

Letter to the Editor

Perceptions and Attitudes of Parents Toward Vaccination of Children in Western Balkan Countries: Trust in Function of Improving Public Health

Boban Melović¹, Anđela Jakšić Stojanović², Tamara Backović Vulić¹, Mehmet Emin Baynazoğlu³

¹University of Montenegro School of Economics, Podgorica, Montenegro

²University of Donja Gorica Faculty of Culture and Tourism, Podgorica, Montenegro

³Trakya University, Department of Business Information Management, Edirne, Turkey

Address of Correspondence: Mehmet Emin Baynazoğlu, Trakya University, Department of Business Information Management, Edirne, Turkey
meminbaynazoglu@trakya.edu.tr
0000-0003-1978-1348

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Although vaccination is considered to be the most effective and cost-effective way of preventing the contraction of infectious disease, there are still many controversies about vaccines. Namely, despite the trend of increasing vaccination rates worldwide, many factors may influence the formation of negative perceptions and attitudes, especially in developing countries, such as the Western Balkans. Studies show that the process of immunization, as one of the greatest public health achievements, is occasionally affected by strong social, cultural, and biological reactions from the public (1, 2). A significant number of countries are trying to develop motivational measures, while some of them are introducing the obligation of the vaccination process and penal policy in case of refusal. In that sense, understanding the attitudes and opinions of parents about the vaccination of children is essential for planning and undertaking extensive and properly directed educational actions in order to prevent their indecision and strengthen the trust in vaccines.

Having in mind all mentioned above, the authors carried out the research to identify the factors that influence parents' perceptions and attitudes about children's vaccination, that is, trust in vaccines, and whether there is a significant difference in the analyzed countries. This is the first academic study that examines parents' perceptions and attitudes integrally across the five Western Balkan countries. The authors developed and empirically tested a model that examined the relationship between influential factors and parents' attitudes toward children's vaccination, that is, trust in vaccines. Online quantitative research was conducted in the first quarter of 2020 using the survey method. Multivariate factor analysis was applied to data collected from 2193 parents in the analyzed countries. The relevance of the hypotheses was tested using standard statistical tests, ANOVA test, and eta coefficient. The research showed that the analyzed variables from the model have a significant influence on parents' perceptions and attitudes about vaccination of children, which is reflected in the level of confidence in vaccines. Further, the study showed that their impact varied depending on the factor being observed. Thus, for example, social media is a relevant factor of influence on the formation of attitudes and perceptions of parents about the vaccination of children, which is why it is necessary to use this form of social marketing in order to improve public health.

The results of this research are correlated with other researches and studies (3) that showed that socio-economic status, media information, attitudes and motivations regarding health care, as well as knowledge and awareness of the need for vaccines are related to indecision about the process of vaccination. Furthermore, the important factors of influence are the age and the education of the parents, as well as the level of development of the country, which the authors wanted to investigate in this research. In this sense, the results of this segment of research correspond to similar researches in other countries. Thus, for example, some studies (4) emphasize the age of parents, while others (5) point out that decisions about vaccinating children largely depend on their level of education because a higher level of education is translated into a higher awareness or information being perceived differently, which was confirmed in this study as well.

It is encouraging that the research showed that the largest number of respondents (parents), despite the strong influence of certain analyzed factors, have high confidence in vaccines. The results also showed that there is no statistically significant difference in the perceptions and attitudes of parents in the observed countries, which is not surprising at all having in mind that these are countries with a similar level of economic development. The achieved results provide an important contribution to public health policymakers to identify and understand the impact of particular factors, and thus to better adapt their initiatives to changes that will serve to improve public health.

Conflict of Interest: No conflict of interest was declared by the authors.

REFERENCES

1. MacDonald, N. E., Butler, R., & Dubé, E. (2018). Addressing barriers to vaccine acceptance: an overview. *Human vaccines & immunotherapeutics*, 14(1), 218-224.
2. Betsch C, Brewer, NT, Brocard P, Davies P, Gaissmaier W, Haase, N. Opportunities and challenges of Web 2.0 for vaccination decisions. *Vaccine*. 2012; 30(25):3727–3733. doi: 10.1016/j.vaccine.2012.02.025.
3. Larson HJ, Cooper LZ, Eskola J, Katz SL, Ratzan S. Addressing the vaccine confidence gap. *Lancet*. 2011; 378(9790):526–535. doi:10.1016/S0140-6736(11)60678-8.
4. Brown K., Fraser G, Ramsay M, Shanley R, Cowley N, Van Wijgerden J, Sevdalis N. Attitudinal and demographic predictors of measles-mumps-rubella vaccine (MMR) uptake during the UK catch-up campaign 2008-09: cross-sectional survey. *PLoS ONE*. 2011; 6(5):e19381. doi:https://doi.org/10.1371/journal.pone.0019381.
5. Anderberg, D., Chevalier, A., & Wadsworth, J. (2011). Anatomy of a health scare: education, income and the MMR controversy in the UK. *Journal of Health Economics*, 30(3), 515-530.

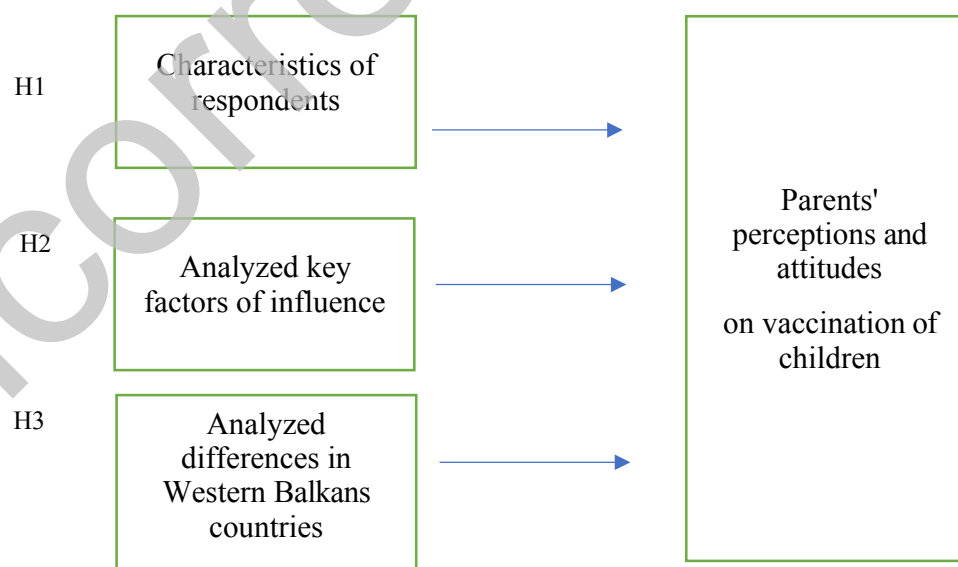


FIG. 1. Conceptual model of research