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FAMILY SETUP AND REPRODUCTIVE PLANS OF INDIAN MEDICAL STUDENTS

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*Smolensk State Medical University, 28, Krupskoj St., Smolensk, 214019, Russia**Abstract*

Objective. Family Planning and Reproductive Health are core issue in context of large and diverse population of India's large and diverse population.

This research is aimed at studying family structure and reproductive plans among unmarried (eligible) medical students from India, their ideas about premarital sex, contraceptive use.

Methods. Using a specially designed questionnaire, an online survey was conducted of Indian students (n=241) of a medical university from India who are studying in Russia, India and other countries. The scenario of possible decisions regarding unplanned pregnancy in terms of the influence of family, cultural and social factors on it is analyzed. Particular emphasis in the study is placed on the issues of sex education in the families of respondents and the possible influence of the parental family on the reproductive plans of young people.

Results. Analysis shows results, which correlate with world trends: the model of a family with 1-2 children, delayed reproductive plans, the predominance of material needs over family values, tolerant attitude towards premarital sex and a high willingness to terminate an unwanted pregnancy.

Conclusion. The findings highlight the need for holistic approaches aimed at improving the health literacy of young people in matters of reproductive behaviour, timely familiarization with effective reversible contraception.

Keywords: reproductive plans, artificial abortion, contraception, sex education

СЕМЕЙНЫЕ УСТАНОВКИ И РЕПРОДУКТИВНЫЕ ПЛАНЫ ИНДИЙСКИХ СТУДЕНТОВ-МЕДИКОВ

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Цель. Планирование семьи и вопросы сохранения репродуктивного здоровья являются основной проблемой в аспекте большого и разнообразного населения Индии. Это исследование направлено на изучение семейного устройства и репродуктивных планов среди незамужних (имеющих на это право) студентов-медиков из Индии, их представлений о добрачном сексе, использовании противозачаточных средств.

Методика. С использованием специально разработанной анкеты проведен он-лайн опрос индийских студентов (n=241) медицинского университета из Индии, которые получают образование в России, Индии и других странах. Проанализирован сценарий возможных решений в отношении незапланированной беременности в аспекте влияния на него семейных, культурных и социальных факторов. Особый акцент в исследовании сделан на вопросы полового воспитания в семьях респондентов и возможного влияния родительской семьи на репродуктивные планы молодежи.

Результаты. Анализ показывает результаты, которые коррелируют с мировыми трендами: модель семьи с 1-2 детьми, отложенные репродуктивные планы, преобладание материальных потребностей над семейными ценностями, толерантное отношение к добрачному сексу и высокую готовность прервать нежелательную беременность.

Заключение. Полученные результаты подчеркивают необходимость целостных подходов, направленных на повышение медицинской грамотности молодежи в вопросах репродуктивного поведения, своевременное ознакомление с эффективной обратимой контрацепцией.

Ключевые слова: репродуктивные планы, искусственный аборт, контрацепция, половое воспитание

Introduction

India becomes the first country in the world for initiating National family programme in 1952, second most populous country in the world with 1.45 billion people, such large and diverse population. Family setup and reproductive plan become important aspect of life. It has significant implication for public health, social development and economic growth [3, 5].

Promotion of contraceptive use and legalisation of MTP in 1971 in India shed light on factor that influence decisions about desired number of children. Among young eligible people premarital sex and unwanted pregnancies become the most sensible topic to discuss. Illegal abortion in India continues to be a significant issue despite the legalisation of abortion in India, many girls over 18 still performing unsafe abortions, often putting their life at risk. This study shows factor contributing to this behaviour social and religious cues, parent's attitude towards premarital sex and reproductive plan of their child, their support and how social stigma influence their behaviours towards premarital pregnancies [1, 4].

The article touched upon the issues of reproductive plans of Indian medical students studying mainly in Russia and India or recently graduated. The following issues are proposed for discussion: 1) Family planning, 2) Premarital sex, 3) Use of contraceptive in couple, 4) Factors determining the decision to have an abortion when a premarital pregnancy occurs, 5) The role of parents in reproductive choices, 6) Male and female individual perception about reproductive plan.

Objective – family Planning and Reproductive Health are core issue in context of large and diverse population of India's large and diverse population.

Methods

The above topic is studied among eligible people studying in universities or graduated. This survey held by the Department of obstetrics and gynaecology under the guidance of head of the department professor Vita N. Pokusaeva.

In this survey 241 people were participated in which 212 (88%) were student and 29 (12%) has recently graduated. Opportunity of participation was given equally to female and male. 143 (59.3%) female and 98 (40.6%) males had given their response via google form in which there was 20 questions. For each question there was possible answer and selection of one answer only. This form was an anonymous only responses were gathered in the form of statistical data. We tried to compare their ideas and views about future family planning. Participants chosen the appropriate option according to their will and responses were gathered and studied and following results were obtained (Table).

Most students were over 20 years old (79.3%), only 50 (20.7%) participants were aged 18-20 years. As they are enough capable of giving their ideas about future plan and the factors influences their decisions. The age composition of the boys and girls who participated in the study turned out to be approximately the same.

We tried to analyze the upcoming reproductive plans of youth and how modern society has changed in developing countries, which were previously dominated by traditional family foundations. Our current generation has more access to information and resources about family planning than previous generation this allows individual to make more independent decisions based on their personal circumstances, goals and values. Additionally, the current generation is more likely to have open discussions about family planning with their partner.

The only child in the family was only 12% of students, with more often young men (18.3% against 9.0%, $p=0.028$). 6 out of 10 (154 - 63.9%) participants had two children in their families. It is due to effect of campaign held by National family planning programme of India with slogan "HUM DO HAMARE DO". It aims at having an only two child policy, thus it can help in slowing down the fast pace growth of India's population [9].

Increase in literacy rate, use of contraception and educating about reproductive health, late marriages greatly affect the mindset of people. To control adverse effect of growing population such as poverty, unemployment, health issues and to deal with upcoming future challenges, it was implicated.

Table. Survey results of the respondents

Question	Features	Male, N=98		Female, N=143		General, N=241	
		Abs	%	Abs	%	Abs	%
Age	18-20	21	21.4	29	20.2	50	20.7
	21-22	27	27.5	47	32.8	74	30.7
	Over 22	50	51.02	67	46.8	117	48.5
What country do you currently live in?	Russia	58	24.1	69	28.6	127	52.7
	India	40	16.6	66	27.4	106	44.0
	Other countries	1	0.4	7	2.9	8	3.3
No of children in family	I am only child	18	18.3	13	9.0	31	12.8
	two	58	59.1	96	67.1	154	63.9
	Three	14	14.2	26	18.1	40	16.5
	More than three	8	8.1	8	5.5	16	6.6
Discussed with parents possible no of future children	Never	69	70.4	94	65.7	163	67.6
	A couple of	23	23.4	39	27.2	62	25.7
	Often	6	6.1	10	6.9	16	6.6
Grandchildren would parents like to have	One	19	19.3	28	19.5	47	19.5
	Two	69	70.4	100	69.9	169	70.1
	Three, more	7	7.1	10	6.9	17	7.0
	No kids are needed	3	3.0	5	3.4	8	3.3
Importance of parent's opinion about number of children	My decision	44	44.8	52	36.3	96	39.8
	Important guided by circumstances	36	36.7	67	46.8	103	42.7
	Very important	18	18.3	24	16.7	42	17.4
I plan to have (no of children)	One	21	21.4	33	23.0	54	22.4
	Two	58	59.1	83	58.0	141	58.5
	Three	6	6.1	12	8.3	18	7.4
	Four or more	10	10.0	6	4.1	16	6.6
	Child free	3	3.06	9	6.2	12	4.9
First child at what age	Under 25	4	4.08	4	2.7	8	3.3
	25-30	53	54.0	104	72.7	157	65.1
	Over 30	41	41.8	35	24.4	76	31.5
Age of first sexual experience	Less than 15	6	6.1	1	0.6	7	2.9
	15-18	12	12.2	7	4.8	19	7.8
	19-22	18	18.3	29	20.0	47	19.5
	Over 22	7	7.1	13	9.0	20	8.2
	Didn't start	55	56.1	93	65.0	148	61.4
Premarital sex opinion	Strongly against	29	26.5	53	37.0	82	34.0
	Its normal	55	56.1	76	53.1	131	54.3
	If partner doesn't mind, I would refrain	14	14.2	14	9.7	28	11.6
Contraceptive use in couple	Don't use	5	5.1	10	6.9	15	6.2
	Natural ways	4	4.0	8	5.5	12	4.9
	Condoms	40	40.8	41	28.6	81	33.6
	Hormonal	0	0	0	0	0	0
	Never did sex	49	50	84	58.7	133	55.1
If you become pregnant now (for girls)	Abortion	-	-	49	34.2	-	-
	Give birth	-	-	26	18.1	-	-
	As partner decide	-	-	8	5.5	-	-
	As parents decide	-	-	6	4.1	-	-
	No idea	-	-	47	32.8	-	-
	Didn't answer	-	-	7	4.8	-	-
If your partner become pregnant (for boys)	I will advise her to abortion if not this is her problem	35	35.7	-	-	-	-
	I will advise her abortion if she refuse, I will get married	12	12.2	-	-	-	-
	I'm getting married	39	39.7	-	-	-	-
	I will not get married but I will acknowledge paternity and financially support	9	9.1	-	-	-	-
	Didn't answer	3	3.06	-	-	-	-
At this moment what is important	Career, money	85	86.7	119	83.2	204	84.6
	Family, children	13	13.2	24	16.7	37	15.3
	Didn't answer	7	7.1	10	6.9	17	7.0

Continuation of the table

Not wanting child before age 25 (reason)	Too young to decide	9	9.1	16	11.1	25	10.3
	Material, housing problem	2	2.0	6	4.1	8	3.3
	At this age career is more important	73	74.4	106	74.1	179	74.2
	At this age no reliable partner	7	7.1	5	3.4	12	4.9
	I want to be childfree	3	3.0	5	3.4	8	3.3
	Didn't answer	4	4.0	5	3.4	9	3.7
Main reason for abortion if you get pregnant or your partner get pregnant	Family & society pressure	27	27.5	43	30.0	70	29.0
	Health issues	13	13.2	26	18.1	39	16.1
	Fear of losing career	33	33.6	55	38.4	88	36.5
	Your partner decided	18	18.3	9	6.2	27	11.2
	Didn't answer	7	7.1	10	6.9	17	7.0

Despite of this act people living in rural area, still giving priority to having more than one child and also religious factor has great influence. 141 (58.5%) respondents in our study plan to have two children. Modern young people are increasingly choosing a one-child policy – 54 (22.4%) of 241. It is important to note that modern youth, both men and women, choose a family model with one child 2 times more often than their parents ($p = 0.004$) (Figure 1). During the statistical analysis, we did not reveal any differences in comparing the plans of medical students from large and small families. In general, this trend was inherited from their parents, but there was a further change towards reducing the number of children from owning many children to 2-3, and now to 1-2. As well as new population trends some want to be child free. 12 (4.9%) don't want any child and responsibilities in their future. They declared their child-free life position. It seems to us that a survey of girls shows important results. They are more likely than young men to seek childlessness.

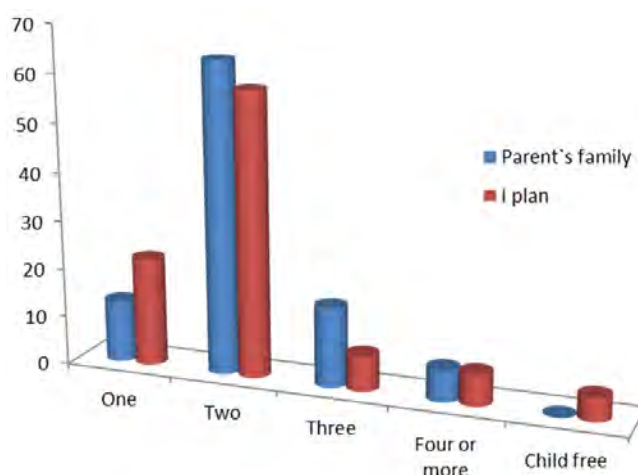


Figure 1. Reproductive plans of respondents and the number of children in parental families

The role of the parent in family planning and the opinion of parents regarding the determination of the number of children in the family is becoming less and less significant. In Indian society most parents don't like to talk about sex education, still now this conversation makes them awkward. Indian morals taught this is private thing and should not be discussed. This will lead their children having sex. This is why premarital pregnancy quite often ends with abortion sometimes under guidance or with self-induced. PAN India report released on 2018, on children day (14 November) showed that 6 out of 10 Indian parents do not discuss sex education with their children. They often think their children already know this. Young generation often hesitant to talk about their sexual life.

As the survey showed, in Indian families it is not customary to discuss their future reproduction with children, whether sons or daughters (Table 1). Only 16 (6.6%) students answered that this topic was often raised in a conversation with parents, the rest did not discuss at all (163.0-67.6%) or talked about it a couple of times (62.0-25.8%). It is interesting to note that the significance of these conversations for future decision making does not correlate with the frequency of conversations. Only 42 respondents (17.4%) consider the opinion of parents extremely important, 103 (42.7%) are more likely to listen, 96 (39.8%) are ready to completely ignore.

Analysis of reproductive plans demonstrates the idea of delayed parenthood. At the same time, girls still plan to give birth to their first child earlier than boys (Fig. 2).

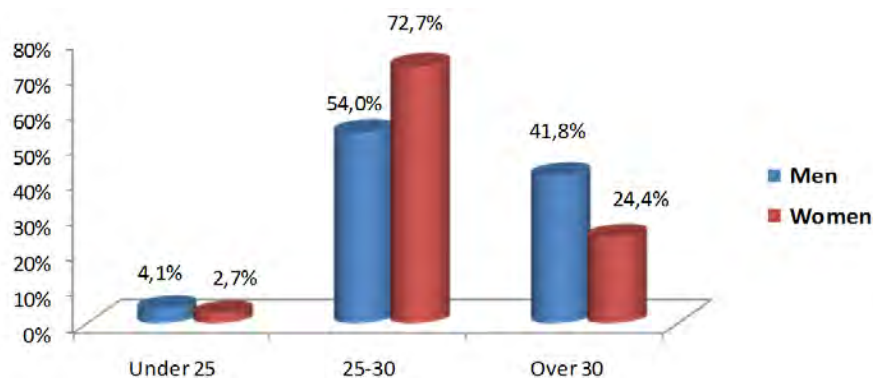


Figure 2. The planned age at first birth

Despite the fact that almost all respondents postponed childbirth to 25 +, only 148 (61.4%) did not start their sexual activity, while 47 (19.5%) began in their twenties (Fig. 3). Premarital sex in India is still considered as tobacco. In India sex before marriage has been a topic of great discussion and controversy for decades. In traditional Indian society premarital sex was seen as immoral and violation of sanctity of marriages. Sex without marriage was strictly forbidden, with severe social and legal consequences resulting from such act. However, in recent years there has been shift in attitude towards sex and marriage in India with rise of globalisation and exposure to western culture younger generations are increasingly questioning traditional beliefs and practices.

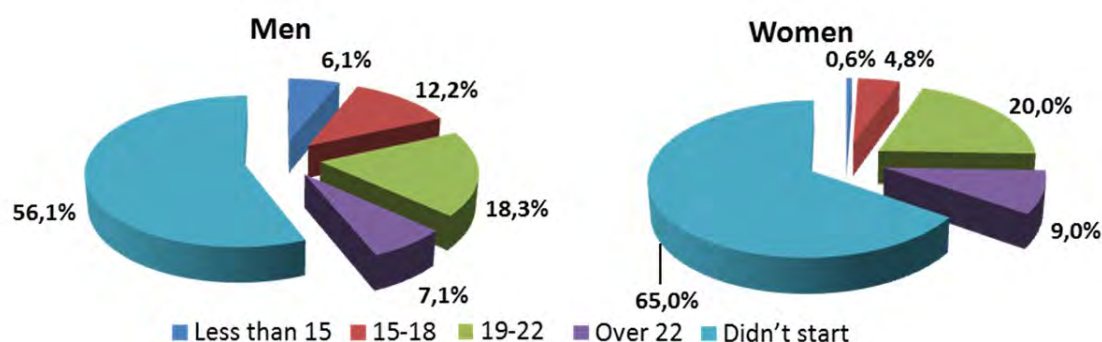


Figure 3. Age of first sexual experience

Medical students were asked their opinion about premarital sexual activity. Both male and female have alliance, they feel it is normal to have sex before marriage. Although more than half of boys and girls have not yet begun sexual relations, the vast majority believe that pre-marriage sexual relations are normal (Fig. 4). At the same time, the opinion of girls practically does not differ from the opinion of boys. 82 out of 241 (34.0%) respondents are categorically against this, since they adhere to traditional beliefs in their morality.

Pop culture has played significant role in shaping the perception of relationship with movies and TV shows. Despite of changing attitude towards sex still there is significant cultural and religious barrier. People living in urban areas are more accepting of the idea of premarital sex. Due to the fact that the number of urban residents has changed significantly, this has led to another problem related to pregnancy and unsafe abortions [7].

Researchers note that delayed marriage has brought premarital sexual relations and unwanted pregnancies. Moreover, the risk of sexually transmitted infection and unplanned pregnancies were higher among people below age of 25 as they often did not use contraceptive or use them ineffectively [6]. According NFHS-4 40.2% men think it is women responsibility to avoid getting pregnant, but men are often primary decision maker in family planning. Contraceptive methods and services are mainly targeted at women, although some studies show that 20% of men believe that women's use of contraceptives contributes to her promiscuous sex [8].

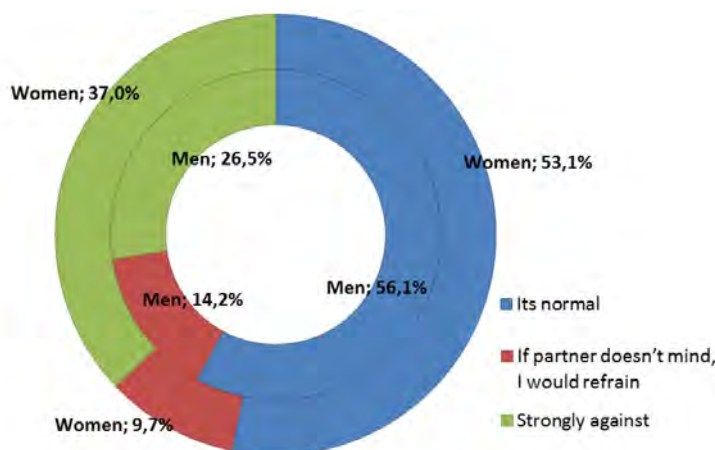


Figure 4. Premarital sex opinion

Discussing unmarried contraception is an uncomfortable issue for most people, including health professionals who are responsible for meeting the reproductive health needs of young people. This is because of prevailing social norms, where sex outside marriage is discouraged and stigmatised. These social norms give importance to virginities and children outside marriage are not welcomed. At the same time, the expansion of premarital sex highlights the need to provide sexual and reproductive health services to all young people, regardless of their marital status [9]. And more an important role in lowering the rates of premarital sex is open parent-child communication [2].

Real life shows that the number of unmarried women in India using contraceptives has increased (Figure 5). In this study participants were asked about their contraceptive method 133 (55.1%) denied sexual activity. Of the sexually active unmarried, the majority use condoms and spermicides (pharmatex): men – 40 out of 49 (81.6%), girls – 41 out of 59 (69.5%). As condoms are easily accessible contraceptive and it is widely used in India [6]. Every tenth prefers natural planning methods: men (4-8.2%) are somewhat less likely than women (8-13.6%). None of them use hormonal contraceptives. But the authors doubt the truth of this answer, since often Indian students take hormonal contraceptives to normalize menstrual function and treat polycystic ovary syndrome. Unfortunately, 13.6% (10 out of 59) of girls and 10.2% (5 out of 49) of boys do not think about the real consequences of unprotected sex and do not use any contraception methods.

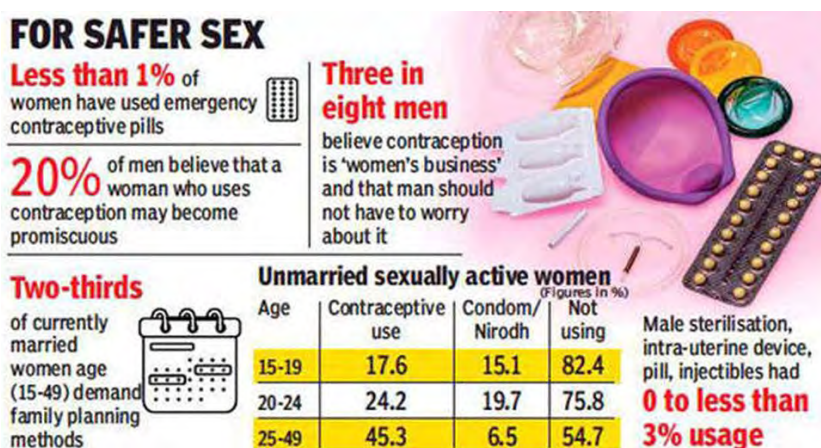


Figure 5. The number of unmarried Indian women using contraception [6]

Talking about unprotected sex, we first think about unwanted premarital pregnancies and abortion. India legalised medical termination of pregnancy (MTP) in 1971 under 24 weeks. It was believe that this law is for married women. Later, supreme court of India in 2022 revised this law for unmarried women also, still lot of girls performing unsafe abortion. This becomes critical issue in India [10].

When we asked girls about premarital pregnancy 49 out of 143 (34.2%) had chosen abortion. Didn't answer 7 (4.9%), they probably don't know what to do in this situation. And we can add them to the 47 (32.8%) who have «No idea» what to do (Figure 6).

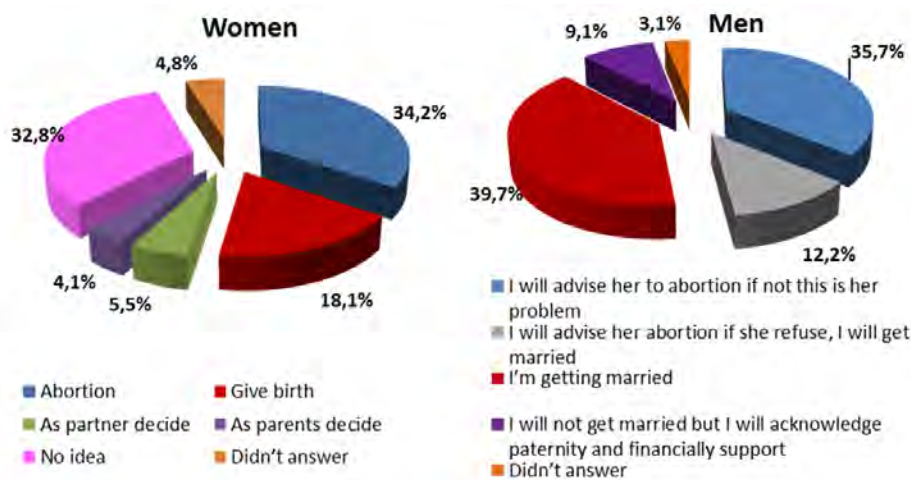


Figure 6. if you get pregnant (girls) or if your partner become pregnant (boys)

As girls don't feel it is child bearing age they give more priority to their career as 55 (38.4%) they think career is more important at this stage while 43 (30.0%) girls feel that society and family will not accept them. Rejection from parents, feeling of ashamed provoke them for abortion (Figure 7). Our study identified the following reasons why, in the event of an unplanned pregnancy, respondents would terminate the pregnancy: fear of losing career opportunity, family and society pressure, health issue, decision of partner. Two main reasons were highlighted for abortion (fear of losing career, family and society pressure). This is because of social norms of India. Till now it is considered as a crime. Cultural background and religious belief have great impact on this.

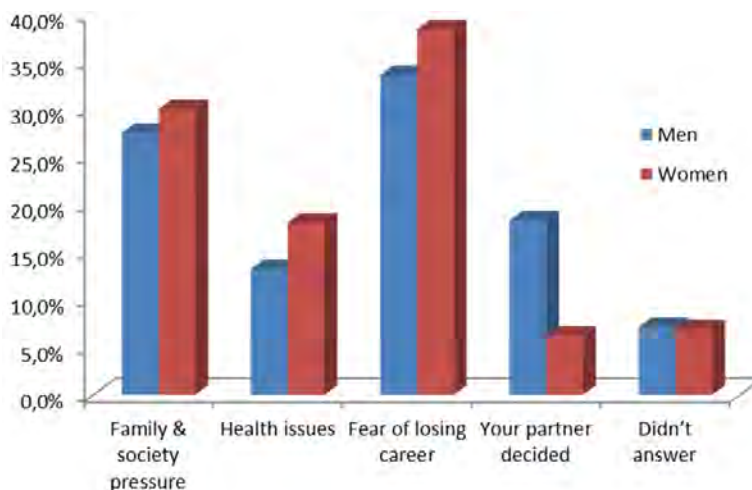


Figure 7. Main reason for abortion if you get pregnant or your partner get pregnant

When the same question was asked to boys 35 (35.7%) out of 98 told that they will advise their partner to abort. Surprisingly, these indicators are identical to women's. But men are more likely to be ready to take their responsibility for a child: they get married immediately and 39 (39.7%) or if the partner refuses to have an abortion (12.0-12.2%) or will acknowledge paternity and financially support (9.0-9.1%). It is important to note 3 (3.1%) didn't answer as they afraid of giving truthful answer or may lack of surety about their decision.

While career and money are more important to both genders at the moment than family and children (Table), our study shows that women are more dependent on the opinions of parents and partner in determining their reproductive plans.

Considering the importance of knowledge on contraception, the Department of Obstetrics and Gynecology with a course in prenatal diagnostics of Smolensk State Medical University conducts informational lectures with students on effective contraception. Students highly appreciate the importance of such sanitary educational measures (Figure 8).



Figure 8. Indian students attend a lecture on contraception (2024)

Conclusion

This research provides a comprehensive overview of the current state of family setup and reproductive plans among unmarried people, their ideas and thought were studied. Analysis shows results, which correlate with world trends: the model of a family with 1-2 children, delayed reproductive plans, the predominance of material needs over family values. This study highlights tolerant attitude towards premarital sex and unwanted pregnancy, the reason for abortion among youth in India, parents attitude and behaviour towards sex education. The findings highlight the need for holistic approaches aimed at improving the health literacy of young people in matters of reproductive behaviour, timely familiarization with effective reversible contraception.

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