

THE IMPORTANCE OF A COMPREHENSIVE SEXUAL HEALTH AND HUMAN DEVELOPMENT EDUCATION

Joshua Quisias^{1*}, Vincent Tang^{2*}, Asia van Buuren^{2*}

¹ Schulich School of Medicine and Dentistry, University of Western Ontario, London, ON, N6K 5K8

² University of Toronto, Faculty of Medicine, Toronto, ON, M5S 1A8

* These authors contributed equally to this work.

Approved: April 6th 2019

PURPOSE

The purpose of this paper is to advocate for the development of a modern and comprehensive sexual health and human development curriculum that promotes healthy development of all youth. The intention is not to replace or update existing guidelines, but to highlight their recommendations that directly address the current debate in Ontario.

In this paper, we will use the term sexual health and human development (SHHD) to more closely reflect the language used by the Ontario government, and this term should be considered synonymous with sexual health.

BACKGROUND

Sexual health can carry many definitions, each of which is informed by societal, community, and individual factors. Societal perceptions on sexual norms can influence what is considered “healthy”. Even further, an individual’s experiences with sexuality can develop a very personalized definition of being sexually healthy. Because of differences in definition, in order to discuss sexual health and human development (SHHD) education, we must first define sexual health. The World Health Organization (WHO) released a working definition of sexual health that we will use in this paper. The WHO working definition of sexual health is *“a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled.”* (1).

Considering the many potential conceptualizations of sexual health and the effect of education on health outcomes, it is important that education on SHHD is incorporated into curricula. Although education surrounding SHHD in primary and secondary schools is ubiquitous in North America, its quality and comprehensiveness in different settings remains heterogeneous. In Canada, education falls under the jurisdiction of the provinces, which contributes to the varied landscape of the quality and scope of the SHHD curriculum across provinces, and even within provinces (2). Therefore, despite the presence of national guidelines, the scope of the SHHD education is left to the discretion of each provincial government. Recently, educators in British Columbia and Alberta have partnered with SOGI 123 to

incorporate sexual orientation and gender identity in their SHHD curriculum (3). However, as this implementation is relatively new, few data exist to show the effect of a new curriculum.

The most focused versions of SHHD education are those that promote only single types of sexual behaviour (e.g. only vaginal, penetrative sex), and fail to address the non-physical aspects of sexuality. The most prevalent in this category is abstinence-only sexual education, which focuses on the idea that abstinence is the only acceptable behaviour. In these limited curricula, the topics discussed often relate only to reproductive-related physiology, as well as the risks of engaging in sexual activities. Generally, abstinence-only SHHD education is rarely taught in Canada and is not supported by the Canadian government (4). However, it continues to be taught, formally or informally, in various settings (5).

In contrast to abstinence-only sexual education, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in coordination with other UN agencies released a guideline for SHHD education that includes not only physical aspects of sexuality, but also its emotional, cognitive, and social dimensions (6). Similarly, the Public Health Agency of Canada (PHAC) Guidelines for Sexual Health Education state two primary goals for sexual health curricula (7):

1) Achievement of positive outcomes (e.g. self-esteem, respect for self and others, non-exploitative sexual relations, rewarding human relationships, and informed reproductive choice)

2) Avoidance of negative outcomes (e.g. STI/HIV transmission, sexual coercion, and unintended pregnancy)

The PHAC Guidelines also refer to five principles that characterize effective SHHD education: accessibility, comprehensiveness, effectiveness of educational approaches and methods, training and administrative support, and planning, evaluation, updating and social development. Specifically, this paper will focus on the principle of comprehensiveness and advocate for the implementation of a comprehensive SHHD curriculum. This principle can be summarized by the following excerpt from the PHAC Guidelines (7):

Sexuality is a central and positive part of the total well-being of young people and, as a result, comprehensiveness of sexual health education for children, adolescents and young adults involves far more than the prevention of unintended pregnancy and STI/HIV education. Sexual health education should include an understanding of developmental changes (e.g., puberty), rewarding interpersonal relationships, developing communication skills, setting of personal limits, developing media literacy, challenging of stereotypes, prevention of STI/HIV, effective contraception methods, information on sexual assault/coercion, sexual orientation and gender identity and a critical examination of evolving gender-roles and expectations.

BENEFITS

Though the implementation of a comprehensive SHHD curriculum is controversial, it is widely recommended. Research has shown that it is beneficial to prevent negative sexual health outcomes and promote positive ones. Generally, due to cultural and societal influences on the idea of sexual health, children, adolescents, and young adults may encounter conflicting information from multiple sources (8). Beyond this, a Canadian survey of youth found that a higher proportion of respondents reported sexual experimentation with the same sex than the proportion that identified as a sexual minority (9). This highlights that sexual behaviours do not necessarily correspond to sexual identity, and that tailoring SHHD curricula for a specific sexual orientation or identity is inadequate (7). In the absence of comprehensive SHHD education, youth may use incorrect or incomplete information to make decisions regarding their sexual behaviours that can lead to negative health outcomes or prevent the achievement of positive outcomes.

NEGATIVE SEXUAL HEALTH OUTCOMES

Negative sexual health outcomes include the transmission of sexually transmitted infections (STI), such as chlamydia, gonorrhea, and human immunodeficiency virus (HIV), sexual coercion, and unintended pregnancy (7). One goal of a comprehensive SHHD curriculum is to avoid these outcomes. A study by Chin et al found that comprehensive SHHD education decreases rates of sexual activity, STI transmission, and adolescent pregnancy (10). In addition, a 2015 review reported that curricula that addressed gender and power resulted in a significantly lower rate of STI transmission and unintended pregnancy compared to curricula that did not (8). Similarly, several reviews and meta-analyses show that comprehensive SHHD education can decrease sexual risk behaviours (e.g. unprotected intercourse, multiple partners) among adolescents (10, 11). A decrease in high sexual risk behaviours helps minimize transmission of STIs and their sequelae. For example, a decrease in transmission rates of human papillomavirus (HPV) can impact the prevalence of downstream conditions, such as genital warts and certain cancers (12). In the same way, a decrease in gonorrhea and chlamydia transmission can reduce the development of pelvic inflammatory disease (13). These complications are associated with significant morbidity and can translate to an increased economic burden on the healthcare system (13).

Furthermore, comprehensive SHHD curricula has benefits that extend beyond individual health. Data suggest that comprehensive education can decrease the self-reported likelihood that males would use physical violence in a relationship and may decrease the incidence of intimate partner violence (11,14). In the same way, the lack of a comprehensive SHHD curriculum may increase the risk that youth participate in harmful sexual behaviours and become involved in sexual exploitation (8).

POSITIVE SEXUAL HEALTH OUTCOMES

Positive sexual health outcomes include improved self-esteem, respect for self and others, non-exploitative sexual relations, rewarding human relationships, and informed reproductive choice (7). Naturally, the goal of SHHD education should be to maximize the achievement of these outcomes. Comprehensive SHHD curricula has been shown to develop increased respect for others and egalitarian attitudes, both of which can lead to healthier relationships and may improve both sexual health and social outcomes (e.g. decreased bullying) for sexual minorities (11,15). In addition, comprehensive SHHD education builds understanding on the importance of consent in relationships and may be used as a preventative measure to address sexual assault (14). A 2015 randomized study in the United States found that a comprehensive SHHD curriculum improved students' understanding of their rights in a sexual relationship, confidence to assert sexual limits, and knowledge regarding how to access information about sexuality and sexual health (16). Finally, on a practical note, learners in SHHD education rate the quality of education to be higher when the topic coverage is more extensive, which may have implications on youth engagement in the material (17).

CHALLENGES

Despite the clear benefits of comprehensive SHHD education outlined above, there are a number of challenges posed by implementing a curriculum of this nature. One challenge is the controversy regarding the appropriateness of sensitive topics for school. The inclusion of some of the particularly contentious topics have received pushback from parent groups and organizations, such as Parents as First Educators (PAFE), that advocate for greater parental autonomy with regards to sexual education. In 2018, PAFE received 35,000 signatures arguing against the implementation of the Health & Physical Education Curriculum that was implemented under then Premier Kathleen Wynne (18). Presumably, a reinstatement of this 2015 curriculum would face objections by these groups that supported its repeal. With that said, it should be noted that parents have the option to opt out from school-based SHHD education if they wish (19).

Additionally, research has demonstrated that teachers feel more comfortable knowing the SHHD education they are delivering in classrooms is supported by parents (20). Parent support can be gleaned from appropriate community consultation, however, this process is resource-intensive. The consultation

that created the 2015 Health & Physical Education Curriculum surveyed 4000 parents, 2400 educators and 700 students, but despite the significant resource allocation required to complete it, only captured a small percentage of Ontario's parents (21). If adequate ongoing consultation is to be implemented, extensive resources will be required. Nevertheless, despite the strong voice of some parent-led organizations, research demonstrates that over 80% of Ontario parents strongly agree or agree that SHHD education should be provided in schools (22).

Another challenge is the inability to control the quality of education students receive in both informal and formal education settings. A recent study demonstrated that only 85% of participating schools in Eastern Ontario had a sexual health education program, and many schools did not follow established SHHD education guidelines regardless of what curriculum standard was in place (23). This raises questions about how SHHD education is monitored and what the most effective methods are for educator accountability. For example, the Ontario Government implemented a community reporting system for any teachers steering away from the prescribed curriculum; this, however, was met with backlash from educator and parent-based organizations (24). Ongoing evaluation of curriculum change has been historically inadequate, and researchers urge the government to consider how a new SHHD education curriculum, if implemented, will be monitored and evaluated (23). In addition, research demonstrates a clear association between the comfort of the individual teaching SHHD curricula and the quality of the education they provide. Similarly, coverage of more sensitive topics has been found to vary between teachers and by teacher interests (20). Given this known trend, one may expect that educators receive rigorous training to prepare for SHHD education. Unfortunately, only one-third of teachers in Eastern Ontario received formal training on the topic of sexual health (23). These results are similar to other provinces such as New Brunswick, where a significant majority of teachers value comprehensive SHHD education, but only report feeling somewhat knowledgeable and comfortable teaching these topics (20). Therefore, comprehensive SHHD education requires adequate training and professional development for educators in order to overcome these barriers.

Despite the variety of barriers to implementing comprehensive SHHD education outlined above, we believe that these challenges are manageable, and do not outweigh the benefits of a more thoroughly educated student body and population. Effective community consultation, continuous evaluation, and ongoing resource allocation to adequately support SHHD educators are all necessary aspects of successful SHHD curriculum implementation.

CURRENT STATE OF AFFAIRS

In 1998, the Ontario Government, led by Premier Mike Harris, released a Health and Physical Education Curriculum ("1998 curriculum") to be implemented in schools across Ontario. The curriculum document is 42 pages long and covers expected achievement milestones for students in Grades 1 to 8 in areas such as "Healthy Living", including "healthy eating, growth and development, personal safety and injury prevention, and substance use and abuse", "Fundamental Movement Skills", including "locomotion/travelling, manipulation, and stability", and "Active Participation", including "physical activity, physical fitness, living skills, and safety" (25). The province's SHHD curriculum was laid out in the "Growth and Development" section of the curriculum, with each grade containing a series of expectations for students. For example, in Grade 5, students are expected to be able to "describe the processes of menstruation and spermatogenesis" and in Grade 7, they are expected to "explain the term 'abstinence' as it applies to healthy sexuality" (25).

This curriculum was amended in 2010, under Premier Dalton McGuinty ("2010 curriculum"). Although this curriculum is greatly expanded at 223 pages and includes prompts that provide educators with examples of the curriculum standards, the "Growth and Development" section remained unchanged from the 1998 version (26). It denoted "(1998)" next to each subsection and had little additional guidance for educators for curriculum delivery. In all essence, the SHHD curriculum in 2010 is identical to that of 1998.

In 2014, the Ontario Government, led by Premier Kathleen Wynne, commissioned a consultation of 4000 school boards across the province in an effort to amend the Health and Physical Education Curriculum from the 2010 version. In September 2015, the revised version of the curriculum ("2015 curriculum") was

introduced for implementation. The 2015 curriculum is 244 pages long. Various prompts and examples for different learning objectives were also included, including for the “Growth and Development” sections, a departure from the 1998/2010 curricula. In addition, the 2015 curriculum made significant revisions to the SHHD curriculum, by mandating some topics be taught to students in earlier grades, as well as introducing additional topics.

Altogether, the differences between the 1998/2010 curricula and the 2015 SHHD curriculum are quite vast. When comparing the coverage of topics in the 1998/2010 and 2015 SHHD curricula, many topics are covered at earlier grade levels in the 2015 version (25–27). For example, the 2015 curriculum introduces scientific terminology for body parts, including those of genitalia, at an earlier point compared to the 1998/2010 curricula. In addition, the table below provides a list of topics that were particular motivators behind the 2015 curricular update that are not explicitly stated as objectives in the previous 1998/2010 curricula or absent altogether (25–27).

Standard*	Grade
Identify risks associated with communications technology, and describe various types of bullying and abuse, including bullying using technology	4
Assess the effects of stereotypes, including homophobia and assumptions regarding gender roles and expectations, sexual orientation, gender expression, race, ethnicity or culture, mental health, and abilities, on an individual’s self-concept, social inclusion, and relationships	6
Explain the importance of having a shared understanding with a partner about: the reasons for not engaging in sexual activity, the concept of consent and how consent is communicated	7
Demonstrate an understanding of gender identity, gender expression, and sexual orientation, and identify factors that can help individuals of all identities and orientations develop a positive self-concept	8

* Note that each of these standards is taken verbatim from the government curricula

The most controversial topics in the 2015 curriculum include same-sex marriage or non-traditional couples, sex for pleasure, and gender identity, which have come up against vast resistance from some parental organizations (28). Additionally, organizations such as the Campaign Life Coalition and the Institute for Canadian Values have launched online campaigns to have the 2015 curriculum repealed, citing disagreement with the inclusion of topics such as gender identity and sexual orientation (29, 30). These efforts have culminated with wide-scale protests across the province, organized by the GTA Parents Association, My Child My Choice, and PAFE (30).

In July 2018, the Ontario Government, under current Premier Doug Ford, announced that it would be repealing the 2015 curriculum, and would begin consultations to develop a new SHHD curriculum. In response to widespread backlash and controversy, the Ontario Minister of Education, Lisa Thompson, announced that Ontario would not be reverting back to the 1998 curriculum, but would instead be reverting to the curriculum “last taught in 2014”, which in all essence is identical to the 1998 curriculum (25–27, 31). The consultations were announced in August 2018, and consisted of telephone town hall sessions, an open submission form, and online survey on the Ontario Government website. All of these were focused on the perspective of parents and generally ignoring input from educators, education experts, healthcare professionals, and students. These consultations closed in December 2018 (32). Although the government has not yet formally announced the results of these consultations, the Canadian Press was able to retrieve approximately 1,600 comments filed out of the total 35,000 eventually filed. Of the 1600 comments from the Freedom of Information request, approximately 20-30 comments were in support of repealing the 2015 curriculum, with the remainder against (33).

In March 2019, Education Minister Lisa Thompson announced that the Government would be keeping all content areas previously included in the 2015 curriculum, with the caveat that certain topics, such as teachings on sexual orientation and gender identity, will be taught at later points in primary and secondary education. For example, these topics will be moved from Grades 3 and 5 to Grades 5 and 8 (27, 34).

Since the announcement of the repeal of the 2015 curriculum, various medical organizations have come forward to condemn the decision. For example, the Society of Obstetricians and Gynecologists of Canada released a statement urging the Ontario Government to “reconsider [the] decision and work with healthcare providers, educators, and other experts as well as the public to ensure a more up-to-date sexual education plan is put in place as soon as possible” (35). Other organizations that have publicly come out against this decision include the Canadian Pediatric Society (36), the Registered Nurses’ Association of Ontario (37), and the Ontario Medical Students Association (38).

Though current events are rapidly evolving, as of the writing of this paper, this remains the current state of affairs in Ontario as it relates to the repeal of the 2015 SHHD curriculum in Ontario and the subsequent public consultation for the new curriculum.

MEDICAL EDUCATION

The issue of adequate SHHD education extends beyond the classroom. The PHAC guidelines and the UNESCO guidelines both mention the role of the medical community in providing sexual health education as part of their scope of practice (6, 7). Despite this, a survey of medical students training in both Canada and the United States found that 53% of respondents did not feel adequately prepared to address sexual concerns in clinical practice (39). This study also found that individual student’s sexual values and experiences influence their general perception of sexuality, and likely, the quality of care they provide.

This relationship between values and quality of care has consequences. For example, a study of HIV-prevention counselling amongst medical students demonstrated that most students did not ask important questions about patients’ sexual behaviours (40). Another study assessing the experiences of LGBTQ patients in primary care suggests that practitioners should intentionally address existing heteronormative frameworks in order to provide meaningful patient-centred care (41). While there are no studies to date that examine the relationship between the SHHD curriculum that a medical trainee receives and the quality of sexual healthcare they provide in clinical practice, we hypothesize that the above studies highlight challenges that may be seen as downstream outcomes of inadequate SHHD curriculum.

Though there are improvements needed in educating medical students to provide sexual health care, and grade school curricula does not directly affect current medical students, we acknowledge that there are more ways to promote health than just direct patient care. We believe that advocating for government policies that promote public health and wellbeing falls within the scope of practice of all physicians, regardless of specialty. As such, medical students should endeavour to “support patients, communities, or populations to call for change, [and] increase awareness about important health issues” (42).

PRINCIPLES

The Ontario Medical Students Association (OMSA) puts forward the following principles to guide recommendations for ensuring adequate access to a comprehensive SHHD curriculum.

Ontario’s students should have access to:

1. Sociopolitical, physical, and educational environments that are safe and health-promoting, specifically in the context of having a robust and comprehensive SHHD curriculum that is inclusive of different identities and provides students with the tools they need to navigate the evolving world, specifically as it relates to online safety and consent.

2. Education that is of high quality, accessible, and comprehensive from early childhood to adulthood, which includes a sexual and reproductive health education, which best equips these individuals to make informed decisions regarding their own health and social relationships.

On a systems level, we recognize the importance of education in shaping population health outcomes. As such, we affirm that the Ontario education system, as a proxy for a health system, should ensure:

1. Universality, in that a quality, comprehensive SHHD education should be provided to all those residing in the province of Ontario without discrimination.
2. Comprehensiveness, in that the SHHD education delivered should cover all areas as appropriate for the day-and-age in which we all live, including coverage of gender identity and sexual orientation, consent, the importance of recognizing the impact of stereotypes and discrimination on one's self-concept, and cyber safety, amongst others.
3. Accessibility, in that the same, high-quality and comprehensive SHHD curriculum is delivered to an individual without regard to their school or attendance, area of residence, socioeconomic status, religious or faith affiliation, gender identity, or race or ethnicity.

RECOMMENDATIONS

The authors of this position paper thus issue the following recommendations, based on the arguments of this position paper, and guided by OMSA principles:

- 1. We recommend that the Ontario Government consider returning to the 2015 Health and Physical Education Curriculum, which included a comprehensive, accessible, and robust SHHD curriculum. This includes not only consideration of the topics to be included in the curriculum, but also an alignment of the biological and psychosocial developmental realities of students and Grades at which certain topics are taught.**

This curriculum should be based on extensive consultation with parents, students, educators, and medical experts. We recognize this as a resource-intensive process, but only by thorough consultation of all stakeholders can appropriate recommendations be made that will impact the education of students in years to come. An extensive consultation has already been completed by the Ontario government in 2015, and findings from this comprehensive consultation included the viewpoints of parents, education experts, educators, community stakeholders, and child development experts (27). The 2015 Health and Physical Education Curriculum has potential to be re-implemented across Ontario without the need for a third province-wide consultation.

Comprehensive SHHD curricula have been shown to have a multitude of health benefits, from an individual to a health systems perspective. In communities where such curricula have been implemented, rates of STI transmission, adolescent pregnancy, and high sexual risk behaviours have decreased (7, 8, 10, 11). Additionally, comprehensive curricula that address the impacts of power and gender on relationships have been shown to reduce rates of sexual coercion, unintended pregnancy, and intimate partner violence (7, 8, 11, 14). Beyond preventing negative sexual health outcomes, comprehensive SHHD curricula, where implemented, have been shown to positively impact and individual's self-esteem, confidence to assert their sexual limits, and knowledge of how to access information regarding sexuality and sexual health (7, 16). At a base level, increasing an individual's knowledge in the realm of their sexual health will decrease the overall burden on health systems, specifically as it relates to decreased rates of STI transmission, which would require treatment and contact tracing, and result in lower rates of sexual risk behaviours and unintended pregnancy (13).

We also encourage the Ontario Government to consider alignment of topic areas with human developmental milestones. This is especially pertinent with regards to topics related to gender identity and expression, and sexual orientation, which continue to be points of contention within the SHHD curriculum under development. Research has shown that the age at which gender identity becomes established varies; for many individuals, this can happen by the ages of 2-3, but for others, this may

remain fluid until later in life. By ages 4-5, many children become stable in their sense of gender identity and begin to express themselves accordingly. As puberty approaches, a discordant gender identity can become quite distressing for children and adolescents (43). By delaying teachings on gender identity and expression and sexual orientation, students for whom this information may be the most helpful do not receive any validation or any additional information on their development until it is too late. In cases such as these, alignment of these objectives is key. We recognize and acknowledge the competing interests in such topics that may be socially contentious, but would like to emphasize the importance of following evidence-based guidelines in the development and implementation of such curricula, and in the absence of pedagogic curricular evidence, we recommend the alignment of the scientific literature on SHHD with curricula that are developed.

2. We recommend that medical associations under which sexual and reproductive health or human development fall under their purview advocate for the maintenance of the 2015 Health and Physical Education Curriculum.

Physicians and healthcare providers often see the impacts of an inadequate sex education firsthand, and thus are well placed to advocate for this from a health perspective. Physician advocacy can take many forms, including the release of a position statement, collaboration with medical student initiatives, and public support of other professional associations (e.g. Ontario College of Teachers).

As discussed previously, the Society of Obstetricians and Gynecologists of Canada, the Canadian Pediatric Society, the Registered Nurses' Association of Ontario, and the Ontario Medical Students Association have come out with public statements advocating against the repeal of the 2015 Health and Physical Education Curriculum. However, this is not a comprehensive list of organizations within the medical community for which sexual and reproductive health of their patients falls under their purview.

3. We recommend that medical schools in Ontario, from top-down, i.e. from school leadership to students, advocate in their communities for a comprehensive SHHD curriculum.

This advocacy can take place in the form of meetings with local Members of Provincial Parliament (MPPs), letter writing campaigns, meetings with school board officials, rallies, and partnering with community agencies. By recognizing the importance of education as a social determinant of health, as well as that of advocacy in the CanMEDS framework, medical professionals and learners can play an increasing role in the public discourse.

Medical students and physicians have a long history of advocating for policies that affect the health of the public. Recently, physicians across Canada have been at the forefront of advocacy for a national Pharmacare and safe injection sites. Last year, Ontario medical students spearheaded the Spots4Docs campaign to address the increasing number of unmatched Canadian medical graduates, which resulted in a one-time increase in residency spots (44). Without this advocacy and resulting intervention, the impact of an unprecedented number of unmatched Ontario medical graduates would undoubtedly be felt by communities in Ontario currently facing a physician shortage. We believe that it is the responsibility of the medical community to advocate for a SHHD curriculum that will give our community an inclusive education that adequately addresses their diverse sexual health needs.

As it relates to students advocating within the medical community and their communities at large, this role falls within the scope of the Local Officers of Reproductive and Sexual Health (LORSH) of which there is a representative at each medical school in Canada. These individuals are one example of many at each school that could work directly with community partners and faculty who have already initiated advocacy in these areas (e.g. The 519 in Toronto, which has implemented a "We Have Your Back" campaign) in order to better advocate for an increased inclusion of sexual and reproductive health in their medical school curricula and within the community at-large (45). We acknowledge the relative power and privilege that medical students, learners, and professionals have within the public discourse, and we encourage all those involved to partner with community stakeholders and those with experience in community and evidence-based advocacy in order to make the greatest impact.

REFERENCES

1. World Health Organization. Defining sexual health [Internet]. Sexual and reproductive health. Available from: https://www.who.int/reproductivehealth/topics/sexual_health/sh_definitions/en/.
2. Appendix 1: Structure of education and training in Canada [Internet]. Available from: <https://www150.statcan.gc.ca/n1/pub/81-582-g/2012001/app-ann/app-ann1-eng.htm>.
3. SOGI 1 2 3 [Internet]. Available from: <https://www.sogieducation.org/>.
4. Sexual health education in the schools: Questions and answers. Updated 2015 Ontario edition. [Internet]. Sex Information and Education Council of Canada; 2015. Available from: <http://sieccan.org/wp/wp-content/uploads/2015/08/SIECCAN-QA-Sexual-health-education-in-the-schools-2015-Ontario.pdf>.
5. Sexuality Education [Internet]. Catholic Independent Schools Vancouver Archdiocese. Available from: <https://cisva.bc.ca/info/parent-resources/sexuality-education/>.
6. International technical guidance on sexuality education [Internet]. United Nations Educational, Scientific and Cultural Organization (UNESCO), UNAIDS Secretariat, United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF), UN Women, World Health Organization (WHO); 2018. Available from: <http://unesdoc.unesco.org/images/0026/002607/260770e.pdf>.
7. Centre for Communicable Diseases and Infection Control (Canada), editor. Canadian guidelines for sexual health education. Rev. ed. Ottawa: Community Acquired Infections Division, Centre for Communicable Diseases and Infection Control, Infectious Disease and Emergency Preparedness Branch, Public Health Agency of Canada; 2008. 56 p.
8. United Nations Educational, Scientific and Cultural Organization. Why comprehensive sexuality education is important [Internet]. UNESCO. 2018. Available from: <https://en.unesco.org/news/why-comprehensive-sexuality-education-important>.
9. Wells, K. The gay–straight student alliance handbook: A comprehensive resource for K-12 teachers, administrators, and school counsellors. Ottawa, ON: The Canadian Teachers' Federation; 2006.
10. Chin HB, Sipe TA, Elder R, Mercer SL, Chattopadhyay SK, Jacob V, et al. The Effectiveness of Group-Based Comprehensive Risk-Reduction and Abstinence Education Interventions to Prevent or Reduce the Risk of Adolescent Pregnancy, Human Immunodeficiency Virus, and Sexually Transmitted Infections. *Am J Prev Med*. 2012 Mar;42(3):272–94.
11. Haberland N, Rogow D. Sexuality Education: Emerging Trends in Evidence and Practice. *J Adolesc Health*. 2015 Jan;56(1):S15–21.
12. Monk BJ, Tewari KS. The spectrum and clinical sequelae of human papillomavirus infection. *Gynecol Oncol*. 2007 Nov;107(2 Suppl 1):S6-13.
13. Institute of Medicine (U.S.), Committee on Prevention and Control of Sexually Transmitted Diseases, Eng TR, Butler WT. The hidden epidemic: confronting sexually transmitted diseases [Internet]. Washington, D.C.: National Academy Press; 1997 [cited 2019 Jan 25]. Available from: <http://site.ebrary.com/id/10063023>.

14. Hirsch JS, Khan SR, Wamboldt A, Mellins CA. Social Dimensions of Sexual Consent Among Cisgender Heterosexual College Students: Insights From Ethnographic Research. *J Adolesc Health*. 2019 Jan;64(1):26–35.
15. American College of Obstetricians and Gynecologists. Comprehensive Sexuality Education [Internet]. 2016. Available from: <https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Adolescent-Health-Care/Comprehensive-Sexuality-Education?IsMobileSet=false#14>.
16. Constantine NA, Jerman P, Berglas NF, Angulo-Olaiz F, Chou C-P, Rohrbach LA. Short-term effects of a rights-based sexuality education curriculum for high-school students: a cluster-randomized trial. *BMC Public Health*. 2015 Mar 26;15:293.
17. Byers ES, Hamilton LD, Fisher B. Emerging adults' experiences of middle and high school sexual health education in New Brunswick, Nova Scotia, and Ontario. *Can J Hum Sex*. 2017 Dec;26(3):186–95.
18. Tanya Allen. Ford's Sex-ed Consultations Need a Rethink [Internet]. Parents as First Educators. 2018. Available from: http://www.pafe.ca/ford_s_sex_ed_consultations_need_a_rethink.
19. Kathleen Jolly. Reality check: What's the evidence behind Ontario's sex ed curriculum? [Internet]. Global News. 2015. Available from: <https://globalnews.ca/news/1863258/reality-check-whats-the-evidence-behind-ontarios-sex-ed-curriculum/>.
20. Cohen, JN, Byers, E, Sears, HA, Weaver, AD. Sexual health education: Attitudes, knowledge, and comfort of teachers in New Brunswick Schools. *Can J Hum Sex*. 2004;13(1):1–5.
21. Fae Johnstone. Ontario's Sex-Ed Consultation Is An Insult To Parents And Students [Internet]. HuffPost. 2018. Available from: https://www.huffingtonpost.ca/fae-johnstone/ontario-sex-ed-consultation_a_23568461/.
22. McKay A, Byers ES, Voyer SD, Humphreys TP, Markham C. Ontario parents' opinions and attitudes towards sexual health education in the schools. *Can J Hum Sex*. 2014 Dec;23(3):159–66.
23. Farmer E, Fleming N, Black A, Dumont T. Where Are We in Terms of Sexual Health Education: An Ontario Perspective. *J Obstet Gynaecol Can* [Internet]. 2018 Dec [cited 2019 Jan 6]; Available from: <https://linkinghub.elsevier.com/retrieve/pii/S1701216318308958>.
24. Isabel Teotonio. Educators slam Ford's 'snitch line' for teachers who defy sex ed rollback [Internet]. The Star. 2018. Available from: <https://www.thestar.com/news/queenspark/2018/08/22/educators-slam-fords-snitch-line-for-teachers-who-defy-sex-ed-rollback.html>.
25. Health and Physical Education Curriculum, Grades 1-8. Ontario Ministry of Education; 1998.
26. Health and Physical Education Curriculum, Grades 1-8. Revised Edition. Ontario Ministry of Education; 2010.
27. Health and Physical Education Curriculum, Grades 1-8. Ontario Ministry of Education; 2015.
28. The Canadian Press. Ontario sex ed curriculum: 5 things to know [Internet]. 2015. Available from: <https://www.cbc.ca/news/canada/toronto/ontario-sex-ed-curriculum-5-things-to-know-1.3059951>.

29. Sean Davidson. Ontario sex ed: How founded are fears of “indoctrination”? [Internet]. CBC. 2015. Available from: <https://www.cbc.ca/news/canada/toronto/ontario-sex-ed-how-founded-are-fears-of-indoctrination-1.3065545>.
30. CityNews. Parents protest Ontario’s new sex-ed curriculum in 107 ridings [Internet]. 2015. Available from: <https://toronto.citynews.ca/2015/09/02/parents-protest-ontarios-new-sex-ed-curriculum-107-ridings/>.
31. Health and Physical Education Curriculum, Interim Edition (re-issued 2018) Grades 1-8. Ontario Ministry of Education; 2018.
32. 2018 Consultation: Education in Ontario [Internet]. Ontario. 2018. Available from: <https://www.ontario.ca/page/for-the-parents>.
33. Sex-ed curriculum consult website flooded by ‘certain groups’ who may have skewed results: Ford [Internet]. Global News. 2018. Available from: <https://globalnews.ca/news/4774220/sex-ed-consult-doug-ford/>.
34. HuffingtonPost. Doug Ford’s Government Won’t Scrap Any Topics From Liberal Sex Ed Curriculum [Internet]/ 2019. Available from: https://www.huffingtonpost.ca/2019/03/15/doug-fords-government-wont-scrap-any-topics-from-liberal-sex-ed-curriculum_a_23693359/?utm_hp_ref=ca-politics.
35. SOGC statement on Ontario sexual education curriculum announcement [Internet]. Society of Obstetricians and Gynaecologists of Canada. 2018. Available from: <https://sogc.org/news-items/index.html?id=217>.
36. Kimberly Dow, Eddy Lau. Letter to Premier Doug Ford [Internet]. 2018. Available from: https://www.cps.ca/uploads/advocacy/Sex_ed_curriculum.July24_.pdf.
37. Registered Nurses’ Association of Ontario. Hands off Ontario’s sexual-education curriculum [Internet]. 2018. Available from: <https://rno.ca/policy/action-alerts/HandsoffsexED>.
38. Ontario Medical Students Association. OMSA Supports the Current Sexual Health Curriculum in Ontario [Internet]. 2018. Available from: <https://omsa.ca/en/hub/omsa-supports-current-sexual-health-curriculum-ontario>.
39. Shindel AW, Ando KA, Nelson CJ, Breyer BN, Lue TF, Smith JF. Medical Student Sexuality: How Sexual Experience and Sexuality Training Impact U.S. and Canadian Medical Students’ Comfort in Dealing with Patients’ Sexuality in Clinical Practice: Acad Med. 2010 Aug;85(8):1321–30.
40. Cook RL, Steiner BD, Smith AC, Evans AT, Willis SE, Petrusa ER, et al. Are medical students ready to provide HIV-prevention counseling? Acad Med J Assoc Am Med Coll. 1998 Mar;73(3):342–6.
41. Law M, Mathai A, Veinot P, Webster F, Mylopoulos M. Exploring lesbian, gay, bisexual, and queer (LGBQ) people’s experiences with disclosure of sexual identity to primary care physicians: a qualitative study. BMC Fam Pract [Internet]. 2015 Dec [cited 2019 Jan 25];16(1). Available from: <http://www.biomedcentral.com/1471-2296/16/175>.
42. CanMEDS Role: Health Advocate [Internet]. Royal College of Physicians and Surgeons of Canada. 2015. Available from: <http://www.royalcollege.ca/rcsite/canmeds/framework/canmeds-role-health-advocate-e>.

43. Healthy Gender Development and Young Children: A Guide for Early Childhood Programs and Professionals. The National Centre on Parent, Family, and Community Engagement. Available from: <https://depts.washington.edu/dbpeds/healthy-gender-development.pdf>.
44. Ontario funding additional residency positions for medical graduates [Internet]. 2018. Available from: <https://news.ontario.ca/mohltc/en/2018/04/ontario-funding-additional-residency-positions-for-medical-graduates.html>.
45. The 519 [Internet]. Available from: <http://www.the519.org/>.