

Correlation between STD-Related Social Stigma and STD/STI Screening among Young Adults in the United States

Larisa Benta, Sahrish Khan, Shahzaad Khan, Sally Madanat, Romain Sewchand, Alexey Pryakhin, Aleksandar Dusic, Victoria Minakova*

Department of Biochemistry/Physiology, Saint James School of Medicine, Park Ridge, IL, USA

Email: *vminakova@mail.sjmsm.org

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Abstract

Objective: To evaluate the relationship between STD-related social stigma and screening behaviors among young adults aged 18 - 30 in the United States, and to assess implications for future sexual and reproductive health services. **Methods:** A nationwide cross-sectional survey was distributed via social media to young adults (n = 112). The questionnaire assessed three domains: 1) attitudes toward sexual health, 2) awareness of sexually transmitted diseases (STDs), and 3) attitudes toward screening. Statistical analyses included Spearman's correlation coefficient and Mann-Whitney U tests. **Results:** More than half of participants (55.4%) preferred the internet as their primary source of sexual health information, and 57% believed that sexual health remains a taboo topic. Younger respondents were less likely to seek medical care for suspected STDs compared to those aged 22 - 30 ($r = 0.26$, $p = 0.006$). Religious affiliation and cultural background also influenced perceptions of stigma and willingness to discuss sexual health with providers. **Conclusions:** STD-related social stigma remains a significant barrier to screening and treatment among young adults in the United States. Culturally sensitive interventions and open communication between healthcare providers and patients are essential to reducing undiagnosed cases and improving sexual and reproductive health outcomes.

Keywords

Sexual Health, Sexually Transmitted Diseases, Sexual Literacy, Social Stigma, Screening

1. Introduction

Sexual and reproductive health has long been a central concern in public health.

Despite advances in medicine and wider access to services, rates of sexually transmitted diseases (STDs) such as chlamydia, gonorrhea, and syphilis have risen significantly in the United States over the past five years, with young adults disproportionately affected [1] [2]. This trend underscores the importance of prevention, early diagnosis, and regular screening.

One of the most persistent barriers to screening is social stigma. Feelings of shame and fear of judgment discourage many young adults from seeking care, even when they suspect an infection [3]-[5]. Additional factors—including privacy concerns, cultural and religious beliefs, and provider bias—further compound reluctance to pursue testing [6]. Minority populations, in particular, may experience unique challenges due to discrimination or perceptions of bias within healthcare settings [1].

Since 2020, a growing body of research has highlighted the role of digital and remote sexual health services in mitigating stigma-related barriers. Young people report that bidirectional digital sexual health interventions can improve privacy, comfort, and engagement when thoughtfully designed, while also noting the need to address confidentiality and usability concerns [7]. Telemedicine and remote consultations similarly offer discreet access to counseling, screening, and follow-up care [8] [9]. Self-testing and home-based kits have become increasingly accepted by adolescents and young adults [4] [10]. These innovations highlight new opportunities for reducing stigma and improving sexual health outcomes.

This study aims to evaluate the relationship between STD-related social stigma and screening behaviors among young adults aged 18 - 30 in the United States. We hypothesize that higher levels of perceived stigma are associated with a lower willingness to undergo screening, particularly among younger participants and those with stronger religious affiliations.

2. Methods

A cross-sectional survey was available to American young adults aged 18 to 30 via SurveyMonkey. Social media platforms, such as Facebook, Instagram, and Twitter, were employed to distribute the questionnaire to volunteers. The authors were solely responsible for formulating the questions in accordance with the privacy and confidentiality laws of the United States.

The questions were obtained from external sources and adjusted to better suit the proposed study [4] [10]. Specifically, some items were rephrased to use simpler, non-technical language appropriate for young adults, while others were tailored to reflect U.S. cultural and healthcare contexts. In addition, certain response scales were modified from open-ended formats to Likert-type scales to facilitate statistical analysis and improve comparability across participants. These modifications preserved the original constructs while enhancing clarity and cultural relevance.

Participants were asked to complete a questionnaire on sexual health and sexually transmitted diseases (STDs). Data were collected anonymously, and no per-

sonal identifiers were obtained. One hundred twelve participants completed the survey and provided consent for data analysis.

Statistical Analysis

Observational codes were entered into Word 2019, Version 16.0, and data were analyzed using Spearman's correlation coefficient and the Mann-Whitney U test. Stigma was assessed through several individual items (e.g., belief that sexual health is taboo, comfort discussing contraception, use of internet for privacy). A composite stigma score was not created. Instead, item-level correlations and Mann-Whitney tests were used to examine associations between stigma indicators, demographics, and screening behaviors.

3. Results

3.1. Participants

A total of 112 American young adults (53 males and 59 females) aged 18 to 30 participated. The majority were Caucasian, followed by African American, and most were in the 22 - 30 age group. **Table 1** summarizes participant demographics, while **Figure 1** illustrates the age distribution.

Table 1. Participant demographics.

Characteristic	Category	N	%
Gender	Male	53	47.3
	Female	59	52.7
Total		112	100
Age group	18 - 21	17	15.3
	22 - 30	83	73.9
	Prefer not to answer	12	10.8
Religious affiliation	Christianity	64	57.1
	Islam	16	14.3
	Hinduism	3	2.7
	Judaism	1	0.9
	Atheist/Agnostic	7	6.3
	Other	9	8.0
	Prefer not to answer	11	9.8
Education	High school	18	16.1
	Trade/Technical/Voc.	1	0.9
	Associate degree	7	6.3
	Undergraduate (BA/BS)	61	54.5
	Graduate (Master's)	18	16.1
	Doctorate	5	4.5
	Prefer not to answer	2	1.8

Continued

Ethnicity	Caucasian	58	51.8
	African American	34	30.4
	Hispanic/Latino	10	8.9
	Asian	6	5.4
	Other	4	3.5

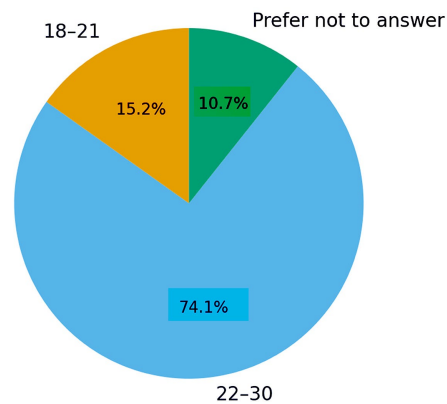


Figure 1. Age group distribution of participants.

3.2. Attitudes toward Sexual Health

Most respondents reported being sexually active within the past year, but just over half used contraception consistently. While the majority were comfortable discussing sexual health with providers and loved ones, 57% still viewed sexual health as taboo. These results are summarized in **Table 2** and illustrated in **Figure 2**.

Table 2 and **Figure 2** summarize sexual health attitudes and practices.

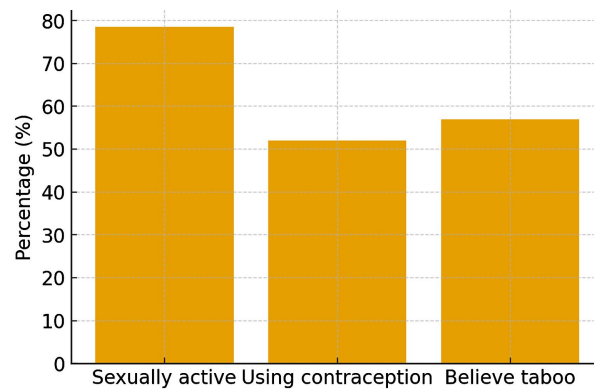


Figure 2. Attitudes toward sexual health.

Table 2. Sexual health attitudes and practices.

Question	N	% Yes/Agree	% No/Disagree
Sexually active in the past year	112	78.6	21.4
Using contraception (if sexually active)	98	52.0	48.0

Continued

Comfortable asking questions about sexual health	112	88.4	11.6
Comfortable asking loved ones about sexual health	110	65.5	34.5
Discussed contraception with the PCP	112	41.1	58.9
Attended school-based sex education program	111	68.5	31.5
Believing sexual health is still taboo	112	57.0	43.0

Our survey yielded results that show remarkable differences in age, ethnic, and religious groups as well as educational backgrounds. 78.6% of participants revealed that they have been sexually active within the past year; however, only 52% reported using contraceptive methods, which can explain the increasing numbers of sexually transmitted diseases among other factors. This could reflect an association between younger age and increasing risky behaviors due to impulses governed by cognitive growth and development in young adulthood [4] [11]. The advent of modern medicine and scientific advances allowed those diagnosed with a sexually transmitted disease to receive treatment in a timely fashion and avoid subsequent complications, such as infertility. Despite this, our study revealed that the majority of young adults have never discussed contraceptive methods with their primary care provider, nor do they feel comfortable discussing sexual health with their primary care provider. This could directly relate to a lack of sexual health communication between young adults and health care professionals in the United States and the increasing numbers of undiagnosed cases. The Institute of Medicine [12] argues that “sexuality is a value-laden subject that makes people—including health care professionals, researchers, educators, and the public—feel anxious and uncomfortable talking about it.” Park and Kwon [13] argue that “sexual health information online was also closely linked to privacy issues. The resulting inability to address issues of sexuality places individuals at risk of STDs” [11] [14]. 55.4% of our subjects reported that they prefer to use the Internet as a source to learn about sexual health (Table 2). This could explain the reluctance of American young adults to seek information about sexual and reproductive health from a health care professional. Many youths felt reluctant to speak with an HCP about sensitive issues surrounding sexuality and instead use the Internet to avoid embarrassment and overcome privacy issues” [15]. Furthermore, 57% of our subjects reported that they believe sexual health is still seen as a taboo topic in today’s society, which reinforces the aforementioned statement. Human sexuality throughout history has primarily been reserved for reproductive purposes. Women were expected to repress their sexuality as sexual activity other than for the purposes of conception was frowned upon and even punished at times [16]. Contrary to popular belief, our study did not find a significant difference in sexual activity among males and females, which reveals that gender differences in sexual activity are absent in today’s social climate.

3.3. Awareness of Sexually Transmitted Diseases

Overall, 95.5% of participants reported awareness of STDs beyond HIV/AIDS.

However, misconceptions persisted—20.7% agreed that most STDs can be cured without treatment. Additionally, 74.8% disagreed that there is “too much talk” about STDs in the media, suggesting that public health messaging remains insufficient. A statistically significant correlation was observed between education level and STD awareness ($r = -0.21$, $p = 0.026$). Education was coded numerically, with lower values indicating higher attainment, meaning that higher education was linked to greater awareness. Results are presented in **Table 3**.

Table 3 presents awareness and beliefs about STDs.

Table 3. Awareness and beliefs about STDs.

Question	N	% Agree/Yes	% Disagree/No
Heard of STDs beyond HIV/AIDS?	112	97.3	2.7
Most STDs can be cured without treatment.	111	20.7	79.3
Following medical advice maintains sexual health.	111	92.8	7.2
Too much talk about STDs in the media.	111	25.2	74.8
It is good to know as much as possible about STDs.	110	94.6	5.4

Differences in response rates according to religious groups must also be noted. Our data showed a statistically significant correlation between various religious groups and perceived norms ($r = 0.202$, $p = 0.033$), as seen in **Table 3**. Participants who identified themselves as Hindu, Muslim, or Jewish agreed with the statement that sexual health is still seen as a taboo topic in today’s society. On the other hand, participants who identified themselves as Atheist or Christian were more likely to disagree with the above-mentioned statement. This can explain the influence of certain religious institutions on ethnic minorities in the United States. As Wingood and DiClemente [17] suggest, certain religious beliefs, such as Islam, condemn premarital sexual activity, thus creating difficulties for young adults, particularly females, to access sexual and reproductive health services [18]. When comparing different ethnic groups, the data collected suggest a level of discomfort when discussing sexual health and sexually transmitted diseases. Some studies suggest that sexual attitudes and beliefs are highly influenced by the cultural and familial context [19]. This attitude is seen more in Caucasian and Hispanic families in contrast to ethnic families in which religion dictates their communication regarding sexual health (**Table 3**). The disparity among differing ethnicities is clearly visible. Although a majority of ethnic groups consider the subject taboo, they still express a willingness to seek information as evidenced by **Table 3**. The results of the survey conclude that a majority of young adults across a wide demographic are not willing to discuss sexual and reproductive health matters.

3.4. Attitudes toward Screening

In the United States, young adults are highly influenced by the media, where views on sex and sexuality tend to be more relaxed and without consequences. The media portrayal of human sexuality can often lead to negative health impacts, partic-

ularly in vulnerable populations, such as adolescents and young adults. 95.5% of our participants reported that they are aware of sexually transmitted diseases (STDs), indicating that there is general knowledge among young adults in the United States. Furthermore, 68.5% reported having attended a school-based program for sexual health education at some point in their lives; however, our study revealed that only a small percentage of our sample size are willing to receive sexual and reproductive health information from other sources, such as schools (**Table 2**). Regarding the treatment of sexually transmitted diseases, 79.3% disagreed with the statement that “most sexually transmitted diseases can be cured without any treatment whatsoever,” indicating a general awareness of the risk of health complications if left untreated. We can conclude that a high level of education directly contributes to greater awareness, as evidenced by a statistically significant correlation found in our study between these two variables ($r = -0.21$, $p = 0.026$). Despite this, the number of undiagnosed cases continues to rise. Manlove, Fish, & Moore [20] proposed that this may be caused by several other factors leading to a shortage of information, such as lack of youth-friendly resources, budget cuts, and staff reductions [2]. Our study also revealed that there continues to be a lack of awareness about sexually transmitted diseases in the media, as evidenced by 74.8% of our participants disagreeing with the statement that “there is too much talk about sexually transmitted diseases in the media,” as outlined in **Table 4**. This finding reinforces the need for more STD/STI prevention and screening methods.

Social stigma emerged as a significant barrier. Participants aged 18 - 21 were less likely to seek medical treatment if they suspected infection compared to those 22 - 30 ($r = 0.26$, $p = 0.006$). Discomfort discussing contraception with a PCP was negatively correlated with willingness to schedule a consultation ($r = -0.317$, $p = 0.001$). Perceiving sexual health as taboo was correlated with both ethnicity ($r = 0.239$, $p = 0.011$) and religion ($r = 0.202$, $p = 0.033$). Mann-Whitney tests showed that educational attainment significantly influenced whether participants discussed contraception with a PCP ($U = 0.000$, $Z = -2.449$, $p = 0.014$). These findings are summarized in **Table 4**.

Table 4 shows key correlations and Mann-Whitney U test results linking stigma and screening behavior.

Table 4. Key correlations and Mann-Whitney U test results

Comparison	Test statistic	p-value	Significance
Age group (18 - 21 vs. 22 - 30) × Likelihood to seek medical treatment	Spearman $r = 0.26$	0.006	Significant
Religion × Perception of sexual health as taboo	Spearman $r = 0.202$	0.033	Significant
Ethnicity × Comfort discussing sexual health	Spearman $r = 0.239$	0.011	Significant
Gender × Discussing contraception with PCP	Mann-Whitney U = 1062.5, $Z = -3.34$	0.001	Significant
Gender × Sexual health considered taboo	Mann-Whitney U = 1290.5, $Z = -1.81$	0.070	Not significant (trend)

4. Discussion

This study demonstrates that social stigma remains a central barrier to STD screening among young adults in the United States. Consistent with earlier research, feelings of shame and embarrassment reduced participants' willingness to seek testing and treatment [3] [6] [10]. Our findings extend this evidence by showing that younger respondents [8]-[10] were significantly less likely than older peers to pursue medical care.

Cultural and religious values also shaped attitudes toward sexual health. Participants identifying with Islam, Hinduism, or Judaism were more likely to perceive sexual health as a taboo subject, while Christian and atheist respondents were more open to discussion. These results highlight the need for culturally sensitive interventions [18] [21]-[22]. For example, interventions targeting these groups should involve partnerships with trusted community and religious leaders who can frame sexual health in ways that respect faith-based values. Outreach in African American and Hispanic communities may benefit from peer educators and family-centered discussions, while culturally adapted campaigns should be developed for Asian and immigrant populations.

The reliance on the internet as the primary source of sexual health information—reported by more than half of participants—underscores the need for accurate, youth-friendly digital resources. Digital health interventions—including telemedicine, remote counseling, and self-testing—offer discreet, accessible alternatives to in-person services, reducing stigma and enhancing engagement [19].

From a practical perspective, interventions should focus on normalizing conversations around sexual health and reducing stigma within both healthcare and community settings. Providers must be trained to create safe, nonjudgmental environments, particularly for young patients and those from minority backgrounds. Public health campaigns could also leverage digital platforms, where young adults already seek information, to promote accurate education and emphasize the importance of routine screening.

5. Conclusion

STD-related stigma, reinforced by cultural and religious norms, discourages open dialogue with healthcare providers and reduces screening uptake. Younger adults are particularly reluctant to seek timely care. To address these challenges, health systems should prioritize culturally appropriate interventions, normalize conversations about sexual health, and expand access to confidential screening opportunities—both in-person and digitally.

6. Limitations and Further Recommendations

The sample size was relatively small and not fully representative. Most participants were Caucasian or African American, limiting generalizability. Data were self-reported and anonymous, which may introduce bias. Future studies should expand sample diversity and consider developing a validated composite stigma

scale to directly test the primary hypothesis.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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