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Letter to the Editor

Cervical cancer screening among immigrant women: Framing the barriers through solution oriented lens

We read with great interest the article by Chan et al. (2019) published recently in the European Journal of Oncology Nursing. In that article, using a cross-sectional exploratory correlational study design with pathway analysis, the authors tested their hypothesized path model and examined the relational effects of multi-level factors on screening behaviours among South Asian immigrant women residing in Hong Kong. Data was collected at the community level through face-to-face interviews using a structured survey. Participants were engaged through community centres and ethnic minority serving agencies as well as approaching them in their common place of gatherings at the community levels, such as parks, health centres, workplaces, or churches, temples or mosques. Among a total of 909 eligible Indian, Pakistani, and Nepalese women, 776 consented and completed the survey (response rate of 85.4%). The commending efforts of the authors led to the development of an explanatory model to explore the cervical cancer screening behaviour among South Asian immigrant women. The authors reported that fifteen factors (ranging from intrapersonal, interpersonal, organizational, and community levels) affect the women's screening behaviour. For example, "*Language use, modesty and crisis orientation at the community level and clinics known to be available for a Pap test at the organisational level had an inter-relationship with cancer fatalism, perceived barriers to and benefits of screening at the intra-personal level, to cause a change in the final screening behaviour.*"

In our recently published manuscript, we summarized the research regarding barriers to cervical cancer screening (Table 1) among immigrant women in Canada (Ferdous et al., 2018). We conducted a comprehensive search (Ahmed et al., 2016) and synthesis (Samnani et al., 2017) of academic and grey literature to capture the reported barriers through the perspectives of immigrant populations, healthcare providers, and stakeholders. Our initial search yielded 687 articles and, after applying the inclusion criteria, we identified 28 studies for final synthesis. We used a thematic analysis approach to categorize the barriers identified across the studies. Six major thematic categories emerged: (a) economic barriers; (b) healthcare system-related barriers; (c) cultural barriers; (d) language barriers; (e) knowledge-related barriers; and (f) individual-level barriers. Within these thematic categories, patients', healthcare providers', and stakeholders' perspectives were presented to provide an outline on which future engagement toward solutions could be planned. Using a thematic analysis of the barriers helps organize the material, but grounding the themes and the identified barriers within a theoretical framework is helpful when considering possible solutions. Anchoring our identified barriers within the theoretical framework of Social Ecological Model (SEM) (Centers for Disease Control and Prevention, 2018; Sallis et al., 2008) offers a holistic overview of the multilevel barriers faced by immigrant women in accessing cervical cancer screening and helps explain these findings in a solution-oriented way. Fig. 1 illustrates the barriers grounded across interpersonal, interpersonal, institutional, community, and public policy levels. This grounding of barriers within the SEM framework will aid in developing interventions directed at mitigating barriers.

Early detection through screening is very important, as cervical cancer is highly preventable if detected early. Initiatives are warranted to improve immigrant women's access to screening services, especially because immigrants continue to be under screened both in the U.S.

Table 1

Themes and underlying barriers to cervical cancer screening among immigrant women in Canada identified through syntheses of literature [a].

Theme	Barriers
Sociodemographic factors associated with under screening	- Extreme age groups (older/younger) - Lower educational attainment - Less acculturation - Being single
Economic barriers	- Costs (transportation/child care/time off work) - Low income/socioeconomic status - Frequent moving of immigrants - Intervention not adequately reimbursed
Healthcare system-related barriers	- No regular doctor - Lack of appropriate reminder system - Dissatisfaction with patient/provider interaction - Lack of physician recommendation/consult - Heavy workloads of physicians - Dearth of acceptable health care provider/female provider - Long waiting time - Service is inconvenient/difficult to access - Lack of appropriate services/referral pattern - Lack of appropriate educational materials/services
Cultural barriers	- Cultural differences/religious belief - Stigma - Embarrassment/modesty - Preference for traditional/alternative care - Patriarchy - Physician-patient hierarchy
Language barriers/communication barriers	- Language/communication difficulties - Lack of interpretation/translation services
Knowledge-related barriers/Low health and wellbeing literacy	- Lack of information about how to access/navigate services - Lack of preventive health concept/knowledge of screening tests - Lack of cancer literacy - Belief that screening is not necessary/ineffective - Physicians unaware of screening guideline
Individual-level barriers/personal level barriers	- Lack of time - It is not a priority/self-sacrifice - Not getting around to it/procrastination - Concern about cancer diagnosis/prognosis - Concern about side effects of treatment - Fear of procedure (pain/discomfort) - Sense of confidentiality/privacy - Limited support/encouragement

[a] Adapted from Ferdous et al. Barriers to cervical cancer screening faced by immigrant women in Canada: a systematic scoping review. BMC Womens Health. 2018; 18:165 under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/).

(Walker and Barnett, 2007) and Canada (Lofters et al., 2007). In their manuscript, Chan et al. also have captured the facilitators of cancer screening and very appropriately emphasized that identifying barriers and facilitators provides important evidence for interventions at individual, community, and structural levels to increase screening among immigrant women. The immigrant population's access to health services, including cancer screening, is a complex issue and requires multilevel coordinated efforts through meaningful engagement of stakeholders. It is evident through these both studies (Chan et al., 2019; Ferdous et al., 2018) that the barriers identified need to be approached within a solution-oriented framework that will contribute toward barrier mitigation and consequently in the facilitation of increased screening.
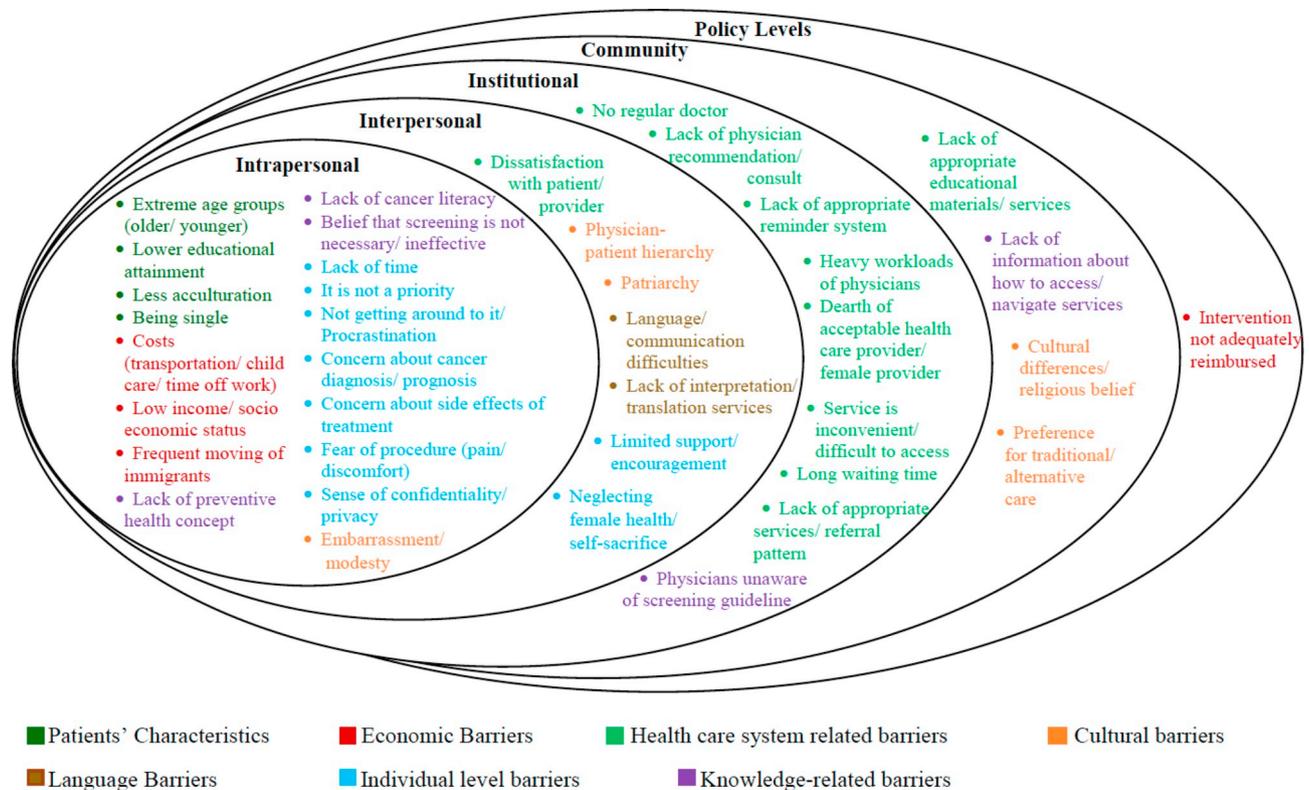
Fig. 1. Using the social ecological model to explain the barriers to cervical cancer screening among immigrant women in Canada with a solution-oriented approach. Source: Adapted from the Centers for Disease Control and Prevention (CDC). The Social Ecological Model. www.cdc.gov/cancer/nbccedp/sem.htm. Accessed 26 October 2018.

Conflict of interest

There is no conflict of interest.

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