# Study of the Menstrual Cycle and its Disorders in Adolescent Girls

## Negmadjhanov B. B

Samarkand State Medical University Samarkand, Uzbekistan

### Khudoykulova Z. S

Samarkand State Medical University Samarkand, Uzbekistan

Relevance. Menstrual and reproductive health of teenage girls is a major issue in current society. In modern conditions, the reproductive health of adolescents is being damaged as a result of the negative impact of the environment and society. Recently, adolescents have a high incidence of menstrual and reproductive function disorders. Therefore, the health of teenage girls aged 15-18 requires serious attention [1]. Puberty-as a period of formation of sexual maturity of the body, occupies an important place in the formation of the entire reproductive system of a woman, the activity of which largely depends on the timely development of girls during this period. Features of the puberty period affect the state of reproductive health of a woman during her life, her fertility, as well as the demographic situation in the country. According to many authors, the risk factors for the emergence of pathology and the deterioration of the health of the population of children in many cases are associated with the sex and age of the child, and negative trends affect their sexual maturity and physical development. Early detection and timely correction of various disorders in the reproductive system of girls is a manageable important factor in maintaining the health of adolescents [2]. The state of health of adolescents in adulthood determines the reserve of the population.For children aged 11-16 years, first of all, the growth rate is characteristic, which determines an important Mass for girls - 49 kg. The turning point in the maturation of the reproductive system-the transition to ovulation periods - is accompanied by the activation of the secretion of gonadotropins, and this corresponds to the age of 14-16 years .Puberty is very important – the border stage of human development. How fully puberty lasts and how successfully it ends depends largely on the formation of reproductive functions [3]. One of the main indicators of Adolescent Health is their sexual and physical development. The results of the study confirm that teenage girls with increased body weight were found to have disorders in their menstrual and reproductive systems during the examination, according to a number of clinical and laboratory analyzes. In the formation of risk groups for the development of reproductive diseases, the following can be :associated with a violation of fat metabolism, previously pubarche after telarxe(hair growth in the groin area at the age of 7-8 years before the mammary glands grow), it is necessary to determine the incorrect passage of stages of sexual development, a rapid increase in body weight In recent years, there has been an increasing deterioration in reproductive health and an increase in gynecological diseases of teenage girls, in the composition of which disorders of menstrual function occupy a leading place. The prevalence of secondary amenorrhea in young girls is 2.6-8.5%, while teenage girls who have been diagnosed with a nonegular menstrual cycle are -11.3 - 26.7% [5]. Long and irregular menstrual cycles are more frequent in the first 1-2 years after menarche, but most girls settle for regular cycles (24-38 day interval) during late adolescence. The fact that adolescent girls achieve a 2-phase ovulation cycle is undoubtedly one of the most important stages in adolescence, but the physiological mechanisms underlying this developmental transition are not well studied [6].

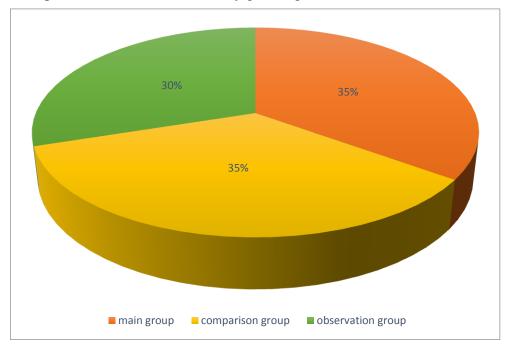
Purpose of the study: study and analysis of the menstrual cycle and its disorders in adolescent girls.

**Material and research methods:** 100 girls who applied to Samarkand children's multidisciplinary Central Hospital on changes in the menstrual cycle until 2022-2023 to prevent menstrual cycle disorders and reproductive disorders that can occur in teenage girls, to determine their reproductive health were studied. General clinical, UQT, UST, biochemical analysis of blood, coagulogram, ultrasound of the uterus, dopplerography of the leg veins, MRI.

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**Results of the examination:** 100 girls who applied to Samarkand children's multidisciplinary Central Hospital on changes in the menstrual cycle until 2022-2023 to prevent menstrual cycle disorders and reproductive disorders that can occur in teenage girls, to determine their reproductive health were studied. These patients were studied in two stages, and in the first stage, retrospective and prospective examinations were carried out on patients in 70 patients, since the regularity of the menstrual cycle was determined in 30 patients, the medical history of patients, methods of examination, specific aspects of the course of the gestation period in their mother were analyzed, and all medical documents were All patients were studied in three groups:

- Group I the main group of 35 patients-the main complaint of patients is that the menstrual cycle is more than 2-3 months of the nonegular and interval, and patients are prescribed hormonal drugs.
- Group II 35 patients in the comparison group menstrual cycle disorders during puberty antifibrinolytic and anti-inflammatory drugs were used.



 $\blacktriangleright$  Group III – 30 patients in observation-healthy girls (figure 2.1).

Figure 2.1. Clinical features of the group of patients.

The median age of patients was 14-17 years and the median age was 14.2 years. So, girls aged 15 made up the main part.

Urban population was 42.42% in terms of patient residence and rural population was 58.58%, with the main patients being rural population (figure 2.2).

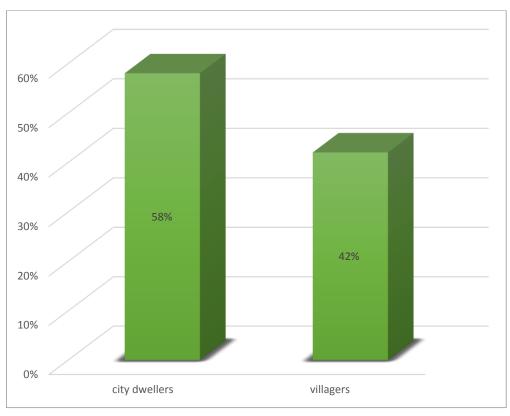


Figure 2.2. distribution of patients by place of residence.

In all groups of patients, menstrual function began at the age of 11-12 years. Early onset of menstrual function was 12% in Group 1 patients, 7% in Group 2, and 2% in Group 3. Late onset of menstrual function was 10% in Group 1 patients and 2% in Group 2 and 3.

The regularity of the Menstrual cycle during this examination was 3% in Group 1 patients, 2% in Group 2, and 100% in Group 3. The menstrual function was on average 7-8 days, and in patients of the 3rd Group it was 3-4 days. The duration of the menstrual cycle was 47 - 60 days. In Anamnesis, hypomenorrhea was observed in 2% of patients. Hypermenorrhea accounted for 30% in Group 1 patients, 26% in Group 2, and 1% in Group 3. Algodismenorrhea was detected in girls of the main and comparative group.

Of the gynecological diseases experienced in patients, vulvitis accounted for 33 people (33%)/30%, vulvovaginitis-20 people (20%)/33%, Bartholin's gland cyst - 1 people (1%)/2%, dysuria - 10 people (10%)/8%, chronic pelvic pain - 12 people (12%)/10%, inflammation of the small pelvis - 14 people (14%)/10%, (figure 2.3).

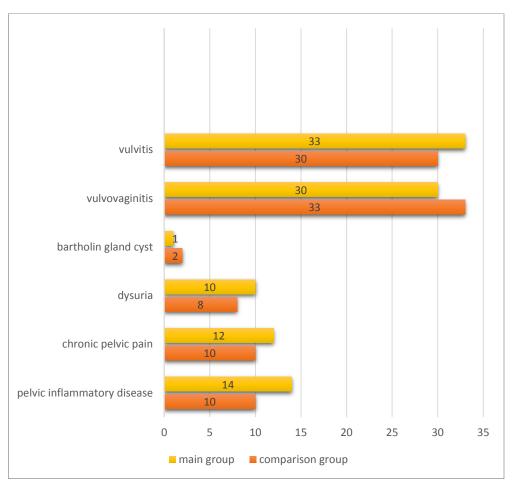
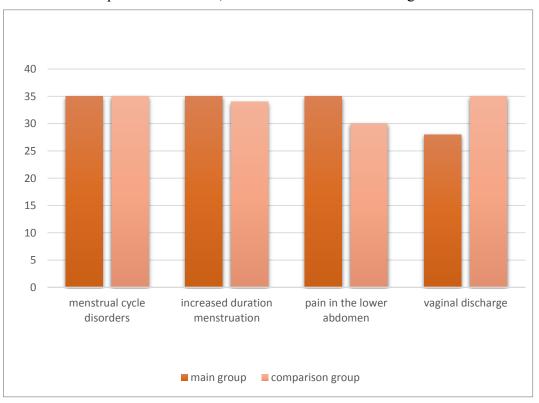
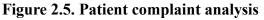


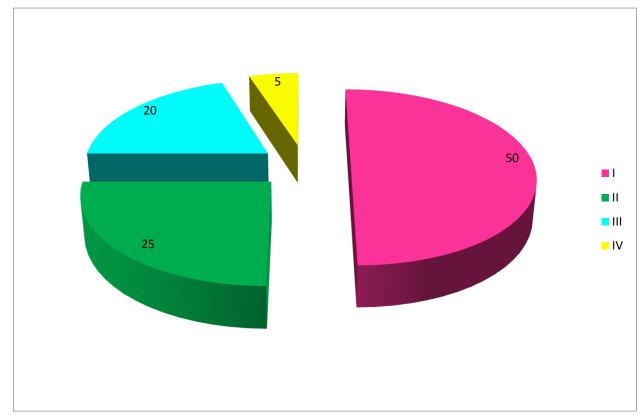
Figure 2.3. gynecological diseases encountered in patients.

Patients ' complaints included menstrual cycle disorders of 35%/35%, increased menstrual duration of 35/34%, lower abdominal pain of 35%/30%, and the arrival of various vaginal secretions of 28%/35%.





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According to blood groups: I - 50 (50%),II - 25 (25%),III - 20 (20%), IV - 5 (5%) (figure 2.8).

## Figure 2.6. Distribution of girls by blood group.

In conclusion, in our study, we examined the specifics of menstrual and reproductive function in adolescent girls who have undergone general clinical examinations and, through ultrasound and MRI examination in the study of menstrual cycle disorders, the benefits, effectiveness and indications for their use.

### Literature used:

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