AWARENESS OF MEDICAL COLLEGE STUDENTS ABOUT THE FORMATION OF REPRODUCTIVE HEALTH

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The study objective is to assess awareness of medical college students about formation of reproductive health. 80 female students from a medical college were surveyed concerning formation of their menstrual function; this survey was followed by an interview of 126 female students and 81 male students from medical colleges about their awareness of reproductive health protection and attitude to hygienic education regarding this topic. Data were processed using Statistica 13.0 (StatSoft, USA). 83.8% girls had their periods between 11 and 14, whereas in 7.5% of girls they started at the age of 15 and older. During the interview, 22.5% of girls had an irregular menstrual cycle. The conducted study revealed an insufficient awareness of students from a medical college of reproductive health formation. It produces a negative effect on their own health and will prevent subsequent effective hygienic education of different categories of population as far as this issue goes.

Key words: menstrual function, students, reproductive health care

Compliance with ethical standards: the study was approved by the Local Ethics Committee of Pirogov Russian National Research University (protocol No. 159 as of November 21, 2016) and done within a research project (Research and Technology State Registration Number НИОКТР АААА-А19-119021890068-7 as of February 18, 2019). It did not expose participants to danger and corresponded to requirements of biomedical ethics.

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ОСВЕДОМЛЕННОСТЬ СТУДЕНТОВ МЕДИЦИНСКОГО КОЛЛЕДЖА О ФОРМИРОВАНИИ РЕПРОДУКТИВНОГО ЗДОРОВЬЯ

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Цель исследования — оценка осведомленности студентов медицинского колледжа о формировании репродуктивного здоровья. С помощью анкетирования онлайн были опрошены 80 девушек-студенток медицинского колледжа о формировании у них менструальной функции; далее были опрошены 126 студенток медицинского колледжа и 81 студент медицинского колледжа об их осведомленности по вопросам охраны репродуктивного здоровья и отношении к проведению гигиенического воспитания по этой теме. Обработка данных осуществлялась с использованием Statistica 13.0 (StatSoft, США). В период с 11 до 14 лет менструации начались у 83,8% девушек и у 7,5% — в 15 лет и более поздние сроки. На момент опроса не установившийся менструальный цикл имели 22,5% девушек. Проведенное исследование показало недостаточную осведомленность студентов медицинского колледжа по вопросам формирования репродуктивного здоровья, что негативно влияет на их собственное здоровье и не позволит в дальнейшем эффективно осуществлять гигиеническое воспитание различных категорий населения по данному вопросу.

Ключевые слова: менструальная функция, студенты, охрана репродуктивного здоровья

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Reproductive health is comprehended as an ability to conceive and give birth to children, protection from sexually transmitted diseases, access to family planning methods, protection and safety during pregnancy and labor, support of maternal and child's health [1]. Importance of reproductive potential of the country is recorded in the 'Demography' National Project which has been implemented since 2019.

A set of factors producing a negative effect on reproductive health of young people has been described [2–5].

However, the role of knowledge of young people in the area of reproductive health protection requires further examination. The study objective is to assess awareness of students from a medical college about reproductive health formation.

MATERIALS AND METHODS

80 female students of a medical college were interviewed online about formation of their menstrual function. The average age of the interviewed girls was 18.4 ± 0.2 years. Subsequently, 126 female students of a medical college and 80 male students of a medical college were asked questions about their awareness of protection of reproductive health and attitude to hygienic education on this topic using online survey. The average age of the interviewed girls and boys was 18.4 ± 0.2 years and 18.5 ± 0.3 years, respectively.

The surveys were developed by the author having the 'Organization of healthcare and public health' certificate, with participation of teachers from the department of hygiene of faculty of pediatrics having professional certificates such as 'Hygienic education' and 'Hygiene of children and adolescents.

Criterion of inclusion of survey results into the study involved properly filled in questionnaires. This was manifested as voluntary informed consent, age and gender of students from a medical college.

The results were processed using Statistica 13.0 (StatSoft, USA). When processing the results, compliance of the obtained values to the normal distribution law of variation series was assessed. Descriptive statistics using the arithmetic mean

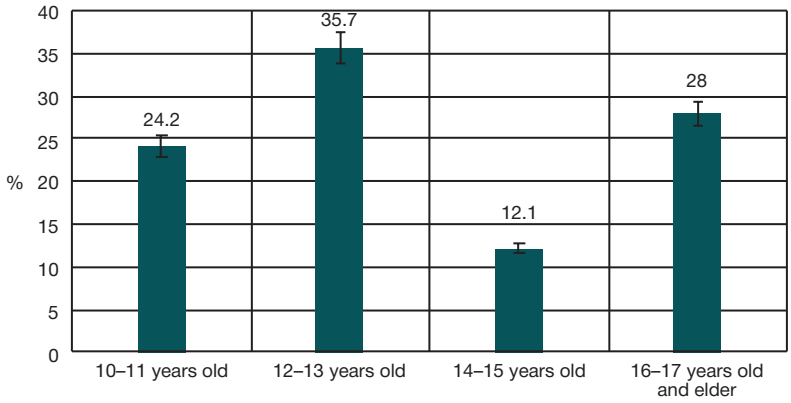

Fig. Distribution of answers among students of a medical college while answering the question about the age of beginning of hygienic education on the issues of reproductive health protection,%

(*M*) and mean square deviation (σ) was carried out. Student t-test (the differences were significant at $p \leq 0.05$) was used to estimate reliability of differences between mean values. Pierson contingency coefficients were calculated (95.0%, $p \leq 0.05$).

RESULTS

Among the interviewed girls, the mean age at menarche was ($M \pm m$) 12.3 ± 0.2 years. 83.8% and 7.5% of girls had first menses between 11 and 14 years and at the age of 15 and later, respectively. 22.5% of girls had an irregular menstrual cycle at the interview.

The girls had an abnormal menstrual cycle: duration of the menstrual cycle was less than 21 days (epimenorrhea) in 1.3% of girls and more than 35 days (opspmenorrhea) in 15.0% of girls. Delay in menstrual cycle for 9 days and more was found among 36.3% of those interviewed. 15.0% of the girls mentioned that duration of their menstrual cycle was 7 days and more.

23.8% of students from a medical college noted that they had blood secretion between periods. 37.5% of girls reported appearance of pain in the lower abdomen between periods. 45.0% of girls had pronounced pain in the lower abdomen. When menstrual pain is classified on a ten-point scale with 0 for a lack of pain, 1 to 3 for a mild pain, 4 to 6 for a moderate pain, 7 to 9 for severe pain, and 10 points for very severe pain, the mean value ($M \pm m$) amounted to 6.1 ± 0.3 points. Severe and very severe pains were found in 41.3% and 1.4% of girls, respectively.

Irritation, aggressiveness, tearfulness, raid fatigue and weakness are reported by 80.0% of girls prior to and during periods; edemas, increased body mass, constipation, diarrhea, breast augmentation and tenderness of the mammary glands were found in 86.3% of girls before and during periods; headaches, dizziness, nausea, vomiting, insomnia, increased sensitivity to sounds and smells prior to and during periods were noted in 40.0%; rise in BP, pain in the heart, palpitation and panic attacks were noted among 15.0% of girls, respectively.

However, only 36.6% of students from the medical college gave a positive answer to the question 'Do you have problems with a menstrual cycle?'. It means that the students are poorly aware of reproductive health formation. This is confirmed during calculation of the Pearson's contingency coefficient using four-fold contingency tables (k = 0,28).

The study conducted among male and female students from a medical college confirms the fact. Thus, 33.4% of girls and 24.7% of boys noted that the topic of hygienic education on protection of reproductive health and sexual behavior had never been covered during their training. 90.3% of students from a medical college believe that the classes should be included into curriculum.

Due to the lack of proper information and awareness of reproductive health formation among medical students who are future medical professionals, only 24.2% of those interviewed managed to provide a correct answer to the following question 'At what age is it necessary to begin sexual education of a child?' (fig.)

28.0% of students of a medical college believe that the topic should be discussed at the age of 16–17 and later. It means that they want to gain the information for themselves.

Students constitute a reproductive potential of the country. Thus, their attitude to the problem as future parents is important. 91.3% of those interviewed provided a positive answer to the question whether parents should discuss the issue associated with reproductive health with their children. 76.8% of students from a medical college mentioned that they were ready to attend free courses and webinars for parents devoted to sex education. 83.6% of students are ready to obtain necessary information through profile groups in social networks; 57.5% of them have already searched for the data and found its deficiency.

DISCUSSION OF RESULTS

Medical professionals must have a wide range of knowledge in matters of prevention, in particular. Then they will be able to conduct qualitative preventive work with their future patients and hygienic education of different categories of patients. However, the conducted study has shown that both female and male medical students have a lack of updated knowledge in protection of own reproductive health and that of someone of a different age (schoolchildren, for instance).

This situation is intolerable as far as implementation of Demographics National Project goes. It pays a great attention to protection of reproductive potential among young people considering the current demographic situation [6].

It has been previously shown that college students know little about reproductive health (35.0% and less) [7].

It has also been reported that optimal knowledge on the issue among students of medical universities is lacking as well [8–9].

The issue of attention deficiency is acute among other population categories, including migrants [10–11].

At school, the problem requires special attention as well, as this is the time of menstrual cycle formation in girls [12–13].

Data about effectiveness of various preventive and educational programs in the area of reproductive health protection can be found in literature [14–16].

CONCLUSION

The conducted study has shown an insufficient awareness of students from a medical college in matters of formation of reproductive health. It produces a negative effect on their own health and will hamper subsequent effective hygienic education of different categories of population as far as this issue goes. Students from a medical college should be provided updated information, which has to be integrated into the educational process. At the same time, they have to be given valid references to Internet sources of the leading preventive medical companies as additional information on the issue.

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