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Guest Editorial

The future of nutrition care in hospitals

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Malnutrition affects up to 50% of hospitalised patients (1, 2) and has severe consequences for patients and the health care system. Malnutrition increases the risks of mortality (3) and complications like pressure injuries (4), infections (5) and falls (6) and is associated with increased length of stay, readmissions and higher hospital costs (3). Inadequate dietary intake is the major modifiable risk factor for malnutrition and the majority of patients fail to meet their nutritional needs in hospital (7). Improving dietary intakes among hospitalised patients is difficult as the problem is complex and multifactorial. Patient related factors include poor appetite; nutrition impacting symptoms such as nausea or constipation; problems with self-feeding; chewing or swallowing problems; increased nutrition requirements; older age and individual preferences (8-10). Hospital related factors encompass nutrition care practices, hospital foodservice and the mealtime environment (10).

Many interventions have targeted improved nutrition among hospitalised patients, and have included supplementation with oral nutrition support (11) or fortified foods (12), protected mealtimes (13), mealtime assistance (14) and nutrition education and counselling (15, 16). Most have failed to achieve improvements in nutritional outcomes, and those that have succeeded have not been translated into practice as they are either not practical or sustainable. Hence, malnutrition continues to be a major problem in hospitals. A new approach is needed; one possible way forward is to actively involve patients and/or families, and hospital staff, as the main parties able to influence patients' nutrition intake and nutrition care.

As researchers, we cannot assume to know why malnutrition is occurring among hospitalised patients, particularly when each patient, ward, hospital, health service and country are unique.

The issues contributing to poor nutrition in one setting are not likely to be the same as those in another; in the same way the problems or barriers faced by patients and staff are likely to differ among individuals. Interventions therefore need to be context-specific and relevant to their target population. They also need to be feasible, effective and sustainable in real world practice. This highlights the need for an integrated knowledge translation approach to nutrition research and patient-centred interventions to improve dietary intakes.

The Canadian Institute of Health Research defines integrated knowledge translation as a research process involving knowledge end-users as equal partners alongside researchers, which leads to research that is more relevant and useful to knowledge users (17). This partnership ensures that the problem being addressed is significant to end-users, and the strategies used to address it are feasible, acceptable and sustainable; resulting in interventions that are more likely to succeed. Too often have we seen studies testing a nutrition intervention that never gets implemented in practice. There have been many large, randomised trials of nutrition interventions that have been rigorously conducted, with significant results (which look great on paper when published) but, in reality, are not feasible to implement in usual practice. Large-scale trials of oral nutrition supplements are one example of this. In theory, providing blanket oral nutrition support to all patients at risk of malnutrition would result in improved energy and protein intakes among these patients; and this is supported by these trials (11). However, the findings of these trials fail to be translated into practice, because providing blanket oral nutrition support to all at-risk patients may not be feasible or acceptable to patients, staff, or hospitals in the real life setting.

Consistent with the integrated knowledge translation approach is the notion of patient-centred nutrition care. In particular, patients should be actively involved or engaged in their own care, so they can make informed health care decisions and contribute to their own health status. And, as reflected in integrated knowledge translation, patients are an important end-user group for interventions targeting nutritional intake. When patients participate in their care they are safer, have better outcomes, and are more satisfied with their care (18). Only a few studies have used patient participation in nutrition care as an intervention strategy to improve dietary intakes in hospital, despite theory and evidence suggesting that this may be effective. The studies conducted so far have shown success in improving patients' dietary intakes (19, 20). For example, actively involving hospital patients in their nutrition care through self-monitoring intake (i.e. keeping their own food record) and participating in guided nutritional

goal setting with a dietitian or nurse improves energy and protein intakes in relation to estimated requirements (19, 20).

Patients can participate in many ways, and are a resource that should be utilised. Patients are the best source of information about themselves and their care, including their individual needs and preferences. There are many nutrition-related tasks in hospital that even moderately sick patients could do themselves with minimal training, including malnutrition risk screening, food intake monitoring and weight monitoring; and contributing to their own nutrition plan. Not only is this encouraging patients to be actively involved and take responsibility for their nutrition in hospital, but patients are also likely to gain knowledge and awareness of nutrition and its importance in their recovery. This could also save staff time by allowing patients to do simple things themselves. In the research on health literacy, there is evidence that knowledgeable patients have better outcomes (21, 22). Active participation is also extremely empowering, as patients are more aware of their care and can make informed decisions about it. Hospitalisation has been described as one of the most disempowering experiences someone can have (23), which is something we as health care professionals need to change. Perhaps, giving patients control over some simple nutrition-related activities may help restore some power to patients. Food is something familiar to patients and families. That is, everybody eats and knows their likes and dislikes. Thus engaging patients in this important activity draws on their own experiences.

Being in hospital doesn't have to be a disempowering experience. Healthcare professionals have the ability to engage patients in their health care, which can affect their outcomes and experiences in hospital. Food and nutrition is an area in which many patients and families feel comfortable participating. As hospital malnutrition continues to be a major problem, despite much effort to address it, a change in the way we conduct nutrition research and deliver nutrition care is needed. Actively involving those who are in prime positions to affect change in patients' nutrition (that is, the patient and/or their family and hospital staff) in research and practice is important for leading to actual improvements in nutrition outcomes. This approach could make for a brighter future for nutrition in hospitals.

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