Evidence-based medicine: Truths?

In dwelling upon the vital importance of being true to the best light of what is observed in life and for the sake of taking up miscellaneous information or curious facts, but for the sake of saving life and increasing health and comfort. The caution is necessary to be observed that, by dwelling upon the manner how many men (some woman do it too), practically behave as if the scientific evidence were the only one in view, or if as if the sick body were but a reservoir for stoming medicines into, and the surgical disease only a curious case for medical or surgical special information. This is really no exaggeration (Nightingale, 1840/1859, p. 70).

More than 150 years ago, Florence Nightingale (1840/1859) insightfully challenged the medical and nursing community to consider that empirical science was but one way of knowing about a patient to improve length and quality of life. In Notes on Nursing, Nightingale (1840/1859) went to offer a view of patients that goes beyond the biomedical focus on curiying disease, also considering the mind-body-spirit connection and its effects on health and healing. As such, Nightingale (1840/1859) was among the first nurses to write about sources of knowledge in addition to empirical science that may create a foundation for clinical decision making.

Despite Nightingale’s early writings about the importance of sources of knowledge in addition to scientific evidence3 to make practice-based decisions, the dominant influence of Western scientific and biomedical paradigms persists in cancer care today (Sribun & Twerk, 2007; Hollenberg & Mazurin, 2010). Evidence-based medicine (EBM), which disregards traditional ways of knowing (e.g., historical, experiential) in preference of scientific evidence generated via randomized controlled trials (RCTs) that is presented as value-free, has been widely embraced as a basis to inform clinical decision making and practice in cancer care in North America (Dubovoy, Gutay, & Ashcroft, 2009; Haylock, 2006). EBM is defined as the conscientious, explicit, and judicious use of best evidence in making decisions about the care of individual patients (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). Encouraging a Cartesian reductionist paradigm that reduces people and objects into their smallest parts to understand the whole, similar to the parts of a clock being dismantled to understand why it is not working. EBM employs a quantitative methodological approach to develop new knowledge. By controlling for possible "confounding" variables or conditions (e.g., a person’s experience of a situation, or their preferences, values, beliefs) that might affect the variable under study, EBM produces adding factors from values and context to find the "truth." For example, the testing of a new treatment for the management of oral pain in the mouth and throat, "whether of cancer or of interference in the mouth of EBM.

There is no doubt that EBM has played an important role in improving many patient outcomes and has allowed people diagnosed with cancer to live longer than ever before. From a nursing perspective, it is the "white noise" and "interference," tuned out by EBM, which is of great interest and value to understand in order to fully address the needs and ensure good quality of life for people and families as they live longer with cancer. In fact, to deliver care according to the CANO/ACCN’s Social Normative and Competencies for the Specialized Oncology Nurse (CANO/ACCN, 2006), one must reach beyond EB misinformation and social regular source and type of knowledge upon which to base practice decisions. Nurses need to be aware of the various critiques of EBM, which is important to understand at least three key challenges that can occur with EB (i.e., RCTs). Other sources of knowledge may be useful to contextualize the knowledge produced via EBM in relation with individuals and families experiencing cancer. I offer a very brief introduction to three of the major critiques to suggest challenges and solutions to address these criticisms.

One of the critiques of EBM is that it is important to understand at least three key challenges that can occur with EB (i.e., RCTs). Other sources of knowledge may be useful to contextualize the knowledge produced via EBM in relation with individuals and families experiencing cancer. I offer a very brief introduction to three of the major critiques to suggest challenges and solutions to address these criticisms.

First, the challenge relates to the fact that the knowledge produced via EBM allows only for the answering of questions regarding intervention effects for groups or population characteristics rather than individual patients (Lambert, 2006; Rosner, 2009; Pettigrew, 2002). EBM gives us information about commmonalities rather than the unique characteristics of the individual. In other words, EBM can inform us about what works under a specific hierarchy of acceptable outcomes but is of interest or value to the actual recipient of care, EBM runs the risk of further marginalizing those who cannot guide the nurse or provide knowledge, beliefs, and values that make sense to the patient and layer and intersect to create a unique set of conditions for that individual. Nor does it support nursing’s efforts to explore and address the structural factors (e.g., colonization, poverty, stigma) that may prevent the uptake of evidence among groups who experience marginalizing conditions within society (Goldenberg, 2006). Notably, Colletta (2006) reminds us that a grant single mother who has English as a second language, and is experiencing nausea and vomiting post chemotherapy for her breast cancer. She holds beliefs about the use of herbal products in lieu of antimetics, and has been unable to communicate to her health care team that she cannot afford the aromatherapeutics or alternative supportive drugs. To effectively care for this woman and her family, in addition to evidence about effective interventions described in the symptom management guidelines, the nurse must draw on many sources of knowledge, such as, for example, the lived experience of being a new immigrant woman facing health issues, the role of culture and spiritual beliefs. Both experiences involve in complementary medicine decision making in the context of cancer treatment (i.e., single, evidence-based, or something in between) to provide more-needed perspective to contextualize the population-based knowledge from EBM, to make sense and be applicable to the individual and family in front of us. As Krupa (2010) alludes to, to do with the tendency of RCTs (the gold standard of evidence within EBM) to include subjects that are within the threshold and uptake of findings are intended (Rosner, 2011). For example, RCTs (e.g., Szwarcz, 2007) refer to other chronic health conditions, as this may interfere with the intervention under study in relation with individuals, subjects who generally are recruited into RCTs tend to be healthy and free from other socioeconomic status and have breast cancer (Jenkins et al., 2013). Consider that cancer is a disease tackled by many people, even if the people diagnosed at age 60 or older, living longer with cancer and other chronic illnesses associated with aging may be more prone to be recruited from patients with younger. Although evidence indicates that such findings may severely limit the generalizability of evidence from RCTs within the EBM paradigm. The third critique of EBM is that the lived experience of the patient is not the only value, or the whole is the sum of the parts, for people who are complex, unique beings.

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Confounded and...
Réflexions sur la recherche

La médecine fondée sur des données probantes: des demi-vérités?

par Tracy Truant

Lorsqu'on examine l'importance vitale d'une observation approfondie, il ne faut jamais perdre de vue l'objectif de l'observation. Elle ne vise pas à engager des renseignements divers ou des faits curieux et doit plutôt servir à sauver des vies et à rehausser l'état de santé et le confort. Cet avertissement peut paraître inutile mais il est assez étonnant de savoir combien d'hommes (et même de femmes) se comportent pratiquement comme si l'aspect scientifique est le seul qui existe ou comme si l'organisme malade n'est qu'un réservoir qu'on remplit de médicaments et comme si le problème chirurgical est tout simplement un fait curieux que la personne qui le subit vient présenter pour l'information du médecin. Et il ne s'agit pas là d'une exagération (Nightingale, 1946/1859, p. 70 [traduction libre]).

Il y a plus de 150 ans, Florence Nightingale (1946/1859) invitait judicieusement le milieu médical et infirmier à réfléchir au fait que la science empirique** constituait seulement une des façons de connaître le patient afin d'améliorer sa durée et sa qualité de vie. Dans son ouvrage Notes on Nursing, Nightingale (1946/1859) poursuivait sa pensée en offrant un point de vue sur les patients qui dépassa l'orientation biomédicale*** de la guérison de la maladie et s'étend également sur la relation corps, esprit et psychisme et sur ses effets sur la santé et la guérison. Cela fait que Nightingale (1946/1859) a été l'une des toutes premières infirmières à aborder des sources de savoir en plus des sciences empiriques constituant les assises de la prise de décision clinique.

Malgré les écrits déjà anciens de Nightingale sur l'importance des sources de savoir qui complettent les preuves scientifiques**** dans la prise de décisions axées sur la pratique, les influences de la pensée scientifique et le paradigme biomédical occidentaux continuent de prédominer dans le domaine des soins de cancérologie actuels (Broom & Tovey, 2007; Hollenburg & Muzzin, 2010). La médecine fondée sur des données probantes (MFPD), laquelle met en doute les modes de connaissance traditionnels (p. ex. historiques, expérientiels) pour accorder toute la préférence aux preuves scientifiques obtenues par le biais d'essais cliniques aléatoires à la fois objectives et acontextuelles, est, en Amérique du Nord, le principal fondement de la prise de décision et de la pratique cliniques dans le domaine des soins de cancérologie (Djulbegovic, Guyatt & Ashcroft, 2009; Haylock, 2006).

La MFPD est définie comme étant «l'utilisation consciencieuse, explicite et judicieuse de la meilleure preuve actuelle dans le processus décisionnel concernant les soins aux patients» (Sackett, Rosenberg, Gray, Haynes & Richardson, 1996, [traduction libre]). La MFPD utilise une approche méthodologique quantitative afin de développer de nouvelles connaissances en adoptant un paradigme réductionniste cartésien visant à réduire les individus et les objets à leurs parties les plus infimes dans le but de comprendre l'ensemble, un peu comme on démonte une horloge afin de comprendre pourquoi elle est en panne. En contrôlant les variables ou facteurs de confusion éventuels (p. ex. l'expérience individuelle d'une situation, ou les

Au sujet de l'auteure

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