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IMPROVING SEXUAL HEALTH RESOURCES FOR YOUTH: THE USE OF SEX-POSITIVE PUBLIC HEALTH WEBSITES

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Abstract: Technologies that bring more information to our fingertips can often mislead and misinform youth about the risks of practising unsafe sex. On the other hand, valid and trustworthy information can promote health and reduce harmful practices by shaping and encouraging safe sex practices. Our qualitative study conducted with 32 youth explored their desire to access sexual health information and services, their perceptions of current sexual health services, and their sources of information. The results of the study indicate that youth are concerned about the accessibility, anonymity, confidentiality, and comfort of sexual health services; and that they identified the Internet as a key source of information, and as the preferred medium for sexual health information. Yet they expressed concern about the quality of information retrieved on the Internet. This indicates that trustworthy sources of youth-friendly health materials on the Internet need to be provided to support youth in making low-risk sexual decisions.

Keywords: adolescent, reproductive health, health service, Internet, health promotion, Canada

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Youth in Canada experience a high burden of sexually transmitted infections (STI) and early pregnancy (Maticka-Tyndale, 2001, 2008). This is exemplified in the Durham Region, a municipality east of Toronto, where the prevalence of STIs such as chlamydia among youth is high (Durham Region Health Department, 2004). For example, in the Durham Region for the years 2007 and 2009 combined, chlamydia rates in males 15 to 19 years were reported at 298.3 per 100,000 compared to a corresponding gender/age provincial average of 278.0 per 100,000, and among females 15 to 19 years at 1,203.5 per 100,000 compared to a corresponding gender/age provincial average of 1,155.7 per 100,000 (Durham Region Health Department, 2011). For various reasons, youth, particularly those from rural communities and sexual minority groups, have difficulty in accessing sexual health services (Klein, McNulty, & Flatau, 1998; Trieu, Bratton, & Hopp Marshak, 2011; Walters, Horwath, & Simoni, 2001). In addition to such barriers as poor health infrastructure, including limited clinical services, difficult transportation schedules, and long distances between home and clinical sites, access to sexual health services is often challenged by community and cultural values stigmatizing youth sexual practices (Maticka-Tyndale, 2001). This reduces the likelihood of youth seeking direct sexual health information and health care services (Maticka-Tyndale, 2008; Quine et al., 2003). How services are made available influences who will access them and the extent to which they will be accessed. However, youth input is seldom included in policy and program development.

For sexual health services to be effective, youth must be aware of the services available and feel comfortable accessing them; moreover, the services must be appealing and flexible enough to fit within youth schedules (Anderson & Lowen, 2010). Further, for programs to be effective for youth, especially for sexual minorities, they must be perceived as friendly.

We conducted a qualitative study in Durham Region, Ontario, Canada, to explore youths' access to sexual health services, their perceptions of current sexual health services, and their sources of and desire for information to help with sexual health decision-making.

Methods

Community-based Research

This qualitative study used a community-based participatory action research approach. This approach offers theoretical flexibility and facilitates the development of community networks and capacity. Moreover, the approach fosters "buy-in" among youth whose concerns we wished to understand and whose needs we hoped to meet (Minkler, 2000). Developing partnerships would aid in the shaping of services that would be more youth-centred and hence more acceptable to youth (Anderson & Lowen, 2010; Maticka-Tyndale, 2008).

Youth were engaged through the development of a community advisory committee (CAC). This CAC included members of an existing youth community-building group and other youth members who were interested in sexual health research. Members were recruited by advertising on the Internet and through the *Durham Healthy SexYOUTHality Coalition* (a group of government and non-governmental agencies working with and on behalf of youth in Durham region). A total of eight youth, who self-identified variously as heterosexual, gay, lesbian and bisexual, formed the CAC. The CAC met during the early stages of the research process to set the agenda, approve the questionnaire guide, and advise on recruitment.

Recruitment and Sample

Focus groups were employed for gathering data since this approach would encourage ongoing capacity-building by engaging youth in areas that affect their lives. Based on recommendations from the CAC, focus group participants were assigned to four groups to capture a diverse range of sexual health needs in the region: an urban group, a rural group, a semi-rural group, and a group for gay, lesbian, bisexual and other sexually diverse youth (LGBT). The LGBT group included youth from all geographic areas in the region. Each member participated in one group only.

Flyers and information cards about the study were distributed at stakeholders' work sites, and we actively recruited participants at local shopping centres and other areas frequented by youth. Additionally, we posted the study on the local "Craigslist" website. The recruitment material included a poster with brief information about the study, a telephone number, incentive information, and the e-mail address of the study coordinator. Participants would then contact the coordinator, who screened them for eligibility according to five criteria: (a) between the ages of 15 and 24 years, (b) a local resident, (c) able to provide contact information, (d) able to consent to participation in the study, and (e) able to commit to three meetings over a one-month period.

Focus Groups

For each group of participants, we planned three focus-group meetings at one-week intervals. At the first meeting, the research was introduced and informed consent was obtained. We also attempted to sensitize youth about the topics, to create a friendly environment to facilitate discussions in a group setting, and to ensure that youth were aware of basic ground rules. The second meeting was a guided discussion and the third meeting included a "member checking" and debriefing session. At that final focus group meeting, participants were able to add information that had not emerged in earlier discussions and to correct information that may have been misunderstood.

We wanted to capture broad areas of youth concern about sexual health without delving into individual behaviours in a group setting. We provided a safe environment for youth to express themselves and urged participants to describe "what their friends do or say" to remove the pressure of unwittingly disclosing personal information (although most youth did speak in the first person). Youth were reminded of the principles of inclusion, group etiquette, and confidentiality of information. Group discussions followed a general questionnaire guide created with the CAC.

At each focus group meeting, participants were greeted by the study coordinator , who was also a youth, and an adult facilitator. A light dinner was offered and refreshments were available throughout the meeting. Once youth had had the opportunity to meet, and to partake in refreshments, the facilitator began with icebreakers to bring light humour to the meeting, and thus encourage honest discussion, as described by Powell and Single (1996). Each meeting lasted approximately two hours. All meetings were held at youth-friendly, accessible, and safe locations, with a trained peer coordinator and a facilitator, who took notes. The study was approved by the University of Ontario Institute of Technology Research Ethics Board.

Data Collection

Group discussions were slightly modified based on the dynamics in each group. Some groups were ready to discuss sexual health needs and priorities from the first meeting while others took longer to develop rapport. Discussions were audio-recorded and a note-taker documented non-verbal cues and reactions of the group. Recordings were later transcribed verbatim by the research coordinator. The transcriptions were completed using *Express Scribe* to enhance the speed of transcribing and ensure that what participants said was written verbatim.

Each participant received an honorarium of either a movie pass or 10 Canadian dollars. Youth were given information about sexual health and safer-sex resources, such as condoms and dental dams. Transportation fare was provided if requested.

Data Analysis

Transcripts were analyzed using content analysis for common themes in NVivo 9 (QSR International, 2010). Our analysis summarized and categorized the data from conversations and grouped them based on an "a priori" coding frame. This frame was informed by the literature (LaRossa, 2005) and our knowledge of the local vernacular and politics. The analyst first categorized the data by the research questions. Categories were then coded according to the content of the conversations. Initial themes emerging from the analysis were discussed with the research team, revised, and refined. A combination of themes that arose from this process were treated as outcomes.

Results

Table 1 presents the demographic composition of the youth involved in the focus groups. The themes that arose from the focus groups based on the questionnaire guide are discussed below.

Table 1

Demographic characteristics of youth in the Durham SexYOUTHality study

Characteristic		Total Sample *n* = 32
Age in years	Mean	18.96
	Median	18
	Range	15-24
Gender	Male	12
	Female	19
	Transgender	1

Sexual Orientation	Bisexual	3
	Gay	5
	Heterosexual	16
	I don't know	2
	Lesbian	2
	Pansexual	4
Self-Identified Ethnicity	Black	1
	Middle-Eastern	2
	Mixed	2
	Spanish	1
	Italian	1
	White/Canadian	24
	Missing	1
Residence	Urban	17
	Rural	5
	Semi-rural	10

Awareness of Services for Sexual Health

Unless youth are aware of sexual health services, they cannot access them. To ascertain the level of awareness, participants were asked several questions about what programs were available to youth and where youth could go for sexual health services. Participants indicated that they sought information about sexual health services through various sources, including parents, but unanimously agreed that the Internet was their primary source.

Many of the urban youth knew about sexual health services in their region. However, LGBT members and rural youth were less aware of these services. As small communities often lack specialized sexual health clinics, rural youth frequently used general clinics when they required sexual health services. Participants indicated that the specialized clinics were not promoted through their schools or health care providers. As expressed by one participant, "*Honestly, I think that's how bad it is … I'm 21 now and I have no idea where any* [sexual health] *programs are set up … absolutely nothing*". As a result of not knowing where these specialized clinics are located, some youth forgo sexual health services, resulting in outcomes that may be detrimental to their health, as one participant explained, "*When I think of that I think of people who got pregnant in high school … I honestly think it's because they didn't have that support system or they didn't know where to turn*".

When youth were asked about places to receive sexual health education and services, they first discussed family doctors although many stated that they did not have a family doctor.

Additionally, although many of the urban youth knew where sexual health clinics were located, they did not know about the specialized sexual health services that these clinics offered.

Accessibility of Health Services

Focus group members expressed concerns about the accessibility of sexual health services such as testing for STIs, counselling, free condoms, and birth control. Services were often not available at convenient times for in-school youth, such as evenings and/or weekends; or involved extended travel. For example, youth from one community lamented that condoms were not easily accessible from public sources and were expensive to purchase. In communities where no sexual health services existed, youth needed to travel long distances to access services, so transportation also became a barrier. When the facilitators asked youth about how they would get to a sexual health clinic or to describe their ease of access to transportation, a participant said, "*We have the Go bus*" [an intercity bus], to which another participant added, "*It only comes every five days*". The difficult transportation schedule, plus lack of time due to being involved in many activities, meant that youth often delayed their appointments. One female participant said, "*I have to reschedule a doctor's appointment usually at least once a week. I don't have time*".

Perception of Health Services

Youth were concerned about the anonymity, confidentiality, and comfort of health services. It should be noted that since many did not use specialized sexual health services, their concerns were often about services in the school system or general clinical sites. While some perceptions were negative, youth also believed that there were positive aspects to some of the sexual health services that they had used.

Friendliness

Youth who had previously accessed the specialized sexual health clinics stated that the staff were friendly. Youth identified these sexual health practitioners as knowledgeable and able to provide useful information. A male participant believed that sexual health clinics and health centres at his location were youth-friendly; he believed that by working daily on these issues with young people, clinic staff became more aware and sensitive to youth needs. A female participant said, "*They literally touch on every subject; they're very thorough, they know their stuff, they make you feel super-comfortable while you're there*". There was also an expectation that services should be "queer" friendly. This was not always the case with general clinics. In general, youth wanted to know that the staff providing the services they would be accessing understood the issues that affected them.

Anonymity

Participants voiced concerns about the level of anonymity provided when accessing sexual health services and resources such as birth control and condoms. They indicated that in rural areas community networks are often small and lack anonymity discouraging them from buying condoms at a local store or pharmacy. For those who live in urban areas, the location of sexual health services may inhibit them from walking into the clinic. Youth suggested that condoms should be provided in a variety of places, such as school bathrooms, where anonymous access would be possible. With regard to the location of clinical sites, youth wanted these services located in areas where youth gather, such as shopping centres. Youth from one

community applauded the fact that their sexual health clinic entrance was located at the bathroom section of a shopping centre, where there are no commercial businesses. This limited the stigma of being seen accessing sexual health services.

> *I sort of like the way the* [name] *Health Centre is set up in the mall for that because you have to walk kind of by the bathrooms behind everything else and like you can just* [say] *"I'm just going to the bathroom," but I've been gone a really long time, because I'm actually going to the room behind the bathroom.*

Confidentiality

Issues related to confidentiality were the foremost concern of youth seeking services for sexually transmitted infections (STIs). Confidentiality issues arose due to the insensitivity of the general clerical staff and the misunderstanding of youth culture by clinical staff. A male participant said:

> *When I get tests done at the [clinic location] it makes me feel extremely uncomfortable when I go to the receptionist and say, "I want to get tested", and then she asks, "What are you here to get tested for?"* [in a very audible voice] *I go up there and I'm whispering because I don't want people to think that I have HIV when I'm just getting tested. It just feels so uncomfortable to ask them.*

Lack of confidentiality extends to other aspects of sexual health. For example, youth living in rural areas expressed distrust of teachers and guidance counsellors who provide them with sexual health education. Multiple participants reported not confiding in these agents for fear of information being shared with others. As sexual health clinics are not located in rural areas, youth suggested that there should be confidential services at school so that they could talk to a supportive professional. One youth stated:

> *In a rural community, you are going to have a lot of people that you've seen before. So it might be like not a good idea [to use the general community health service], because they won't want to go to it, because* [they may see someone they know] *so they won't feel confident to go.*

Judgemental

Many youth were concerned about being judged by health providers when accessing information and services as these services often ask for a sexual health history. Participants felt they were being interrogated about their sexual health history, particularly if they were LGBT. Some participants felt that the tone of the provider can be condescending. One youth said, "*… I understand the need to ask those* [questions] *for statistical purposes … but they don't explain that to you*". A case in point is exemplified below:

> *I mentioned earlier that I am with a man and at some point we went in to get checked for various reasons and he came out afterwards and said, "I've never been so uncomfortable to be almost interrogated about my sexual history, you know my sexual health, this and that", and I'm like, "Welcome to my life", you know because* [there is] *no comfort in terms of how you're asked questions and what, like I know some questions have to be asked but how you ask them and your tone and the order of them is really, really important, and not feeling like you're being interrogated.*

How Youth want to Receive Sexual Health Services and Education

An important part of this research was to get youths' input on how they would like to receive health education and services. While youth mentioned that they would like to receive better information from teachers, and lamented forgone opportunities with their parents, they all identified the Internet as a key source for information and as the preferred medium for sexual health information. Some youth also identified the Internet as a source of sexual health services. Many youth stated that they use Google to search for information that they may not otherwise ask a friend, peer, parent, teacher, or health services provider. Further, youth often research a topic through Google searches before approaching a professional. Therefore, if health care providers fail to provide frank and honest information about an issue, when that information is readily available on the Internet, they may be judged as incompetent:

> *I feel that my doctor, he's practised in everything, so he's not specialized in STIs. He's doing a swab, but he doesn't know what he's* [testing for]. *I'm a nurse* [nursing student] *and everyone expects me to know everything … but I don't. If I knew there was an STI doctor or like a person that is specialized in that area … if I knew there was a doctor that specialized* [in STIs] *in the community, I'd probably go there before my GP.*

The Internet was said to be accessible, easy, anonymous, safe, and convenient. Participants said, "*It's so much easier just Googling it*". As they are not subjected to being judged on moral grounds, a barrier to information and services is removed: "*You get rid of that stigma and the confrontation and all that*". Further, youth talked about the challenges in discussing sexual health information with parents or authority figures, who may regard some areas of sexual activity as not socially acceptable. Parents were said to be sometimes upset with youth for asking questions. A youth stated, "*… You're not going to get yelled or screamed at by the Internet as well. So it's just a very safe medium to go to*".

Youth were cognizant of the fact that not all information on the Web is credible and discussed the dangers of unreliable information posted on websites or in chat forums. One female participant said, "*Forums pop up when you ask sexually related questions and* [are often not] *legitimate at all*". Because of this, youth preferred to go to websites of authoritative organizations such as government or non-governmental health organizations, where they felt the information could be trusted. A youth said:

> *If it's like on the* [name] *Department* [website] *there could be a link that leads specifically to that* [sexual health] *stuff. In that way, it would be reliable and we would know it's all updated … it's still private and confidential and you'll get full information.*

Schools were identified as a preferred location for receiving sexual health information and services as most youth attend schools. However, the manner in which information is presented, and by whom, is very important. Youth expressed the need for many changes to be made to the current curriculum including the content, the method of delivery, and the personnel providing the sexual health education or service. Youth had four recommendations about who should be teaching sexual health in schools, suggesting that it should be someone who is: comfortable teaching the material, knowledgeable about and interested in what they are teaching, able to relate to students, and external to the daily instructor/student relationship. A major recommended change relates to the individual delivering the sexual health information. As one participant said:

> *I'd want someone who actually takes a general interest in it, instead of just, "Oh, I'm only doing this because I have to"…. If the teacher actually takes an interest into it and actually wants to teach it, then that would be better than someone that's like, "I'm only doing it because I have to".*

Participants said that some teachers skip the material altogether, while others treated it in a perfunctory way. For example, one youth said that his in-school education on homosexuality consisted of the teacher saying, "*Guys, some people are like that… just don't hate them*".

Youth expressed the need to have a peer, or someone they could relate to, presenting the materials. They believed that peer educators would be more attuned to their needs since there would be no "intergenerational divide". Finally, youth also preferred having someone external to their environment present sexual health information in school settings. This was particularly important for youth in rural areas. Youth suggested that having a professional, such as a nurse or other front-line worker who is not part of the regular staff, would be more effective.

> *It's kind of nice for me to talk to someone and they can relate to what you're going through, like they make it relatable so you don't feel like you're alone in it. You know, when people have experienced what you're experiencing, like it helps, makes you feel like better or whatever … reassuring.*

Discussion

Providing information to promote sexual health can be challenging (Gilliam, 2006; Maticka-Tyndale, 2008; Wynn & Trussell, 2006). Sex is often tied to moral and religious constraints and many people regard some forms of sexual health education or promotion as fostering promiscuity (Epstein, 2006). While youth in our study were generally aware that sexual health services existed, they were not uniformly aware. Further, some were confused about the nature of specialized sexual health services, given that many had only experienced health services from family medicine clinics. Other studies have shown differential awareness of services, especially among inner city, rural, and sexual minority youth (Epstein, 2006; Quine et al., 2003; Walters, Horwath, & Simoni, 2001). As such, providing sexual health information without targeting specific groups will perpetuate current disparities in sexual health awareness.

Youth in our study highlighted the difficulty in accessing specialized sexual health services due to infrastructural limitations. However, not accessing specialized services may be detrimental to their health (Coles, Makino, Stanwood, Dozier, & Klein, 2010; English, 2000; Quine et al., 2003). Even in larger cities, sexual health services may not be located within easy reach of the youth who need them, creating a barrier to access (Nwokolo, McOwan, Hennebry, Chislett, & Mandalia, 2002). Yet other studies have shown that it is possible for individuals in remote locations to have access to information and services at lower cost compared to the traditional clinic through new technology such as telemedicine, smart phones, and other Web 2.0 enhanced devices (Fox, Somes, & Waters, 2007; Norman & Skinner, 2007; Norman & Yip, 2012). Today's youth are Internet-savvy and adept at using smart-phone technology devices. Many youth are already using smart phones. Cost-free services on these devices could be readily implemented to provide anonymous and non-judgemental sexual health promotion services (Garrett, Hocking, Chen, Fairley, & Kirkman, 2011; Garrett et al., 2012; Hottes et al., 2012). The

Internet is becoming the norm for service provision in education and industry and, as such, providing youth with health information through Web 2.0 should be promoted and enhanced (Davis, Shoveller, Oliffe, & Gilbert, 2012; McCarthy et al., 2012; Miller & West, 2009; Public Health Agency of Canada., 2008).

Youth Perception of Sexual Health Services

Not only are there concrete, objective, physical constraints on service access, there are also perceived constraints that produce equivalent effects. As indicated by study participants, anonymity, confidentiality, and comfort are all important for effective use of a service. Dehne and Riedner (2001) have suggested that factors such as those described above create an atmosphere of comfort and friendliness, and suggested it is also important to have providers specially trained in youth issues. This gives youth a sense that their information will be handled with respect. Practitioners who are not trained to provide this type of service, and services that are not set up to provide youth with a sense of security, may unintentionally obstruct access to support services resulting in negative health outcomes. Similarly, youth often turn away from services when they feel that moral judgements go along with the information or resources provided (Public Health Agency of Canada., 2008).

How Youth would like to Receive Sexual Health Services and Education

A key lesson from the study is that all the participants wanted pragmatic information on sexual health from reliable government or non-governmental health agency websites. This information is supported by other studies that have shown similar results (Gray, Klein, Noyce, Sesselberg, & Cantrill, 2005). Youth require more than a "clinical" guide to sexual health promotion. Many Public Health sites do provide this type of information but the focus is on the negative consequences of sex, such as STIs and pregnancy. However, youth are often looking for information on love, intimacy, and pleasure, which are fundamental to human sexuality (Gray et al., 2005). Materials on sexual pleasure and intimacy are often not available on Public Health websites. Not addressing these issues on trustworthy institutional websites may lead youth to explore websites where the emphasis is on the commercialization of sex, and where dangerous sexual practices may be presented as the norm (Buhi, Daley, Fuhrmann, & Smith, 2009; Buhi et al., 2010; Gray et al., 2005; Ybarra & Mitchell, 2008).

The use of the Internet as a major health resource for youth has been identified by other researchers in Canada and elsewhere (Garrett et al., 2011; Media Awareness Network, 2005; Ralph, Berglas, Schwartz, & Brindis, 2011; Shoveller, Knight, Davis, Gilbert, & Ogilvie, 2012). However, gaining access to the Internet is still challenging for some (Buhi et al., 2009; Magee, Bigelow, DeHaan, & Mustanski, 2012; Rains, 2008). Some youth come from economically deprived homes where an Internet connection may not be a priority or where web browsing and download fees may be judged unaffordable. In rural areas, access to broadband service may be difficult or expensive to obtain. Some youth also face intellectual challenges and may not be able to master web browsing or distinguish legitimate from false information (Media Awareness Network, 2005). Local information is also more difficult to find than general information (Buhi et al., 2009). In some public spaces, such as schools and libraries, surfing sexual health-related information may be restricted. This is problematic, particularly for economically and socially deprived youth (Gray & Klein, 2006; Mitchell, Finkelhor, & Wolak, 2001; Richardson, 2002; Ybarra & Mitchell, 2008). However, many youth do have personal smart-phone devices: health

agencies can explore initiatives to provide low-cost sexual health promotion through such devices with little additional infrastructure (Skinner, Biscope, Poland, & Goldberg, 2003). Engaging youth in creating and designing such sexual health outreach initiatives would help to make the service youth-friendly (Franck & Noble, 2007; Gray et al., 2005).

Youth in our study suggested that authoritative institutions, such as public health departments working on behalf of youth, should work with trustworthy organizations to validate their websites, thus providing a "seal of approval" to support youth decisions. Alternatively, these authoritative institutions could, through their web pages, provide hyperlinks to trustworthy sites, as most youth find public health department websites to be too clinical. For example, a discussion on sexual pleasure would be hyperlinked to a legitimate site where sexual pleasures are described in a purely non-clinical way. There are youth-friendly electronic resources available from many non-governmental organizations but it may be a challenge for youth to search, find and evaluate the legitimacy of these resources (Hansen, Derry, Resnick, & Richardson, 2003; Skinner et al., 2003). Public health institutions could reduce this barrier to finding reliable sexual health information by providing links to trustworthy resources.

Limitations, Conclusion, and Recommendations

A number of strategies that were incorporated into the data collection process were aimed at ensuring that youth would be open to talking about sexual health, recognizing the sensitive nature of the topic. However, while this enabled good rapport, it also meant that our participants may have been more informed or politically motivated about sexual services or programs in their communities than youth in general. Also, while our strategy of using follow-up focus groups may have increased rapport, there is always the possibility that this, in turn, may have engendered "group think". This is particularly the case for the LGBT group since, as an outcome of the research, an informal group ensued. However, we posed questions to encourage dissenting views and so curb group-think tendencies. The sample size and technique may also make it difficult to generalize from this study, since the sample was not randomly selected.

This study was formative in nature, as it was designed to assess the sexual health service and education needs of Durham Region youth. The results are applicable to similar communities in Canada, the United States, and other parts of the world that face the challenge of providing services for a mix of urban, rural, and semi-urban communities and sexual minority youth. Youth participating in the study identified various sexual health needs and challenges but also identified ways to improve the available sexual health services to better address their sexual health issues. Many of their suggested improvements could be implemented with currently available web-based technologies, which are often readily accessible to youth. Reaching out to youth through smart-phone devices and the Internet should be considered for targeted sexual health services. We deduce from the study that there is an important role for youth in planning and developing programs targeting their sexual health information needs. Sexual health providers are often resistant to engaging youth in these discussions. Youth are ready and willing to explore sex-positive health promotion through the Internet.

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