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Original Article

# FAMILY FACTORS AND RISK SEXUAL BEHAVIOUR IN STUDENTS AGED 12-18

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# **Summary**

The aim of this study was to identify family factors determining risk sexual behavior among students aged 12-18 in Veliko Turnovo region. A cross-sectional study was conducted in 2014. Three hundred and ten students were included in a representative sample of students attending seven schools in Veliko Turnovo region. The respondents filled in a self-administred questionnaire, designed to collect data on family interactions, acts of sexual coercion, parental social status and their influence on the sexual behavior of the students. Data were processed using SPSS.v.19. Parametric and non-parametric statistical methods were applied. About one-fifth of the students were nurtured in incomplete families. History of a sexually transmitted diseases correlated with type of family (p<0.05). Poorer family interactions (rare family dinners and no conversations about sex) determined acts of risk sexual behavior - accidental contraceptive use during sex and postponing an obstetric examination (p<0.05). Students reporting sexual coercion had also had frequent casual sexual intercourse (p<0.05). Identifying family factors is of essential importance in planning effective sexual health education at school.

**Key words:** risk sexual behavior, sexual coercion, incomplete family, poor interaction

#### Introduction

Sexual risk behaviors (early sexual intercourse, promiscuity, unsafe sex, experienced sexual abuse or sexually transmitted disease, etc.) are often determined by family characteristics – incomplete family structure, lower parental social status, ineffective interactions, authoritative parenting, absence of emotional support, etc.

#### **Materials and Methods**

A cross-sectional study was conducted in 2014, aiming to identify factors of family environment determining risk sexual behaviour among school children aged 12-18, attending 7 schools in Veliko Tarnovo region. Three hundred and ten students were included in a representative sample of students. The respondents filled in a self-administred questionnaire, designed to collect data on family interactions, acts of sexual coercion, parental social

Table 1. Sociodemographic characteristics of students

Gender (Number, %)	Age (Number, %)	Residence (Number, %)	Live with (Number, %)
Males $-132 (43.4)$	14  or younger - 16 (5.2)	City - 163 (53.4)	Parents – 228 (74.8)
Females – 172 (56.6)	14  years - 20 (6.6)	Town - 65 (21.3)	Grandparents $-21$ (21.3)
	15 years – 64 (21.0)	Village – 77 (25.2)	A single parent (my parents are divorced) – 34 (11.1)
	16 years – 54 (17.7)		A single parent (the other dyed) $-6 (2.0)$
	17 years – 82 (26.9)		Other – 16 (5.2)
	18  years - 18 (22.6)		
Mother's social status (Number, %)	Father's social status (Number, %)	Mother's educational level (Number, %) Father's educational level (Number, %)	Father's educational level (Number, %)
Employed – 192 (81.4)	Employed $-201$ (85.2)	Higher education $-73 (25.9)$	Higher education – 60 (21.6)
Unemployed $-44 (18.6)$	Unemployed $-23 (9.7)$	Secondary education – 175 (62.1)	Secondary education – 186 (66.9)
	Pensioner $-5(2.1)$	Elementary education $-26 (9.2)$	Elementary education $-28 (10.1)$
	Dyed - 7 (3.0)	Primary education – 8 (2.8)	Primary education – 4 (1.4)
Total (Number,%) – 310 (100.0)			

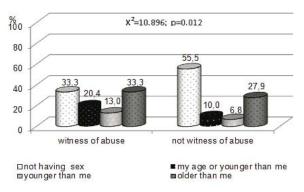
status and their influence on sexual behavior. Some basic characteristics of the respondents are presented on Table 1. Data were processed using SPSS.v.19. Parametric and non-parametric statistical methods were applied in the analysis.

#### Results

The study found out that over 50% of the students had already had a sexual intercourse, the age at the first sexual intercourse for the majority being at 16 years. Earlier onset of sexual activity was found among the girls, as compared to the boys. The mean age for the girls was 15.56±1.18, and for the boys it was 16.50±1.11 (F=19.33; p=0.001). Significant differences were reported regarding family interactions: the children who talked freely with their parents about sex and pubescence reported early onset of sexual relationships (F=14.59; p=0.001). For most of the students (58.7%), the first sexual partner was an older person. The partner was  $\geq 5$  years older in 19 (21.6%) cases. Eighteen children (33.3%) who had witnessed abuse reported having had sex with an older person ( $\chi^2=10.896$ ; p=0.016) (Figure 1). Age differences with partners are largely determined by choosing a trustee. The majority of children (54.4%) preferred to discuss "embarrassing" topics with their mothers: there were significant levels of preference for an older partner for their first sexual intercourse  $(\chi^2=19.456; p=0.003)$ . At the same time, 81% of the respondents who talked freely with their parents about sex and sexual education had used condoms during their first sexual intercourse, as compared to 64.2% of the other group. The differences were significant ( $\chi^2$ =4.88; p=0.027).

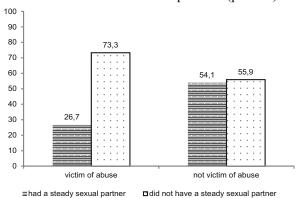
Among the most common reasons for lack of parent-child interactions the students reported choosing friends for trustees (35.9%), embarrassment (27.8%) and shyness (22.7%) experienced by the children, as well as the lack of need to share their problems with their parents (13.6%). The reasons for lack of communication between parents and children varied with the place of residence. Children living in urban areas focused mostly on the embarrassment related to sexual and reproductive health, while those residing in rural areas preferred to talk on sexual matters with friends ( $\chi^2$ =14.283; p=0.027). In the cases of underestimating family interactions and choosing to trust friends we found out an increased frequency of having sexual intercourse after using alcohol or drugs ( $\chi^2 = 8.143$ ; p=0.043).

## - Simeonova J., et al. Family factors and risk sexual behaviour in students aged 12-18

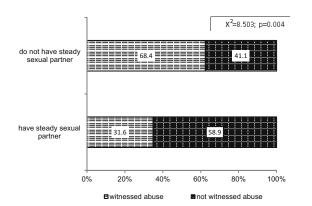


**Figure 1.** Association between the age of first sexual partner and witnessing an act of physical abuse (%)

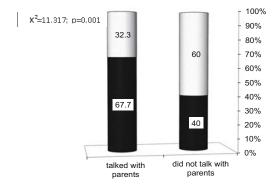
Almost half of the respondents had no permanent sexual partners, and over 70% "consumed" the relationship soon after coming to know their current partner. Risk groups included children who had experienced or witnessed physical abuse, as well children in whose family topics related to sexual education were not discussed (Figures 2-4), and this correlation was significant (p<0.05). Those who had experienced physical abuse more often reported having had sexual intercourse with casual partners (p<0.05).



**Figure 2.** The proportion of respondents-victims of abuse and without steady sexual partner (%)



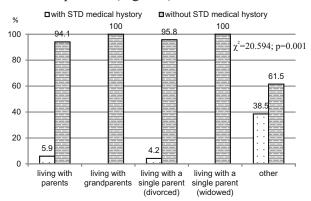
**Figure. 3.** Relative share of respondents - witnesses of abuse and without steady sexual partner (%)



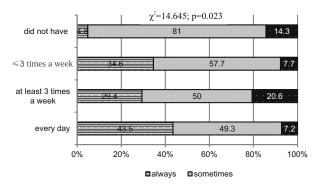
· had a steady sexual partner Bdid not have a steady sexual partner

**Figure 4.** The proportion of respondents who did not talk with their parents about sexual education and did not have a steady sexual partner (%)

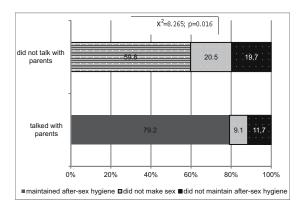
Only one third of the students reported regular use of condoms, 15 (7.3%) had already had a sexually transmitted disease (STD), 33 (16.6%) had no proper after sex hygiene habits. The lack of family support determined the risk sexual behavior of students. More than one-fifth of the respondents did not live with their parents and this fact more often correlated with a history of STD (Figure 5). A large number of the students (45.9%) reported less often having dinner with their parents during the previous week and some of those reported having had unsafe sex, rarely or never using contraception (Figure 6). At the same time, the lack of hygiene after a sexual intercourse in adolescents was a consequence on ineffective family interaction (Figure 7). Although 15% of the students reported frequent conflicts in their families and 7% qualified the behaviour of their parents as negligent, this was associated with use of psychoactive substances rather than risk sexual behavior (p>0.05). In 56% of the girls avoidance of discussing embarrassing topics in the family significantly correlated (p<0.05) with a delay in seeing a gynecologist in case of a problem (Figure 8).



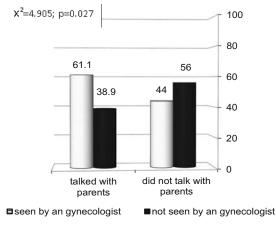
**Figure 5.** Distribution of respondents according to STD medical history and living arrangements (%)



**Figure 6.** Frequency of dinners with parents during the last month and condom use (%)



**Figure 7.** Proportion of respondents who did not talk with their parents about sexual education and did not have proper after sex hygiene habits (%)



**Figure 8.** Proportion of respondents that did not talk with their parents about sexual education and were not examined by gynecologist (%)

It was important to explore if some basic characteristics of parents (social status and education) determined risk sexual behavior of our respondents. Almost 11% of fathers and mothers had lower levels of education. The proportion of unemployed mothers (18.6%) was twice as high

as that of unemployed fathers (9.7%). The lower level of maternal education was significantly associated with lack of hygiene habits after sex for both girls and boys and with lower frequency of visits to a gynecologist in girls (p<0.05). In the families where the father had a lower educational level, the children more often reported casual sexual intercourses (p<0.05).

#### **Discussion**

Many researches on risk sexual behavior in adolescents have identified various determinants that can be divided into three main groups: psychological (extroversion, mental well-being, self-respect, religiousness), behavioral (smoking, alcohol use) and social (family structure, parental monitoring and support) [1-5].

The present study found out that incomplete family structure was related to a higher frequency of STDs (p<0.05). A previous study conducted by our research team in 2010, showed that absence of a parent in a family, or when grandparents take care of the children were significantly related to two aspects of risk sexual behavior in adolescents aged 12-18: ineffective contraception during sex and the lack of hygiene after sex [2].

Bruce et al. (2012) found that family disintegration, the absence of a biological father after divorce or separation, poor interactions between parents and children, especially in early childhood and maturation caused earlier menarche, earlier sexual activity and higher frequency of teenage pregnancy [1, 6]. One of the mechanisms for reducing risk sexual behavior in adolescents is associated with limiting the time children spend with their peers. This can be achieved if the parents spend more time with their children [5]. In our study, adolescents from nuclear families did not often report respect for tradition of family dinners and at the same time they reported less frequent condom use (p<0.05), although family traditions did not determine risk sexual behavior in the Krishna study (2010) [7]. We found that frequent family conflicts and neglect of parental duties were related to some aspects of high risk behavior in adolescents (alcohol and drug use). However, these family factors were not necessarily associated with risk sexual behavior (p>0.05). Nevertheless, parental overprotection, as well as lower interest in children was identified among the risk factors for trafficking young girls, including Bulgaria [11].

Parental influence on adolescent behavior is complex and multifactorial and the process could

not be understood if the focus is on a single theoretical construct. In most cases, parental control is explored (including attention, monitoring, problem-solving, identifying and introducing of rules in case of unacceptable behavior). Behavior management, social skills and parental trust in children are major components of behavioral prevention and monitoring of high risk behaviour in adolescents [1, 5, 8, 10, 12]. It has been shown that high levels of parental control and support have a protective effect on some aspects of risk sexual behavior – delaying first sexual intercourse in time, more effective contraception, and lower incidence of STDs among adolescents [1, 5, 8]. Some studies have found that positive communication of girls with their mothers is associated with later onset of sexual activity and maintenance of a steady intimate relationship [1]. Ondrei (2012) found that control on boys by their fathers increased 2.14 times the likelihood for condom use during sex [1]. Unfortunately, most of our respondents (61.3%) did not report talking with their parents about sexual and reproductive health; the reasons being similar to those that were established in another study of ours [2], i.e. unwillingness, embarrassment, shame, as well as preference to discuss such topics only with friends. On the contrary, 80% of girls и 66% of boys in USA talk freely with their parents on at least one of six topics (how to refuse an invitation for sex, contraception, STDs, how to get a contraceptive, how to protect oneself from HIV/AIDS, and how to use a condom) which correlates with frequent condom use and with lower abortion and birth rates in girls aged 15-19.

During the period 1993-2003, the proportion of adolescents with 4 and more intimate partners has dropped [9]. We found that limited family interactions significantly correlated with lack of a steady sexual partner, and with lack of hygiene habits after sex, with shortened period between initiating a relationship and a sexual intercourse, as well as with a lower frequency of visits to a gynecologist (p<0.05). In a previous study we reported that lack of frank conversations with parents led to embarrassment when buying condoms [2]. Intentionally maintained distance with parents by the children themselves increased the frequency of sexual intercourses under the influence of alcohol or drugs (p<0.05). A study conducted among teenage girls in Estonia showed that when they left home without informing their parents, the frequency of unplanned pregnancies was higher [3]. Unlike other researchers [1, 5, 8], we found that positive family interactions were associated with earlier sexual intercourse. The first sexual intercourse in the girls was often with an older partner (p<0.05).

Another serious problem directly associated with various aspects of risk sexual behavior in adolescents, including early sexual intercourses, unwanted pregnancy, dropping out of school, experiencing abuse, etc. is the hostile community in which children and teenagers live and function. Poverty and lower social status of parents have different influence on adolescent boys and girls. In girls, these factors are associated with early pregnancy and subsequent single motherhood, while in boys, lower parental educational levels and unemployment are associated with promiscuity and not using condoms [3, 5]. Our findings were similar: lower education levels of parents determined lack of hygiene after sex and fewer visits to a gynecologist (p<0.05). When the father was unemployed, the child more often had casual sexual intercourses (p<0.05). Almost 10% of our respondents were victims of physical abuse and 17.9% had witnessed acts of abuse. These facts correlated with choosing older sexual partners, lack of steady intimate partners, and a shorter period between initiating a new relationship and having sex with this new partner (p<0.05).

## **Conclusions**

Our study confirmed the importance of a family's structure for the development of risk sexual behavior in adolescents. Incomplete family structure was related to increased frequency of STDs. The absence of parents, ineffective family interactions, as well as "avoiding" embarrassing questions resulted in sexual intercourse soon after initiating a new intimate relationship, unsafe sex or sex after using a psychoactive substance, as well as rare visits to a gynecologist. Children, who were victims or witnesses of physical abuse, appeared to be a risk group since they tended to initiate their sexual activity with an older person and in a very short period after beginning of the relationship (1-2 weeks).

Identifying family factors is of essential importance in planning effective sexual health education at school and for development of appropriate family counseling programmes on parenting and problems of adolescents.

# Acknowledgments

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