientific communities have endorsed this recommendation since, and developed clinical practice guidelines to support screening for distress and implementing supportive care (Howell et al., 2009; MSSS, Loutfi & Lafllamme, 2011).

Regarding assessed individuals, it appears that every person living with cancer, whatever type it is, must receive a systematic assessment of their condition and needs (Howell et al., 2009). Special attention should be paid to people who are considered vulnerable (MSSS, Lévesque-Boudreau, & Champagne, 2008), because of their age, their precarious physical condition, their social status, lack of a social network and the complexity of their treatments (Jennings-Sanders, Kuo, Anderson, Freeman, & Goodwin, 2005).

Lastly, since the physical, psychological, social and financial impacts of cancer have serious consequences for both the individual with the disease and their significant others, the latter should also be assessed more systematically. In this regard, the Calgary model (Wright & Leahey, 2007) places emphasis on exploring family dynamics and recommends that the assessment of the individual with cancer and their family take into account the family structure, development and functioning.

Identified key assessment time points correspond with those recommended by the Canadian Association of Psychosocial Oncology and are associated with the following critical episodes across the disease and care trajectories: “initial diagnosis, start of treatment, regular intervals during treatment, end of treatment, post-treatment or at transition to survivorship, at recurrence or progression, advanced disease, when dying, and during times of personal transition or re-appraisal (e.g., in a family crisis, during survivorship, when
Assessment content corresponds to the cancer patient’s demographic and biopsychosocial characteristics such as: their disease, biological and psychological symptoms, social network and resources, environment, needs, perceptions or cognitive appraisal of their situation and coping strategies.

According to Larson et al. (1994), symptoms can be described as a subjective experience reported by the assessed individual (e.g., pain, fear, worry), or as a detectable expression of the individual’s condition by the assessor (e.g., shortness of breath, reduced mobility, crying). Gaining a good understanding of the individual’s biopsychosocial characteristics is necessary, as it helps to identify the resources they have to deal with their situation. These resources are, for example, their health, functional independence, mental capacity, education, beliefs, past experiences with a similar situation, coping strategies, social network or financial means.

The absence or lack of resources will help identify needs. Fitch et al. (2008) identify six major categories of needs: 1) physical (i.e., physical comfort, absence of pain or disabling symptoms), 2) emotional (i.e., sense of well-being, safety, reassurance when facing periods of stress), 3) informational (i.e., access to information to reduce confusion, provide insight into decision making and promote learning), 4) psychosocial (i.e., feel able to deal with the disease, feel socially accepted and supported), 5) spiritual (i.e., the search for meaning) and, 6) practical (i.e., direct assistance to complete a task or activity).

The perception or cognitive appraisal of an individual, concepts derived from Lazarus & Folkman’s Stress Theory (1984), is instrumental in identifying needs (Fitch et al., 2008). Cognitive appraisal is a conscious or unconscious process by which an individual makes a judgment or an assessment of an event in their life. Two levels of appraisal are organized around this process: the primary appraisal and a simultaneous secondary appraisal. The primary appraisal sheds light on the meaning of the event and its impact on the individual’s well-being. The secondary appraisal relates to the judgment the individual makes about their ability to face the event. The individual achieves the latter by considering their past experiences, perception of the event and resources. A cancer patient and their family members risk experiencing high levels of stress even some distress if they assess the event as a threat (e.g. receiving chemotherapy is dangerous) and do not manage to find strategies to face it, i.e., coping strategies (e.g., learn how to manage the side effects or get help at home).

The concept of coping corresponds to the dynamic process during which strategies are mobilized to meet the needs and maintain a state of well-being (Lazarus & Folkman, 1984). Coping strategies are developed from an individual’s intrinsic characteristics and resources. These strategies can be categorized on the basis of their objective and may be efficient at certain times or in certain situations, but not in others (Lazarus & Folkman, 1984). Some of them focus on problem solving and their mobilization is often associated with the secondary appraisal of stress (e.g., seeking information to deal with the uncertainty associated with cancer). Others focus on managing the emotional response (e.g., restructure the belief that it
is impossible to have life goals when one has cancer, finding meaning in having to live through the disease) or on emotion regulation behaviours (e.g., relaxation, physical exercise). In the context of cancer, Fitch et al. (2008) suggest that supportive care can be implemented to promote coping and alleviate distress.

The assessment process is complex and dynamic and requires specific knowledge, skills and tools. CANO (2006) defines the assessment as “a systematic, dynamic process by which the nurse through interaction with the client, significant others and health care providers, collects and analyses data about the client”. This definition corresponds to a person-centred assessment process, as recommended by various clinical practice guidelines (Howell et al., 2009) and theoretical models of nursing. The Fitch et al. model (2008) stresses the importance of a person-centred approach. Larson et al. model (1994) states that this importance is linked to the interaction between the individual with cancer, their family and health care professionals in the symptom assessment and management process. Finally, the Calgary model (Wright & Leahey, 2007) highlights this importance by placing enormous value on family dynamics. In other words, the assessment process seems to be built around the implementation of a nurse-patient-family therapeutic relationship in order to enhance the empowerment of the individual and their family in adapting to the illness (Fillion et al., 2006, 2012; Jennings-Sanders et al., 2005; Seek & Hogle, 2007).

To guide the assessment process and to operationalize its content, several authors have suggested structuring the information collection with the help of various tools such as questionnaires or interview guides (Richardson, Medina, Brown, & Sitzia, 2007; Wen & Gustafson, 2004). In Quebec, PNOs have been using since 2013 a standardized form entitled “Évaluation initiale du client suivi en oncologie” [Oncology Patient Assessment] to guide their interviews and collate their information (Fournier et al., 2013). PNOs are also at the centre of the dissemination and utilization of the Outil de dépistage de la détresse [Screening for Distress Tool] implemented in specialized oncology teams (Fillion et al., 2011). This tool makes it possible to quickly screen for the presence of psychological distress and identify the patients’ unmet needs, thus facilitating the assessment process.

Utilization of results depends on the quality of the assessment. According to the Institute of Medicine (2008), only a structured and systematic assessment of the needs in the oncology patients’ physical, psychological, social and spiritual spheres ensures the delivery of supportive care that is individualized and administered at the right time and/or of referrals to psychosocial intervention specialists. Taking inspiration from the conceptualization by Fillion et al. (2012) regarding the role of PNOs, the assessment results should be used to: a) guide the clinical interventions of PNOs and other practitioners in order to enhance the patient and family’s empowerment; b) improve the continuity of care among the various practitioners; and, c) help improve this population’s quality of life.

**DISCUSSION**

In the face of disparities in the information currently available about oncology nursing practice and the complexity of the assessment function vested upon these practitioners, our aim was to put forward an integrative framework to support the PNOs’ assessment function in Quebec. At the end of the process, we summed up and mapped out in six dimensions all of the spheres and elements specific to the assessment role (Table 1).

Among the goals of the assessment, it was determined that the systematic assessment of needs and the screening for distress by PNOs enhance the organization of care and facilitates coping with the illness (Cruickshank, Kennedy, Lockhart, Dosser, & Dallas, 2008; Fillion et al., 2011; Liebert et al., 2003; Melnyshyn & Wibonic, 2006).

Although every cancer patient must be assessed, it appears that the individuals who are more systematically assessed are more likely to belong to so-called vulnerable populations because of their sociodemographic characteristics and the complexity of their treatment. It is the case for the elderly, low-income and poorly educated people (Jennings-Sanders et al., 2005), as well as individuals living with lung cancer (Moore, 2002; Skrutkowski et al., 2008), ENT cancer (Fillion et al., 2009) and neurological cancer (Jackson, 2008). Finally, while some authors report that needs assessments must also include the patient’s loved ones (Fillion et al., 2009; Wilcox & Bruce, 2010), in reality, very few of them have their needs assessed (Fillion et al., 2006).

It was noticed that in everyday nursing practice, the assessment time points vary greatly. Although the recommended assessment must be completed over several time points of the disease continuum (Bowman & Grim, 2008; Fillion et al., 2010; Jackson, 2008; Jennings-Sanders et al., 2005; Pedersen & Hack, 2010; Sussman et al., 2011), it is sometimes limited to the illness investigation phase (Campbell, Craig, Eggert, & Bailey-Dorton, 2010), survival phase (Kimman 2007; Knowles, et al., 2007) and palliative phase (Griffiths, Ewing, & Rogers, 2010).

The assessment content analysis revealed an imposing list of information that can be obtained to understand the individual better, determine their needs and implement interventions. The assessment can thus include the sociodemographic characteristics of referred individuals (Fawcett et al., 2007), their history and physical health condition (Jennings-Sanders et al., 2005; Liebert, et al., 2003), as well as mental health (Fawcett et al., 2007; Fillion et al., 2006), the structure and functioning of their family and social network (Fawcett et al., 2007), the existence of financial or functional problems (Fawcett et al., 2007), their understanding of their disease and treatment (Campbell et al., 2010; Goodwin, Satish, Anderson, Nattinger, & Freeman, 2003; Skrutkowski et al., 2008), and the resources they have to overcome the challenge and adapt to the disease (Campbell et al., 2010).

Regarding the assessment process, Maliski, Clerkin and Litwin (2004) describe the assessment as the process through which PNOs refine and target the needs of the oncology population and select the strategies to meet them. Individuals appreciate a human approach, as person-centred communication promotes the development of a therapeutic relationship (Fillion et al., 2010; Sussman et al., 2011). Unfortunately, Griffiths et al.
have developed tools, written forms inspired by theoretical models (Jennings-Sanders et al., 2005) or indicator lists (Cruickshank et al., 2008) and screening tools such as the one for distress (Fillion et al., 2011; Holland & Bultz, 2007; Swanson & Koch, 2010). As none of these tools are able to pinpoint the population’s needs on their own, an approach combining self-administered questionnaires, a semi-structured interview and tools specific for certain conditions is recommended (Richardson et al., 2007; Wen & Gustafson, 2004). Thus, the assessment process is primarily based on a person-centred approach to establish a therapeutic relationship and draws upon knowledge, clinical skills and the use of specific tools.

Finally, according to women with breast cancer, assessment result utilization represents a crucial step in responding to their needs (Liebert et al., 2003). The assessment promotes empowerment and supports problem solving (Fillion et al., 2006) by guiding the teaching of self-care strategies (Bowman & Grim, 2008). The assessment also helps to accurately determine missing or incorrect information (Melinyshyn & Grim, 2008). The assessment also promotes the usefulness and relevance in the examination of the PNOs’ assessment function. This is why we recently undertook a qualitative study with some PNOs in the Québec City area by using an integrative framework (Fournier, 2011). Overall, our results illustrate the clinical relevance of our model and confirm its usefulness and relevance in the examination of the PNOs’ assessment function.

**REFERENCES**


In closing, while some studies focused on the role of PNOs in Quebec (Cook et al., 2013; Fillion et al., 2006, 2008, 2009, 2010, 2011, 2012; Hébert & Fillion, 2011; Skrutkowski et al., 2008), none of them specifically addressed the PNOs’ assessment function. The integrative framework proposed to support PNOs’ assessment function in Quebec builds upon proposals from health care organizations, clinical practice guidelines in oncology and theoretical models of nursing. It supports assessment practices of PNO-type nurses in Quebec, in the rest of Canada and in other industrialized nations. It is innovative, as it integrates and structures the main elements required to understand the assessment function of PNO-type nurses. Lastly, it can be useful to PNOs by reconciling their assessment practices with emerging standards.


