

The future of well-care for adolescents in Poland. More questions than answers

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Summary This year marks the 20th anniversary of the publication by the Institute of Mother and Child in Warsaw of a document establishing the Polish standards for preventive health care of school-age children and adolescents by general practitioners, which are still in force today. Since then, their health status and the health risk factors have changed. Polish society and its expectations of health care are also different. The Polish economy has grown, and the proportion of the public budget spent on health care has increased. The current system of preventive health care for young people seems to be facing a problem. Over the past decade, the percentage of children and adolescents attending preventive medical visits in Poland has decreased by approximately 30%. During well-care visits, doctors commonly avoid selected physical examinations and sensitive topics, such as sexuality or mental health. It appears that most young people visit doctors only because they falsely believe that check-up visits are mandatory and usually rate the experience negatively. The co-authors of this paper conclude that there is a need for a broad debate on the Polish standards of preventive health care for adolescents and their possible reform, which would lead to their adaptation to the challenges of modern times and the opportunities offered by the progress of medical science and technology. The selection of topics is subjective and certainly does not cover all aspects requiring attention. The authors' intention is to contribute to further discussion rather than to provide a basis for conclusions or postulates.

Key words: adolescent medicine, paediatrics, preventive medicine, Primary Health Care.

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Every year, hundreds and thousands of Polish adolescents visit their primary care physicians for a check-up. In the years 2010–2015, approximately 75% of Polish 13-year-olds, 65% of 16-year-olds and 48% of 19-year-olds attended such visits [1].

Data collected in later years, including data from each voivodeship, not only revealed regional variations in the percentage of teenagers visiting doctors but also illustrated the influence of the Covid-19 pandemic. In the Podkarpackie Voivodeship, for example, during the 2018–2019 school year, a preventive medical visit was attended by approximately 91% of 13-year-olds, 83% of 16-year-olds and 78% of 19-year-olds, and two years later, during the pandemic school year 2020–2021, these numbers decreased to 44%, 25% and 22%, respectively [2]. In the same year (2020–2021), in the Kuyavian-Pomeranian Voivodeship, the numbers were: 38%, 20% and 17%, respectively [3].

Although the above-mentioned data suggests that the majority of Polish teenagers (excluding during the pandemic) were under preventive care, the following facts should not go unnoticed:

- Although the standards developed by the Institute of Mother and Child in Warsaw require almost a full physical examination during a well-care visit [4], only 30% of secondary school students asked about physical examinations during the visit could recall having had a palpation of the abdomen, a palpation of the thyroid gland – 52.1% of boys and 38.8% of girls – or an examination of the external genitals – 16.8% and 2.1%, respectively [5].

- Although doctors conducting a check-up have a legal duty to collect a medical history and provide health education on issues crucial for each age group, only 3.1% of adolescents had a conversation about depression and 4.5% of young people had a chance to talk about contraception [5].
- Approximately one third of adolescents' well-care visits lasted 10 minutes or less, and only 25% took longer than 15 minutes. According to standards, these visits should take at least 20 minutes [5].
- The study conducted by the authors on a group of 910 students of 80 randomly chosen schools also shows that Polish adolescents negatively rate well-care visits. On a 5-point Likert scale, the parameter 'gains/losses from the visit' was rated on average at 2.24 (SD = 1.1), which means a slight loss [6].
- Whether a student decides to visit the doctor for a check-up largely depends on their (and their parents') belief regarding the legal status of the examination. Among students who falsely believed that participation was mandatory, as many as 61.5% attended the visit; among those aware that the examination was voluntary, only 37% did so ($\chi^2[1, n = 910] = 37.72, p < .0001$) [7].

Data collected by the Ministry of Health from doctors' reports shows that the number of Polish children and adolescents who have had a check-up has fallen by about 30% over the past decade [8]. Even if part of this decline is due to under-reporting by practitioners, it is an indication that the issue of preventive



visits is not a priority for the decision-makers who shape the functioning of the healthcare system and who should be closely monitoring the process.

In light of the aforesaid data, it seems necessary to not only assess the functioning of the preventive healthcare system for adolescents in Poland but also its principles and possible adjustments to the changing circumstances and demands of modern life. The discussion about the functioning of preventing medical care for adolescents has been the subject of numerous international publications for many years [9–11]. In Poland, the discussion still seems inadequate to the needs.

The authors of this paper present several issues which, in their opinion, are worth analysing. The selection is subjective and certainly does not cover all aspects requiring attention. The authors' intention is to make a contribution to further discussion rather than provide a basis for drawing conclusions or making demands.

Goals and indicators of their achievement

The foundation for the effective functioning of any project lies in clearly defining its goals, as well as the indicators that demonstrate their achievement. It is best when the adopted indicators relate to the effectiveness measured at various stages of implementation and the actual impact of the project.

For instance, in terms of preventive actions in the area of mental health, the output could be the number of students who were examined for symptoms of depression during their well-care visit. The outcome could be the number of teenagers in whom the family doctor identified depressive symptoms and successfully referred to a psychiatrist. The impact could be the reduction in the number of suicide attempts among young people.

In practice, according to the current standards in Poland, the goal of preventive health care for pupils is to 'support the development and education of children and adolescents and cooperate to protect and promote pupils' health'. Additionally, specific goals for each age group have been defined for periodic preventive visits. For example, for 13-year-olds, it is the 'evaluation of the progress of puberty, assessment of health and development along with a prognosis for future direction of further education in secondary school, as well as planning preventive actions, health promotion and health education' [4].

While understanding that some documents require (e.g. in the preamble) the general formulation of the project's goals, nowadays, the lack of specifics in the substantive part of the document cannot be accepted. What does 'planning preventive actions, health promotion and health education' mean for a doctor in practice? Should they plan the actions and delegate their implementation to a nurse, for example? Or should the doctor plan the actions and carry them out independently, thus inviting the adolescent for several subsequent visits? The meaning of 'evaluating the health and development of the student' is also unclear, as it may refer to the overall diagnostics offered by medical sciences, auxology and pedagogy.

In the 21st century, it is difficult to accept the proposed method of assessing the effectiveness of preventive actions limited to so-called 'performance indicators', i.e. the number of performed procedures.

The standards do not consider indicators of population health improvement, because, as stated, 'health status is determined by multiple factors, mainly non-medical ones; medical interventions only play a supporting role'. Additionally: 'The pupil population is in a period of dynamic development in which many disorders emerge or intensify. Therefore, it is difficult to establish a temporal relationship between medical care and the dynamics of these disorders' [4].

Such an approach may have been acceptable at the turn of the 20th and 21st centuries, but in the modern world, where evidence-based medicine (EBM) standards prevail and analysis

of terabytes of data is performed on a daily basis, it is an anachronism. The evaluation of the indicators of health improvement allows one to measure the effectiveness of the entire system and, in fact, is the only method for verifying the validity of many procedures that constitute a traditional element of well-care visits, for which doubts about their validity have been raised, such as scoliosis screening [12].

It is essential to redefine the goals of preventive care for adolescents, and this task should be accomplished through consensus among medical societies, the Ministry of Health and the public payer. The goals and indicators should primarily address health problems and needs.

Scope of care

Recognition of needs and formulation of goals and indicators are the first stage of the debate on the reform of preventive care. Detailed descriptions of procedures and assigning the procedures to particular healthcare providers are also necessary.

The Regulation of the Minister of Health regarding the scope of tasks of a primary healthcare physician (...) [13] indicates that the role of a physician in preventive care is not limited solely to 'conducting systematic and periodic assessment of health status' but also includes, among others, 'providing health education, identifying risk factors and health hazards', as well as 'undertaking actions aimed at limiting them'. Similarly, the catalogues of services listed in the standards of care for students [4], as well as in the Regulation of the Minister of Health on guaranteed services within primary health care, have an open character – they contain such generalisations as 'interview (...) with the assessment of risk factors for health...' and 'counselling on a healthy lifestyle' [14].

At the same time, Article 4 of the Medical Profession Act obliges this profession to be carried out 'in accordance with the indications of current medical knowledge, available (...) methods (...), in accordance with the principles of professional ethics and with due diligence' [15]. What should this mean in practice?

- Is it a legal obligation for a primary care doctor to actively search for signs of depression in every teenager? On the one hand, this procedure is not listed as a standard part of a periodic well-care visit. On the other, suicide is the second leading cause of death among Polish teenagers, and Poland's system of psychiatric care for children and adolescents is insufficient to fully meet the growing need, the scale of which has been revealed, for example, by the Covid-19 epidemic [16].
- Does a family doctor have a legal duty to initiate a diagnostic procedure in the case of an overweight adolescent and, for example, recommend them keeping a daily diet diary and then, on a subsequent visit, give them advice based on the analysis of the content of the diary? Such actions are not listed as a standard element of a check-up. However, obesity has become so common that it should not be neglected by primary care physicians.
- Does a primary care doctor have a legal obligation to initiate a conversation about sexual activity with every adolescent they examine? Should sexual education solely focus on the promotion of sexual abstinence or involve advice on contraception and STD prevention, including HIV infections, which have been increasing alarmingly in recent years [17].

It should be emphasised that this discussion can not only encourage the expansion of the range of services provided by the healthcare system, but, and equally importantly, it may also help establish strict boundaries of such services. In the United States, for example, some experts question whether it should really be the responsibility of the physician to give advice on wearing bike helmets, fastening seat belts or handling firearms at home. It is emphasised that this form of advice, although gen-

erally correct, is neither strictly medical nor proven to be effective according to EBM standards [18–20].

Qualifications

Well-care for adolescents requires a wide range of qualifications; therefore, many countries have developed interdisciplinary subspecialties which focus on the health problems of teenagers. Specialists in the field of ‘adolescent medicine’ or ‘college health’ (there are many names, and the specialties are not exactly the same everywhere) are trained to efficiently navigate in selected areas of many different specialties – primary care, psychiatry, endocrinology, gynaecology and dermatology. They do not replace the specialists but cooperate with them and, if required, independently deal with uncomplicated cases. In many healthcare systems, primary care physicians have competence traditionally associated with specialists in specific medical fields.

Another question that should be posed in the debate about the potential reform of the preventive care system for adolescents is whether Polish primary care physicians are ready to perform this task, including well-care visits. Before receiving the title of a specialist in family medicine, a Polish doctor must independently conduct a given number of periodic check-ups – five, to be precise. However, to become a specialist in paediatrics, independently performed preventive check-up examinations are not required; instead, a doctor must complete a 15-day internship at a primary care clinic.

The above-mentioned numbers in terms of preventive examinations performed independently during advanced training in a specialist field of medicine are not a strong argument supporting the thesis that well-care visits for adolescents are taken seriously by the authorities responsible for the content of specialist training programmes and the functioning of the healthcare system.

The analysis of the potential of medical personnel to perform particular elements of a well-care visit can also raise some concerns. For example, during a preventive visit of students aged 10, 13 and 19, a physician is obligated to conduct a physical examination ‘paying special attention to the evaluation (...) of the genitourinary system (...)’. In girls, this examination should be focused on potential abnormalities in the structure of the external genital organs and symptoms of infection. According to the original specialisation programme in family medicine, physicians training to become a specialist had to complete a 3-month internship on a gynaecological ward or/and at a gynaecological clinic. In later years, this internship was shortened, and earlier this year, it was eliminated. Similarly, paediatric residents have no contact with practical gynaecological training.

Without claiming the right to assess specialisation programmes as a whole, it must be stated that the elimination of practical gynaecological training is a regression in terms of adolescent care. For example, according to the standards of the American Academy of Pediatrics, sexually active American adolescent girls should have a microbiological swab taken from the cervix once a year. In the United States, this procedure can be performed not only by gynaecologists but also by family physicians and paediatricians. Polish primary care physicians will not have such skills, and it will be difficult for them to learn how to perform necessary procedures if future goals of preventive care and the financial capabilities of the system expand the scope of services provided by family doctors.

Work on a potential change in the standards of preventive care for adolescents should involve the inspection of actual qualifications of primary care physicians in order to make adjustments in specialist training programmes. Physicians’ competencies in some areas seem to require particularly thorough evaluation. These areas include:

- selected mental health issues in children and adolescents;
- sports medicine;
- lifestyle and diet medicine;
- gender identity and sexual orientation.

Resources, algorithms and tools

As competent medical personnel is crucial to the functioning of the well-care for adolescents, the discussion about a reform of the system seems to create an opportunity to work on algorithms which will allow for optimum management of the limited workforce, i.e. medical professionals.

For example:

- Case: A significantly overweight 12-year-old, otherwise normally growing and within their centile range, with a family history of obesity and unhealthy diet.
- Question: Is it necessary for this teenager to visit their family doctor first in order to be referred to an endocrinologist, who in turn will refer them to a dietician? Shouldn’t it be possible for a school nurse to provide an initial assessment and advice, and then if she fails, refer the patient to a dietician?
- Case: A 15-year-old girl who had unprotected intercourse on Saturday.

Question: Does she have to inform her parents first about the situation and ask them to accompany her to the doctor’s appointment to get a prescription for emergency contraception? What if it was possible to receive the prescription (or even the pill) from a school nurse on Monday?

Considering that most of the risks and health needs of teenagers are predictable, it can be presumed that developing algorithms for dozens of situations has the potential to standardise and optimise the majority of preventive care actions in terms of outcomes, costs, convenience and the time required to meet the adolescent’s needs.

Alongside the reform of the preventive care system, the current model of a health booklet in Poland should also be analysed. This document should serve as a compendium of knowledge about the patient. At present, there is no space to record, for example, any chronic diseases concerning the adolescent’s parents and siblings, the height of the father and mother (necessary for assessing the child’s growth dynamics), the date of the girl’s menarche and the regularity of menses, etc.

It would also be desirable to consider standardising the questionnaires used in preventive care, for screening depression, eating disorders, gender dysphoria, etc.

Technological advancements and widespread digitisation should also prompt discussions on the use of information technology systems and artificial intelligence, for example, in diagnosing conditions that require additional contact between the teenager and the doctor.

Online questionnaires filled out by teenagers could also support in-person visits by allowing the doctor to conduct a visit tailor-made for the specific patient.

Summary

The currently used standards of preventive care for adolescents were published by the Mother and Child Institute 20 years ago, i.e. in 2003, with a complementary textbook released a year earlier [21]. Back then, both documents were cutting edge. However, since then, the health hazards for adolescents, general health and available diagnostic tools have changed. The fact that Poland has become a wealthier country is also significant. Theoretically, we, the Polish society, can afford more, and our expectations regarding the well-care system for adolescents should be higher. This is an obligation for the medical services sector, an obligation that cannot be met without extensive dis-

cussion and changes to the documents that establish the standards.

Finally, it should be noted that Polish teenagers have also undergone changes in the last two decades, especially in terms of awareness and opposition to anything imposed upon them.

A reform of preventive care should lead to a system which will meet the criteria of 'adolescent friendly medicine' with the respect for the right to doctor-patient confidentiality and a young patient's autonomy. Work on new standards must not exclude the voice of those directly involved [22].

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