

Original Article

Information, Attitudes and Behaviours about Reproductive Health of a University's Students

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Abstract

Introduction: This study was carried out in cross-sectional type in Rize to determine knowledge levels, attitudes and behaviors of a university students about reproductive health. The study included 1898 students studying at the undergraduate level and agreeing to participate. Percentage, mean, standard deviation, chi-square test were used in the statistical analysis of the collected data by questionnaire method.

Results: 57% of the students who participated in the questionnaire were female, 40% were male and the average age was 20. 61.2% of the students stated that they had knowledge about reproductive health, 14.6% said they had received education, and 49.4% said education was encouraging and incentive. 5.1% knew any family planning method and 81.4% knew at least one STI. The most well-known disease was AIDS, the most risky behavior was not to use condoms. The internet was the most used as information source. In any period of life, 10.4% had sexual experience and this rate was significantly higher in men. The initial rate of not protecting was found to be 30%.

Conclusion: There is not enough information in both genders about reproductive health which is an important place in health protection. For this reason, young people face risks like unwanted pregnancy, STI. Proper education of reproductive health is important in adolescence period.

Key words: Reproductive health, university student, sexually transmitted infections, family planning

Introduction

As a result of the inadequacy of the concept of maternal child health and family planning in the world, reproductive health approach (Pabuccu et al. 2005) has begun to be considered as a more comprehensive and holistic concept. The concept of reproductive health is a broad concept that covers maternal and child health services, youth, family planning, sexually transmitted infections. Reproductive health (RH) is not only the absence of illness and disability, but also the physical, mental and social well-being of the reproductive system, functions and process (Akin et al., 2005; Akin 2012) The reproductive health needs of 10-24 age group that WHO defines as young people are different from adults and the fact that these requirements are not met can have serious

consequences in their future life (Savas & Cesuroglu 2005; Ozcebe et al. 2007, Mihciokur 2012). The difficulties they encounter and the decisions they make affect the quality and length of their lives (Akin 2012), as young people exhibit risk taking behaviors because they do not think the consequences of events too much (Ozcebe et al. 2007). Due to unprotected and increasing sexual activity without sufficient information about contraceptive methods and sexually transmitted diseases, they are faced with problems such as unwanted pregnancies, voluntary curettage and sexually transmitted diseases and this is one of the important health problems in the world (Sen & Under-Kavlak 2009; Karabey & Muftuoglu 2009). Reproductive health problems in young people are among the problems of unwanted pregnancies,

sexually transmitted diseases, increased HIV / AIDS, low levels of reproductive health of young people, lack of youth reproductive health services and lack of receiving of health care services to meet special needs (Pabuccu et al., 2005; Akin, 2012).

According to Turkish Statistical Institute (TURKSTAT) 2016 data, the total population is 79,814,871. Of the total population, the population of 15-24 years of age is 12,989,042, which constitutes 16.2% of the total population (URL 1).

Worldwide, in 2013, approximately 35 million people were infected with HIV and about 1.5 million people died from AIDS (URL 2). In middle- and low-income countries, 15-19 year-old girls have 16 million births and 3 million unsafe abortions every year, and birth complications are the second cause of death. More than 2 million young people live with HIV (URL 3). In 2003 there were 31 abortions per 1000 live births (URL 4). In developed countries, the majority of young women and men before 20 years of age were found to have sexual relation. The rate is 75% in Canada, 86% in Sweden, 81% in America, 83% in France and 85% in Great Britain (Darrowch et al. 2001). These rates for men and women are 67 -83% in France, 79-85% in England and 71-81% in the United States. The rate of sexual relation experience before age 18 is 11-75% in Asia, 12-44% in Latin America and 45-73% in sub-Saharan Africa (Salgado & Cheetham 2003; Brown et al., 2001).

The information about sexuality of university youth in Turkey is also quite inadequate (Ozcebe et al., 2007). Starting to give birth in the adolescence period is 6% in TDHS 2008 and 5% in TDHS 2013. (TDHS 2008; TDHS 2013). The voluntary abortion rates are 2.9 in the 15-19 age group and 3.6 in the 20-24 age group according to age groups (TDHS 2013). According to the Ministry of Health data of 2011, there are 632 HIV / AIDS cases in total of 324 males and 307 females in the 10-24 age group young people (Yilmaz 2013). In Izmir between 1996 and 2004, the rate of sexual relation in the same high school increased from 19.9% to 34.4% in males (Kokmaz-Cetin et al., 2008).

As a result, the share of young people in the population is great. It is important to determine the level of knowledge, behavior and needs to protect

young people from the risks associated with reproductive health. This study was carried out to determine knowledge levels, attitudes and behaviors of students in university about reproductive health.

Materials and Methods

The research was planned with 3200 students registered in undergraduate programs in Rize, during April-May 2012, 1898 students who were in school during the research and agreed to participate were studied. In study, 60% of students were reached. The study was a cross-sectional study and a questionnaire developed by the researcher was used to collect data. The questionnaire consists of 36 questions to determine socio-demographic data, knowledge, attitudes and behaviors related to reproductive health, family planning, sexually transmitted infections and risky behaviors. During the course, the students were informed about the subject by entering the classes, questionnaires were given to the students who gave the oral approval, and they were collected and applied after students filled in.

SPSS 18.0 package program was used for statistical analysis of the data. Qualitative data were expressed as percent, quantitative data were expressed as mean \pm standard deviation. Chi-square test was used for statistical analysis of qualitative data. Recep Tayyip Erdogan University Faculty of Medicine Clinical Investigations Ethics Committee was approved by decision number 2012/60 for the research to be done.

Results

A 57.3% of the students who participated in the research were female, 40.7% were male and the average age was 20.64 ± 3.432 . 4.6% of the students were in the preparatory class, 32.9% were in the first class, 27% were in the second class, 22% were in the third class and 13.4% were in the fourth class. 45.4% of university students lived in the city center, 52.8% lived in the counties and villages. The rate of illiterate parents was, 9.9% - 1.8%. The average monthly amount of students was 371 TL, and the amount which was about half of the minimum wage. This rate was 331 TL for females and 416 TL for males.

When we look at the questions about students' reproductive health knowledge levels; 61% had

knowledge about reproductive health, 14.6% had received education and 46.4% were educated by teachers. The rate of receiving education from health personnel was 22.3%. 49.4% thought that reproductive health education was encouraging and incentive, 25.3% could easily receive reproductive health services. Despite having a youth counseling center on the spot, the rate of those who knew it was 1.5%. 81.6% thought about getting married, and they thought to get married at the age of 22. The rate of knowing any modern family planning method was 5.1% while the rate of at least one STI knowledge was 81.7%. The distributions of students' knowledge of reproductive health by gender and classes are shown in Table 1 and Table 2.

It was significantly higher in males to indicate that they had knowledge about reproductive health, to receive reproductive health education, to think that education was encouraging and incentive and to know at least one STI ($p<.000$, $p=.003$, $p=.000$, $p=.000$, respectively).

While the rate of knowing the methods of family planning was the highest in the 4th class, the highest rate in the others was in the preparation class. Significant differences were found between having knowledge, receiving education, knowing any family planning method and knowing at least one STI ($p=.000$, $p=.012$, $p=.000$, $p=.000$ respectively).

The students knew pills at maximum with the rate of 4.5% and condom with the rate of 3.5%. The

most known disease was AIDS with 80.2%. AIDS, Hepatitis B (18.5%), Gonorrhea (11%) and Syphilis (9.3%) were mostly known in preparatory class and significantly by males ($p<.000$; $p=.000$; $p=.000$ respectively). The highest risk was thought not to use condom as risky behavior (9.9%). Other risky behaviors were polygamy (3.4%), common use of things (2.1%), relation with the person with STI (1.6%) and alcohol-substance use (1%). In conclusion, seeing alcohol and substance use as a risky behavior was significantly higher in males ($p<.000$, $p=.000$ respectively).

When students were examined about their attitudes and behaviors on reproductive health issues, internet was mostly used and the medical institutions were least used to get information. The sources of information on the reproductive health of students are shown in Table 3.

Cigarette use was 15.5% and alcohol use was 3.7% when considering the use of substances. Smoking and alcohol use were 30.8%-8% ($p=.000$, $p=.000$) in males respectively and more in preparatory and 4th classes ($p=.000$, $p=.001$ respectively). 30% of the students were living an emotional relationship. Men (35.2%) were having more emotional relations than girls (27.2%) ($p=.001$). 66.3% of their parents did not know. Knowing any family planning method and knowing at least one STI in the ones who had emotional relationship were significantly high ($p=.004$, $p=.000$).

Table 1: Distributions of Reproductive Health Knowledge Questionnaire by Gender (n:1898)

	Female		Male		Total		P
	n	(%)	n	(%)	n	(%)	
Who had knowledge about reproductive health	626	56,4	531	67,3	1157	61,2	,000
Who received RH education	138	12,4	140	17,7	278	14,6	,001
Who thought that RH education was encouraging and incentive	486	43,8	451	57,2	937	49,4	,000
Who received reproductive health service easily	287	25,9	193	24,5	480	25,3	,484
Who knew any modern FP method	61	5,5	35	4,4	96	5,1	,297
Who knew at least one STI	870	78,4	675	85,6	1545	81,4	,000

Table 2: Distributions of Reproductive Health Knowledge Questionnaire by Classes (n: 1898)

	P	1	2	3	4	T	P
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Who had knowledge about reproductive health	71 80,7	339 54,2	321 62,6	238 57,1	188 73,7	1157 61,0	,000
Who received RH education	24 27,3	83 13,3	70 13,6	65 15,6	36 14,1	278 14,6	,012
Who thought that RH education was encouraging and incentive	47 53,4	297 47,5	244 47,6	217 52,0	132 51,8	937 49,4	,423
Who received reproductive health service easily	26 29,5	166 26,6	107 20,9	106 25,4	75 29,4	480 25,3	,061
Who knew any modern FP method	4 4,5	19 3,0	16 3,0	31 7,4	26 10,2	96 5,1	,000
Who knew at least one STI	85 96,6	477 76,3	428 83,4	336 80,6	219 85,9	1545 81,4	,000

Table 3: Reproductive Health Information Sources of Students Participating in the Research

Reproductive Health Sources	*n	%
Internet	1087	57,3
Book	872	45,9
Television	834	43,9
Newspaper-magazine	777	40,9
Friend	776	40,9
Family	585	30,8
Health Institution	533	28,1

* More than one option marked

The rate of those who stated that they have had sexual experience in any period of their life was 10.4%. 9.6% were male and 8% were female who had sexual experience. Gender, class, monthly income and place of living have made a significant difference. Sexual experience was found to be significantly higher in men (22.8%), preparatory class (25%) and 4th class (14.5%), with higher

monthly income (19.6%) and living in city center (13.2), who had knowledge about reproductive health (13.7%), who received education (19.1), who thought education was encouraging and incentive (13.3%) and who knew at least one STI (11.4%) (p:.000, p:.000, p:.000, p:.000, p:.000, p:.000 respectively).

A 80.7% of the students who had sexual experience had knowledge about reproductive health, 26.9% had education in this subject, 63.5% thought that education was encouraging, 27.9% could get service easily, 7.6% had any family planning method and 89.3% knew at least one STI. 56.3% wanted sexual experience, 18.8% wondered sexual experience, 8.6% had with partner's insistence, 5.6% had with environmental factor, 4.6% wanted to satisfy their partner and 7.1% did not want to answer. 30% of them did not protected in the first experience, condom use rate was 3%, the rate of participants who still have had sexual life was 44.7%, 58.3% said that they have had sexual relation with protection, 3.6% were using pill, 28.4% were using condom and 0.5% were using morning after pill.

Discussion

Reproductive health is a matter of right knowledge. Young people are willing to receive information, and they want information from their parents or experts. It has been determined that young people's information about reproductive health was inadequate, they were willing to receive information and education, they wanted to get information from their family or expert (Akin et al., 2003; Okdem et al., 2016; Pinar et al., 2009; Demir & Sahin, 2014; Dagdeviren 2008). In research, having knowledge about reproductive health was low in the capital (Pinar et al., 2009) and Malatya (Koluacik, Gunes & Pehlivan 2010). It was found higher in Edirne (Yildirim & Dagdeviren 2008), Izmir (Ozan et al. 2004), Erzurum (Karabulutlu & Kilic 2011) and Burdur (Ergun & Cakir 2015). The reason for this difference may be the fact that other studies have only worked with medical faculty or nursing students.

Trustworthy sources of information include books and health care facilities. In the research, books ranked second with 45.9% and health institutions ranked last with 28.1%. Excessive use of books as a source of information is similar to that of the first two ranks in Istanbul (Elkin 2015), Erzurum (Karabulutlu & Kilic 2011), Hacettepe and Dicle (Akin et al. 2003). The fact that the last place was health institutions in Erzurum (Karabulutlu & Kilic 2011), Izmir (Ozan et al., 2004), Edirne (Yildirim & Dagdeviren 2008), capital (Pinar et al., 2009),

Hacettepe and Dicle (Akin et al., 2003), 4 universities in Istanbul and Kocaeli (Aslan et al., 2014) was similar. It seems that they do not use healthcare institutions too much in spite of their willingness to receive information. This may be due to the fact that the health care staff may think they are judicial.

The rate of obtaining information from the family was also not at the desired level. It was similar to Duzce (Demir & Sahin 2014) and Istanbul (Elkin 2015), which were second in the research. Their reason for not talking though they wanted to talk to their parents may be that they thought that these issues were taboo subjects that can not be spoken with their parents and that their families did not have enough knowledge.

As the source of information, the most used was internet with 57.3% was similar to the study covering 4 universities in Istanbul and Kocaeli (Aslan et al., 2014) and in the capital (Pinar et al., 2009). Differently, inter was at the last place in Izmir (Ozan et al., 2004), Hacettepe and Dicle (Akin et al. 2003). The fact that the internet where the information pollution is happening is the most used resource, it can cause the students to accept every information they receive and it can cause important problems. For this reason, it is important that family and health personnel are able to talk about reproductive health issues with young people. Especially the use of the internet and books shows that young people are trying to reach the information they need on their own and without notice.

Young people want to be educated about reproductive health. In research, the rate of education about reproductive health which was 14.6% was lower than studies in capital (Okdem et al., 2016), Istanbul (Elkin, 2015) and Erzurum (Karabulutlu & Kilic 2011). Information about sexual health was desired 87.7% in Edirne (Yildirim & Dagdeviren 2008) and 81.9% in capital (Pinar et al., 2009). As it can be seen, young people want to know about reproductive health and try to access information by using different resources. It is necessary for the students to meet this need from the right and reliable sources.

A 84.1% of the students in Harran said that it should be served (Simsek, Koruk & Altindag

2007). Receiving service was at 37.9% in Erzurum (Karabulutlu & Kilic 2011), 11.5% in Malatya (Koluacik, Gunes & Pehlivan 2010) and 25.3% in this research. Young people stated that they could not go to any place in Malatya (Koluacik, Gunes & Pehlivan 2010), they were embarrassed, thought that they could not get any service since they were not married and could not go to any place in Erzurum (Karabulutlu & Kilic 2011). They stated that only married people could be provided and they could not go even if they wanted to receive services (Akin et al., 2003). In the research, despite being a youth counseling center, only 1.5% of them knew it. It is seen that the students do not get services easily even they want to get services. This may be due to the attitudes of the health care workers and the social environment.

It was seen that they did not have enough information on reproductive health issues. Knowing any modern family planning method was much lower from other studies. According to this study, it is more common to know the method of family planning by both genders in Edirne (Yildirim & Dagdeviren 2008), Hacettepe and Dicle (Akin et al., 2003) and capital (Pinar et al. 2009) The most commonly known methods were similar to other studies in which pills, condoms and IUDs were most common (Sen & Under-Kavlak 2009; Karabey & Muftuoglu 2009; Pinar et al 2009; Yildirim & Dagdeviren 2008; Aslan et al 2014). In a literature review, pills were known to be at the rate of 51.8- 67.8% and condoms at 63.8- 84.3%, and this study was quite lower (Sen & Under-Kavlak 2009). Students were thinking about getting married at an average age of 22. That is, although they are thinking about getting married after college graduation, family planning methods and low level of knowledge on STI issues increase the likelihood of unplanned pregnancies and STIs.

It was similar to Izmir (Siyez & Siyez 2009), Istanbul and Kocaeli (Aslan et al. 2014) was different from Ankara (Pinar et al., 2009) because at least one STI knowing was significantly higher in men. The most known STIs in the study was AIDS with 80.2%. AIDS was most known STI similar in capital (Pinar et al. 2009), in Istanbul (Elkin 2015), in Harran (Simsek, Koruk & Altindag 2007), in Istanbul and Kocaeli (Aslan et al. 2014), in Burdur (Ergun & Cakir 2015), in Konya (Demir & Sahin 2014). Hepatitis B,

Gonorrhea, and Syphilis knowledge rates were similar to studies in Burdur (Ergun & Cakir 2015), Harran (Simsek, Koruk & Altindag 2007) and Konya (Demir & Sahin 2014) and were lower than studies in Ankara, Istanbul and Kocaeli (Pinar et al. 2009; Elkin 2015 and Aslan et al. 2014). In the study involving 8 universities, it was found that STIs were significantly more knowledgeable as the age of the students increased (Elkin 2015), while the fact that at least one STI knowledge in the study was highest in the preparatory class was different.

While not to use condom as risky behavior was in the first place with a rate of 9.9%, the rate of condom awareness as fp method was 3.5%. The reason for seeing not using condoms as risky was the risk of getting AIDS and STIs similar to the studies in Hacettepe and Dicle (Akin et al., 2003) and was not considered as a method of family planning. STI and pregnancy were found to be considered as risky behavior in Erzurum, Hacettepe and Dicle (Akin et al., 2003; Karabulutlu & Kilic 2011), relationship with a person known to be ill was considered as same in Dicle (Akin et al. 2003).The work to be done to protect from STI in the study was similar to the studies in Konya, Burdur and Istanbul (Demir & Sahin 2014; Karabulutlu & Kilic 2011; Aslan et al. 2014) and it was not to have relation with the person known to be ill, condom use, and monogamy.

In the research, smoking and alcohol use were lower than health statistics in 2015 (Kose et al., 2016), and studies in Hacettepe and Dicle (Akin et al., 2003), Edirne (Yildirim & Dagdeviren, 2008), Harran (Simsek, Koruk & Altindag, 2007), and in another university (Camur et al., 2007). The abundance of substance use in males was consistent with the statistics of Edirne (Yildirim & Dagdeviren 2014), Hacettepe and Dicle (Akin et al. 2003) and statistics. 30% of the students lived an emotional relationship. This ratio was similar to Erzurum (Karabulutlu & Kilic 2011), and lower than Hacettepe and Dicle (Akin et al. 2003) Emotional relationship was similar to the study involving 8 universities according to the fact that having an emotional relationship was more common in men (Karabey & Muftuoglu 2009).

The sexual experience in the study was lower than the studies in Edirne (Yildirim & Dagdeviren 2008), Istanbul and Kocaeli (Aslan et al., 2014), capital (Pinar et al., 2009), Izmir (Korkmaz-Cetin et al. 2008), America (Caminis et al. 2007), METU (Karabey & Muftuoglu 2009), Izmir Buca (Siyez&Siyez 2009), and was similar to Erzurum (Karabulutlu & Kilic 2011), Harran (Simsek, Koruk & Altindag 2007), a university (Camur et al., 2007) and Sanliurfa (Kirmizitoprak & Simsek 2011). These rates were lower in Hacettepe and Dicle (Akin et al., 2003). It can be said that students in larger cities experienced more. This situation overlaps in the research with the fact that there were more people in the city center living. It is different in villages and counties in Canakkale in where it was higher (Kaya, Serin & Genc 2007).

Males having higher rate of sexual experience was similar to the studies in America (Caminis et al. 2007), Izmir (Ozan et al., 2004), Edirne (Yildirim & Dagdeviren, 2008), Harran (Simsek, Koruklu & Altindag, 2007), capital (Pinar et al., 2009), Sanliurfa (Kirmizitoprak & Simsek 2011), Hacettepe and Dicle (Akin et al., 2003), Dokuz Eylul (Aras et al., 2007), Buca (Siyez & Siyez 2009), Canakkale (Kaya, Serin & Genc 2007) and 8 universities (Karabey & Muftuoglu 2009). Gender did not make any significant difference in the study in Istanbul and Kocaeli (Aslan et al. 2014). It was different from Canakkale (Kaya, Serin & Genc 2007) that the sexual experience was high in people with higher monthly income. Any family planning method knowledge of ones who had sexual experience was lower than Edirne (Yildirim & Dagdeviren 2008). It was similar to Izmir (Ozan at al., 2004), Dokuz Eylul (Aras et al., 2007) as the reason for living the sexual experience in the first place was pleasure, curiosity and partner's insistence. It can be said that girls had sexual experience not to lose their emotional bond and partner, while men were more about pleasure, self-proof and environmental influence.

Conclusion and Recommendations

Young people do not have enough knowledge about reproductive health. But they want to be knowledgeable and therefore they use internet more. The rate of knowing modern family planning methods is very low. The most known of STI is AIDS. They can not easily get service when they

need it. Sexual experiences are less than other studies. The reason of sexual experiences in males are mostly pleasure and curiosity.

The provision of information and services that young people need in relation to reproductive health is important in terms of preventing greater problems. Regulation of education programs according to the characteristics of age groups, increase of work related to the subject, sensitivity of the health personnel to the subject, talking with the children of the families will be effective in reducing the problems that young people can live.

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