**Trauma Informed Pelvic Examinations and Gynecological Practice** i**n Canadian Medical Education Curricula - A Policy Paper**

*Developing and Instituting Evidence Based Gynecological Curricula for Medical Students Centered on Patient Focused Teaching and Care*

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**POLICY AREAS:** (1) Health Equity. (2) Competencies for Undergraduate Medical Education.

**BACKGROUND:**

***How Much of a Problem is Sexual Abuse in Canada?***

* The 1993 Violence Against Women Survey estimated that roughly ½ of all Canadian women, 16 years of age or older, experienced one instance of physical or sexual violence, with 39% of women experiencing sexual violence (1). The Ontario Health Supplement in 1997 revealed that 12.8% of females ages 15 and older reported sexual abuse during their childhood, and 11.1% of females reported severe sexual abuse (2).

***What are the Health Implications of Sexual Abuse?***

* *Psychiatric and Mental Health:* Female survivors of childhood sexual abuse (SCSAs) are significantly more likely to experience an anxiety disorder in their lifetime than counterparts who had not experienced childhood sexual abuse (CSA) with rates of 37% and 14% respectively; lifetime prevalence of depression being 22% vs 6% respectively (3). Other psychiatric diagnoses such as eating disorders, PTSD, sleep disorders, and suicide attempts are at a higher rate as well (4). Revictimization is also a concern with SCSAs, with increased likelihood of experiencing battering, attempted rape, or rape later in life (3). Survivors of sexual abuse in general have also been shown to experience high rates of PTSD (5).
* *Gynecological Health:* Survivors of sexual abuse at any stage of life, hereafter referred to only as “survivors” without distinction of when the sexual abuse occurred, have significant health related challenges beyond just mental health conditions. With respect to gynecological care, survivors experience more “chronic pelvic pain, dysmenorrhea, premenstrual dysphoric disorder, menorrhagia, bladder dysfunction, sexual dysfunction, sexually transmitted diseases, pelvic inflammatory disease, pelvic diseases, breast disease, and challenges with contraception” (6). “Recurrent yeast infections, early hysterectomy, metrorrhagia, a burning feeling in the genitals, and possible infertility” have also been implicated in survivors (7). Regardless of the presence of organic pathophysiology, survivors have considerably different physical health experiences that may result in them needing gynecological care. One multidisciplinary clinic (SAFE clinic) providing comprehensive care to rape survivors found that only 82% of survivors wished to have a pelvic examination, and 17.7% of all survivors reported gynecological complaints (8). Of those who attended their follow up visits, 9% were concerned that the assault affected their anatomical or reproductive function (8). Of the 49.2% of survivors who were sexually active at the time of their first follow up, 78.3% reported sexual difficulties (8). 11.4% of sexually active survivors always had difficulty with sex (8). Another study found that survivors in intimate relationships with their perpetrators reported “vaginal and anal tearing, bladder infections, dysmenorrhea, sexual dysfunction, pelvic pain, and urinary tract infections” (9). A Norwegian study further characterized the types of sexual dysfunction in these relationships as including “lack of libido, difficulty achieving orgasm, and problems caused by conflicts over sexual frequency” (10). Rates of dyspareunia, sexual indifference, and decreased sexual satisfaction are also significantly higher in this population (7).
* *Future Oncological Health:* The research shows that survivors with an increased risk of developing cervical cancer may be the ones least likely to access screening (12). Women who have experienced sexual abuse had an increased rate of cervical cancer (11). The more different types of sexual abuse experienced, the greater the rates of cervical malignancies in comparison to women who had experienced fewer types or none (11). The research shows that women who experienced sexual abuse as children were less likely to get Pap screening for cervical cancer (12,13), and have a greater likelihood of developing dysplastic cervical cells (12). They are also likely to contract HPV by way of two other high risk factors - engaging in sex earlier in life and having a greater number of intimate contacts (12).
* *Infectious Burden:* The relationship between sexually transmitted infections and sexual abuse is complex. A summary of some select significant findings is included. With respect to transmission of sexually transmitted infections, survivors are at high risk of infection through numerous paths: the perpetrator might be seropositive, which may be related in itself to their abusive tendencies and the increased likelihood of them having numerous sexual partners; mucosal lacerations resulting from sexual abuse can promote inoculation of pathogens into the bloodstream or cause their retrograde movement into the urethra; the stress response following sexual abuse may result in a weakened immune response, increasing susceptibility to infection; and finally, sexual abuse may cause the survivor to engage in high risk behaviours as coping strategies to deal with the trauma of their assault (14). One study demonstrated that individuals experiencing abuse within their romantic relationships reported acquiring STIs including but not limited to trichomoniasis, chlamydia, gonorrhea, herpes, genital warts, and syphilis (15). For women who had been raped in the past 60 days, as well as women who felt that there would be adverse impacts to discussing condom use with their abusive partners, survivors were significantly more likely to have contracted an STI in the same time period as well as multiple STIs from previous intimate partnerships (15).

***The Survivor and Their Relationship with Care:***

* *Seeking Care:* Despite this increased burden of illness, survivors may be more likely to present during later stages of disease, where the severity is greater due to their earlier dismissal of symptoms (6). 52.9% of survivors reported their past abuse affecting their present gynecological care (6). 37.7% of survivors believed a gynecological appointment would result in significant psychological stress vs 3.5% of non-abused women (6). Interestingly, only 24.7% of survivors believed that revealing past trauma would be useful with respect to their gynecological care, highlighting that patients may not voluntarily share this information or feel that it is necessary to share (6). 55.8% of survivors actually wanted to discuss their abuse history or disclose it indirectly (6). Prior studies have found that less than 15% of survivors disclose their abuse (6).
* *Receiving Care:* 43.5% of survivors experienced memories of their original abuse during their visit; triggers included the language used by the provider, positioning, the exam itself, lack of declaration prior to the procedure, and feelings of helplessness and pain (6). A significantly higher number of survivors reported examination with a speculum, palpation, or transvaginal ultrasound being stressful (6). Roughly 66% of survivors experienced “panic, terror, helplessness, shame, disgust, humiliation, grief, rage, and fear” during the procedure or shortly after (16). 45% of survivors experienced intrusive thoughts and several endorsed flashbacks and dissociative symptoms (16). This dissociation might be why survivors endorse less pain and discomfort, instead focusing on the emotional aspects of the gynecological exam (16). While survivors experienced significantly more distress, 45% and 38% respectively did not reveal this to their providers (16).  Women who experience sexual pain will likely demonstrate recurrence of their pain during a speculum examination (17), and prior research indicates that survivors are more likely to experience sexual pain (7).
* *Continuing Care:* Survivors also appear to have high rates of attrition with respect to receiving follow up gynecological care acutely after assault. Holmes’ study of the SAFE clinic also learned that despite aggressive attempts to ensure further follow up, only 31% of their survivors returned for further care (8). Strikingly, the attacker’s use of alcohol or illicit substances prior to the assault, as well as a positive syphilis test were both associated with a significantly decreased likelihood of follow up (8).
* *Pain and The Impact on Care:* Survivors reported significantly more pain during their first gynecological visits, as well as more embarrassment, shame, vulnerability and fear through all of their visits (16). Survivors also report significantly more discomfort during the pelvic exam (16). Another study found that survivors who had PTSD were most distressed by the pelvic exam, followed next by survivors without PTSD, compared to controls (18). Survivors also reported more pain during the pelvic exam (18).

***Why Does This Matter to the Provider Providing a Pelvic Exam?***

* Providers can ensure delivery of competent and empathetic care by creating a safe space for women to disclose their past sexual abuse or trauma, and discussing what would make the procedure easier. Moreover, there are steps that can be taken to ensure that the survivor is as comfortable as possible during what is considered an invasive and anxiety-provoking procedure. Distressed patients may not be able to fully relax the muscles of their pelvic floor; performing a speculum or manual examination against this tension causes resistance and pain (18). A provider can assist a patient in relaxing the pubococcygeus muscles by asking them to let their lower limbs fall to the sides (17).
* Preparing for, reducing, and managing distress are crucial aspects of a skilled provider’s approach to a pelvic exam; other strategies that can be useful include patient education around the procedure, taking time, and allowing the patient to stop the procedure at any time (18). Offering the presence of a chaperone can also be a strategy to reduce distress (19). Providing the option of not using stirrups allows patients to experience decreased vulnerability and less discomfort during the exam, although further research is required to determine if this affects the adequacy of Pap smear samples (19). Water based gels placed on the “outer inferior speculum bill”, “distal superior and inferior speculum bills”, or on “the vaginal introitus as well as the speculum” itself do not impact cytology samples though checking with the pathology laboratory of one’s facility would be necessary in order to account for site specific variations and susceptibilities in sample analysis (19). The narrowest speculum that allows for adequate visualization should be chosen, typically the Pedersen medium (19). Ultra-narrow speculae are also available for women who are uncomfortable during a digital examination (19).
* To avoid pain and injury, pelvic exams must never be forced (17). Most pain and discomfort during a pelvic examination can be avoided entirely by taking enough time to perform the examination slowly (17). Full retraction of tissue prior to speculum insertion, navigation away from the clitoris and urethra, and gentle pressure inferio-posteriorally toward the rectum should be used (19). The speculum should be inserted slowly to allow the cervix to fall into the field of view, while simultaneously decreasing pain during insertion and reducing unconscious painful vaginal spasms (17). The speculum should be opened slowly only after it has been fully inserted, and only to the extent necessary for visualization (19). Care should be taken during closure to avoid entrapment of vaginal or cervical tissue (19). Individuals with vaginismus, a painful pelvic floor muscle spasm, have often experienced sexual abuse in the past and should be cared for accordingly (19).
* All women should be asked about sexual abuse, prior to the exam, when they are dressed and seated (19). Strategies around examining survivors include offering counselling, education around and discussion of the pelvic exam, the option of deferring the exam, options to remove as few articles of clothing as needed, yielding control of stopping the exam to the patient, alternative examination positioning, the possibility of self inserting or having a trusted individual insert the speculum, and anxiolytics in rare instances (19). More detailed guides are available as well (17). Telling patients to relax may cause a counterproductive tension (17). Similarly, applying pressure to the legs to maintain field of view will cause a reflex tension in thigh and pelvic muscles, or cause retraction of the legs, increasing chances of pain (17). Any expression of pain or wish to stop the exam should be respected; the patient should be asked if they want the speculum withdrawn (17).

***What is the Role of the Medical Student in Pelvic Examinations?***

* While pelvic examinations are undoubtedly an essential and necessary skill for physicians to have, and thus, for medical students to learn, students experience significant anxiety around pelvic examination teaching (17). While use of standardized patients is helpful for reducing learner anxiety, this strategy does have its own disadvantages; the cost is considerable and may be prohibitive for some programs (17). Learners may also develop a false sense of security around the ease of the pelvic exam as they are not exposed to the factors common to many women that make pelvic examinations challenging, such as anxiety or significant gynecological disorders involving pain (17). In the United States, learners do not have much teaching around how to care for such patients, which are precisely the patients who are most likely to have negative experiences surrounding their gynecological examinations (17). Gynecological examinations in themselves are not inherently benign and a poor technique risks causing pain, distress, discomfort, trauma, re-traumatization, and anxiety (17). Proper education on a variety of different clinical scenarios, and observation and supervision can hopefully reduce learner anxiety (17) and increase competency, while simultaneously decreasing patient anxiety and distress.

**PROBLEM DEFINITION:**

**A standardized national approach to the gynecological exam and pelvic care for adult women and trans-men is lacking. In light of the alarming rate of sexual abuse experienced by women as children and adults, both of which carry long term sequelae, it is imperative that healthcare providers performing gynecological exams be mindful of past trauma in providing clinical care.** Requiring disclosure from all survivors is unrealistic, and inappropriately shifts the onus of providing patient-centered care from provider to patient. This is especially challenging in settings such as the Emergency Department or teaching centers with high learner turnover, where there is no opportunity to establish a long-term relationship with the examining provider. Providers must adopt informed clinical practices that allow patients to receive safe and compassionate gynecological care relevant to their presenting problem. Medical students have a rare opportunity to ensure that all the gynecological exams they practice are informed by the evidence relating to the prevalence and long lasting health impacts of sexual trauma, and thus demonstrate “trauma informed care”. Requiring a standard approach to gynecological exams allows both patient and learner to respectively receive and deliver care safely. Having a learner performing a pelvic exam allows the supervising provider or resident to allow for more examination time and thoroughness as necessitated by the medical student’s need for instruction. The medical student is also in the unique position of being able to use their knowledge base to advocate for patient safety and wellness by referencing the evidence that has informed their teaching of the gynecological exam. A national policy endorsed by the CFMS also ensures that patients and learners are not placed in unsafe situations where gynecological exams may be performed without explicit consent of both patient and learner. It also holds faculties to a higher standard of care that is required whenever a learner is involved in gynecological exams, which can hopefully lay the seeds for a cultural shift in the approach to pelvic care within medicine. Successful implementation of a solution to the problem identified involves the CFMS and all 14 Canadian faculties of medicine and their curriculum committees, including any school specific educational representatives such as Vice Presidents (Academic).

**POSITION STATEMENT:**

1. Access to safely performed gynecological care is a basic human right.
2. Healthcare providers are responsible for advocating for marginalized and vulnerable patients.
3. All women and trans-men in need of pelvic examinations and gynecological care deserve to receive sensitive and empathetic healthcare from providers educated on the challenges they commonly face.
4. Practical clinical education with patients is a privilege and not a right; medical students and their supervisors should respect and preserve the needs of their patients above all else.
5. Medical students deserve evidence based education on how to safely care for vulnerable and high risk populations, including survivors of sexual trauma, in order to become clinically competent practitioners.
6. A trauma informed approach to all gynecological care and pelvic examinations is supported by the present scientific evidence and aligns with physician mandates to serve in the best interest of their patients; both patients and providers deserve to have evidence based standards guiding their clinical experiences.

**ACCOUNTABILITY:**

It is proposed that this Policy Paper be supported by the Vice-President Education, National Officer of Health Policy, National Officer of Reproductive and Sexual Health, the National Officer of Research, and the author of this paper jointly. The author will continue to assume lead responsibility for this project throughout training, and requests assistance from the CFMS to help achieve the outlined objectives.

**RECOMMENDATIONS AND ADVOCACY PLAN:**

**1. Support the characterization and tracking of present teaching methods for pelvic examinations and trauma-informed gynecological care in pre-clerkship and clerkship medical education and across all fourteen Canadian faculties of medicine (May to September 2017)**

a. Understanding the present approach to pelvic examinations and the present inclusion of trauma informed teaching in undergraduate medical education is necessary to identify areas of strength, challenges, and opportunities for growth.

b. Understanding undergraduate medical education curricula and experiences at both the pre-clerkship and clinical clerkship stages of the areas outlined is also necessary for identifying barriers to implementation of changes in health policy.

c. Understanding the existing knowledge base, competencies, and concerns of pre-clerkship students and clerkship students exposed to their existing medical education curricula on pelvic examinations allows for evidence based recommendations that include the perspective of the learner.

d. Characterizing these approaches quantitatively wherever possible allows for the development of robust evidence based recommendations relevant to the population of learners impacted by introduction of new medical education teaching, as well as the patient population that they may serve.

e. Engage the CFMS Vice-President Education, National Officer of Health Policy, National Officer of Research, and National Officer of Reproductive and Sexual Health to help promote and distribute completion of two national surveys surrounding preclerkship education in the aforementioned areas (present undergraduate medical education curricula on pelvic examinations and trauma informed gynecological care); one for the curriculum committees or designated block chairs responsible for these portfolios, and one for pre-clerkship students across the country to convey their experiences related to their medical education.

f. Engage the CFMS Vice-President Education, National Officer of Health Policy, National Officer of Research, and National Officer of Reproductive and Sexual Health to help promote and distribute completion of two national surveys surrounding clerkship education in the aforementioned areas (present undergraduate medical education curricula on pelvic examinations and trauma informed gynecological care); one for the clinical clerkship directors in the Obstetrics and Gynecology clerkship rotations, and one for clinical clerks to share their experiences regarding their clinical education, clinical experiences, and clinical challenges.

**2. Support the development of a formal clinical practice guideline on the teaching of trauma-informed gynecological care in medical education and subsequent implementation in clinical practice. (October 2017 – February 2018)**

a. As a clear national guideline on the teaching of the trauma-informed pelvic examination is lacking, although research indicates such an approach would be beneficial, there exists a unique niche to be leaders in education and health policy development for Canadian faculties of medicine.

b. Results from the outlined surveys of Canadian faculties of medicine and their students can help guide development of the clinical practice guideline to reinforce existing clinical competencies present in UME, revise deleterious practices, and suggest improvements to further enhance the patient care experience, and subsequently that of the learners.

c. Engage the CFMS Vice-President Education, National Officer of Health Policy, and National Officer of Reproductive and Sexual Health to advocate for the creation of a working group of clinicians, residents, and medical students to develop a clinical practice guideline for the teaching and implementation of trauma informed gynecological care in Canadian medical education.

d. Engage the CFMS Vice-President Education, National Officer of Health Policy, and National Officer of Reproductive and Sexual Health to petition the Society of Obstetricians and Gynecologists of Canada for their endorsement of this initiative through a joint statement.

**REFERENCES:**

1. Johnson H. Assessing the prevalence of violence against women in Canada. Statistical Journal of the United Nations Economic Commission for Europe. 2005 Jan 1;22(3, 4):225-38.
2. MacMillan HL, Fleming JE, Trocmé N, Boyle MH, Wong M, Racine YA, Beardslee WR, Offord DR. Prevalence of child physical and sexual abuse in the community: results from the Ontario Health Supplement. Jama. 1997 Jul 9;278(2):131-5.
3. Beitchman JH, Zucker KJ, Hood JE, DaCosta GA, Akman D, Cassavia E. A review of the long-term effects of child sexual abuse. Child abuse & neglect. 1992 Jan 1;16(1):101-18.
4. Chen LP, Murad MH, Paras ML, Colbenson KM, Sattler AL, Goranson EN, Elamin MB, Seime RJ, Shinozaki G, Prokop LJ, Zirakzadeh A. Sexual abuse and lifetime diagnosis of psychiatric disorders: systematic review and meta-analysis. InMayo Clinic Proceedings 2010 Jul 31 (Vol. 85, No. 7, pp. 618-629). Elsevier.
5. Meltzer-Brody S, Leserman J, Zolnoun D, Steege J, Green E, Teich A. Trauma and posttraumatic stress disorder in women with chronic pelvic pain. Obstetrics & Gynecology. 2007 Apr 1;109(4):902-8.
6. Leeners B, Stiller R, Block E, Görres G, Imthurn B, Rath W. Effect of childhood sexual abuse on gynecologic care as an adult. Psychosomatics. 2007 Oct 31;48(5):385-93.
7. Golding JM. Sexual assault history and women's reproductive and sexual health. Psychology of Women Quarterly. 1996 Mar 1;20(1):101-21.
8. Holmes MM, Resnick HS, Frampton D. Follow-up of sexual assault victims. American journal of obstetrics and gynecology. 1998 Aug 31;179(2):336-42.
9. Campbell R, Lichty LF, Sturza M, Raja S. Gynecological health impact of sexual assault. Research in Nursing & Health. 2006 Oct 1;29(5):399-413.
10. Schei B, Bakketeig LS. Gynaecological impact of sexual and physical abuse by spouse. A study of a random sample of Norwegian women. BJOG: An International Journal of Obstetrics & Gynaecology. 1989 Dec 1;96(12):1379-83.
11. Coker AL, Hopenhayn C, DeSimone CP, Bush HM, Crofford L. Violence against women raises risk of cervical cancer. Journal of women's health. 2009 Aug 1;18(8):1179-85.
12. Farley M, Golding JM, Minkoff JR. Is a history of trauma associated with a reduced likelihood of cervical cancer screening?. Journal of Family Practice. 2002 Oct 1;51(10):827-30.
13. Olesen SC, Butterworth P, Jacomb P, Tait RJ. Personal factors influence use of cervical cancer screening services: epidemiological survey and linked administrative data address the limitations of previous research. BMC health services research. 2012 Feb 14;12(1):34.
14. Stockman JK, Lucea MB, Campbell JC. Forced sexual initiation, sexual intimate partner violence and HIV risk in women: a global review of the literature. AIDS and Behavior. 2013 Mar 1;17(3):832-47.
15. Wingood GM, DiClemente RJ, Raj A. Identifying the prevalence and correlates of STDs among women residing in rural domestic violence shelters. Women & health. 2000 Aug 15;30(4):15-26.
16. Robohm JS, Buttenheim M. The gynecological care experience of adult survivors of childhood sexual abuse: a preliminary investigation. Women & health. 1997 Feb 5;24(3):59-75.
17. Williams AA, Williams M. A Guide to Performing Pelvic Speculum Exams: A Patient-Centered Approach to Reducing Iatrogenic Effects. Teaching and learning in medicine. 2013 Oct 1;25(4):383-91.
18. Weitlauf JC, Finney JW, Ruzek JI, Lee TT, Thrailkill A, Jones S, Frayne SM. Distress and pain during pelvic examinations: effect of sexual violence. Obstetrics & Gynecology. 2008 Dec 1;112(6):1343-50.
19. Bates CK, Carroll N, Potter J. The challenging pelvic examination. Journal of general internal medicine. 2011 Jun 1;26(6):651-7.

**APPENDIX A: Definitions and Additional Reading**

***What Is Sexual Abuse?***

Sexual abuse, herein defined as any sexual activity perpetrated by one or more individuals without consent regarding the act from the individual being engaged in said act, is a staggering problem with prominent healthcare implications. The terms sexual abuse, sexual assault, and sexual violence are used interchangeably in this paper; though each article may use a slightly different version of the definition of sexual abuse, a broader encompassing operational definition has been employed for this paper and readers are encouraged to consult the references for further examination of specific methodologies.