RESEARCH LETTER

The promise of an interactive, online curriculum in improving the competence of those working in healthcare settings to address sexual assault

Janice Du Mont[1,2]
Daisy Kosa[3]
Sheila Macdonald[3]
Robin Mason[1,2]

[1]Women's College Research Institute, Women's College Hospital, [2]Dalla Lana School of Public Health, University of Toronto, [3]Ontario Network of Sexual Assault/Domestic Violence Treatment Centres, Toronto, ON, Canada

Introduction

Healthcare providers and trainees often lack the requisite knowledge and skills to address sexual violence in the clinical setting.[1–3] To address this gap, we developed and evaluated an innovative and evidence-informed online curriculum designed to improve the competence of those working in healthcare settings to respond to the needs of women who present with past histories of sexual assault.

Development of curriculum

The curriculum was developed using a rigorous competency- and evidence-based approach.[4,5] It contains a series of interactive clinical case scenarios and vignettes to encourage learners' reflexivity, as well as scripted and filmed practitioner–patient interactions demonstrating both helpful and unhelpful ways of responding to sexual assault survivors; knowledge and skills that are relevant to anyone working in a healthcare setting. The approximately 1-hour curriculum, Addressing Past Sexual Assault in Clinical Settings, was made available across Ontario without charge in May 2015 through the website DVeducation.ca[6] and promoted to professional associations (e.g., Association of Ontario Midwives, Ontario Long-Term Care Association, Ontario Society of Occupational Therapists), governing colleges (e.g., College of Medical Radiation Technologists of Ontario), and organizations (e.g., Michener Institute, Ontario Network of Sexual Assault/Domestic Violence Treatment Centres). The link to the online curriculum[6] was then shared by the professional associations, governing colleges, and organizations with their members.

Evaluation of curriculum

Prior and immediately subsequent to completing the training, participants were asked to rate their perceived level of knowledge about and skills in responding to women who present with past histories of sexual assault. Within the knowledge domain were 8 items, about which participants were asked, "How much do you know about the following [item]", with responses rated on a 5-point Likert scale (i.e., 1 = nothing, 2 = a little, 3 = a fair amount, 4 = a lot, 5 = everything). Within the skills domain were 4 items, about which participants were asked, "How prepared do you feel to perform the following [item]", which they rated on a 5-point Likert scale (i.e., 1 = completely unprepared, 2 = slightly unprepared, 3 = somewhat prepared, 4 = very prepared, 5 = completely prepared). Likert

Correspondence: Janice Du Mont
Women's College Research Institute, Women's College Hospital, 76 Grenville Street, 6th Floor, Toronto, ON M5S 1B2, Canada
Tel +1 416 351 3732 (Extension 2705)
Email janice.dumont@wchospital.ca

scores from individual items and overall mean domain scores for knowledge and skills were compared across the pre- and post-training questionnaires using paired *t*-tests, with statistical significance set at *p* = 0.05. The analysis of Likert scales with parametric tests has been shown to be robust to skewed data.[7]

Five additional items assessing the training overall followed the post-test, which asked participants whether the training led to: 1) improvement in knowledge about women who have experienced a past sexual assault, and 2) being better prepared to a) identify, b) respond, c) provide appropriate support, and d) provide resources/referrals to these women. Finally, participants were asked whether they were interested in further training on sexual assault.

Description of participants in the evaluation

Of the 497 online curriculum participants who completed a voluntary pre- and post-training questionnaire between May 2015 and March 2017, 14.1% were between 18 and 24 years of age, 40.0% between 25 and 35 years, 20.1% between 36 and 45 years, and 25.8% were 46 years and older. Most participants were women (90.9%) and represented the diverse range of individuals working in healthcare settings including allied health providers (e.g., physiotherapist, social worker, radiology technician; 53.7%), nurses (9.1%), physicians (1.6%), and administrative staff (1.6%), as well as other professionals (16.1%) and trainees (17.9%). More than half

of the participants (54.5%) had been practicing for 5 years or less, 15.1% for 6–10 years, 12.3% for 11–15 years, and 18.1% for 16 or more years.

Improvements in competence post-training

There were significant improvements in the mean content domain scores for both perceived knowledge (2.8 [pre-training] vs. 3.9 [post-training]; *p*<0.001) and skills (3.1 vs. 4.1; *p*<0.001) following completion of the online curriculum (Table 1). There were also statistically significant improvements on all 8 individual items within the knowledge domain and all 4 individual items within the skills domain.

There was an overwhelmingly positive response on all 5 items assessing the training overall, with the clear majority of participants having noted increased knowledge about survivors who have experienced a past sexual assault (97.2%), as well as being better prepared to identify (96.4%), respond (96.8%), and provide appropriate support (94.6%) and resources/referrals (87.5%). Additionally, 71.4% of participants stated interest in further training on sexual assault.

Discussion

Sexual assault is prevalent and has many potentially serious health-related sequelae. Individuals working in healthcare are therefore likely to care for survivors within their clinical settings; however, they often lack the training on how to

Table 1 Changes in perceived competence pre- and post-curriculum (Addressing Past Sexual Assault in Clinical Settings) training

Item	Pre-training		Post-training		*p*-value
	Mean	**SD**	**Mean**	**SD**	
How much do you know about the following					
Prevalence of sexual assault in Canada	2.6	0.95	3.6	0.78	<0.001
Indicators of past sexual assault	2.7	0.92	3.9	0.71	<0.001
Why women do not disclose sexual assault	3.3	0.92	4.1	0.69	<0.001
Creating an environment that supports disclosure of past sexual assault	2.9	0.98	4.0	0.69	<0.001
Responding appropriately to disclosures of past sexual assault	2.9	0.99	4.0	0.69	<0.001
Legal requirements, if any, for reporting past sexual assault	2.5	1.0	3.9	0.83	<0.001
Strategies for dealing with flashbacks, dissociation, and other symptoms of posttraumatic stress disorder	2.5	1.0	3.7	0.79	<0.001
Collaborating with or referring women who disclose past sexual assault to local community agencies/organizations for further care	3.0	1.0	3.9	0.75	<0.001
Knowledge domain mean score	2.8	0.78	3.9	0.62	<0.001
How prepared do you feel to perform the following					
Respond appropriately to disclosures of past sexual assault	3.0	1.0	4.1	0.68	<0.001
Acknowledge the woman's response in a supportive manner	3.6	0.94	4.2	0.66	<0.001
Identify indicators of past sexual assault	2.8	0.99	4.0	0.70	<0.001
Provide appropriate referrals/resources to women who may have experienced past sexual assault	3.2	1.0	4.0	0.73	<0.001
Skills domain mean score	3.1	0.85	4.1	0.62	<0.001

appropriately respond. Our curriculum appears to effectively educate and improve the perceived skills of diverse individuals working in healthcare settings in addressing past sexual assault, and continues to be made freely available online.[6] Nonetheless, in future research, it would be of value to assess the extent to which improved competence is maintained over time, whether this competence translates to better clinical practice and health outcomes for survivors of sexual assault, and whether the training is equally effective for male learners. Furthermore, as almost three-quarters of participants indicated that they were interested in further training on sexual assault, we have initiated the important next step of developing a more in-depth and extensive training entitled, Recognizing and Responding to the Commonly Misunderstood Sequelae of Sexual Assault, which will also be made available free of charge and accessible through the website DVeducation.ca[6] in 2018.

Ethics statement

This study was approved by the Women's College Hospital Research Ethics Board (REB #2015-0026-E).

Acknowledgments

Disclosure

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