Approaches to considering sex and gender in continuous professional development for health and social care professionals: An emerging paradigm

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Abstract

Consideration of sex and gender in research and clinical practice is necessary to redress health inequities and reduce knowledge gaps. As all health professionals must maintain and update their skills throughout their career, developing innovative continuing professional education programs that integrate sex and gender issues holds great promise for reducing these gaps. This article proposes new approaches to partnership, team development, pedagogical theory, content development, evaluation and data management that will advance the integration of sex and gender in continuing professional development (CPD). Our perspectives build on an intersectoral and interprofessional research team that includes several perspectives, including those of CPD, health systems, knowledge translation and sex and gender.

Introduction

Our research team has been involved in designing and evaluating continuing professional development (CPD) activities for many years (Légaré et al. 2010, 2014). In this article, we suggest approaches to integrating sex-and-gender considerations into CPD design. These approaches will be used by our intersectoral, interdisciplinary team to co-design sex-and gender-sensitive CPD activities for French-speaking health professionals in Canada, with relevance for other research teams and development projects with similar goals.

We use the word “sex” to refer to the biological attributes that distinguish male from female, and “gender” to refer to men and women’s socially constructed roles, identities and behaviors (Coen and Banister 2012).

Knowledge gaps

Knowledge translation (KT) science and practice display obvious gaps in considering sex and gender in research (Tannenbaum et al. 2016). First, sex as a biological variable is understudied. Disease manifestations and outcomes differ between the sexes. Twice as many women suffer from depression, for example, and three times as many men as women commit suicide (Turecki and Brent 2016; Kuehner 2017). Studies often neglect the structural influence of gender on

health-related variables such as housing, occupation and socio-economic status (O'Neill et al. 2014).

Addressing the gaps

Research that includes sex- and gender-based analysis produces more reliable evidence and can lead to better recommendations, more precisely-targeted interventions, and better outcomes. It should also lead to more equitable, effective and efficient health care services and policies (Jackson et al. 2006). Some countries have created tools for evaluating sex and gender integration in research applications, such as the Women and Minorities Inclusion Decision Tree, for NIH grant applicants in the United States (Clayton 2016), and the European Research Area Network's Integrating Gender Analysis in Research (IGAR) checklists (GENDER-NET). The Canadian Institutes for Health Research (CIHR) now require reporting of sex-and-gender considerations on all applications; a sex-and-gender champion on each team; a sex-and-gender platform in all large collaborations; and completion of sex-and-gender training modules by principal applicants (Johnson et al. 2014; Duchesne et al. 2017).

Yet a 2017 review suggested that only 35% of Canadian practice guidelines reported screening, diagnosis or management considerations specific to sex or gender, and only 25% used the terms "sex" and "gender" correctly (Tannenbaum et al. 2017). Research results still need to be translated into practice. CPD programs for health and social care (HSC) professionals could play a supporting role.

Continuing professional education

HSC professionals need to consider sex and gender in (a) critical appraisal of scientific literature; (b) interpreting clinical practice guidelines; (c) identifying risk factors for illnesses; (d) identifying variables that may affect treatment effects; (e) communication styles; and (f) understanding implications of care decisions (Rojek and Jenkins 2016). Medical curricula are beginning to address sex and gender (Sex and Gender Medical Education Summit Proceedings 2015). HSC professionals need support in developing their capacity to consider the influence of sex and gender and in translating this into clinical practice.

CPD is a cornerstone of KT (Davis et al. 2003) in that it mobilizes professional and regulatory bodies as well as educational institutions to make changes in clinical practice (Ferlie and Shortell 2001). In Canada, for example, CPD is a requirement for maintenance of a professional license and is partly paid for through professional dues.

We define CPD as all educational activities serving to maintain or increase the knowledge, skills, work performance, and relationships that a clinician uses to serve patients, the public or the profession (Davis et al. 2009; National Academy of Science 2010).

Approaches

We propose a number of interrelated approaches to integrating sex-and-gender considerations into CPD that could be considered by a research team or by other professional and regulatory bodies designing CPD activities. These approaches cover five areas: intersectoral team and project development, pedagogical theory, content development, evaluation and data.

Team and project development

Integration of sex and gender into scientific research has given rise to a whole sector dedicated to this task. But stakeholders in CPD belong to a variety of sectors. For example, the KT sector, which is proposing new sex-and-gender sensitive approaches (Jull et al. 2017). Developers and producers of CPD, including HSC managers and institutions, must necessarily be involved in integrating sex-and-gender considerations into CPD. Patients and consumers, too, want care that reflects sex-and-gender considerations. An intersectoral and interdisciplinary team of stakeholders could ensure that sex-and-gender considerations are integrated into CPD activities in a way that reflects everyone's interests. Such a team needs first to agree on why sex-and-gender considerations should be integrated into CPD. It needs to reflect on the sex and gender of team members, discuss how this matters, and strive to achieve sex equity (Barros del Río and Sánchez de Madariaga 2016). It also needs to address methodology, terminology, language and metrics.

Methodology

Participatory research is one approach that is appropriate for team and project development. Participatory research seeks to balance interests, benefits and responsibilities between knowledge users and their research institutions, and would ensure that the entire process of developing a CPD activity, from planning to dissemination of results, is transparent and accessible to all parties (WHO 2015). A participatory research approach could apply in all phases of CPD development, including training needs analysis, stakeholder engagement, co-construction of CPD activities, evaluating them, recommendations and sustaining partnerships in preparation for scale-up.

Terminology

Creating a common repertoire of terms and concepts regarding sex and gender is an essential step in developing a coherent framework for co-creating CPD activities. As each sector has its own terminology with meanings and associations specific to that sector, a common vocabulary needs

to be agreed on. Some scientists, for example, may see "feminist" as a term that has not expanded sufficiently to be useful in discussing the fine nuances of the various sex-and-gender-based approaches to reducing inequalities in HSC (Rowe-Finkbeiner 2004).

Language

The influence of gender on language is central in KT, since knowledge cannot be "translated" without it. Language is an inherent component of a society's cultural identity (Fraser 2016). A potential source of inequity in many contexts is the predominance of one language over others in scientific publishing and research funding (knowledge production): the publicly-funded Canadian Institutes of Health Research acknowledge that grant applications in English and by men are more successful than those by women and in French (CIHR 2017; Witteman et al. 2017). Research and professional development are essential cultural building blocks for the significant Canadian population whose mother tongue is French (20% in Canada, 77% in Quebec) (Statistics Canada 2016). Furthermore, integrating sex-and-gender considerations into KT activities in French is particularly difficult because of the gendered nature of the language: every noun and pronoun has an assigned gender and adjectives must match these. Traditionally there are no neutral or gender-inclusive forms. Responding to this challenge in KT helps to keep sex-and-gender considerations front and foremost.

Metrics

In terms of developing approaches in keeping with integrated knowledge translation (iKT) principles, a comprehensive metric for assessing sex-and-gender integration in research projects has been developed by Day et al. (2017) that includes detailed scales on data analysis, data reporting, KT planning and patient engagement.

Pedagogical approaches

New approaches are needed for analyzing sex-and-gender considerations specifically in the CPD context (e.g. health institutions, professional regulators and CPD providers) and in CPD pedagogical theory and goals (i.e. the targeted clinical behavior).

CPD context

To analyze sex-and-gender considerations in the CPD context, four gender constructs (referred to here as RIRI) may be useful: (a) Roles (e.g. as a healthcare provider); (b) Identity (e.g. personality traits), (c) CPD Relationships (e.g. with colleagues or patients) and (d) CPD Institutional culture (e.g. professional expectations, accreditation opportunities) (Johnson et al. 2009; Coen and Banister 2012; Tannenbaum et al. 2016).

CPD development theory

One model that has been at the forefront of CPD program development is the Theory of Planned Behaviour (TPB), a conceptual model to predict behavioral change among healthcare professionals (Godin et al. 2008). This model identifies variables that can be modified to change behaviors. According to the TPB, clinical behaviors are influenced by behavioral intention, which is itself derived from the other factors such as one's habits, social influences and beliefs about one's abilities. However, theories for developing CPD were not conceived to take sex-and-gender considerations into account. For example, the key papers on the Theoretical Domains Framework, a framework partly based on the TPB that is widely used for assessment of barriers to implementation, makes no reference to sex or gender (Sarmast et al. 2014). Other adult learning theories, such as Knowles's andragogy, are also blind to sex-and-gender considerations such as preferred learning styles or learner motivations (Knowles 1984). Rethinking theories involves examining assumptions and ensuring that concepts adopted do not blind researchers to aspects of sex and gender that could be important sources of new knowledge or affect clinical behavior (Gendered Innovations n.d.). The most commonly used theoretical and pedagogical approaches to CPD could be analyzed using questions such as (a) Are the TPB and its related models equally applicable across sexes, genders and other variables? (b) Is there relevant evidence about sex and gender in the field, and how can the theory be reformulated to take this evidence into account? (Gendered Innovations n.d.; Tannenbaum et al. 2016).

Content development

The implications of sex and gender on the topic chosen must be part of determining CPD content (Moerman et al. 2009). There may be new evidence on sex and gender for the chosen condition. For example, heart disease has been defined as a problem affecting middle-aged men, yet is also a major killer of women (Bairey Merz et al. 2010). New evidence will also emerge as the sex distribution in clinical trials is equalized: currently it is 70% men and 30% women (Raz and Miller 2012). Systematic reviews that applied sex-and-gender criteria should be sources for CPD content.

Evaluation

The Kirkpatrick model is often used to evaluate CPD activities (Kirkpatrick and Kirkpatrick 2016). This model evaluates the effectiveness of a training course in CPD by measuring (a) participants' reactions, (b) improvements in knowledge, skills or attitudes, (c) changes in behavior and (d) organizational results. Most evaluation tools only address (a) and (b). We developed a 12-item instrument to assess the impact of CPD activities on health professionals' clinical behavioral intentions (Légaré et al. 2014). This instrument could be adapted to assess intentions to consider sex and gender. The RIRI gender constructs (roles, identity, relationships and institutional culture) could be integrated into the Kirkpatrick model or other training evaluation models, as well as into the assessment of barriers or facilitators to CPD uptake.

Data collection, analysis and reporting

Best practices must be developed for managing CPD evaluation data, including data collection (e.g. evaluation forms and other tools that capture sex and reflect a wide range of gender identities); analysis, and reporting (e.g. disaggregated by sex/gender). KT plans should not only be customized for relevance to all CPD stakeholders (Day et al. 2017) but should consider sex and gender in the presentation of results.

Conclusions

Integrating sex-and-gender considerations into CPD development is highly complex and operates at many levels: human resources (sex balance in the team), context analysis (considering the gendered nature of CPD contexts), operational (research approaches), curriculum production (based on evidence that reflects sex-and-gender differences), behavior (a CPD activity that improves sex-and gender-sensitivity among clinicians), evaluation, data management and knowledge dissemination.

These new approaches could facilitate the generation and translation of knowledge in a number of areas: (i) knowledge about how to integrate sex- and-gender considerations into CPD development in all its phases, including team development, pedagogical theory, content development, evaluation and data management; (ii) knowledge about sex- and gender-sensitive teaching practices; (iii) knowledge about sex- and gender-sensitive evaluation of CPD.

These approaches are intended for an intersectoral, interdisciplinary team wishing to co-design sex- and gender-sensitive CPD projects. The approaches could be translated upstream into pre-graduate programs, training CPD providers and their scientific committee members, and training the next generation of researchers in sex- and gender-sensitive KT and CPD.

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