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CONTENT

BOSNIAN JOURNAL OF HEALTH SCIENCES AND TECHNOLOGIES (BJHST)
Vol. 2, No. 2, 2026

Original articles

1. **Prevalence of Factor II Prothrombin (G20210A) and Factor V Leiden (G1691A) Mutations in Pregnant Women with Spontaneous Miscarriage** 88
Adis Muhić, Eldina Hodžić, Zana Halilović, Ilir Bejtović, Melisa Hnjalić, Berina Balaž, Senada Džebo, Amina Omanović
2. **Demonstration of Protein Kinase Zap-70 Expression in Cells of Patients With Chronic Lymphocytic Leukemia Using Flow Cytometry** 95
Amina Omanović, Nuriya Bilalović
3. **Characteristics and Causes of Intensified Hyperbilirubinemia in Term Neonates Hospitalized at the Department of Neonatology and the Neonatal Intensive Care Unit of the Clinical Center University of Sarajevo**106
Đenana Šaldo, Amela Ramović, Fahira Imamović, Lejla Jamak, Azra Halilović
4. **Diagnostic Value of CRP, Rheumatoid Factor and Anti-CCP Antibodies in Patients with Rheumatoid Arthritis**112
Merima Šehić, Nejra Džananović, Edina Zahirović, Azra Čamdžić, Senada Džebo, Selma Mutevelić
5. **Care and Treatment of Women Undergoing Medical Abortion**118
Enesa Sulejmani, Gordana Kamčeva-Mihailova, Gordana Panova
6. **The Work Tasks of the Family Nurse in the Care, Treatment and Education of Postoperative Patients in the Municipality of Veles**126
Blagojka Nanevska, Gordana Panova, Gordana Kamčeva-Mihailova

Professional articles

1. **The key role of the midwife in support, preparation and assistance during instrumental vaginal births, with a special emphasis on the care of the mother and baby after delivery**.....133
Tanja Petrovska, Gordana Kamčeva-Mihailova, Gordana Panova
2. **The Role of the Visiting Nurse in the Prevention and Early Detection of Diseases in Young Children**138
Savetka Ilisheva, Gordana Panova, Gordana Kamčeva-Mihailova, Marjan Balovski

Review articles

1. **The Role of the Nurse in Understanding the Parents' Experiences of Children with Type 1 Diabetes Mellitus**145
Elvedina Hodžić, Alma Hadžić, Elmedina Mrkulić, Elvira Kundo
2. **Nurse-Led Transitional Care Interventions and Patient Outcomes: A Systematic Review 2020–2025**151
Valentina Ješić, Sabina Babić
3. **Quality of Life of Patients Before and After Disc Herniation Surgery**.....162
Admira Bandić, Hadžan Konjo

- Instructions to authors**170
Uputstvo za autore172

The Role of the Visiting Nurse in the Prevention and Early Detection of Diseases in Young Children

Uloga patronažne sestre u prevenciji i ranom otkrivanju bolesti kod male djece

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ABSTRACT

Introduction: Visiting nurse has a key role in primary health care, especially in the prevention and early detection of diseases in young children.

Ai: to examine the importance and impact of visiting nurses on the health and development of children through preventive activities, health education and early recognition of diseases.

Materials and methods: The paper analyzes the basic tasks of community nurses, including home visits, monitoring the growth and development of children, advising parents on proper nutrition, hygiene and immunization, as well as early recognition of health and developmental problems. Special emphasis was placed on the role of the monitoring service in the education of parents and its impact on reducing morbidity in the child population.

Results: indicate that the continuous work of visiting nurses significantly contributes to the improvement of the health condition of children, the timely detection of diseases and the prevention of complications. Parental education has proven to be an important factor in creating healthy habits and improving children's health.

Conclusion: the public health care nurse is an indispensable part of the health system, with an important role in preventive medicine and the protection of children's health.

Keywords: public health nurse, prevention, early detection, children, health education

SAŽETAK

Uvod: Patronažna sestra ima ključnu ulogu u primarnoj zdravstvenoj zaštiti, posebno u prevenciji i ranom otkrivanju bolesti kod male djece.

Cilj: ispitati značaj i utjecaj patronažne sestre na zdravlje i razvoj djece kroz preventivne aktivnosti, zdravstveno obrazovanje i rano prepoznavanje bolesti.

Materijali i metode: Rad analizira osnovne zadatke patronažne sestre, uključujući kućne posjete, praćenje rasta i razvoja djeteta, savjetovanje roditelja o pravilnoj ishrani, higijeni i imunizaciji, kao i rano prepoznavanje zdravstvenih i razvojnih problema. Poseban naglasak stavljen je na ulogu patronažne službe u edukaciji roditelja i njen utjecaj na smanjenje morbiditeta u dječjoj populaciji.

Rezultati: Ukazuju da kontinuirani rad patronažne sestre značajno doprinosi poboljšanju zdravstvenog stanja djece, pravovremenom otkrivanju bolesti i prevenciji komplikacija. Edukacija roditelja se pokazuje kao važan faktor u stvaranju zdravih navika i poboljšanju zdravlja djece.

Zaključak: Medicinska sestra javnog zdravstva neizostavan dio zdravstvenog sistema, sa značajnom ulogom u preventivnoj medicini i zaštiti zdravlja djece.

Ključne riječi: medicinska sestra javnog zdravstva, prevencija, rano otkrivanje, djeca, zdravstveno obrazovanje

INTRODUCTION

Children's health from an early age is the basis for proper growth, development and quality of life in the future. Early childhood is a sensitive period in which children are especially susceptible to various diseases, developmental disorders and risks that can have long-term consequences. Therefore, prevention and early detection of disease are key factors in modern healthcare.

The visiting nurse plays an important role in primary health care, especially in working with newborns, infants and young children. Her work takes place in a home environment, which allows for direct insight into the child's environment, family conditions, and habits. This approach enables timely recognition of potential risks to the child's health and development (1).

One of the main tasks of the visiting nurse is the health education of parents. She advises them on proper nutrition, breastfeeding, vaccinations, hygiene, and how to recognize early illness symptoms. Through continuous communication and counseling, the visiting nurse contributes to improving health habits and reducing risk factors. Early detection of the disease is particularly important as it allows for timely intervention and prevention of complications (2). The visiting nurse plays a key role in monitoring the child's growth and development, identifying deviations and referring

them to appropriate health facilities. She actively participates in screening programs and monitoring the immunization status of children. In addition, the visiting nurse plays an important role in the early detection of social and psychological family problems that can affect the child's health. Through an individual approach and a confidential relationship with the family, she contributes to the creation of a safe and supportive environment for the child. Modern healthcare systems increasingly recognize the role of community health services as a key element in preventive medicine. Investing in this service contributes to reducing morbidity and mortality in children, as well as improving the general health of the population (3).

Home health care service and its importance

The home health care service is an integral part of primary health care and has a significant role in improving the health of the population, especially among vulnerable categories such as newborns, infants and small children. This service is based on the preventive medicine principles, continuous care, and an individual approach to the patient and his/her family. A home health nurse performs her work in a home environment, which enables her to have direct insight into the living environment, social conditions, and health habits of the family. This approach is of particular importance given that many factors affecting a child's health derive from the home environment. In addition to medical activities, home health care services also have a social and educational role. The services also contribute to improving the health culture of the population and reducing health inequalities (4).

The role and tasks of the home health care nurse

The home health nurse has a wide range of tasks aimed at preserving and improving the child's health. Her work includes the following:

Home visits

Home visits are a fundamental segment of a visiting nurse's work. They enable: assessing the child's health status, monitoring growth and

development, assessing hygienic and social conditions, and establishing trust with the family.

Monitoring growth and development

Regular monitoring of physical and psychomotor development is essential for early detection of deviations. The following is monitored: body weight and height, motor development, cognitive and speech development and social behavior

Health education

The visiting nurse plays an important role in educating parents about: breastfeeding and proper nutrition, hygiene and child care, vaccinations, and recognizing symptoms of illness.

Early disease detection

Through regular visits and observation, the nurse can timely identify: infections, developmental disorders, nutritional deficiencies and chronic diseases.

Referral and cooperation

In case of suspected health problems, the visiting nurse refers the child to the appropriate doctor and cooperates with: pediatricians, family doctors and social services.

Disease prevention in children

Prevention is a key aspect in children's health care and can be divided into:

Primarna prevencija - It refers to preventing the occurrence of diseases through: immunization, proper nutrition, maintenance of hygienic and healthy lifestyle habits. The public health nurse has an important role in promoting these measures.

Secondary prevention - It refers to early detection of disease and timely treatment and includes: screening, regular check-ups, and early recognition of symptoms.

Tertiary prevention - The aim is to prevent complications and disability in already ill children

through: rehabilitation, ongoing care, and family support.

Early detection of disease

Early detection is essential for successful treatment and a better outcome. It enables: timely therapy initiation, prevention of complications and a better quality of life. The visiting nurse plays a key role through: observing symptoms, monitoring developmental parameters, and communicating with parents. The most common early detected conditions include: respiratory infections, anemia, eating disorders, and developmental delays (5).

Health education of parents

Parental education is the basis of prevention. An informed parent can: recognize symptoms in a timely manner, react appropriately, and ensure a healthy environment. The home health nurse uses various methods such as: individual counseling, demonstrations, and educational materials. Topics most frequently covered include: breastfeeding, introducing complementary foods, hygiene, vaccinations and child safety (6).

The most common diseases in young children

Young children are susceptible to various diseases, such as: respiratory infections (colds, bronchitis and pneumonia), gastrointestinal diseases (diarrhea, vomiting and dehydration), nutritional disorders (anemia, malnutrition and obesity), developmental disorders (speech delay, motor problems and cognitive disorders) (7,8).

Social factors and their influence

A child's health depends not only on medical factors, but also on: economic status, parents' education, living conditions and family support. The visiting nurse identifies these factors and suggests measures to overcome them (9).

The importance of community care in the modern healthcare system

In the modern healthcare system, the emphasis is on prevention. Home health care: reduces the burden on hospitals, enables early intervention and improves the health status of the population. Investing in this service is of great importance for the public health system. The visiting nurse plays an irreplaceable role in the prevention and early detection of diseases in children from a young age. Her work directly impacts the health, development and the child's quality of life. Through education, monitoring, and timely intervention, she is a key factor in modern healthcare.

AIM

The main objective of this paper was to examine the role of the visiting nurse in the prevention and early detection of diseases in young children, to analyze the tasks of the community nurse, determine the importance of health education of parents, examine the role in early detection of diseases, determine the impact of community care on children's health, and to propose measures to improve community care services.

Hypotheses

Home health nurses play a significant role in preventing illness in children.

- Early detection through home health care reduces the risk of complications
- Parental education contributes to better child health

MATERIALS AND METHODS

The research was conducted in the territory of Strumica in the period from January to March 2025. The research included 100 parents of children aged 0 to 5 who were visited by a community nurse.

Inclusion criteria: parents with children up to 5 years of age using patronage services.

Exclusion criteria: parents not visited by a community nurse and incomplete surveys.

Data was collected based on Survey-questionnaire, consists of 15 questions, divided into several parts: demographic data, experience with a community nurse, level of information, and early detection of the disease.

The survey included YES/NO and multiple choice questions, and 1-5 scale.

The data were processed using descriptive statistics, percentages, and tabular and graphical presentation.

RESULTS

Parents

Table 1 Demographic characteristics.

Characteristics	No. (n)	%
Women	78	78%
Men	22	22%
Age 20–30	40	40%
Age 31–40	45	45%
>40 years of age	15	15%

Table 2 Did a community nurse visit you?

Answer	No.	%
Yes	92	92%
No	8	8%

Table 3 How often were you visited?

Visits	No.	%
1–2 visits	20	20%
3–5 visits	50	50%
>5 visits	22	22%
No visits	8	8%

Table 4 Did you receive education from the visiting nurse?

Answer	No.	%
Yes	88	88%
No	12	12%

Table 5 Which topics were you educated on?

Topic	%
Breast-feeding	75%
Diet	82%
Hygiene	90%
Vaccination	85%

Table 6 Did the community nurse help in early detection of problems?

Answer	No.	%
Yes	60	60%
No	40	40%

Table 7 Which problems were detected?

Problem	%
Anemia	20%
Infection	30%
Developmental delays	25%
Nutritional problems	25%

Table 8 Satisfaction rate (1-5).

Rate	%
1	2%
2	3%
3	15%
4	40%
5	40%

Table 9 Does a community nurse contribute to better child health?

Answer	%
Yes	85%
No	15%

Nurses

Table 1 Demographic characteristics.

Characteristic	No.	%
Women	78	78%
Men	22	22%
20–30 yeras	40	40%
31–40 years	45	45%
>40 years of age	15	15%

Table 2 Visits by a community nurse.

Answer	No.	%
Yes	92	92%
No	8	8%

Table 3 Frequency of visits.

Visits	No.	%
1–2 visits	20	20%
3–5 visits	50	50%
>5 visits	22	22%
No visits	8	8%

Table 4 Health education.

Answer	No.	%
Yes	88	88%
No	12	12%

Table 5 Early detection.

Answer	No.	%
Yes	60	60%
No	40	40%

Table 6 Satisfaction.

Rate	%
1	2%
2	3%
3	15%
4	40%
5	40%

DISCUSSION

The results of this study confirm the important role of home care nurses in the prevention and early detection of illness in young children. The findings are in line with contemporary scientific knowledge and recommendations from relevant international health organizations such as the World Health Organization and UNICEF, which emphasize the importance of primary health care and home visits as key mechanisms for promoting child health.

Regarding coverage of home health visits, the results showed that 92% of respondents were visited by a home health nurse. This high percentage is in line with research from the World Health Organization, which highlights that regular home visits significantly reduce the risk of illness in children and improve parents' health education. However, the remaining percentage of 8% indicates that there are still some gaps in coverage, which presents a challenge for the health system. The results of the study show that 88% of parents received health education from a home care nurse. This is in line with UNICEF studies, which indicate that parent education is one of the most effective ways to prevent illness in children.

It is particularly significant that most of the education relates to hygiene, nutrition, and vaccination, which are considered key factors in reducing morbidity in the child population. Regarding early detection, 60% of respondents stated that the community nurse helped in the timely detection of certain health problems. This result is consistent with research published by the Centers for Disease Control and Prevention, which highlights that early detection of health conditions significantly improves treatment outcomes and reduces the risk of complications.

The analysis of the types of problems detected (infections, anemia, developmental delays and eating disorders) is consistent with global data, according to which these conditions are most common in young children. According to the World Health Organization, these diseases are the leading causes of morbidity in children, which further

emphasizes the importance of community health services.

Parents' satisfaction with the services of the community nurse is also an important indicator. In this study, 80% of respondents gave a high score (4 and 5), which indicates a positive perception of service quality. This finding is consistent with studies showing that trust and communication between the health care provider and the family are crucial for successful health intervention.

In addition, 85% of respondents believe that the community nurse has a direct impact on improving the child's health. This confirms the importance of preventive activities and continuous care, which is in line with the concept of primary health care promoted by the World Health Organization.

However, the study also has certain limitations. The sample is relatively small (100 respondents) and geographically limited to one municipality, which may affect the generalization of the results. Also, the data is based on parents' self-assessment, which can result in subjectivity.

Future studies should have a larger sample, inclusion of more regions, and a combination of quantitative and qualitative methods. The discussion shows that the research results are in line with global trends and scientific literature. The community nurse is a key factor in the prevention and early detection of diseases in children, and her role should be further strengthened and improved within the healthcare system.

CONCLUSION

The home care nurse is one of the most important pillars of primary health care, especially in the area of health care for children from an early age. Through her continuous and comprehensive work in home conditions, the community nurse ensures timely prevention, early detection of diseases and appropriate health education for parents. Parental education has proven to be a key factor in disease prevention. Informed parents have a greater ability to recognize early symptoms, apply

proper health practices, and create a safe and healthy environment for their children. In this context, the community nurse has not only a medical role, but also a significant pedagogical and advisory role. Despite the positive results, the research also points to the need for further improvement of the community care service. It is necessary to increase the volume, continuously educate health staff and improve coordination with other health and social institutions.

REFERENCES

1. World Health Organization. Home visits for maternal and child health: A global review. Geneva: WHO; 2020.
2. The state of the world's children 2019. New York: UNICEF; 2019.
3. World Health Organization. WHO recommendations on maternal and newborn care. Geneva: WHO; 2018.
4. Centers for Disease Control and Prevention. Child development and early detection guidelines. Atlanta: CDC; 2021.
5. World Health Organization. Early childhood development and health. Geneva: WHO; 2017.
6. Berk LE. Development through the lifespan (7th ed.). Pearson Education; 2018.
7. Hockenberry MJ, Wilson D. Wong's nursing care of infants and children (11th ed.). Elsevier; 2019.
8. Stanhope M, Lancaster J. Public health nursing: Population-centered health care in the community (10th ed.). Elsevier; 2020.
9. Pillitteri A. Maternal and child health nursing (8th ed.). Wolters Kluwer; 2017.

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