

Young people's comfort receiving sexual health information via social media and other sources

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Abstract

Social media are growing in popularity and will play a key role in future sexual health promotion initiatives. We asked 620 survey participants aged 16 to 29 years about their time spent using social media and their comfort in receiving information about sexual health via different channels. Median hours per day spent using social network sites (SNS) was two; 36% spent more than two hours per day using SNS. In multivariable logistic regression, being aged less than 20 years and living in a major city (compared to rural/regional Australia) were associated with use of social media more than two hours per day. Most participants reported being comfortable or very comfortable accessing sexual health information from websites (85%), followed by a doctor (81%), school (73%), and the mainstream media (67%). Fewer reported being comfortable getting information from social media; Facebook (52%), apps (51%), SMS (44%), and Twitter (36%). Several health promotion programs via social media have demonstrated efficacy; however, we have shown that many young people are not comfortable with accessing sexual health information through these channels. Further research is needed to determine how to best take advantage of these novel opportunities for health promotion.

Keywords

Social media, health promotion, sexual health, information sources

Introduction

Mobile technologies and social media – particularly social networking sites (SNS) – have transformed the way we communicate. Mobile phones allow us to communicate instantaneously and perpetually; almost all (98%) of Australian youth own and use a mobile phone,(1) and 68% of the adult population own a smartphone (phones allowing internet access and computerised functions).(2) SNS like Facebook and Twitter allow users to interact and actively participate in creating content. Australia has over 11 million Facebook users (54% of the population); approximately half of these users are aged 18-34 years.(3) These media are growing in popularity and will play a key role in future health promotion initiatives. Sexual health promotion is emerging on SNS (4) and via mobile phones.(5-7)

One of the potential benefits of social media sexual health promotion is that it could be used to reach groups who have less access to traditional sources of sexual health information; such as those not at school, who have limited contact with medical practitioners, or who are geographically isolated. It can also be used to reach those who are not actively engaged in sexual health education, by reaching out to them in an environment they are already engaged in. However, it is important to determine whether young people are comfortable being engaged for sexual health promotion through these media.

Some studies have demonstrated high levels of acceptability among young people receiving sexual health related mobile text messages (SMS).(6,8,9) A study of adolescent parents in the US found that less than ten percent would discuss sexual health with friends using SNS, but more said they would share sexual health tips and information from a health organisation via SMS (35%) or SNS (20%). Just 42% were willing to communicate about sexual health through new media technologies.(10) An Australian study found that young people were not comfortable with open sharing of sexual health related information on Facebook.(11) Here, we investigate how comfortable young Australians are

with accessing sexual health information through various social media platforms, and correlates of this.

Methods

Survey participants were recruited at a Melbourne music festival in January 2012. Festival patrons were approached to self-complete a risk behaviour questionnaire by recruiters located around a market stall. Methodological details have been described previously.(12,13)

In 2012, two questionnaire versions were designed to maximise the number of themes covered while minimising the length of the questionnaire. Both versions included core demographic and behavioural questions, however one version included detailed questions regarding smoking, diet, and physical activity, and the other version included questions on social media. Questionnaire versions were distributed at random. Only those completing the social media version of the questionnaire are included in this analysis. Participants were asked on average how many hours per day they spent using SNS, and were asked to rate their level of comfort receiving information about sex/sexual health from different sources, including traditional sources (school, doctor), older media (mainstream media, websites), and social media (Facebook, Twitter, SMS, Mobile apps). These were listed in a matrix with possible responses *very comfortable*, *reasonably comfortable*, *mildly uncomfortable*, *very uncomfortable*, and *not sure*.

All analyses were conducted using Stata 11. Factors associated with comfort and number of hours using SNS were determined using univariable logistic regression and all factors significant at $p < 0.10$ were included in a multivariable logistic model. The primary outcome was reporting being '*comfortable*' (very or reasonably comfortable) with information via at least one of the four social media. Hours using SNS was dichotomised at the median of two hours per day. Sex was defined as vaginal or anal intercourse. Participants were asked to self-report whether they had ever had a test for any STI, (excluding pap smears). STI knowledge was assessed with six statements which could be

deemed by participants as 'true,' 'false' or 'don't know'; 'don't know' was considered incorrect. A high knowledge score was defined as five or more out of six true/false questions correct.

The project was approved by the Alfred Hospital Human Research Ethics Committee.

Results

Forty individuals commenced the questionnaire but did not complete it, and twelve participants were excluded as they did not complete the information source question; the remaining 620 questionnaires were included in analysis. The median age of respondents was 18 years and 64% were female. (Table 1) Median hours per day spent using SNS was two (interquartile range 1-3); 36% spent more than two hours per day using SNS and only 18 (3%) said they spent no time on social media in an average day. In multivariable logistic regression only younger age and living in a major city were associated with use of social media for more than two hours per day (Table 1).

Participants were most comfortable accessing sexual health information from websites, followed by a doctor, school and the mainstream media. (Figure 1) They were least comfortable getting information from social media (Twitter, SMS, smartphone apps, and Facebook).

Overall, 65% of respondents were comfortable getting sexual health information from at least one form of social media. Table 2 shows that this was similar across all groups, with the exception that those who had ever had sex were more likely to be comfortable getting information from social media than those who had never had sex (AOR 1.51, 95%CI: 1.02-2.23). However, this effect was lost when further adjusted with those who had ever had sex being more comfortable with all types of information sources (AOR 1.03, 95%CI 0.59-1.80). Spending more time on social media was only marginally associated with increased comfort with sexual health information via social media (AOR 1.38, 95%CI 0.95-2.00).

Almost all (98%) of those who reported comfort with at least one form of social media for sexual health information were also comfortable with a non-social media source of information. This means

that only nine (2%) participants would be comfortable in receiving sexual health information from social media as their only source.

Discussion

Young people in this survey reported being more comfortable with traditional sources of sexual health information than with sexual health promotion via social media. Still, two thirds were comfortable with at least one of these newer sources and it is possible that comfort will increase over time as social media becomes even more ubiquitous. Twitter was the source with the fewest reporting comfort and the highest number unsure; this may be because fewer young people in Australia regularly use Twitter compared to Facebook and SMS. Comfort with sexual health information via social media was not associated with age, gender, or any other characteristic, other than previous sexual experience. There was a non-statistically significant association between time spent using social media and comfort with receiving sexual health information via these media.

Young people reported the greatest level of comfort accessing information via websites. However, previous research has shown that sexual health information on the internet may not be credible, accurate, reliable, comprehensive or relevant.(14-20) For example, a study found that almost half of located sex education sites portrayed abstinence as the only way to avoid adverse sexual health outcomes, and were narrowly focused with a moralistic stance.(21)

Qualitative research has identified an unwillingness among potential users to engage in sexual health promotion on Facebook because of an incompatibility between their public presentation of themselves on social media and the stigma of sexual health.(11) In contrast, websites and traditional media are a more anonymous and one way route of acquiring information and may be preferable for more private individuals.(22) While websites may increase comfort with receiving the information, they may be less efficient for communicating messages to a healthy population; websites require people to actively search for information, whereas social media can 'push' information to users through platforms they are already engaged with.

It is important to note that comfort with an information source does not necessarily translate into actual use of the information; multiple other factors come into play, including access, trust, quality of the information, useability, and motivation. For example, a Spanish study showed that even though adolescents preferred to access information from doctors, they were unlikely to have actually done so in practice.(23) A British study, however, showed that young people tended to rate the sources of sexual information they were comfortable with as the most useful (i.e. they were most comfortable talking to friends as well as finding friends the most useful information source).(24) In our questionnaire the term 'comfort' was not defined and perceptions of this concept may have differed between participants; comfort may have been understood as credibility, reliability, ease of use, familiarity with a source, or another quality. Further qualitative research would be needed to determine what makes young people 'comfortable' with an information source, and how this can be used in sexual health interventions.

It is also worth noting that while surveys of theoretical acceptability of social media sexual health promotion may not be high (this study and (10,11)), studies of actual acceptability following receipt of a social media intervention do show high satisfaction.(6, 8, 9, 25) This may reflect selection bias through only including those willing to participate in an intervention, or possibly, that once actually faced with a specific intervention, participants find it acceptable. It may also be that these interventions have been well designed to appeal to the target audience and increase comfort and acceptability.

The representativeness of this research may be limited by the study sample; compared to the Australian population, our sample is more highly educated and reported more frequent drug use, binge drinking, and sexual risk behaviours.(13, 26) However, an advantage of the sample is that they were not selected by their willingness to participate in a social media intervention; and they tend to engage in risky behaviours so they are an ideal target group for an intervention.

Several sexual health promotion programs using social media have shown an impact.(6, 8, 22, 27-29)

It is vital to identify which aspects of such interventions have made them acceptable and successful and how they can appeal to a broad range of young people. Further research is needed to determine how to best take advantage of these novel opportunities for health promotion.

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Conflict of Interest

None to declare.

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Table 1: Sample characteristics and risk behaviours and their association with use of social networking sites (SNS) more than two hours per day.

Characteristic	TOTAL n+	>2 hours per day using SNS n(%)*	Univariable OR (95%)*	Multivariable OR (95%)*
TOTAL	620	197 (36)		
Male	221	67 (35)	1.0	
Female	397	129 (36)	1.04 (0.72-1.51)	
Age 16-19	408	149 (42)	1.0	1.0
Age 20-29	212	48 (24)	0.45 (0.30-0.66)	0.52 (0.33-0.84)
Currently studying	329	125 (42)	1.0	1.0
Not currently studying	283	70 (28)	0.53 (0.37-0.77)	0.70 (0.46-1.07)
Visited a GP, past 12 months	452	142 (35)	0.84 (0.56-1.24)	
Not visited a GP	164	55 (39)	1.0	
Born in Australia	574	185 (36)	1.38 (0.69-2.77)	
Born elsewhere	45	12 (29)	1.0	
Live in major city	398	139 (39)	1.48 (1.01-2.18)	1.72 (1.15-2.58)
Rural/regional	203	54 (30)	1.0	1.0
Low STI knowledge	430	141 (37)	1.0	
High STI knowledge	190	56 (33)	0.81 (0.56-1.19)	
Ever had sex	447	129 (33)	0.62 (0.42-0.90)	0.90 (0.58-1.37)
Never had sex	169	67 (44)	1.0	1.0
Ever had an STI test	151	42 (31)	0.75 (0.49-1.14)	
Never had an STI test	290	153 (38)	1.0	
0-1 sexual partner, past year	243	126 (35)	1.0	
>=2 sexual partners, past year	181	58 (36)	1.04 (0.71-1.53)	
*69 people with missing data on hours spent social networking were excluded +missing data are excluded				

Table 2: Sample characteristics and risk behaviours and their association with comfort with at least one of SMS, Apps, Facebook, or Twitter as sources of sexual health information.

Characteristic	TOTAL n+	Comfortable with at least one social media source n(%)	Univariable OR (95%)	Multivariable OR (95%)
TOTAL	620	401 (65)		
Male	221	154 (70)	1.0	1.0
Female	397	246 (62)	0.71 (0.50-1.01)	0.74 (0.51-1.08)
Age 16-19	408	263 (64)	1.0	
Age 20-29	212	138 (65)	1.03 (0.73-1.46)	
Currently studying	329	215 (65)	1.0	
Not currently studying	283	182 (64)	0.96 (0.69-1.33)	
Visited a GP, past 12 months	452	291 (64)	0.96 (0.66-1.40)	
Not visited a GP	164	107 (65)	1.0	
Born in Australia	574	372 (65)	1.12 (0.60-2.09)	
Born elsewhere	45	28 (62)	1.0	
Live in major city	398	124 (61)	1.26 (0.88-1.78)	
Rural/regional	203	264 (66)	1.0	
Low STI knowledge	430	285 (66)	1.0	
High STI knowledge	190	116 (61)	0.80 (0.56-1.14)	
Ever had sex	447	300 (67)	1.48 (1.03-2.13)	1.51 (1.02-2.23)
Never had sex	169	98 (58)	1.0	1.0
Ever had an STI test	151	103 (68)	1.24 (0.84-1.83)	
Never had an STI test	290	291 (63)	1.0	
0-1 sexual partner, past year	243	267 (65)	1.0	
>=2 sexual partners, past year	181	116 (64)	0.97 (0.67-1.40)	
<=2 hours per day using SNS	354	220 (62)	1.0	1.0
>2 hours per day using SNS	197	134 (68)	1.30 (0.90-1.87)	1.38 (0.95-2.00)
+missing data are excluded				

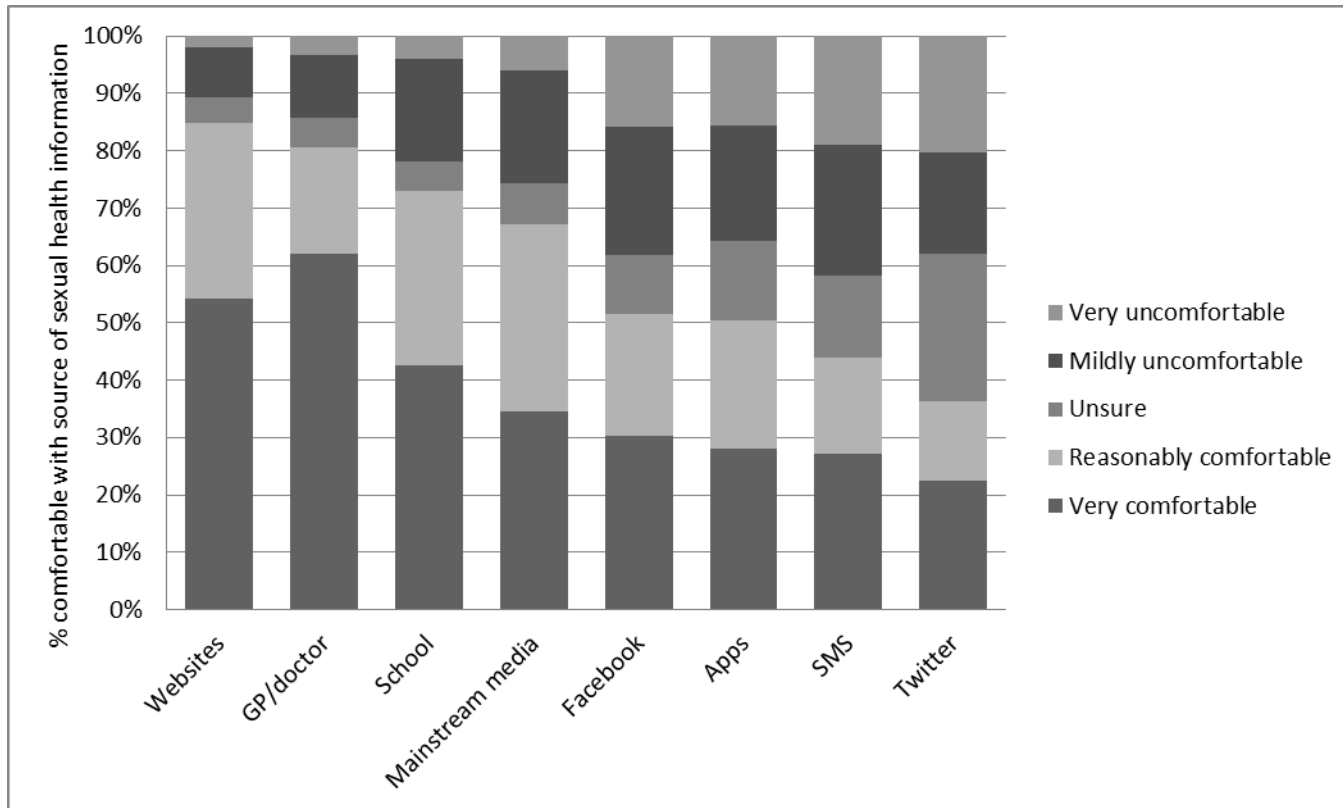


Figure 1: Reported level of comfort with different sources of sexual health information (n=620)