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Analysis of 16 years of calls and emails to the Options for Sexual Health "Sex Sense" information and referral service

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Sex Sense, a service provided by Options for Sexual Health in Canada, offers a telephone and online information service in which people can confidentially ask questions concerning sexual health. To analyze data over 16 years of the Sex Sense services (2000–2016) and to identify primary client concerns according to gender, age, and region and how the frequency of these concerns may have changed over time we analyzed the database where all data were stored. Descriptive analyses and Pearson's Chi-Square tests were performed. Among our sample, more women contacted the service, and most clients were aged 17–29. Contraception was the main reason for contact; however, the proportion of contacts about this decreased over the years. When genders were compared, women were more concerned about contraception, emergency contraceptive pills, and pregnancy, while men asked about sexually transmitted infections, general sexual health, and pleasure. Contraception was the main reason for contact among all age groups except for people over 40 years, who asked more about sexually transmitted infections. Some reasons differed with the region from where people were situated, and this may relate to services available in those regions that might eliminate the need to contact Sex Sense. These findings revealed some of the main concerns about sexual and reproductive health among the Sex Sense service users. Furthermore, analyses showed that concerns differed by gender, age, and region. The findings are important for informing health care professionals and policy makers, government leaders, and stakeholders on the provision of sexual information and services.

KEY WORDS: Reproduction, reproductive health, sexual health, sexuality

Many preventable consequences of sexual activities are a major public health concern, such as unintended pregnancies and sexually transmitted infections (STIs), especially among people aged 15–24 (Guilamo-Ramos et al., 2015; Whitfield, Jomeen, Hayter, & Gardiner, 2013). Almost half of pregnancies in developed countries are unplanned (Peipert, Madden, Allsworth, & Secura, 2012) and nine out of ten abortions occur because the pregnancy was unwanted (O'Neil-Callahan, Peipert, Zhao, Madden, & Secura, 2013). Among the Canadian population, the prevalence of unintended pregnancies is 27% and occur mainly among people under 20 years of age (Oulman, Kim, Yunis, & Tamim, 2015). STIs are another important public health issue, with rates increasing in Canada since the late 1990s; moreover, by the year of 2011, over 70,000 people in Canada were living with HIV (Public Health Agency of Canada, 2017). These infections can put people at risk of other STIs, infertility, cancer, mental health concerns, chronic pain, and premature death (Charlton et al., 2011).

While no contraceptive method is 100% effective, over half of unintended pregnancies occur when there is no use of a contraceptive and almost half happen because of failed, incorrect or inconsistent use of the methods (Ferreira, Nunes, Modesto, Gonçalves, & Bahamondes, 2014; Winner et al., 2012) many of those pregnancies occur while waiting to start a new birth control method (Lesnewski & Prine, 2006). Out of 2,751 sexually active Canadian women who responded to a survey questioning their contraceptive habits, 65.2% reported that they always used contraceptives, while the rest of the participants used them inconsistently (Black et al., 2009). Furthermore, a study assessing information concerning the barriers to contraceptive use and their adherence among adolescents found that concerns about contraceptive side effects, and worry about parents finding out their contraceptive practices were the main

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barriers to contraception use (Clare, Squire, Alvarez, Meisler, & Fraser, 2016).

Misinformation and lack of access to reliable information are contributors to unintended pregnancy and STIs. Many people prefer informal sources of sexual and reproductive health (SRH) information such as television and the internet (Whitfield et al., 2013), which may not always provide reliable or accurate information (Bryant-Comstock, Bryant, Narasimhan, & Levi, 2016). Furthermore, the median age at first intercourse has declined over time (Maticka-Tyndale, Barrett, & McKey, 2000) and this is a concerning issue since the influential adults in adolescents lives may not be comfortable, competent, or reliable sources of SRH facts and this may lead the youth to unsafe sexual habits (Lopez, Bernholc, Chen, & Tolley, 2016). A USA-based study by Nair et al. (2012) found that only 5.2% of teachers and 1.1% of parents had discussed aspects of sex and sexuality with adolescents. In Canada, even though formal sexual education is mandatory in the high school curriculum, there are many gaps in knowledge about SRH among adolescents, especially when it comes to reproductive physiology, contraception, HIV, sexual assault, and Canada's age of sexual consent (Kumar et al., 2013).

In some jurisdictions, there are specific services to assist people who need more learning about SRH or access to safe and effective contraceptive methods. In the USA, *Planned Parenthood*® is a key provider of accessible, high quality and affordable SRH care (Planned Parenthood, 2017). Based in British Columbia (BC), Canada, *Options for Sexual Health* is Canada's largest non-profit provider of SRH services. Their information and referral service is called Sex Sense. In existence since 1996, Sex Sense provides free and confidential SRH information, resources, and referrals for clients who call toll-free or email—mainly from the provinces of BC and the Yukon Territory (YT). Callers and emailers may ask about anything concerning SRH, including but not limited to contraceptive methods, contraceptive efficacy, missed hormonal contraceptive pills, pregnancy risks, STIs, sexuality and pleasure. The Sex Sense staff are Registered Nurses with Contraceptive Management and/or STI Management Certification, sexual health educators, and counsellors with expertise in SRH (Options for Sexual Health, 2017).

The objective of this study was to analyze 16 years of Sex Sense service data (2000–2016) with the aim of identifying primary client concerns according to gender, age, and region, and how the frequency of these concerns may have changed over time. Our goal was to identify the main areas of concerns expressed by callers to inform how Sex Sense as well as other reproductive and sexual health services might design or improve their services to meet the needs of consumers.

METHODS

Data Source

We did not establish a sample size since data from all client calls and emails received by the Sex Sense service were analyzed from 2000–2016.

Procedures

This was a retrospective study with data analysis performed by independent researchers JMF and LAB, who were not involved in any of the data collection or in responding to any of the Sex Sense calls or emails. Any individual with questions related to SRH may access the Sex Sense service through telephone or email, and they are then counted as "clients." The individuals were free to ask as many questions as they wanted about more than one subject. After the client's questions were addressed, they were invited to participate in a brief survey in which age, gender, and caller location were requested before the call was ended. When a person reached the service by email, demographic information was not requested. The clients for whom age was available were divided into 5-year age categories from ≤16 years to ≥40 years. These categories were established by the Sex Sense service prior to our analysis.

Variables Measured

For each call and email the staff entered the reasons for the client's call or email into a database. These reasons were classified as "concerns" and were divided into 13 distinct categories by Sex Sense service prior to our analysis: contraception; emergency contraceptive pills (ECP); pregnancy related concerns, which includes questions about pregnancy symptoms, how to become pregnant, finding a family physician/midwife/obstetrician, adoption, fertility, pregnancy testing and paternity; pregnancy risk, including concerns about possibility or risk of being or becoming pregnant; abortion; sexually transmitted infection (STI); general sexuality, e.g., how to express themselves as a sexual being, questions about the wish to increase desire, role playing, communication, etc.; general sexual health including female and male sexual health with concerns such as benign prostatic hyperplasia, cancers, premature ejaculation, erectile difficulty, etc.; sexual assault; legal issues, e.g. non-disclosure laws about HIV, STI reporting, age of consent for sex, sex work (workers and Johns), reporting to the ministry of child and family development for child sexual abuse, etc.; general medical, for concerns outside sexual health scope; sexual orientation LGBT; and pleasure.

Any individual caller/emailer may have expressed more than one concern, and each were entered into the database. Most information was entered in check box survey format, with occasional additional free text entry. The information was stored in a Microsoft Access Database. The years were condensed into four periods (2000–2003; 2004–2007; 2008–2011; 2012–2016) in order to better present the concerns reported during contact to the service,

Data from two distinct geographic regions were captured and we therefore categorized the contacts by where they were from (BC or YT). The province of BC was further divided in five Health Authorities: Vancouver Coastal Health Authority (VCHA), Fraser Health Authority (FHA), Interior Health Authority (IHA), Vancouver Island Health Authority (VIHA) and Northern Health Authority (NHA).

Analyses

All calls and emails received from BC and YT from years 2000 to 2016 were analyzed. The database was first reviewed to ensure completeness. Data were transferred from the Microsoft Access database into Microsoft Excel and then into SPSS (version 20.0). Descriptive analysis was performed, categorized by year of service, age, gender, and geographic region. The proportion of responses across each of the SRH concerns was calculated. Trends in types of client concerns across the 16 years were examined. Pearson's Chi-Square test was used for comparisons.

This study was approved by the Children's and Women's Hospital Behavioural Research Ethics Board. Approval from the BC Ministry of Health was obtained prior to carrying out the analyses, given the financial role of the Ministry of Health in supporting the Sex Sense service.

RESULTS

Number of Calls by Year of Service

Sex Sense responded to a total of 153,610 calls and emails during the study period. The greatest number of contacts occurred in 2015 (n = 12,970; 8.4%), followed by 2014 (n = 11,754; 7.7%) and 2007 (n = 11,719; 7.6%). Web-based emails were added to the service in July 2002, starting with 38 emails received in that year, increasing to 2,934 in 2016, and the total number of emails received from 2002 to 2016 was 23,662. "Other" types of contact included: hang-ups including those who were asked to wait on line, wrong numbers, nuisance calls and repeat callers and emailers. Some repeat callers would contact Sex Sense on a near-daily basis and they were usually identified by voice characteristics or their stated concerns; repeat emailers were identified by their email address (see Figure 1). There was a total of 41,421 "other" contacts throughout the years and they were not included in our statistical analyses; however, the type of concern expressed by the first contact of repeat callers and emailers was analyzed.

Client Gender and Age

Data on the gender and age of clients were not provided by all clients, nor necessarily evident on all calls or emails. Gender was recorded in the data set as two binary options: male and female.

Gender was indicated for 106,341 of the contacts. A total of 73,882 clients reported their age category. Missing data were not included in these analyses (30.1% and 48.1% of callers did not inform the staff of their gender and age, respectively). Among clients with identified gender, more women sought the service than men (73.2% and 26.8%, respectively; $p < .001$) and a total of 16,049 women asked questions of at least two different topics, while 5,835 men did the same. Among clients with identified age category, 24.9% were 20–24 years of age, followed by 18.6% who were aged 17–19 years ($p < .001$; Table 1). More clients aged 20–24 contacted the service for multiple questions (n = 4,041), followed by people aged 17–19 (n = 3,192) (Table 1)

Concerns by Years

From 2000 through 2016, contraception was the main reported concern. However, the frequency of this reason decreased over the course of those years (36.6% in 2000–2003

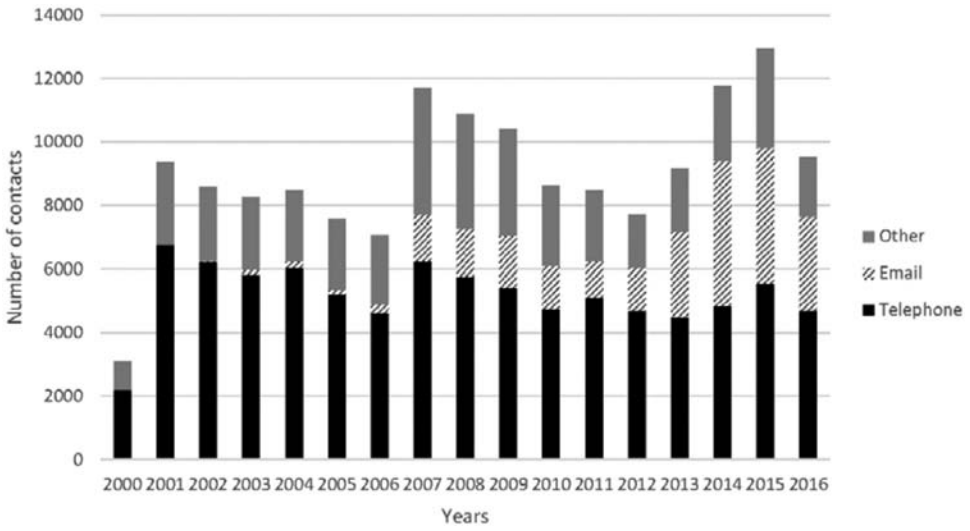

Figure 1. Number of contacts divided by years (2000–2016) and by contact type

Other = hang-ups, wrong numbers, nuisance calls, hang-ups by those who were asked to wait on line, and repeat callers and emailers

Table 1. Number of Clients Contacting the Sex Sense Service Divided by Gender and Age

Gender	*n* = 106,341[a] (%)	Chi-square Test[c]
Female	77,838 (73.2)	$\chi(1) = 22.9$, $p < .001$
Male	28,503 (26.8)	
Age	*n* =73,882[b] (%)	$\chi(6) = 12.9$, $p < .001$
≤16	8,985 (12.2)	
17–19	13,752 (18.6)	
20–24	18,409 (24.9)	
25–29	13,170 (17.8)	
30–34	7,973 (10.8)	
35–39	4,573 (6.2)	
≥40	7,020 (9.5)	

[a] Total number of contacts with identified gender
[b] Total number of contacts with identified age
[c] Pearson's Chi-Square test comparing proportions across categories

to 25.1% in 2012–2016), $\chi(3) = 2.22$, $p < .001$. The same pattern of decline was observed for ECP, $\chi(3) = 122.4$, $p < .001$, and pregnancy related concerns, $\chi(3) = 125.4$, $p < .001$. In contrast, the frequency of STI concerns consistently increased over the years (12.5% in 2000–2003 to 18.6% in 2012–2016; $\chi(3) = 6.42$, $p < .001$, as did pregnancy risk concerns (0% in 2000–2003 to 12.7% in 2012–2016; $\chi(1) = 4.66$, $p < .001$ (Table 2).

Concerns by Gender and Years

Throughout the period of data collection, clients identified as women had a higher number of contacts related to contraception, followed by pregnancy related concerns in comparison to clients identified as men. Highest frequencies for these concerns among women were in the first category of years (2000–2003: 41.3% and 15.5% respectively) but decreased thereafter. There were also more contacts concerning ECP, pregnancy risk and sexual assault among women.

Among men, there were a higher number of contacts concerning general sexual health in relation to women, $\chi(3) = 15.41$, $p < .001$ and STI, $\chi(3) = 41.01$, $p < .001$ (2000–2003: 26.3% and 22.6% respectively; 2012–2016: 27.6% and 27.3%, respectively). There were also more men contacting the service with concerns related to general sexuality, $\chi(3) = 33.51$, $p < .001$; general medical concerns, $\chi(2) = 6.42$, $p = .04$; and pleasure-related questions, $\chi(2) = 22.52$, $p < .001$ (Table 3).

Concerns by Age

Contraception was the main reported concern among clients of all age groups except ≥40 years, $\chi(6) = 9.38$, $p < .001$. For clients ≥40 years, STI was the most common concern, followed by contraception. STI was the second most common reason for contact among people in the 20–39 age category. General sexual health was among the main concerns across all ages and abortion was a more frequent concern among people in the 20-24-year-old group (Table 4).

Contacts by Region and Health Authority

In all regions of BC and in YT the main reported concerns were contraception, STI and general sexual health. Nearly a third of calls from YT were about contraception, which was much higher than the proportion of calls/emails from BC about contraception, $\chi(6) = 9.38$, $p < .001$. Among all the health authorities in BC, Vancouver Coastal Health Authority (VCHA) presented the lowest frequency of concern related to abortion, $\chi(6) = 1.35$, $p < .001$ (Table 5).

Table 2. Frequency of the Clients' Concerns Divided by Groups of Years from 2000 to 2016

Concerns[a]	2000–2003 (20,939)[b]	%	2004–2007 (25,429)[b]	%	2008–2011 (30,332)[b]	%	2012–2016 (53,194)[b]	%
Contraception	7672	36.6	8213	32.3	8481	28.0	13366	25.1
ECP	2365	11.3	2427	9.5	2279	7.5	2986	5.6
Pregnancy related	3029	14.5	3154	12.4	2509	8.3	3334	6.3
Pregnancy risk	0	0.0	0	0.0	816	2.7	6760	12.7
Abortion	2151	10.3	2605	10.2	1578	5.2	2312	4.3
STI	2616	12.5	3266	12.8	4591	15.1	9884	18.6
General Sexuality	563	2.7	1266	5.0	2367	7.8	1586	3.0
GSH	2475	11.8	3787	14.9	5138	16.9	9750	18.3
Sexual assault	68	0.3	123	0.5	165	0.5	214	0.4
Legal issues	0	0.0	60	0.2	229	0.8	209	0.4
General medical	0	0.0	371	1.5	806	2.7	1219	2.3
Sexual orientation LGBT	0	0.0	103	0.4	204	0.7	229	0.4
Pleasure	0	0.0	54	0.2	1169	3.9	1345	2.5

ECP = emergency contraceptive pills; STI = sexually transmitted infections; GSH = general sexual health
[a] Pearson's Chi-Square test comparing concerns across the years: *p*-value < .001 for all variables.
[b] Frequency of reported concerns by groups of years.

Table 3. Percentage of Concerns Among Clients Who Identified themselves as Male or Female Divided by Groups of Years from 2000–2016

	2000–2003		2004–2007		2008–2011		2012–2016		
Concerns	Female (16,796)[a]	Male (3,864)[a]	Female (19,037)[a]	Male (5,562)[a]	Female (19,058)[a]	Male (7,860)[a]	Female (30,170)[a]	Male (11,703)[a]	*p-value*[b]
Contraception	41.3	16.2	38.5	11.9	35.7	10.8	31.1	7.5	<.001 χ(3) = 51.0
ECP	11.9	8.9	10.6	6.3	9.0	4.8	6.3	3.4	.001 χ(3) = 16.7
Pregnancy related	15.5	10.1	13.3	9.3	9.3	5.6	6.8	4.9	<.001 χ(3) = 83.4
Pregnancy risk	0.0	0.0	0.0	0.0	2.6	2.2	11.9	8.9	.028 χ(1) = 4.8
Abortion	10.8	8.2	11.5	6.4	6.5	3.1	5.5	2.2	.062 χ(3) = 7.3
STI	10.2	22.6	10.3	21.6	12.6	21.7	16.4	27.3	<.001 χ(3)41.0
General Sexuality	1.5	7.6	2.5	12.3	4.6	14.0	1.4	6.5	<.001 χ(3) = 33.5
General Sexual Health	8.5	26.3	10.9	27.7	13.6	24.2	16.4	27.6	.001 χ(3) = 15.4
Sexual assault	0.4	0.2	0.5	0.5	0.6	0.4	0.5	0.2	.048 χ(3) = 7.9
Legal issues	0.0	0.0	0.1	0.5	0.6	1.1	0.3	0.6	.382 χ(2) = 1.9
General medical	0.0	0.0	1.4	1.6	2.5	2.6	2.2	2.7	.040 χ(2) = 6.4
Sexual orientation LGBT	0.0	0.0	0.2	1.2	0.3	1.6	0.2	1.2	.572 χ(2) = 1.1
Pleasure	0.0	0.0	0.1	0.6	2.0	8.1	1.0	6.8	<0.001 χ(2)22.5

ECP = emergency contraceptive pills; STI = sexually transmitted infections
[a] Frequency of reported concerns by gender and groups of years.
[b] Pearson's Chi-Square test comparing concerns across gender.

Table 4. Percentage of the Clients' Concerns Divided by Groups of Ages

Concerns[a]	≤16 (9,943)[b]	17–19 (16,851)[b]	20–24 (21,879)[b]	25–29 (15,082)[b]	30–34 (8,988)[b]	35–39 (5,110)[b]	≥40 (7,560)[b]
Contraception	26.74	36.40	34.03	30.33	27.59	22.97	19.19
ECP	8.53	11.73	8.98	7.64	7.01	6.01	4.31
Pregnancy related	9.62	9.44	9.67	11.00	12.21	10.41	8.16
Pregnancy risk	3.72	4.48	2.88	1.98	1.48	1.04	0.82
Abortion	3.76	5.25	7.52	8.71	10.67	11.76	7.25
STI	8.28	10.57	16.52	19.32	18.11	22.94	30.54
General Sexuality	11.61	3.96	2.79	2.75	3.35	3.74	5.05
GSH	20.95	14.74	13.77	14.19	15.20	15.97	17.61
Sexual assault	0.62	0.27	0.34	0.40	0.34	0.61	0.70
Legal issues	1.07	0.26	0.20	0.19	0.27	0.45	0.57
General medical	1.47	1.34	1.60	1.88	1.85	1.74	2.62
Sexual orientation LGBT	0.55	0.23	0.31	0.31	0.36	0.63	1.03
Pleasure	3.08	1.35	1.39	1.29	1.57	1.74	2.14

ECP = emergency contraceptive pills; STI = sexually transmitted infections; GSH = general sexual health
[a] Pearson's Chi-Square test comparing concerns across ages: *p*-value < .001 for all variables.
[b] Frequency of reported concerns by groups of ages.

DISCUSSION

This analysis of the Sex Sense data from 2000 to 2016 reveals findings that are worth considering in detail. Among contacts with an identifiable gender, there were significantly more women reaching the service and 61.3% of clients were between 17–29 years of age. The higher proportion of women contacting the Sex Sense service supports findings by Khurana and Bleakley (2015). They found that young women (18–29 years of age) were more likely to seek reliable sources of information regarding sexual health, such as health care professionals, while men tended to ask friends, partners, or consult the internet and television.

Concerns about contraception showed a substantial change over time. Contraception was the main reason for contacting Sex Sense during the analyzed period, however, its frequency

Table 5. Percentage of Concerns in British Columbia by Heath Authorities and in Yukon Territory (YT)

Concerns[a]	VCHA (46,629)[b]	FHA (19,918)[b]	IHA (8,745)[b]	VIHA (8,213)[b]	NHA (2,811)[b]	YT (324)[b]
Contraception	32.5	30.5	29.3	28.4	28.8	16.7
ECP	8.7	8.5	7.1	8.6	6.7	6.8
Pregnancy related	9.7	10.8	9.2	9.2	8.8	12.3
Pregnancy risk	2.1	2.5	2.0	1.8	1.8	0.9
Abortion	6.8	9.2	12.9	9.7	8.9	5.6
STI	17.4	15.1	18.6	18.6	14.9	29.0
General Sexuality	3.8	4.1	3.1	4.5	6.2	4.0
GSH	15.0	14.5	14.0	14.3	17.2	15.7
Sexual assault	0.4	0.5	0.6	0.4	0.5	1.2
Legal issues	0.3	0.3	0.4	0.4	0.6	0.9
General medical	1.7	1.9	1.6	1.4	2.2	4.0
Sexual orientation LGBT	0.4	0.4	0.5	0.9	0.7	0.9
Pleasure	1.3	1.7	0.9	1.7	2.8	1.9

VCHA = Vancouver Coastal Health Authority; FHA = Fraser Health Authority; IHA = Interior Health Authority; VIHA = Vancouver Island Health Authority; NHA = North Health Authority; ECP = emergency contraceptive pills; STI = sexual transmitted infection; GSH = general sexual health
[a] Pearson's Chi-Square test comparing concerns across regions: *p*-value < .001 for all variables.
[b] Frequency of reported concerns by regions.

decreased over the years (36.6% in 2000–2003 to 25.1% in 2012–2016). This may be attributed to more widespread education and availability of contraception, thus reducing the need for accessing the Sex Sense service for this concern. Between 2010–2013, 62% of women worldwide reported the use of at least one contraceptive method (Curtis & Peipert, 2017). In addition, there has been an increased availability and information about the Long Acting Reversible Contraceptives (LARCs), which are highly effective methods and can be used by all ages including teens and women who had never been pregnant with minimal risk of complication (Brown, 2010; Hathaway, Torres, Vollett-Krech, &Wohltjen, 2014). As LARCs are both long-acting and less user dependent, women may have fewer questions about them over the duration of use.

In contrast, the rates of questions pertaining to pregnancy risk, STI, and general sexual health increased from 2000–2016. Shoveller et al. (2009) demonstrated in a qualitative study across four communities in BC that young men and women (15–24 years) experienced barriers in assessing youth-friendly STI testing. Confidentiality of the service was among their concerns. Given the confidentiality of the Sex Sense service, more people may be inclined to contact it to access information about these issues. Even though more information about different kinds of contraceptive methods is available, unintended pregnancies may occur due to their incorrect or inconsistent use (Winner et al., 2012). This is one explanation for why there were more concerns about pregnancy risk, pregnancy and ECP. This suggests more work can be done around educating users on the correct and consistent use of contraception, including by contraceptive prescribers/providers. Another possible explanation for increases in the concerns about pregnancy relates to increasing trends in delay of childrearing, with increasing focus on one's career, financial stability and emotional maturity (Waldenström, 2016).

We also found that more women contacted the service with questions about contraception than men. This finding may stand in contrast to a qualitative study that assessed the views of young men (14–18 years) about sexual health services and contraception. Those participants thought they should share the responsibility with their partners for contraception, however, they also believed that when in a relationship it was not always necessary to use a condom (Brown, 2012). It is important to highlight that men may seek information regarding contraception less frequently as there are fewer male-focused contraception techniques other than the condom and withdrawal.

Contraception was also the main concern among all analyzed age ranges except for clients over 40 years of age. In this group, STI was the main reported concern. It has been reported that the STI risk increases with age (Johnson, 2013). In Canada, the rate of confirmed cases of syphilis increased from 2010 to 2015 and three age cohorts had the highest increase: 25–29, 30–39 and 60+ (Choudhri, Miller, Sandhu, Leon, & Aho, 2018). Mid-age and older adults may participate in risky sexual behaviour since they may not see themselves at risk for these infections, and unintended pregnancy may not be as much of a concern at their age (Johnson, 2013). Another explanation for our finding is that older clients may obtain information about contraceptive methods from their health care providers.

Even with the existence of many programs that try to reduce sexual risk-taking in the USA, about one fourth of sexually active adolescents contract a STI, including HIV, every year (Kirby, 2002). Around 110 million Americans were infected in the year 2008 and over 20% of these infections were among people aged 15–24 years (Satterwhite et al., 2013). In Canada, 68% of people in the same age range use condoms (Cheng et al., 2016; Roterman, 2012), however many men reported not liking this method because of their effects on reducing

pleasure (Romero-Estudillo, González-Jiménez, Mesa-Franco, & García-García, 2014). This is consistent with other findings in our study, namely, that when we compared genders, more men than women were concerned about STI, general sexuality, general sexual health, and pleasure.

Concerns about sexual orientation were low throughout the years of this analysis. We believe that many LGBT people would contact the service searching for other information and their calls or emails may have been captured as other concerns. For example, a male client who has sex with men, regardless of how he identified himself, may have questions about STI; in this case the concern would be identified by the Sex Sense staff as STI and not as sexual orientation. There is some support from qualitative research that concerns about STIs and HIV were prominent among LGBT individuals (Magee, Bigelow, Dehaan, & Mustanski, 2012). Moreover, the sexual orientation of Sex Sense clients was not specifically requested or recorded as the staff answers their questions. When looking at trends in abortion concerns and the different regions, 12.9% of clients from IHA and 9.7% of clients from VIHA were concerned about abortion, while only 6.8% of callers and emailers from VCHA contacted the service with the same concern. Abortion access in BC is mostly available in major urban centers, and most accessible in the city of Vancouver (which is in VCHA). Since individuals from the VCH geographic region had greater access to abortion, this may explain why they had fewer concerns about this topic. Mifepristone, the gold-standard medical abortion drug, was approved in Canada in 2015, restrictions on its use were eased in late 2017 and the BC Provincial Government has covered its cost since January 2018. There is, therefore, hope for increased access to abortion for people living outside of urban regions.

Findings from this analysis showed specifically what are the main gaps in SRH among individuals from different gender, range of ages and location. These results have implications for informing more direct conversations about SRH services that may be taking place among various stakeholders, such as health care professionals, policy makers, and government leaders. With easy access to more accurate and reliable information about SRH, people may be able to have healthier sexual relations with less risk, and potentially decreased need for medical care relating to sexual and reproductive health.

Limitations and Future Opportunities

Our analyses were not based on the entire sample. Individuals who contacted Sex Sense via email did not provide demographic information, which is why variables related to gender and age were not captured for the entire sample. There were also a notable number of callers with missing demographic data and only information on binary gender (male, female) was collected, thus excluding potentially important information about trans and non-binary individuals. Furthermore, the binary gender question may have contributed to some participants not wanting to disclose their gender. The integration of a new database at Sex Sense was implemented in 2017, allowing staff to collect more refined variables on clients who contact the service. This includes non-binary gender and more specific topics of the concern (e.g., STI testing and STI anxiety). In addition, emailers are now invited to answer the demographic questions. This should allow for a greater depth and breadth in future analyses.

Future research might consider the direct impact of such services on the clients, their perception of accessibility and satisfaction with this kind of non-judgmental sexual health information. It may also be possible to follow up with service users to track their behaviours to study the impact of information/education on subsequent behaviours/actions.

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