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A Longitudinal Study of Problems in Sexual Functioning and Related Sexual Distress Among Middle to Late Adolescents

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A B S T R A C T

Purpose: Rates of sexual dysfunctions are high among adults, but little is known about problems in sexual functioning among adolescents. We completed a comprehensive assessment of problems in sexual functioning and related distress over a 2-year period among adolescents (16–21 years).
Methods: A sample of 405 adolescents completed five online surveys over 2 years. The main outcome measures were clinical cutoff scores on the International Index of Erectile Function and Premature Ejaculation Diagnostic Tool for male adolescents and the Female Sexual Function Index for female adolescents. A secondary outcome was clinical levels of distress.
Results: The majority of sexually active adolescents (78.6% of the male and 84.4% of the female) reported a sexual problem over the course; rates did not differ significantly by gender. Common problems for males were low sexual satisfaction (47.9%), low desire (46.2%), and problems in erectile function (45.3%). Common problems for females were inability to reach orgasm (59.2%), low satisfaction (48.3%), and pain (46.9%). Models predicting problems over time showed increased odds among those not in a sexual relationship. Odds of reporting a distressing sexual problem decreased over time for female but not male adolescents.
Conclusions: Problems in sexual functioning emerge early in individuals' sexual lives, are often distressing, and appear not to fluctuate over time. Additional efforts to identify key factors linked to onset will help elucidate possible mechanisms.

IMPLICATIONS AND CONTRIBUTION

This comprehensive, longitudinal assessment of the range, rates, and onset of adolescents' problems in sexual function reveals high rates among both males and females. Half of the problems reached clinical levels of distress, with risk linked most closely to poorer sexual esteem and not being in a sexual relationship.

The World Health Organization emphasizes the value of approaching sexual health not just in terms of "the absence of disease, dysfunction, or infirmity," but also in terms of pleasure and positive functioning [1]. Research on adolescents' sexual health has focused primarily on unintended pregnancies and risk of infection [2,3]; far less is known about sexual functioning or problems in function that adolescents experience. Qualitative studies reveal that adolescents often experience low desire, anorgasmia, and are concerned about "performance" [4,5], but provide little insight into how common or distressing these problems might be.

Survey research addressing adolescent sexual functioning is typically narrow in scope, focusing on single problems such as

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pain during intercourse [6], erectile dysfunction [7], or premature ejaculation (PE) [8]. One exception is a study of problems in sexual functioning among 171 adolescents (17–21 years) [9]. Overall, 97% and 98% of male and female adolescents had experienced a problem. Most common among males (reporting "sometimes" or "always") were PE (41.9%), performance anxiety (32.6%), difficulty maintaining erection (23.1%), and inability to climax (16.3%). For females, inability to climax (53.1%), performance anxiety (31.2%), painful intercourse (25.8%), and no/low desire (22.9%) were most common. Rates were comparable to an older sample of young adults (22–28 years), suggesting that adolescents' problems might persist into adulthood. Interviews with a subset of adolescents revealed sexual problems significantly disrupted sexual and relationship functioning. Another exception was a study assessing problems among a sample of 1,582 Canadian women (15–44 years) [10]. Rates among those 18–24 years were fairly high: low sexual desire (33%), anorgasmia (31%), and pain during intercourse (22%). These rates are similar to those found among women. Missing from the literature are longitudinal data exploring onset of problems in adolescents' sexual functioning and factors best predicting onset of a problem over time.

The abundant research on adult sexual functioning links problems with considerable distress: conflict and discord in their relationships and reduced well-being [11]. Longstanding and distressing sexual complaints in adulthood might be prevented if risk factors were assessed earlier in an individual's sexual life. Such information could allow intervention in ways that prevent these associated psychosocial outcomes if were able to identify markers of developing problems earlier in life. Insights about when and among whom sexual problems, especially distressing problems, originate and evolve would inform the broader literature on sexual dysfunctions, but it is valuable to understand more about adolescent sexual health and corresponding functioning for their own sake. This emerging literature suggests rates of problems among adolescents are high, possibly comparable to adult rates, and associated for many with distress.

Very clear from the adult literature are the disparate rates between men and women. A UK national survey revealed 35% of men and 54% of women (16–44 years) reported a sexual problem lasting at least 1 month in the prior year [12]. A U.S. prevalence survey produced rates of 31% and 43% among men and women in the prior year [13]. We examined gender as a risk factor for problems in sexual functioning to help explain variance in outcomes among adolescents. Related to gender, we examined traditional socialization which positions men as the initiators and pursuers of sexual interactions with women, emphasizing performance in sexual interactions, and high sexual interest. Women, by contrast, are expected to be passive and acquiescent sexually and uninterested in sex [14]. Stronger endorsement of these restrictive standards was expected to predict higher probability of sexual problems.

Drawing primarily from the adult literature, relationship status was selected as a predictor because the relationship is a known context of sexual interactions that often brings to light and possibly exacerbates problems in functioning [15,16]. Sexual esteem and self-disclosure were assessed because these variables capture confidence in oneself as a sexual person [17] and tendency to communicate one's likes and dislikes, both of which are linked to lower likelihood of problems [18]. Self-esteem was associated with sexual enjoyment among females 18–26 years [19]. Research with 914 nonsexually active adolescents linked open communication with more pleasure expectancies about partnered sexual activity [20]. Lower sexual esteem and less self-disclosure were expected to predict problems in sexual functioning.

History of sexual coercion was assessed given consistently strong patterns of association between coercive experience and dysfunction among adults, especially among women [21]. Less is known about men, but we expected coercion history would predict reports of sexual problems among both. Finally, religiosity and quality of sex education were assessed as both are associated with adult dysfunction: Those reporting higher religiosity and those with less sexual knowledge tend to report more sexual problems [21]. Adolescents often endorse a range of misconceptions about sexual health [22]. The prohibitive messages frequently taught in religious programs, including abstinence only programs common in the United States and UK [23], reinforce views that adolescent sexual behavior is problematic by nature and should not be pleasurable. These variables were viewed as potential strong predictors for problems in adolescent sexual functioning.

Assessing problems in sexual functioning among adolescents proves somewhat difficult, however. Despite many measures available in adult literature, no measures have been validated using adolescents. We piloted a range of measures validated with adults in this initial exploration of sexual problems among middle to late adolescents (16–21 years), although validation studies are still needed. Our primary goal was to characterize which adolescents were at risk of experiencing a problem in sexual functioning, as well as clinical levels of distress with a problem, and to track those symptoms over a 2-year period. The research questions were as follows:

1) What are the rates and types of persistent sexual problems in functioning, including distressing problems, among male and female adolescents over a 2-year period?
2) How well do age, relationship status, coercion history, lower sexual self-disclosure, sexual self-esteem, higher religiosity, traditional sexual socialization, and lower quality sex education predict reports of (1) sexual problems (model 1) and (2) distressing sexual problems (model 2)?

Methods

Participants and procedures

Adolescents (N = 411; 16–21 years) were recruited through an existing database of eight Eastern Canadian high school students to take part in a longitudinal study of adolescent sexual health. Permission was first obtained from district superintendents, then school principals, and teachers. All parents of minors provided consent using a passive consent procedure whereby letters were sent home informing parents of the study; parents were given a chance to decline consent for their child. Adolescents were directed to an online survey and provided consent. They were primarily Euro-Canadian (89.9%), heterosexual (89.6%), and English speaking (93.5%). Two males and four females were dropped because of incomplete data. The final sample was 180 male (M age 19.3; standard deviation = 1.27) and 225 female (M age 18.7; standard deviation = 1.41) middle to late adolescents. Participants received a gift card as compensation that increased in amount with each subsequent assessment. There were five assessments 6 months apart (baseline, four