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Sexual and Reproductive Health Service Provision to Adolescents in Edmonton: A Qualitative Descriptive Study of Adolescents' and Service Providers' Experiences

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Abstract: The goal of adolescent sexual reproductive health (SRH) services is to provide information, education and healthcare to promote safe health practices and protect adolescents from negative health outcomes; however, access to timely, effective, and affordable SRH services by adolescents in Edmonton, Canada remains relatively unknown. Our study sought to understand the perspectives and experiences of adolescent girls and service providers in relation to availability, accessibility, and quality of SRH services available in Edmonton. The study objectives were to explore SRH services adolescents seek, uncover barriers in accessing SRH services and identify areas to improve accessibility. Qualitative description design was employed to conduct this study. Five service providers specializing in SRH, and eight females (ages 17–20 years) that access SRH services were recruited from the Alberta Health Services Birth Control Centre (BCC). Semi-structured interviews took place via Zoom. Thematic analysis was conducted using NVIVO software. Findings consisted of four primary themes: (1) views and current SRH practices; (2) barriers to accessibility; (3) the effects of COVID-19 on accessibility; (4) identified gaps in SRH care. The findings from our study support the development of knowledge translation strategies and make recommendations to improve the present quality of SRH services in Edmonton.

Keywords: sexual reproductive health; adolescent; birth control; services; barriers; accessibility



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1. Introduction

The World Health Organization (WHO) defines the period of adolescence as 10–19 years of age and describes it as the phase in which significant growth and development occurs [1]. During this period, adolescents experience the physical changes of puberty, menstruation, alterations in body image, and begin to explore sex and other sexual acts. Young Canadians aged 15–24 years are disproportionately affected by sexual reproductive health issues, including higher rates of sexually transmitted infections (STIs) compared to other older age groups [2], with rates significantly greater for those that identify as female than those that identify as male [3].

1.1. What Is Sexual and Reproductive Health?

Sexual health is defined as “a state of physical, emotional, mental and social well-being in relation to sexuality” [4] and reproductive health is the proper function and processes of the reproductive system. For adolescents, this includes feeling safe and comfortable when exploring their sexuality, being educated about the changes and functions of their own bodies, and having access to youth-friendly services. The concepts of sexual health and reproductive health are interlinked [4] and will be referred to using the collective term sexual and reproductive health (SRH). The goal of adolescent SRH services is to provide information, education, and healthcare to promote an understanding of safe health practices and protect young people from negative outcomes or complications to their SRH.

Comprehensive, age-appropriate SRH care is associated with a reduction in the rate of STIs and unintended pregnancies in this population. Increased use and access to contraceptives results in an improvement in the overall health and wellbeing of adolescents, in addition to positive education and economic outcomes [2].

1.2. Existing Barriers to SRH Care in Canada

Very few studies were conducted to identify the barriers to accessing SRH services by adolescents in Canada. The SRH needs of adolescents have been largely unmet and have increased over the last few years [5,6]. According to Flicker et al., SRH services are highly inaccessible for adolescents, as 83% of Ontario adolescents had never visited a clinic related to SRH needs [5]. With this statistic in mind, our preliminary research looked for common access barriers amongst this population. Flicker et al. found that many adolescents do not know how to approach their healthcare provider for SRH health services mainly because of fear of judgement, embarrassment, and discomfort when asking questions. Adolescents found waiting rooms in clinics unfriendly to youth, and that staff were “not particularly positive towards them” [5]. Stigmas were another common barrier as topics such as STIs and testing are rarely discussed amongst young people; those who accessed testing reported feelings of guilt, fear, and shame [7]. Adolescents from immigrant communities faced increased stigmas, as open discussion about sex-related topics are often discouraged and they are expected to abstain from sexual behaviors rather than seek options to promote positive SRH practices [8]. Locations of SRH services also act as a barrier in Canada. Abortion services are more prevalent in larger communities, requiring rural patients to travel from their own communities for SRH care, resulting in travel costs, accommodation expenses, and unpaid work leave [2]. Accessing pharmaceutical contraception specific to women presents a challenge for many, as 24% of the Canadian population lacks adequate coverage for the costs of these services [2]. Vulnerable populations such as adolescents and those from low-income households are most affected by the cost barrier of contraceptives and oftentimes cannot afford to pay out of pocket [9]. Adolescents accessing contraception through their parents’ insurance may not be able to do so confidentially and independently. These barriers are not specific to the population of Edmonton and may continue to change as Edmonton’s adolescent community grows and diversifies as rapidly as the province’s general population.

1.3. Current Research Gaps

There is a lack of qualitative research that has been conducted in this area; many studies that revolve around this issue include quantitative approaches that do not provide insight into the perspectives of young women on accessing SRH services, how they are accessing it, how readily available it is, or what barriers inhibit access. We could not locate any studies that focus on assessing how adolescent girls in Edmonton access SRH services and what barriers they face in accessing these services. The results from the Flicker et al. report shed light on Ontario teens at that time; however, they are not a direct reflection of Edmonton’s population and current issues [5] as the report is over 10 years old, indicating that more current research is urgently needed.

1.4. Research Purpose and Objectives

In order to identify current SRH practices and barriers to accessing SRH services, there is a need for a qualitative study that provides in-depth analyses of the experiences of adolescent girls from a range of backgrounds as well as what services would benefit them the most [8]. We believe that our study lends greater insight into the experiences of adolescent girls when accessing SRH services.

The overall purpose of our study was to understand the perspectives and experiences of adolescent girls in Edmonton, as well as from SRH service providers, to improve the quality, availability, and delivery of SRH care and services for this population. Our objectives were (1) to explore the SRH services adolescent girls seek out in Edmonton; (2) to discover

the barriers adolescent girls face when seeking services, from the perspective of young girls, and from health service providers; (3) to identify gaps and levers of change to make SRH services more accessible for adolescent girls in Edmonton. By researching the current SRH services available to adolescents and understanding the perspectives of adolescent girls accessing services, we are able to understand the barriers and challenges they face, make recommendations to improve and promote SRH services and create opportunities to enhance SRH care delivery in Edmonton.

2. Materials and Methods

A qualitative description (QD) approach was used to identify specific SRH service gaps and barriers from the perspectives of adolescent girls living in Edmonton and SRH service care providers. QD was most appropriate for our study as it is commonly used to describe nursing-related phenomena [10] and is best suited for studies exploring the who, what, and where of events or experiences [11]. At the outset of our research, in line with assumptions about naturalistic inquiry [12,13], a QD approach helped us to describe the phenomenon of SRH and gain insight into the perspectives of adolescent girls and service-providers' needs, attitudes, perceptions, and experiences related to access to SRH services in Edmonton. The main features of a QD design we executed in our study included conducting small semi-structured interviews and utilizing purposive sampling to obtain broad insights from participants [10].

2.1. Setting and Sample

Participant recruitment occurred at Alberta Health Services (AHS) Birth Control Centre (BCC), a local clinical site that delivers SRH care to adolescents in Edmonton. This site was selected because they provide a wide range of SRH services specifically for female adolescents and were operating during the COVID-19 pandemic. As a result of the ongoing pandemic, and the continuous changing of policies regarding in-person gatherings, all data were collected virtually via Zoom. Zoom has been reported effective because of its relative ease of use, cost-effectiveness, data management features, and security options [14,15]. Due to the privacy of the virtual setting, we tried to ensure the presence of the participants and the researcher during the interview. To mitigate this factor, all participants were encouraged to use the chat box feature on Zoom if they could not answer questions due to the presence of others in the room. We also provided them with the option to reschedule their interview if they felt they could not continue. Notably, some staff participants completed interviews at work and were given time to do so by their clinic manager.

The adolescent sample of our participants were females ages 15 to 20 years old. At 15 years old, we felt participants would be able to accurately provide meaningful and detailed descriptions of accessing SRH services and could provide informed consent without the need for parental supervision. Furthermore, we extended the age range to include those who were 20 years old as per the definition of "young people" by the WHO, which encompasses those from 10–24 years of age [16]. At the ages of 15–20, adolescents have a more solid understanding of their own individual SRH needs and practices, as supported by Piaget's theory of cognitive development, where adolescents are in the period of abstract thoughts and advancement in problem-solving abilities [17]. Implications for nursing practice involve including adolescents in decision-making regarding their own healthcare needs. SRH service providers directly involved in providing SRH services to adolescents were recruited from the BCC.

2.1.1. Inclusion and Exclusion Criteria

To qualify for this study, participants had to be (1) between 15 to 20 years of age, (2) female or identify with the female gender, (3) currently accessing SRH services or had accessed services in the last 4 years, and (4) English speaking. Those who had not accessed SRH services within the last 4 years were excluded as they did not provide the most accurate data about the quality of services currently being provided. To be eligible for the second

component of our study, participants had to be (1) a staff member or healthcare provider at the chosen facility, (2) work with adolescents, and (3) English speaking. Those who were not staff members or did not work with adolescents were not the target population of this project and were not included.

2.1.2. Sample Recruitment

Purposive sampling was used to select participants as it allowed us to deliberately choose individuals to provide relevant and rich descriptions of their experiences with SRH services [18]. Sample size is primarily tied to the breadth and depth of data required to adequately answer the research question; QD methodology does not specify or suggest particular sample sizes but recommends setting a projected sample range based on the research question [18]. Based on existing literature and our supervisor's experience in qualitative research, we chose a sample size of 8–10 adolescent participants and 5–7 staff participants as adequate to generate sufficient data. In addition, due to COVID-19 restrictions and time limitations to complete the project, our sample size was small. Saturation of data was frequently discussed by the research team and was ultimately determined based on redundancy of information and adequate knowledge to formulate rich themes from the respondent's perspectives.

After receiving ethics approval from the University of Alberta Ethics Review Board (Pro 00110093) and permission from the facility, staff were informed of the opportunity to participate and recruitment posters were circulated in the clinic and via notice boards. Clinicians helping to recruit adolescent participants obtained contact information of potential participants via a consent to contact form, rather than medical records. Information and consent letters were presented to selected participants prior to interviews. Participants were contacted via secure email and telephone, based on preference. Emails were used to set up Zoom and did not connect the participant to SRH services. There was no participant attrition at any point in the study.

2.2. Data Collection

The interview guides (Appendices A and B) used in this study were from the WHO's Adolescent Client Interview Tool (pp. 64–67) and the Support Staff Interview Tool (pp. 72–73) from the WHO Quality Assessment Guidebook [19]. We chose the WHO interview tools because of the straightforward questions and adaptable guidelines and added additional open-ended questions to further explore participant perspectives. Interviews were conducted by a single researcher and the other researcher present took notes. All interviews were recorded using the audio record feature on Zoom and the duration of interviews ranged from 9 min to 37 min. Demographic data were collected via secure Google Forms (Appendices C and D).

2.3. Data Analysis

In accordance with QD, data collection and analysis were completed concurrently [20]. Data analysis was completed in 5 phases and guided by Braun and Clarke's Thematic Analysis Steps [21]: (1) transcripts were digitally recorded using the recording feature on Zoom and transcribed verbatim by the researchers; (2) transcripts were read in detail several times; (3) open coding was carried out for all transcripts by the two student researchers. Each researcher coded interviews that were carried out by the other researcher; (4) codes were grouped into preliminary themes and reviewed by our supervisor for validity; (5) themes across cases were derived from the codes and were grouped into an organizational framework. NVIVO version 12 software (QSR International, Melbourne, Australia) was used to manage the entire data analysis process.

2.4. Ethical Considerations

Because our adolescent participant group was a particularly vulnerable population, we took ethical considerations to mitigate any risks. We abided by the Tri-Council Policy

Statement (TCPS 2) which states that consent is not based on age, but rather on the decision-making ability, capacity to understand the significance of the research and comprehension of the potential risks and benefits of research participation [22]. To maintain confidentiality, participation was not disclosed to parents or guardians and did not require parental consent. Ethics approval was obtained from the University of Alberta prior to the initiation of the study. The benefits of participating in our study included the opportunity for the participant to share their perspectives and the potential to positively influence future SRH service provisions to adolescents. The risks of participating were minimal but included the participant discussing uncomfortable or sensitive topics. To minimize discomfort, we followed verbal and nonverbal cues from the participant. Technological safeguards were put in place during virtual data collection to ensure that the Zoom interviews were private, with only the researchers and individual participants present. We encouraged participants to use the chat box feature if they felt they could not speak. If privacy could not be achieved virtually, we offered to conduct an in-person interview.

2.5. Rigour and Validity

We ensured research rigor and trustworthiness in all phases and maintained a reflective journal throughout the study to limit personal biases, opinions, and feelings. Using an audit trail helped enhance confirmability, ensuring that researcher bias did not skew the interpretation of what participants disclosed [13]. To achieve reliability and validity, we employed verification strategies that identified when to continue, stop, or modify the research process. These strategies included (1) methodological coherence, ensuring congruence between our research questions and components of QD; (2) appropriate sampling to ensure effective saturation with optimal quality; (3) collecting and analyzing data concurrently; (4) developing a coding system that was discussed and verified with research team members; (5) keeping a detailed audit trail and field notes [23]. Service providers were included in this study as a means of data triangulation, where they were able to provide a different perspective on the phenomenon of SRH service delivery to adolescent girls. Our decision to include SRH staff perspectives as a secondary source of data contributed to the rigor of our study by providing additional information on the SRH practices of our target population.

3. Results

All of our staff participants ($n = 5$) were registered nurses with 2–28 years of experience practicing in public health and SRH at the clinic. All staff participants identified as female and reported that the highest level of education achieved was a bachelor's degree. For adolescent participants, all of them ($n = 8$) identified as female. In total, 50% ($n = 4$) were 17 years of age, 25% ($n = 2$) were 19 years of age, and 25% ($n = 2$) were 20 years of age. Almost all ($n = 7$) of the adolescent participants were currently enrolled in University or post-secondary institution. Our interviews with SRH staff and adolescent girls led to the discovery of primary themes: (1) views and current SRH practices; (2) barriers to accessibility; (3) the effects of COVID-19 on accessibility; (4) identified gaps in SRH care.

3.1. Views and Current SRH Practices

In order to address our first research objective, we sought to explore participants' perspectives on current SRH services available to adolescent girls and which services adolescent girls currently seek out. We grouped this theme into staff perspectives and adolescents' perspectives. Both adolescents and staff participants' responses were similar in terms of the resources that are currently being accessed by adolescent girls.

3.1.1. Staff Perspectives

Interviews with healthcare providers at the BCC allowed us to gain an understanding of the services available at this specific facility. As explained by a staff participant, the BCC specializes in services for "individuals who identify as female, who may or may not have a uterus and anyone else who identifies as whatever type of gender who does have a

uterus" (Staff Participant [SP] 3617). Staff participants explained that the clinic primarily provides care to those who cannot afford services elsewhere or have barriers in accessing care. Many staff participants detailed that contraceptives are provided at a reduced or no cost to clients who cannot afford them. This umbrella term includes oral contraceptives (e.g., the pill), contraceptive patches, implants, injections, and intrauterine devices (IUDs). Other services provided at the clinic include pregnancy testing, "pro-choice pregnancy options counselling" (SP 2568), and emergency contraceptives. Screening and symptom management for sexually transmitted infections (STIs), including referrals to STI treatment centers, are also offered.

Staff at the BCC stated the services most often accessed by adolescent girls ages 16–20 are the free birth control options, such as the pill or IUDs, as well as pregnancy testing and STI testing. Staff participants also said that oftentimes, it is the first time adolescents are accessing services in this area, so they also provide additional counseling and support regarding SRH. One staff participant stated, "many times I have heard girls say that they didn't know about us until their friend told them at school." (SP 7825). When we asked staff how clients learn about the services at the BCC, word of mouth between clients was a common finding.

3.1.2. Adolescent Perspectives

To gain an understanding of any existing knowledge on the topic, we asked adolescent participants if they were familiar with the term "sexual reproductive health" and to describe what the term means to them. One adolescent participant gave examples of "birth control, abortion clinics. Just anything to do with condoms, stuff like that." (Adolescent Participant (AP) 9345). Another definition was "it means our reproductive organs and how we can keep them healthy, how we can keep them clean from [STIs] and how we can take care of our bodies if we are sexually active." (AP 6743). Some participants were familiar with the term but could not identify any examples of services that would fall under the category of SRH. Adolescents were asked where they acquired information regarding SRH. A majority ($n = 6$) stated they got their information from the internet. A few ($n = 4$) said they learn about SRH topics by talking with friends and compiling information together. When we asked adolescents what services were accessed often, by themselves or their peers, a majority stated that birth control methods, such as the pill or IUDs, followed by STI testing were most relevant in their lives. One adolescent participant, who highlighted unwanted pregnancies as an important aspect of adolescent SRH, stated that "you can be as careful as you can, but it can still happen. Unwanted pregnancies are the biggest thing because I have a lot of friends who have children, or didn't want children, but now have them" (AP 6734). Overall, prioritizing safe practices such as STI and pregnancy prevention were the most popular amongst adolescents.

3.2. Barriers to Accessing SRH Services

Adolescent participants were asked to describe the most common and challenging barriers they face when accessing SRH services. Their responses included (1) family, community, and healthcare providers, (2) financial insecurity, (3) lack of comprehensive SRH education and knowledge of resources, and (4) location and hours of services. Supplemental information came from staff participants, who identified barriers experienced by their clients.

3.2.1. Family, Community, and Healthcare Providers

Parents and family members of adolescents were found to be one of the barriers to accessing SRH services. When asked if their parents were supportive of them seeking SRH services, approximately half ($n = 5$) of adolescent participants said yes, but that it was a topic they did not discuss openly with family members. The other three indicated it was a very sensitive topic within their family, with one stating it was "looked down upon" in her community (AP 7352). One staff participant noted this barrier presents when "family

members [are not] comfortable having these conversations to start, or flat out refusing to give this care to their teens or adolescents" (SP 3617). She explained that at the BCC, clients under the age of 18 can be deemed as mature minors by healthcare providers and are then able to consent to medical care without the need for a parent or guardian present.

Another staff participant described a method to mitigate this barrier by giving the clients options for being contacted by the clinic, including "leaving a message with a trusted person" (SP 1034). Additionally, if clients are concerned with privacy, there is a confidential phone line at the BCC where staff answer with a pseudonym and do not provide any information identifying them as an SRH service. One staff participant reported that "there is no disclosure of any client information, even to parents or guardians" (SP 2568). Despite these safeguards in place, adolescent participants were still concerned with their privacy as not all facilities they have visited employ the same privacy strategies. One adolescent participant stated "young girls can't say to their doctor that they want an IUD or birth control or information about it because their parents are in the room. I mean, they give you the opportunity to do the appointment alone but not all the time" (AP 4491). This barrier can cause adolescents to refrain from disclosing necessary health information to their providers.

Social stigma from community members was identified by adolescents. They felt that sex is taboo in our society and being open about accessing resources is difficult for adolescents. One adolescent participant stated that she thinks adolescents are "genuinely scared to ask for help because they think it's going to get out somehow and it's the embarrassment aspect of it that holds people back" (AP 6442). Moreover, fear of judgement from health providers when asking for birth control was also noted as a barrier to adolescents, most notably when in contact with non-female providers. The adolescent participants seemed to agree that this stigma and judgement that is so prominent in our society could be curbed by comprehensive SRH education and more open dialogue about SRH with parents/elders and educators.

3.2.2. Financial Insecurity

Many adolescents still depend on their parents or family insurance benefits but do not want parents to know they are accessing SRH services. Even families that support their children in seeking SRH services may not be able to afford the high price of products. One adolescent shared her experience of getting a hormonal IUD and said "[my family] had to wait a bit to get the money set aside for [the IUD], and then I was able to get it. With birth control it was okay because I think it was only \$80. But a \$400 purchase is a lot more than that. So, we had to wait a few months before I could get it." (AP 9345). This participant also reflected on her options as a postsecondary student and was asked about how she or her peers felt about the cost of services. She stated, "almost everyone at university is tight on money, and so having to pay for resources, a lot of kids won't think it's worth it, even if it is." (AP 9345). A negative outcome from this barrier would be adolescents having to "stop accessing [SRH] services or having to take money from other essential areas" (AP 8470) of their lives to pay for SRH services.

At the BCC, adolescents are only charged for services or products if they can afford them. There are "compassionate programs available through the pharmaceutical manufacturers" (SP 2668) to reduce the cost barrier of contraceptives such as hormonal IUDs. While this can greatly reduce the cost of products, some application processes require extensive paperwork or the applicant to be over the age of 18. This can deter the adolescent applicant's desire for the product and cause them to search for another contraceptive method.

3.2.3. Lack of Comprehensive SRH Education and Knowledge of Resources

The lack of knowledge of where to find SRH resources and credible information is a barrier for adolescents. The first place many adolescents go for information regarding sex and SRH is the internet. One adolescent said, "it's kind of hard figuring out what resources to trust, especially because on the internet you never know" (AP 9345). Many

of the adolescent participants ($n = 6$) noted that they would have liked to have heard about the facility in their school's sexual education classes. However, some of them had missed out on a comprehensive SRH education because they were taught "abstinence in a Catholic school" (AP 9345). Many adolescent participants expressed their desire to have comprehensive and consistent SRH education in schools. Adolescent participants ($n = 3$) mentioned how the topic of sex is introduced in elementary school and briefly discussed in junior high school, but the topic is not reintroduced in high school when sexual practices are more likely to be taking place. The education system adolescents were enrolled in seemed to have an effect on the SRH education they received. As stated by one adolescent participant "when talking to my friends who were outside of the Catholic school board that were in public [school], they were taught how to have safe sex, and all that. And I just felt stupid because I didn't know any of that. I didn't know that was a thing in school" (AP 6442). Another adolescent participant says she believes the stigma surrounding STI testing is "thanks to Alberta's education system" (AP 2731) and the lack of comprehensive SRH education she and her peers received. Overall, adolescent participants stated that they wish it was more widely known that STI testing, pregnancy testing, and birth control options are available in places apart from their family physician's office.

3.2.4. Location and Hours

The location and environment of the BCC were identified by both the adolescent and staff participants as a barrier to access. Currently, the BCC is located in a professional building in downtown Edmonton. One staff participant identified that the building is "not where you would necessarily intuitively go for birth control services, it doesn't look like somewhere that offers [SRH services]" (SP 3094). One adolescent noted that "smaller clinics may be better for these types of services to operate out of" as they can be less daunting for teenagers (AP 6743). Being accessible by transit was a benefit of the downtown location, as it gave adolescents without access to a vehicle the opportunity to reach the clinic. Because of the location, clients commuting from communities far from the downtown area could be "turned away at closing time" (SP 2568). The clinic hours of operation were regarded as a barrier for clients as the hours coincide with working and school hours. One adolescent indicated ideal hours of operation would include "evenings and weekends so that teenagers [would not] miss school" (AP 9345).

3.3. Impact of COVID-19 on Accessibility

Both the staff and adolescent participants noted that the COVID-19 pandemic impacted adolescents' ability to seek out services from the BCC. For clients accessing the clinic during the pandemic, a staff participant described additional measures in place which included calling beforehand and scanning a QR code. For approximately 12 months during the pandemic, the center altered the delivery of services by instituting telehealth as their main method of service provision. They eliminated their previous walk-in program and were appointment-based only. This staff participant also noted that it was difficult for some clients to adapt, stating "if you're a visual learner, you are missing out on that piece in telehealth, we aren't doing Zoom calls or video calls, we are just doing phone calls" (SP 3617). Additionally, due to the pandemic, two outreach centers run by the BCC had to close down, thus limiting the accessibility of services in the greater Edmonton area. A staff participant noted that "[they have] just reopened one" (SP 7825), which is a positive sign for more to reopen, but for a year during the pandemic there were significant limitations in providing services. Overall, staff participants found the pandemic to have a negative impact on their provision of services. Adolescent participants ($n = 3$) who accessed the BCC using telehealth said it was more convenient for them to phone the clinic as they were able to speak to a nurse right away and then the doctor would call, eliminating the waiting time in between providers.

3.4. Areas for Improvement in SRH Care

When asked what improvements could be made to make accessing SRH services a more positive experience, many of the adolescent participants shared a similar sentiment. The professional image of the building made it “daunting” for AP 6743, with many other adolescent participants preferring a smaller facility that cannot be identified as an SRH clinic. The other adolescent suggestions were to have “more clinic locations”, “inclusive hours”, and more “drop-in availability”. The staff participants’ suggestions for improving the center and the way services are delivered revolved around listening to suggestions from their clients, such as having a suggestion box and encouraging an open dialogue with a “youth council representative or someone that could speak on behalf of the clients” (SP 3094). Both staff members and adolescent participants shared that the educational materials posted in the clinic may be more accessible to adolescents via a scannable QR code instead of paper pamphlets that could be seen by other people.

4. Discussion

The purpose of this study was to better understand the barriers adolescent girls experience that affect access to SRH services and identify areas that could be improved to promote SRH access. Our findings indicated that current SRH services in Edmonton are adequate at addressing the SRH needs of adolescent girls; however, more can be done to address the barriers we identified that affect accessibility of these services. SRH service providers at the BCC are aware of the challenges faced by their clients and would benefit from incorporating the perspectives of adolescent girls into their practice.

Our study findings suggest that adolescents feel uneducated and underprepared to properly care for their SRH through school programs. Literature suggests that barriers such as comprehensive SRH education in Edmonton schools could be remediated by an updated curriculum, developed with the input of adolescent advisory groups [24]. There is currently no legislation mandating comprehensive SRH education for high school students in Alberta, and the current curriculum, Career and Life Management (CALM) lacks updated information for those who identify as sexual and gender minorities [24]. Some of the SRH course objectives in CALM include being able to “describe sexually healthy actions and choices for one’s body, including abstinence” and “assess the consequences of being sexually active” [25] (p. 9). We feel that a remediated curriculum would include a designated course, or courses, specifically related to SRH and personal relationships, as this topic cannot be sufficiently covered in such a short period of time while also providing adequate information on all of the other course objectives. As per our adolescent participant’s perspectives, including sex-positive topics and information for sexual and gender minorities in CALM would be beneficial to students’ understanding of comprehensive SRH. Additionally, having healthcare providers as guest speakers in sexual education classes could allow the dissemination of up-to-date and unbiased health information [5,24]. This could also address the barrier of youth being uninformed on available resources in the community.

Staff and adolescent participants indicated the desire to have updated forms of educational resources in the clinic. In terms of knowledge mobilization strategies, youth-friendly health resources should incorporate more technological aspects in order to resonate with adolescents and maximize effectiveness in their approaches [26]. Using QR codes or links to information may encourage adolescents to explore topics of interest or give them opportunities to share information with peers. Additionally, virtual services such as telehealth were praised by adolescent participants. An important aspect of youth-friendly services is bringing services to youth [5,26], and virtual methods are becoming the preferred method of service provision by this population. According to Palmer et al., targeted communication strategies via mobile devices such as cellphones may have an impact on informing adolescents on SRH services and service use [27]; however, additional studies using electronic strategies are required to conclude if there is a significant effect on adolescents’ awareness of SRH resources and services.

The presence of clinics such as the BCC that are working to mitigate many of these barriers such as financial insecurity and privacy of adolescent patients is a step forward in the direction of improving adolescent SRH services. Our study found that the BCC mandate addresses the cost barrier that affects many youths when accessing costly contraceptives. There was an overwhelming majority of participants, both adolescents and healthcare providers, that believed having more government-funded and subsidized SRH programs would benefit adolescents. Policies in place that reduce the cost of contraception have been shown to reduce the need for more expensive procedures; for example, those that address unintended pregnancies [2,8]. The experiences of adolescent participants from our study reinforced findings from the literature where vulnerable populations, such as youth and those from low-income households, are most affected by the cost barrier of contraceptives and oftentimes cannot afford to pay out of pocket [8]. Our findings support a call for action, in order to allocate funding for services and programs that meet the SRH needs of youth, including adolescent females.

4.1. Limitations

We note some limitations. Purposive sampling was chosen because it provides information-rich perspectives about SRH services; however, there is a possibility for selection and information bias. The sampling site of our study was located at one downtown facility, which could limit adolescent participants to being from the geographic region of central Edmonton. To improve the generalizability of this study, we would have liked to extend this study to other healthcare facilities within Edmonton and have a larger sample size. The COVID-19 pandemic acted as a significant limitation as the initial plan to recruit participants in person had to be modified for remote recruitment. For this reason, the sample size was very small and hence study findings could not be generalized. We believe that more interest could have been generated and thus more participants would have been recruited with our initial plan. While Zoom was convenient and efficient in terms of scheduling and organizing interviews, access to a webcam/computer was a specific criterion that needed to be met in order to participate in the interviews and this could have prevented a potentially information-rich participant from being included in the study.

4.2. Implications for Adolescent SRH Care

Our study findings can be used to (1) enhance the quality of future SRH care practice, (2) develop youth-friendly services that meet the needs of adolescent girls, and (3) make recommendations to overcome access barriers to enhance the delivery of services. In addition, to make services more accessible for adolescent girls, collaboration among primary healthcare providers, school-based education, and sexual health clinics is necessary. By exploring the unique perspectives of our participants, we identified areas of SRH care that require improvement. We plan on disseminating our findings to the staff at the BCC with the intention to inform their practice with feedback from the adolescent female population. Future research guided by our findings could include a subsequent intervention study that looks at the implementation of a SRH education program and the establishment of a youth-advisory council to promote SRH information and services among young people in Edmonton.

5. Conclusions

Overall, this study shed light on the many areas of improvement that need to be addressed in regard to SRH, and with the recommendations that were noted, we hope that this will be a starting point to promote SRH for young people. Though the COVID-19 pandemic hindered the process of recruiting participants and altered the data collection methods, we believe that the findings from this small population can be generalized to reflect the SRH needs of female-identifying adolescents across the province of Alberta.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. Written informed consent has been obtained from the participants to publish this paper.

Data Availability Statement: The data presented in this study are available upon reasonable request from the corresponding author, E.V. The data are not publicly available due to privacy and ethical consideration for participants.

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Conflicts of Interest: The authors declare no conflict of interest.

Appendix A Adolescent Client Interview Guide

(1) Demographics

- (a) Sex of client (note, but do not ask).
- (b) What is your age?
- (c) Are you currently studying in school? (junior high/high school).
- (d) What is the highest level of education you have completed?

(2) Barriers to health services

- (a) What has been your overall experience with receiving services from this facility?
- (b) Have you ever come to this health facility and not been able to receive a particular type of health service?
 - (i) (If yes) Can you tell me more about why you think this was?
- (c) Are any health services offered at this facility that you think some groups of adolescents might not be able to receive?
 - (i) Can you explain why?

(3) Respect and equality

- (a) Have the healthcare providers treated you in a manner that made you feel respected?
 - (i) Can you describe a recent encounter of this, either positive or negative?
 - (ii) Did the healthcare provider make you feel comfortable?
- (b) Have other support staff, such as security staff, clerical staff, and cleaning staff, treated you in a manner in which you would want to be treated?
- (c) Did the other support staff, such as security staff, clerical staff and cleaning staff, make you feel comfortable?

- (4) **Affordability and accessibility**
 - (a) Were you asked to pay for health services?
 - (i) If you were asked to pay for health services, were you able to pay?
 - (ii) In case you could not pay, did you receive the health services anyway?
 - (iii) How do you feel about paying out-of-pocket for services?
 - (b) Do you know the days and times that the health facility is open?
 - (c) Are the working days and working hours of the health facility convenient for you?
- (5) **Informed about services**
 - (a) Could you tell me which reproductive health services are offered at this health facility?
 - (b) How did you hear/learn about this?
- (6) **Support from community members**
 - (a) Do you think that your parents/guardians would be supportive of you coming to this health facility for reproductive health services?
 - (b) Are there some reproductive health services your parents/guardians might not want to be provided to you?
 - (i) (If yes) Which ones?
 - (c) Do you think other adults in the community are supportive of adolescents coming to this health facility for reproductive health services?
 - (i) (If yes) How do you know this?
- (7) **Community programs**
 - (a) Are you aware of any health services that are provided to adolescents in the community?
 - (i) (If yes) what type of health service is being provided?
 - (ii) Who is providing the health service (i.e., a healthcare provider from the health facility, an outreach worker or a community member)?
- (8) **Confidentiality**
 - (a) Do you believe that the information you shared with the healthcare provider will be kept confidential?
 - (i) Why or why not?
- (9) **Privacy**
 - (a) When you visited the health facility, did you believe that other clients could see you and hear you, and know what you came for?
 - (b) When you were talking to the person at the reception/registration counter, could other people hear you?
 - (c) Did anyone interrupt your discussion with the healthcare provider?
 - (d) Do you believe that others could hear your discussions with the healthcare provider when you were in the consultation/examination/treatment room?
- (10) **Non-judgmental environment**
 - (a) Did the healthcare provider give you his/her full attention?
 - (b) Did the healthcare provider seem interested in what you had to say?
 - (c) Did the healthcare provider respect your opinion and decisions even if they were different from his or hers?
 - (i) (If yes) Could you give me an example?
 - (d) Did the healthcare provider treat you in a supportive and considerate manner?
- (11) **Wait times and referrals**
 - (a) Have you found the waiting times to see the healthcare provider reasonable?
 - (b) Did the healthcare provider refer you to another place?

- (i) (If yes) Did he/she explain to you why you were being referred to another place?
- (ii) (If yes) Did he/she explain to you where and when to go?
- (12) **Environmental factors**
 - (a) Did you find the health facility a welcoming place to come to?
 - (b) Did you find all areas of the health facility that you used to be clean?
 - (i) i.e., Waiting room, bathrooms, examination rooms?
- (13) **Education**
 - (a) Did you see informational/educational materials on adolescent health topics during your visit to the health facility?
 - (i) Were the materials useful?
 - (ii) Were they easy to read?
 - (iii) Were they interesting to read?
 - (b) What kinds of topics do you wish you had more information about?
- (14) **Involvement and feedback**
 - (a) Do you believe that you could make a suggestion to the staff for improving the way in which health services are delivered here? Explain.
 - (b) Did you receive the health service you need to deal with your health concern or health problem?
 - (c) Were you referred to another health facility for health services not available at this one?
- (15) **Adolescent friendly**
 - (a) Did the healthcare provider explain things in a way you could understand?
 - (b) Did the healthcare provider explain to you:
 - (i) What check-ups/tests he or she was doing?
 - (ii) The results of the check-ups/tests?
 - (iii) What treatment he or she was proposing and why?
 - (c) Did the healthcare provider:
 - (i) Discuss the pros and cons of the different treatment approaches with you?
 - (ii) Ask you which treatment option you preferred?
 - (d) Did you have enough time to ask the healthcare provider everything you wanted to ask?
 - (e) Did the healthcare provider answer your questions in a relaxed manner or did he/she seem rushed and hurried to see the next client?
 - (f) Did the health facility have all the medicines and supplies to deal with your needs?

Appendix B Staff Interview Guide

- (1) **Demographics**
 - (a) Sex of staff (note, but do not ask)
 - (b) How many years have you worked at this facility?
 - (c) What are your areas of responsibility at this facility?
- (2) **Respect and equality**
 - (a) Are there some groups of adolescents who you do not feel comfortable dealing with?
 - (i) If so, can you explain why?
- (3) **Affordability and Accessibility**
 - (a) How long do clients have to wait before they see a healthcare provider?
 - (b) Do you know the procedures for making referrals for adolescent clients?

- (c) Is there anything else that you think should be improved at this facility to help make adolescent clients feel more welcomed?
 - (d) Are adolescents charged for specific health services at this facility?
 - (i) Are fees for adolescent clients less than fees for adults?
 - (ii) Do you provide concessions for clients who cannot afford to pay for health services?
- (4) **Community programs**
- (a) Do you provide any type of health services to adolescents in the community?
 - (b) Do community members support the provision of reproductive health services to adolescents?
 - (i) If so, do they assist you in any way? Explain how.
- (5) **Confidentiality and Privacy**
- (a) Are there any policies and procedures that guarantee the confidentiality of clients in this facility?
 - (i) If so, what specifically do they say?
 - (b) Are there any circumstances in which you would not follow any of these policies or procedures?
 - (i) If so, why?
 - (c) Are there guidelines in place to provide privacy for adolescent clients?
 - (d) Is it possible for other people to hear your conversations or counseling sessions with adolescent clients?
- (6) **Involvement and feedback**
- (a) Do you give adolescents opportunities to suggest or recommend changes to make services more responsive to other adolescent clients?
- (7) **Comprehensive Care**
- (a) Are adolescent clients offered the following reproductive health services:
 - (i) Information and counseling on reproductive health, sexuality and safe sex.
 - (ii) Testing and counseling services for HIV.
 - (iii) STI diagnosis.
 - (iv) STI treatment.
 - (v) Pregnancy diagnosis.
 - (vi) Care during pregnancy.
 - (vii) Care during childbirth.
 - (viii) Care after childbirth.
 - (ix) Abortion services.
 - (x) Information and counseling on contraception and emergency contraception.
 - (xi) Care and support for clients who have been physically or sexually assaulted.
 - (b) If services are not available, do staff know how and where to refer clients?
- (8) **Competent Care**
- (a) Do you believe that you have adequate knowledge and skills to provide health services to adolescent clients in the following areas?
 - (i) Information and counseling on reproductive health, sexuality and safe sex.
 - (ii) Testing and counseling services for HIV.
 - (iii) STI diagnosis and treatment.
 - (v) Pregnancy diagnosis.
 - (vi) Care during pregnancy.

- (vii) Care during and after childbirth.
 - (ix) Abortion services.
 - (x) Information and counseling on contraception and emergency contraception.
 - (xi) Care and support for clients who have been physically or sexually assaulted.
- (b) Do you believe that you are able/trained to communicate with adolescents about the risks, benefits and potential complications of the treatments and procedures you provide?
- (9) **Timely Care**
- (a) In your opinion, do you think you have enough time for your consultations with your adolescent clients?
- (b) Do you sometimes have to see your clients quickly because there are many clients waiting to see you?

Appendix C Staff Demographic Form

- (1) Do you identify as
- a. Female.
 - b. Male.
 - c. Transgender.
 - d. Non-binary.
 - e. Other (please specify):
- (2) What are the first three digits of your postal code
- a. The first three digits of my postal code are:
 - b. I don't know my postal code.
 - c. I don't have a postal code.
- (3) Education level completed.
- a. Less than high school.
 - b. High school.
 - c. College.
 - d. Bachelor's degree.
 - e. Graduate degree.
- (4) What languages are most often spoken in your home?
- a. English.
 - b. Mandarin.
 - c. French.
 - d. Arabic.
 - e. Spanish.
 - f. Other (please specify):

Appendix D Adolescent Demographic Form

1. How old are you?
- a. 15.
 - b. 16.
 - c. 17.
 - d. 18.
 - e. 19.
 - f. 20.
2. What grade/level of school are you in?
- a. Grade 7.
 - b. Grade 8.

- c. Grade 9.
 - d. Grade 10.
 - e. Grade 11.
 - f. Grade 12.
 - g. University or post-secondary.
 - h. I do not go to school.
3. Do you identify as
 - a. Female.
 - b. Male.
 - c. Transgender.
 - d. Non-binary.
 - e. Other (please specify):
 4. What are the first three digits of your postal code?
 - a. The first three digits of my postal code are:
 - b. I don't know my postal code.
 - c. I don't have a postal code.
 5. What languages are most often spoken in your home?
 - a. English.
 - b. Mandarin.
 - c. French.
 - d. Arabic.
 - e. Spanish.
 - f. Other (please specify):
 6. Were you born in Canada?
 - a. Yes.
 - b. No: Please tell us which country you were born in:
 7. Where were your parents born?
 - a. Mother:
 - i. Canada.
 - ii. Somewhere other than Canada (please specify):
 - b. Father:
 - i. Canada.
 - ii. Somewhere other than Canada (please specify):

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