



PEDIATRIC PREVENTION FROM THE PERSPECTIVE OF PARENTS OF CHILDREN UP TO TWO YEARS OLD

Agata Salwa* and Grażyna Nowak-Starz

Jan Kochanowski University in Kielce, Faculty of Medicine and Health Sciences, Institute of Public Health.

Received date: 14 March 2018

Revised date: 04 April 2018

Accepted date: 25 April 2018

Corresponding author: Agata Salwa

Jan Kochanowski University in Kielce, Faculty of Medicine and Health Sciences, Institute of Public Health.

ABSTRACT

Background: During the first years of life, the child should be under the constant supervision of a specialist who will follow and supervise the proper development of the new organism. Systematic visits at the pediatrician will allow the doctor to see any developmental disorders, correct irregularities, carry out vaccinations in time, and help parents determine the principles of feeding and nursing the child, so as to strengthen his immunity. Each visit to the pediatrician should include a full medical examination, assessment of physical development (measurement of weight and height, as well as head circumference) and evaluation of psychomotor development. **Materials and Methods:** In this work the method of diagnostic survey was used. The research used a survey technique. The tool used in conducting the research was a questionnaire, which contained 20 closed, one-time and multiple-choice questions. The first part of the questionnaire is a questionnaire, which contains general questions pertaining to: age, sex, education and place of residence. The second part of the questionnaire included questions about primary care, compliance with the calendar of preventive visits, expectations of the doctor and other medical staff as well as the availability of specialists as well as reasons for changing primary and private medical care. **Results & Conclusion:** The goal of preventive care is to ensure health and a good start in the life of as many children as possible. Parents and medical staff of basic health care should be partners. In the exercise of this care, which would be manifested in mutual understanding, support and cooperation for health and development of children. Mutual trust and good communication are an indispensable condition for catching emerging threats, as well as possible errors of each party. Cooperation and partnership should result in increased support of the care system for parents and vice versa for the medical staff, but also a greater level of mutual control. Effective cooperation requires understanding, which is why primary health care should adapt the methods of communication to the needs and specificity of the new generation of parents.

KEYWORDS: Prevention, children, pediatric.

INTRODUCTION

Health prevention covers all activities that aim to prevent diseases, through their early detection and treatment, and the preservation of correct healthy lifestyle patterns. As a department of remedial medicine, it focuses on negative health, or pathology and its counteraction. It is addressed to people of all ages and in different health conditions. Prevention of health brings the greatest benefits in the proper development and functioning of children and adolescents, because it prevents disorders in all health zones of the body.^[1]

According to the World Health Organization (WHO), the concept of health is based on total human well-being (psychological, physical and social). The definition

proposed by the WHO therefore goes beyond the absence of disease or other ailments.^[9]

Modern medicine exists and works in the form of treatment as well as prophylaxis. The benefits that society achieves thanks to preventive measures in health care are primarily improving public health awareness and population health status, reducing treatment costs, reducing the number of cases and deaths, sickness absence, as well as the number of people with complications of illness and permanent disability. In addition, the increase in the percentage of cures, as well as the detection of diseases at an early stage of development and lower financial losses (sickness benefits, production losses).^[2] Health prevention focuses

on supporting people in their normal development and healthy life, especially when it comes to children. It also works towards threats or undesirable social phenomena. It has the following phases:

1. Early prevention, consolidating the correct patterns of a healthy lifestyle.
2. Primary (first phase) prophylaxis, preventing disease by controlling risk factors.
3. Secondary prophylaxis (second phase), counteracting the disease by its early detection and treatment.
4. Phase III prophylaxis, inhibiting disease progression and limiting complications.^[2,3]

At every stage of population prevalence an important role is played by health education. It is thanks to her that people learn how to take care of their own health and others, especially for children's health. Health education focuses on showing and realizing the relationship between human health and the style of his life, as well as the social and physical environment.

Preventive health care is implemented based on the provisions of the Act of 27 August 2004 on healthcare services financed from public funds.^[1,2] According to the regulations, preventive health care is exercised by:

- A primary health care physician who provides health care based on a doctor's choice of primary care physician.
- Dentist.
- Community nurse.

During the first years of life, the child should be under the constant supervision of a specialist who will follow and supervise the proper development of the new organism. Systematic visits at the pediatrician will allow the doctor to see any developmental disorders, correct irregularities, carry out vaccinations in time, and help parents determine the principles of feeding and nursing the child, so as to strengthen his immunity. Each visit to the pediatrician should include a full medical examination, assessment of physical development (measurement of weight and height, as well as head circumference) and evaluation of psychomotor development. In proper prevention of the child's health helps the choice of the right specialist, who will take care of the child and provide him with positive associations with visits to the doctor. Systematic use of the help of a chosen doctor allows you to get to know the child and observe its development, thanks to which it will easily notice even the slightest changes in behavior, symptoms of diseases, disorders in the pace of development, etc. Rapid diagnostics are extremely important in the process of treating children and allow you to correct any abnormalities. During planned preventive visits, the pediatrician can indicate to parents the principles of nursing, nutrition and dealing with the child, which should be guided to strengthen its immunity and positively affect its development.^[5,6]

AIMS AND OBJECTIVES

The aim of this work is to show how important it is to improve the quality of preventive care for children up to two years old in such a way that they have development guaranteed under the supervision of a professional team caring about their health condition. The results obtained may contribute to the improvement of the quality of preventive care for children in Poland and better adapt it to the needs of parents.

MATERIALS AND METHODS

In this work the method of diagnostic survey was used. The research used a survey technique. The tool used in conducting the research was a questionnaire, which contained 20 closed, one-time and multiple-choice questions. The first part of the questionnaire is a questionnaire, which contains general questions pertaining to: age, sex, education and place of residence. In the second part of the questionnaire there were questions about primary care, compliance with the calendar of preventive visits, expectations of the doctor and other medical staff and availability of specialists. The research was conducted in the Świętokrzyskie Province. Prior to the start of the research, the consent for conducting the research was obtained. The patients were informed about the course of the tests, their direction and purpose were explained, and they agreed. They consciously expressed their willingness to participate in the research process. The study involved 47 people 28 women and 19 men. The study included persons with children up to two years of age and who declared a change from a primary to a private medical facility during the last year.

RESULTS AND ANALYSIS

Why do not all parents enjoy free childcare in primary care? There are many reasons, but the two most frequently mentioned by parents are too long waiting time for an appointment and a negative assessment of the doctor's competence. The percentage of 25.5% of respondents who used the public sector experienced a negative attitude of the doctor. After the change of the institution to the private sector, no negative attitude of the doctor was noted. This indicates that this segment of care gives parents a sense of security in case of a child's disease and the public sector only forces them to seek help outside the clinic. For many parents, the solution to the problem of the lack of availability of help at the primary counseling center in case of a child's illness is a visit to the Hospital Emergency Department.

The calculated value of X^2 test statistic is greater than the table value (for $p < 0.05$, $df: 17,546 > 5,991$), and the calculated value of $p = 0.0002$ which indicates a very high statistical significance of the observed phenomenon. The VCramer index, 0.609, shows a strong relationship between the reasons for giving up free childcare in the private and primary sectors.

Table 1: Reasons for resignation from free child care according to the respondents.

Reasons for resignation from free child care in basic health care according to the respondents	Before the change, the public sector		After the change, the private sector	
	n	%	n	%
Too long waiting time for an appointment	34	72,3	18	38,3
Negative competence assessment	17	36,2	13	27,7
Negative attitude of the doctor	12	25,5	0	0,0
Obsolete infrastructure	0	0,0	0	0,0
Other	0	0,0	0	0,0
Together	47	100,00	47	100,00

Source: author's own analysis

$$X^2 = 17,456 > X^2_{0,05;4} = 5,991$$

$$VCramer = 0,609$$

Preventive care in primary care, unlike the care of specialist doctors, is characterized by In Poland, good accessibility. Nearly 40% of respondents admit that a balance visit or vaccination is accepted on the day of notification. In the case of a child's illness, the possibility of enrolling to the pediatrician in primary care is 10.6% of respondents. However, for many parents, in the absence of immediate advice, the only option for a child's illness is a visit to the Hospital Admission Room. Respondents, due to the lack of availability of a primary care physician, go to the hospital with their child, use night medical assistance or order a private medical appointment. As many as every fourth child benefited

from help in the hospital due to the lack of possibility to get help in primary care or specialist counseling. Parents commonly use private pediatric visits. Less than one-third use subscription or private care, without even trying to get help in the primary counseling in the event of a sudden illness.

The obtained value X^2 is greater than the table value (for $p0.05$, $df3$: $17.763 > 7.815$), $VCramer = 0.560$ indicates a strong relationship between the opinion of the respondents on basic and private prophylaxis before and after the change of the sector.

Table 2: Characteristics of preventive care according to the respondents.

Characteristics of preventive care in Basic health care according to the respondents	Before the change, the public sector		After the change, the private sector	
	n	%	n	%
Good access unlike specialist doctors	18	38,3	7	14,9
In the case of illness, the option to sign up on the same day	5	10,6	5	10,6
The possibility of arranging a home visit	6	12,8	6	12,8
The appropriate duration of the visit	18	38,3	34	72,3
Together	47	100,00	47	100,00

Source: author's own analysis

$$p=0,002$$

$$X^2 = 14,763 > X^2_{0,05;3} = 7,815$$

$$VCramer = 0,560$$

Not only do the primary health care staff fail to fulfill their obligations to take care of the children, so too are the parents themselves. One quarter of respondents admit that all visits recommended for children - health balances and vaccinations - are not being delivered on time. More than half of respondents decide to vaccinate according to an individual full-vaccination calendar, only 53.2% use mandatory vaccinations as part of primary care, and 17% of respondents decide to give up vaccinating the child altogether. The most common reason for giving up vaccinations, over 50% of the answers, are previous negative experiences related to post-vaccination complications of a child or someone in the immediate family and fear of them.

The value of X^2 is greater than the table value (for $p0.05$, $df2$: $17.763 > 7.815$), $VCamera = 0.480$ indicates a moderate relationship between the observance of the calendar of preventive visits and vaccination of children, and the change in the sector.

Table 3: Compliance with preventive visits and vaccinations of children by the respondents.

Compliance with preventive visits and vaccinations of children by the respondents	Before the change, the public sector		After the change, the private sector	
	n	%	n	%
Not respecting the dates of health bilnases and vaccinations	25	53,2	39	83,0
Selection of an individual vaccination calendar	14	29,8	7	14,9
Resignation from protective vaccinations	8	17,0	1	2,1
Together	47	100,00	47	100,00

Source: author's own analysis

More than three-quarters of children remain in primary care under the supervision of pediatricians, and nearly a quarter are looked after by family doctors. Most parents are satisfied with the medical care exercised over the child in primary care. Parents expect professional skills, reliability and professional advice from medical personnel. They also signal the need for better

communication - getting answers to bothering questions and dispelling all doubts.

A strong dependence between features was found because the calculated value X^2 is greater than the table value (for $p < 0.05$, df_3 : $16,512 > 7,815$), $VCramera = 0.59$. The calculated value $p = 0.001$ means a high statistical significance of the observation.

Table 4: Expectations towards medical staff according to the respondents.

Expectations towards medical staff according to the respondents	Before the change, the public sector		After the change, the private sector	
	n	%	n	%
Empathy	0	0,0	2	4,3
Professional competence, reliability	46	97,9	32	68,1
Improving communication	0	0,0	12	25,5
Providing expert advice	1	2,1	1	2,1
Together	47	100,00	47	100,00

Source: author's own analysis

$p = 0,001$

$X^2 = 16,512 > x^2_{0,05;3} = 7,815$

$VCramera = 0,59$

DISCUSSION

The presented results of analyzes indicate that the majority of parents entrust the care of their children to the public health service, in particular in the field of preventive care (preventive vaccinations and balance sheets). Importantly, the availability of basic health care is good, which means that the most important tool for shaping proper prevention is in the hands of public administration. Unfortunately, as further analyzes show, this potential is not properly used. This is confirmed by the fact that a significant percentage of parents do not follow the calendar of preventive visits (vaccinations and balance sheets). The survey also shows that most primary care counseling accepts an incomprehensible passive attitude - 73% of them do not resemble the child's caregivers about approaching the date on which they should make the recommended appointment or vaccination, or do it very rarely. Screening tests to detect developmental abnormalities are carried out selectively - this applies in particular to the measurement of blood pressure and to the examination of sight and hearing and emotional development of the child. The respondents' answers indicate an insufficient level of health education, especially in the field of proper nutrition of children, as well as significant deficiencies in the area of communication between parents and outpatient care units

as well as medical staff of primary care. It seems that the role of a pediatric nurse in primary health care is not properly defined in the current system, which means that the potential of this professional group in supporting preventive and pro-health activities remains unused.

Turkiewicz's research results point to the need to develop completely new solutions in the field of organization and financing of Basic health care that will motivate this segment of care to better work and a more proactive approach to preventive actions.^[8] In the light of data published by the NFZ, only one-third of the preventive care visits for children and adolescents up to 18 years of age are provided for in the standard. It is necessary to improve the communication of the facility with parents based on modern tools and communication channels.^[4,7] Satisfying the needs of reliable knowledge about the child's nutrition reported by parents would require the introduction of an additional benefit in the form of a dietitian consultation. This is particularly important from a public health perspective, in the context of a growing epidemic of obesity among children and adolescents. In view of the poor assessment of the quality of basic health care work in the field of childcare, increasing the funding of primary care in the mechanism of a significant increase in the capital rate, which will not be accompanied by the simultaneous implementation of

mechanisms that would reward and control the quality of primary health care personnel, will not involve the effective use of public funds for this segment of care.^[5,6]

Preventive care system in Basic health care guarantees the availability of benefits for parents. Most parents are also happy with the care of the attending physician. On the other hand, the quality of care provided over children by basic health care staff requires improvement. In the light of the research on the quality and availability of preventive care for children in primary care, it is clear that this care is not adapted to the needs of parents, current challenges and public health problems - the incidence of obesity among children, movements immunization or loss of parents in brine, not always reliable information on nutrition and care of children.^[8] The system does not provide parents with a sense of security in the case of a child's disease, which is the reason for their use of other forms of child care - temporary help in the hospital or private pediatric visits. Education regarding care, nutrition or the importance of vaccinations that parents receive in primary care is not enough. The need for special dietary education of parents in the first year of the child's life and introduction of screening tests enabling early detection of abnormalities in psychomotor development in the first two years of life^[2] is particularly evident. Basic health care staff do not support parents in complying with the child's health guidelines. About 10% of children in Poland are outside the supervision of preventive care in primary care. A significant percentage of parents do not follow the calendar of preventive visits or immunization of children, and the staff does not remind them about these dates. Statistics show that only one-third of preventive visits are carried out due to the size of the population and the standard of care. Basic health care does not use communication tools with parents, even traditional ones, let alone modern ones. Among other things, for this reason, the potential for care and support that PHC could perform in the health care system is not used up. Negligence is particularly evident in the use of the ability of middle medical staff for preventive care in the group of healthy children.

SUMMARY AND CONCLUSIONS

The goal of preventive care is to ensure health and a good start in the life of as many children as possible. Parents and medical staff of basic health care should be partners. In the exercise of this care, which would be manifested in mutual understanding, support and cooperation for health and development of children. Mutual trust and good communication are an indispensable condition for catching emerging threats, as well as possible errors of each party. Cooperation and partnership should result in increased support of the care system for parents and vice versa for the medical staff, but also a greater level of mutual control. Effective cooperation requires understanding, which is why primary care should adapt the methods of

communication to the needs and specificity of the new generation of parents.

1. The standards of preventive care for children, which create the legal climate and the framework of this cooperation, should be modified so that they take into account the new challenges facing public health today. These are — in the case of the children's population — above all the growing scale of child obesity, anti-vaccine movement, as well as the flood of unreliable information on the care and nutrition of children.
2. Necessary changes are in the organization and financing of this segment of care, increasing the level of support and system control over everything and children from the day of their birth.
3. Suitable mechanisms should increase the responsibility of basic health care for punctuality implementation of the calendar of preventive visits and protective vaccinations by parents. Down system of financing preventive care, evaluation tools should be introduced quality of services, motivating medical staff to pay attention to the most important for public health parameters of the quality of childcare - the number of children with abnormal weight, number of breastfed babies, number of children not vaccinated according to the vaccination schedule or assessment of the quality of care performed by parents.
4. The standards of preventive care properly describe the scope of tasks and the division of roles between the doctor and the medical staff. However, they are not reflected in practice. It is necessary to change the traditionally dominant division of responsibilities between a physician and secondary medical staff in primary care. The latter should receive a greater number of tasks related to the care of healthy children and the health education of parents. The financing of PPE services should take into account aspects of the changed scope of tasks, as well as motivating medical staff to comply with standards and high quality childcare.

REFERENCES

1. Czapiński J, Panek T. Social Diagnosis 2013. Conditions and quality of life of Poles, Warsaw2014,http://analizy.mpips.gov.pl/images/stories/publ_i_raporty/DS2013/Raport_glowny_Diagnoza_Spoleczna_2013.
2. Center of Healthcare Information Systems. Preventive examination of children 2015.
3. CSIOZ. Data on the health status of children and adolescents up to nine years of age who are under the care of a primary care physician, as of 31.12.2015, data from the NZ11 form for 2015.
4. Department of Health. Healthy Child Program. Pregnancy and the first five years of life, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/167998/Health_Child_Programme.pdf.

5. Oblacińska A, Jodkowska M. Ipsos. World Internet Project, Poland 2015. ABC of balance tests in pediatrics. The rules for conducting visits and patronage counseling for children in the first month of life. *Medycyna Praktyczna*, <http://www.mp.pl/pediatrics/artykuly-wytyczne/artykuly-przegladowe/show.html?id=101231>.
6. Report on changes in the scope of access to guaranteed healthcare services in Poland, No. 8/2/2014. As of June / July 2014. WHC Barometer. http://www.korektorzdrowia.pl/wp-content/uploads/barometr-whc_7_1_2014.pdf.
7. Shribman K, Billingham A. Healthy Child Program. Pregnancy and the first five years of life. London 2009, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/167998/Health_Child_Programme.pdf.
8. Turkiewicz J. Building image in health care on the example of doctors in Poland. *Journal of Health Sciences*, 2013; 3(11): <https://pbn.nauka.gov.pl/getFile/1691.html>.
9. World Health Organization. <http://www.euro.who.int/en/health-topics/noncommunicable-diseases/obesity/data-and-statistics>.