

OPINION

of Prof. Dr. Dimitrichka D. Bliznakova, MD
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Member of the Scientific Jury determined by Order of the Rector of MU-Varna
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Dr. Vanya Antonova Aleksandrova was born on 28.09.1969 in Varna. She graduated from the Dimitar Blagoev Secondary School in 1987. In 1994 he graduated from the Medical University of Varna.

Professional development:

- Specialization and medical degree in pediatrics in 1999.
- In 2008 acquired a specialty in General Medicine
- Since 2005 has been working as a general practitioner

Academic development:

- Since 2015 has been appointed as an assistant in the Department of General Medicine

Publications: 4

Reports : 4

Memberships: BMA, BPA, Union of General Practitioners

Fluent in: Bulgarian and English

The dissertation "Immunization calendar and vaccinations in Bulgaria - current trends, problems and opportunities for their solution" considers one of the leading problems in prevention - the problem of immunizations.

The dissertation contains 145 pages and is illustrated with 26 tables, 45 figures. The list of cited literature includes 196 literary sources, 41 of which 41 in Cyrillic and 155 in Latin.

A leading problem of modern medicine is the possibility of prevention, which is the basis of human health. In this context, vaccines play an important role in the protection of human health and are one of the leading factors influencing healthcare worldwide. The analysis of the past decades shows that after the use of vaccinations in many countries there is a decline in the number of sick and dead newborns and children with many serious diseases. It is extremely important to create reliable and effective vaccines on the one hand, and on the other hand to inform the public about the benefits, risks of vaccinations and to assist in their implementation.

The aim of the dissertation is precisely formulated for evaluation of the practices for immunization and vaccination in our country according to the current immunization calendar in Bulgaria.

The tasks are properly formulated and structured:

- To evaluate the knowledge of parents of children in infancy and early childhood about the benefits of vaccinations, as well as their attitudes to their implementation.
- Evaluation of the need to develop and provide information materials related to mandatory and recommended vaccines in our country to parents of infants and young children, as well as future parents.
- The third task is important and it provides information on the level of knowledge of medical professionals in particular GPs about the immunization calendar and

vaccinations in Bulgaria.

- Study of the need for additional research of GPs for their recommendations for compliance with the Immunization Calendar.
- Study of the problems in the organization of the children's consultation, with a view to improving the quality of service in it and recommendation for a more successful model for immunization of infants and children.
- To study the possibilities of the children's consultation of GPs to encourage parents to comply with the Immunization Calendar.

The working hypotheses are well described and meet the set goals and objectives.

Materials and methods

The study covers 142 parents of infants and children aged 0 to 36 months, 28 future parents with reproductive problems and upcoming future in vitro fertilization from Varna and 42 GPs from Varna, Burgas and Dobrich.

Attitudes towards compliance with the Immunization Calendar and reasons for hesitation among current and future parents are discussed. The role of GPs in compliance with the Immunization Calendar has been studied.

Methods for information processing:

- Documentary method
- Sociological method
- Statistical methods: descriptive, analysis of variance by the method of ANOVA, logistic regression analysis

Results and discussion:

Certain demographic and socio-economic characteristics of the respondents are established, which fluctuate when the mandatory vaccines are administered. Parents who refuse mandatory vaccines from the Immunization Calendar of the respondents in 42.86% are in the age group 26-35 years, followed by the group of 18-25 year olds with 28.56%. Prevalence respondents who refused vaccination, who are not married, prevail. Also of interest is the factor of parents' education among the respondents, as those with secondary education have a lower immunization status. Another interesting finding is the increased tension associated with difficult and problematic conception in families after a successful pregnancy and childbirth. This is explained by the over-concern, anxiety, reflection and questioning of any advice given by health professionals, especially when they are unsure. This burdens the work of GPs in conducting irregular children's consultations, as well as increasing the number of redundant tests and consultations with specialists and postponing the vaccination at the request of parents without adequate medical reason.

The source of information and education of parents is important, especially those with a lower level of education using the Internet as the main source of information.

The employment of parents is also taken into account, which makes it possible to use the media and television as a preferred source of information.

The competence of the GP is also extremely important. In 11.3% the parents do not consider the

time and the information received from the GP to be sufficient.

The effectiveness of vaccines is also being discussed among parents, and again the main information is from the media and television.

The analysis of our results, comparing it with literature data shows that the refusal of mandatory immunizations in the country is becoming more common among parents. The main fear is the idea that vaccines can harm their children.

Many GPs doubt the positive effects of vaccines and believe that parents' fears are justified. Given that the practices of some GPs are over 2000 patients, their opinion reaches a wide audience and influences the formation of parents' opinions.

The ethnicity of the parents is also essential. There is a tendency increase in the number of parents from the Bulgarian minority group to the refusal to receive vaccines - 48.72%.

The results of the study will lead to the widespread use of anti-vaccine movements, which can bring back dangerous infectious diseases for which an effective method of control has been imposed.

Conclusions:

- The study reveals the main fears of parents leading to hesitation or refusal of immunizations.
- The role of some demographic factors in forming opinions about vaccines is emphasized. Particular attention should be paid to parents in the age group between 26 and 35 years, to parents with one child, to parents with secondary education, to their involvement. All this requires awareness of both parents and GPs.

Contributions:

Original scientific contributions - 4:

- A large-scale study has been conducted on current global recommendations for immunoprophylaxis in cases of prematurity, low birth weight and immunocompromised children.
- Current trends and the main reasons for parents' hesitation or refusal to immunize their children have
- There is an inverse proportional relationship between parents' anti-vaccination trends and the level of education, younger age, employment, number of children in the family and proportional dependence on the influence of relatives and friends with such attitudes.
- About 90% of the surveyed GPs indicate the need for training courses and recommendations with up-to-date information and scientific evidence for all team members (doctors and nurses) who are actively involved in immunoprophylaxis.

Contributions of a confirmatory nature - 4:

- The main reasons for the emergence of anti-vaccination movements, the influence of the Internet and the media have been studied.
- There is a need to prepare a guide for parents in order to increase trust in medical professionals and the health system.
- The need to increase the time spent talking with parents is confirmed. The need for immunoprophylaxis to be explained by the media and on television as particularly busy parents have

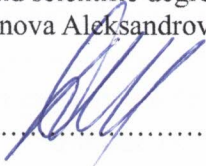
limited time and this is one way to inform them.

Conclusion: dissertation of Vanya Antonova Aleksandrova "Immunization calendar and vaccinations in Bulgaria - current trends, problems and opportunities for their solution" addresses one of the leading problems of prevention in childhood. It provides answers to many questions and getting to know it is essential to persuade and inform not only parents but also the immunization team (doctor, nurse). When specialists and parents are not convinced of the benefits of immunizations, they can not help to implement this key link in prevention.

"Medicine is similar to philosophy. It is both a practical and a theoretical art."

I propose to the esteemed scientific jury to award the educational and scientific degree "Doctor of Medicine" in the scientific specialty "General Medicine" to Dr. Vanya Antonova Aleksandrova.

2022 ,



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Prof. Dr. D. Bliznakova, MD