

Communication in Crisis Situations in the Process of Immunization

Jelena Ravlija¹ and Ivan Vasilj²

¹ Public Health Institute of Federation of B&H, Mostar, Bosnia and Herzegovina

² University of Mostar, Faculty of Medicine, Mostar, Bosnia and Herzegovina

ABSTRACT

Immunization is one of the most effective medical interventions in the prevention of the disease and represents the easiest and most cost-effective investment in health. The strategy of controlling contagious diseases that can be prevented through immunization has a long tradition in B&H. Mandatory immunizations are administered against ten diseases. Although the development of new technologies, the efforts of the pharmaceutical industry, the development of new vaccines provides better vaccines in terms of greater safety and effectiveness it should be pointed out that no vaccine is »absolutely effective and safe«, and it will not achieve the immune response in 100% vaccinated, also there are possible side effects and unexpected reactions that could occur. Vaccination is often a media issue because previously unnoticed local, isolated events-side effects and complications of vaccination are now accompanied by media attention as there are now numerous and fast communication channels (internet, e-mail, TV, etc.) and media evolved from being less »controlled« to more »commercial«. Doubt in benefit of vaccination is growing even among health professionals who are expected to provide up-to-date, understandable information, and issue information about immunization benefits and potential risks. It is therefore important for health professionals to be well informed, to be a good source of authoritative, scientific and reasonable advice, and to speak openly about the benefits and risks of vaccination so that consumers fully understand both possible outcomes of vaccination. This takes communication skills, particularly in crisis situations connected with vaccination. Health professionals are thus faced with a changing attitude toward importance of immunization in the social climate where risk is less tolerated than ever before.

Key words: immunization, health professional, parents, media, crisis communication

Introduction

Immunization is one of the most effective medical interventions in prevention of disease and represents the easiest and most cost-effective investment in health¹. The strategy of controlling contagious diseases that can be prevented through immunization has a long tradition in Bosnia and Herzegovina (B&H). Mandatory immunizations are administered against the following diseases: tetanus since 1946, tuberculosis and diphtheria since 1948, whooping cough and polio since 1961, measles since 1971, and mumps and rubella since 1980. In 2001 a two-dose schedule of the measles, mumps, rubella (MMR) vaccine was implemented in whole Federation of B&H (one of the two governing entities in B&H), with the first dose given at the age of 12 months and the second dose at the age of seven years and no later than 14 years. Use of a two-dose schedule of MMR was discontin-

ued, and several outbreaks in post-war period (morbili, rubeolla) revealed the gaps in the immunization programme during the war in B&H (1992–1995). Hep B vaccination at the age of 7 was introduced in 1999, followed by introduction of neonatal Hep B vaccine in May 2004. Hib vaccine was brought-in in 2002. High coverage of immunization has, together with high quality vaccines, resulted in eradication of polio (last case was registered in 1974) and diphtheria (last case in 1980) (Figures 1 and 2). Neonatal tetanus has not been registered in the last 30 years.

In the pre-immunization era, vaccine-preventable diseases such as measles and pertussis were so prevalent that the risks and benefits of disease versus vaccination were easy to recognize³.

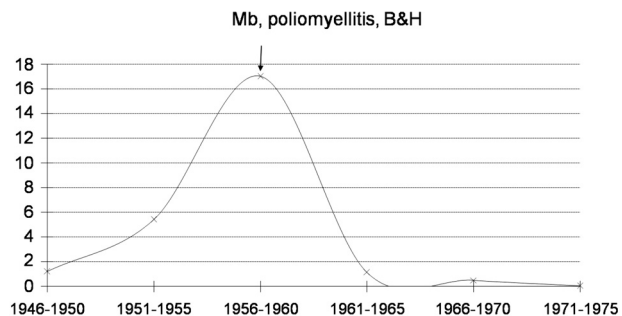


Fig. 1. Vaccination against poliomyellitis was introduced in B&H in 1961, resulting in a decline of rate of disease. Last case of poliomyelitis in B&H was registered in 1974.

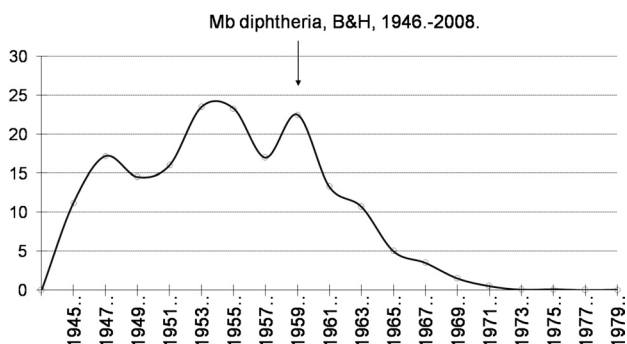


Fig. 2. Vaccination against diphtheria was introduced in compulsory vaccination programme in B&H in 1948. Last case of diphtheria was registered in 1980. In the pre-immunization era, vaccine-preventable diseases such as diphtheria and polio were so prevalent that the risks and benefits of disease versus vaccination were readily evident.

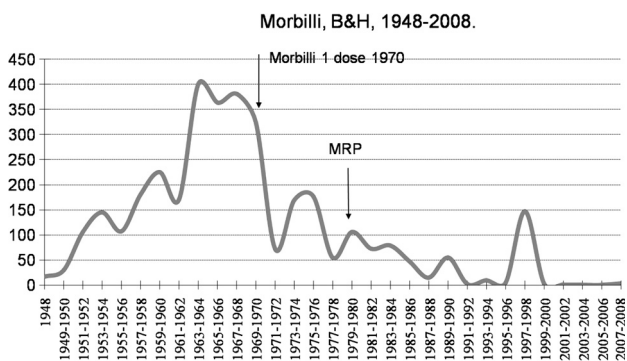


Fig. 3. Vaccination against morbilli was introduced in 1970 in B&H, with a combined morbillia, mumps and rubella vaccine introduced in 1980. Use of a two-dose schedule of MMR was discontinued, and several outbreaks in post-war period (morbilli, rubeolla) revealed gaps in the immunisation programme during the war in BiH (1992–1995). Last sizable epidemic of morbilli in FB&H was registered between 1997–98.

Before the war in 1990, coverage with MMR vaccine was 93.6% in B&H resulting in low incidence of morbilli and Rubella cases since 1990 (Figures 4 and 5), but vaccine procurement and implementation of the immunization programme were difficult during the war. The age

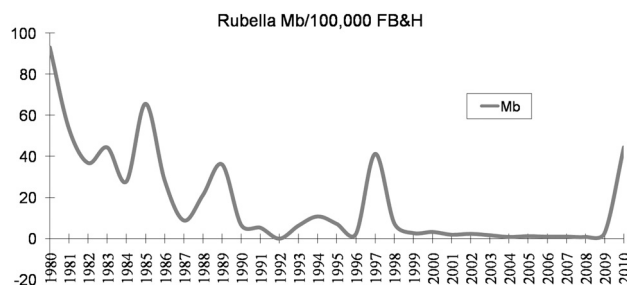


Fig. 4. Following introduction of rubella vaccination programme in Bosnia and Herzegovina, the rate of periodic outbreaks was reduced. Last sizable epidemic was registered in 2010–11 as a result of a disease outbreak among non-vaccinated adolescents (war generation born between 1992–1995).

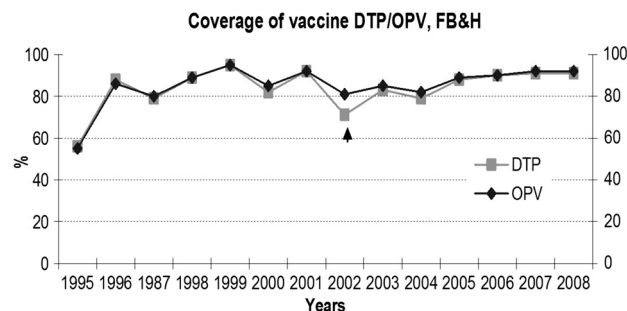


Fig. 5. During the post-war period the immunization program has been implemented without major interruptions until June 2002, and a case of encephalitis following the immunization with the vaccine. The anti-immunization campaign in the media continued for a prolonged period, and resulted in a significant disturbance of immunization services operations in FB&H. This event has significantly contributed to a drop in the rate of vaccinated children.

groups primarily affected in the recent outbreak between 25 December 2009 and 30 May 2010 with 2,014 clinically diagnosed cases of rubella in Federation of B&H were born during the war and most of them were not even vaccinated with the first dose of MMR⁶.

During the post-war period the immunization program has been implemented without major interruptions until June 2002, when media in FB&H initiated a series of articles questioning the use of UNICEF vaccines, particularly questioning the quality of the EUVAX vaccine produced in Korea, followed by concerns about the unusual packaging of a DTP vaccine from CSL, Australia, and a case of encephalitis following the immunization with the vaccine. Although it was found that the case of encephalitis was coincidental or at least not linked to insufficient quality of the CSL vaccine, the anti-immunization campaign in the media continued for a prolonged period, and resulted in a significant disturbance of immunization services operations in FB&H. This event has significantly contributed to a drop in the rate of vaccinated children (Figure 5).

This pressure caused doubts even among physicians who were carrying out immunization and also among

parents. We believed that the increasing lack of trust in immunization among parents was to a great extent a responsibility of the pediatricians². The reason is a lack of communication between pediatricians and the parents. This was one of the main reasons for the Public Health Institute of FB&H to organize training on public relations in vaccination crisis situations for Cantonal and regional coordinators, which resulted in a production of a Crisis communication guide in co-operation with UNICEF^{4,6}. As immunization programs successfully reduced the incidence of vaccine-preventable diseases, an increasing proportion of health care providers and parents have little or no personal experience with vaccine-preventable diseases. Thus, vaccine preventable diseases often are not perceived as a real threat by parents⁷.

The Role of Communication in the Acceptance and Implementation of Immunization

Vaccination always raised questions about the safety and effectiveness among population. Despite proven effectiveness and safety of vaccination, more often immunization is subject to reserve and hesitance^{8,9}. To this contributes the fact that threats to health are less visible (as a result of the success of immunization), and the question arises whether we should continue to be vaccinated. As in the rest of the world, B&H has individuals and groups opponent to immunization called »anti vaccination lobby« demonstrating loudly their opposition to vaccination, receiving media coverage with their often sensational stories. Anti-vaccination activities by one such group intensified during 2008, with public claims accusing UNICEF and entity public health institutes of »poisoning children with mercury« through vaccines used in 2002.

Vaccination is often a media issue because local, isolated events-side effects and previously unnoticed complications of vaccination are now accompanied by the media (sometimes internationally) as a result of numerous and fast communication channels (internet, e-mail, TV, etc), the less »controlled« and more »commercial media«^{10,11}.

Media can have a positive role in vaccination when consumers receive correct and objective information as a positive, optimistic message. However, publishing information on potential complications of vaccination is much more complex and delicate because it is difficult to understand and correctly present the health importance of such an event individually and generally in regard to the total number of people vaccinated. The media must be aware of the potential impact of the message they are conveying.

Arguments against immunization are generally caused by lack of support for immunization, alternative views on health and healthcare and unpleasant experiences, causing emotional concerns which are usually difficult to answer.

Media are looking for topics that attract audience, and questions about the safety and effectiveness of a vaccine are subjects that have a guaranteed readership. This quest for attractive stories also reflects the tendency of our population to dramatize. Anti campaigns, provoked by some accidental complications of vaccination, lead us almost to conspiracy theories. Heavy terms are usually used in such coverage: contaminated vaccines, side effects, disabled children...all used mainly as a result of insufficient communication.

Doubt in benefit of vaccination is growing even among health professionals who are expected to provide up-to-date, understandable information, and thereby give information about immunization benefits and potential risks. It is therefore important for health professionals to be well informed, to be a good source of authoritative, scientific and reasonable advice, to speak openly about the benefits and risks of vaccination so that consumers fully understand both possible outcomes of vaccination. In crisis vaccination particularly, it takes great communication skills to meet these expectations¹².

Effective risk communication involves understanding what people need to know, what is actually known and what their perception is. Many, for example, did not consider immunization communication response strategies until they were faced with a media story that prompted questions about immunizations.

A minor cannot be vaccinated without proper advice to parents about importance, as well as possible side effects of the vaccine and steps to be taken if such occur. Parents should be helped to feel comfortable voicing any concerns or questions they may have about vaccination. Health professionals should be prepared to listen and respond, providing factual information in an understandable language. In cases of non-compulsory vaccination, vaccine consumers must not be vaccinated without their informed consent. They have a right to know, and such a right has resulted in a growing number of demands for access to information, where physicians have an obligation to provide this guidance, strengthening confidence in the immunization process as an effective measure in prevention of disease. Compulsory vaccination does not require patient's consent, but is equally a process where patient must be fully informed about all possible outcomes¹³.

However, neither are scientific presentations controversy-free, with »dilemmas« arising from changes in scientific opinions, technological developments, changes in the epidemiology of the disease, etc¹⁴. For example, even if vaccine against seasonal flu has been in use for over 60 years, expectations are that the vaccine against the new A (H1N1) flu has a similar safety profile. Nonetheless, sporadic confusing information, differing guidelines and standards by different experts can still be found. Continuous monitoring of H1N1 vaccine implementation around the world doesn't seem enough to reassure the effectiveness as well as risks of this vaccine on the public already made oversensitive by the media coverage.

Communication is a process of transfer and reception of information about a particular topic. It is a process – not a product, and is not fulfilled simply by production of brochures and posters. It plays an important role in achieving the largest possible population coverage of the vaccination process. Communication activities alone cannot increase the coverage but are complementary to the already-determined aspects of the vaccination process such as vaccine availability, expenses, storage, handling, etc.

Communication activities include advocacy for immunization as a priority for policy makers, mobilizing communities to participate in immunization activities and educate users about the importance of immunization.

In case of crisis situations in immunization, the most important actors and target groups for relevant health messages are:

1. Parents – with their justifiable reactions, accusations, dissemination of information and quest for protection;
2. Media, and by means of media coverage, the general population (tending to dramatize the data about the risk of vaccination, to give inaccurate or partial information, false claims, commissioned articles, etc);
3. Health professionals (currently losing confidence in the quality of vaccines and their own skill, their advice can be vague, providing insufficient information, etc).

Public health institutions and their experts play a significant role in creation and dissemination of messages by means of right communication channels, which is especially important for raising population awareness about the benefits and possible side-effects of immunization, for neutralization of delusions, lack of knowledge, rumors, worry – and everything else that prevents parents from undertaking immunization¹⁵.

Key Concepts in Vaccination-Crisis Communication:

1. Communicate when the health risk is uncertain (e.g. doubt in the vaccine, complications of vaccination) public needs information on what is known, what is not known, rationale and adequate presentation of decisions that will help them protect their health and health of others;
2. Be prepared for the sudden, intense, and constant demand for informing the public, health professionals,

decision makers and the media, as generated by the crisis;

3. Ensure timely and transparent dissemination of updated, scientifically-based information about the problem and response contributes to public confidence;
4. Coordinate messages and the flow of information (at administrative level) – with the aim of avoiding confusion which could decrease public confidence and increase fear;
5. Provide technically correct information, complete enough to support measures and official activities, without creating a misconception of »patronage of the public«;
6. Aim to provide information that minimizes speculation, avoiding exaggeration in the interpretation.

Health professionals are currently faced with a changing attitude towards importance of immunization in the social climate where risk is less tolerated than ever before¹⁶. It is therefore important to have an effective communication strategy that focuses on:

- correcting misconceptions, ignorance, rumors and worries that prevent the population from accepting immunization;
- raising awareness about the benefits of immunization of the population – immunization not only protects children – it protects the community. For example, if we let the rubella virus spread around by not immunizing children, they will acquire the virus and recover fast. One may ask: »Why should I immunize my child, if rubella is such a mild disease?«. Although it is generally mild for children, it can be transmitted to pregnant women. Due to the risk that accompanies congenital rubella infection during the first trimester of pregnancy, when complications may lead to miscarriage, stillbirth, or infants with birth defects, rubella is of high public health importance.

It is important to inform the population, to build the trust between public health sector and the media, strengthening the dialogue between the two and the general public, especially focusing on immunisation¹⁷. This helps restore public confidence in immunization and highlight the importance of filling in immunization gaps.

REFERENCES

1. INTERNATIONAL NOTE, *Can Commun Dis Rep*, 30 (2004) 66. — 2. CLEMENTS CJ, *Vaccine*, 22 (2004) 1854. DOI: 10.1016/j.vaccine.2004.01.008. — 3. GAY NJ, *J Infect Dis*, 189 Suppl 1 (2004) 27. DOI: 10.1086/381592. — 4. KAP, Istraživanje među roditeljima i zdravstvenim djelatnicima o imunizaciji u FBiH, (NICEF/ZZJZ, Sarajevo, 2003). — 5. UNICEF, Federalni zavod za javno zdravstvo, Institut za zaštitu zdravlja RS (Protokol o javnom zdravlju djece, Sarajevo, 2003). — 6. Bulletin on infectious diseases in Federation of Bosnia & Herzegovina, 2009 (Federal PHI, Sarajevo/Mostar, 2010). — 7. SALMON DA, MOULTON LH, OMER SB, DEHART PM, STOKLEY S, HALSEY NA, *Arch Pediatr Adolesc Med*, 159 (2005) 470. — 8. OFFIT PA, GERBER MA, HACKETT CJ, MARCUSE EK, GELLIN BG, *Pediatrics*, 109 (2002) 124. DOI: 10.1542/peds.109.1.124. — 9. HILTON S, PETTICREW M, HUNT K, *Vaccine*, 24 (2006) 4321. — 10. GELLIN BG, MAIBACH EW, MARCUSE EK, *Pediatrics*, 106 (2000) 1097. DOI: 10.1542/peds.106.5.1097. — 11. GUST DA, DARLING N, KENNEDY A, SCHWARTZ B, *Pediatrics*, 122 (2008) 718. DOI: 10.1542/

peds.2007-0538. — 12. GUST DA, DARLING N, KENNEDY A, SCHWARTZ B, Parents With Doubts About Vaccines: Which Vaccines and Reasons Why, Accessed: 04.12.10, Available from: URL: <http://pediatrics.aappublications.org/cgi/content/abstract/122/4/718>. DOI: 10.1542/peds.2007-0538. — 13. RAVLIJA J, *Medicina i mediji*, (2009) 116. — 14. LEVI BH, *Pediatrics*, 120 (2007) 18. DOI: 10.1542/peds.2006-2627. — 15. World Health Organization (WHO). Department of Immunization, Vaccines and Biologicals, Manual for the laboratory diagnosis of measles and rubella virus infection, Second edition, WHO, (Geneva, 2007). Accessed: 4.12.10. Available from: URL: http://www.who.int/immunization_monitoring/LabManualFinal.pdf. — 16. GUST DA, KENNEDY A, SHUI I, SMITH PJ, NOWAK G, PICKERING LK, *Am J Prev Med*, 29 (2005) 105. — 17. COOPER LZ, LARSON HJ, KATZ SL, *Pediatrics*, 122 (2008) 149. DOI: 10.1542/peds.2008-0987. — 18. Pravilnik o načinu provođenja obvezne imunizacije, imunopofilakse i kemoprofilakse protiv zaraznih bolesti te o osobama koje se podvrgavaju toj obvezi. (Sl. novine FBiH, br. 22/2007, 19/08, 6/10).

J. Ravlija

*Public Health Institute of Federation of Bosnia and Herzegovina, Department of Epidemiology, Vukovarska 46,
88000 Mostar, Bosnia and Herzegovina
e-mail: jravlija@zzzfbih.ba*

KOMUNIKACIJA U KRIZNIM SITUACIJAMA TIJEKOM PROCESA IMUNIZACIJE

S A Ž E T A K

Imunizacija je jedna od najučinkovitijih medicinskih intervencija u prevenciji bolesti i predstavlja najlakši i najisplativiji način ulaganja u zdravlje. Strategija kontrole zaraznih bolesti koje se mogu spriječiti cijepljenjem ima dugu tradiciju u BiH. Obvezno cijepljenje u BiH se provodi protiv deset bolesti. Iako razvoj novih tehnologija, napori u farmaceutskoj industriji, razvoj novih cjepiva pruža bolja cjepiva u smislu veće sigurnosti i učinkovitosti, treba naglasiti da ne postoji cjepivo koje je »apsolutno učinkovito i sigurno«, tj. neće se postići imunološki odgovor u 100% cijepljenih, također moguće su nuspojave i neočekivane reakcije. Cijepljenje je česta tema osobito antivakcinacionih pokreta, jer ranije neuočene, lokalne, izolirane događaje-nuspojave i komplikacije cijepljenja danas su često popraćeni medijskom pozornošću, zahvaljujući danas brojnim i brzim komunikacijskim kanalima (internet, e-mail, TV, itd.) S druge strane, i mediji su »evoluirali«, manje su »kontrolirani« više »komercijalni«. Sumnja u korist cijepljenja raste čak i među zdravstvenim djelatnicima od kojih se očekuje da će pružiti ažurirane, razumljive informacije, roditeljima pružiti informacije o prednostima cijepljenja i potencijalnim rizicima. Stoga je važno za zdravstvene djelatnike da budu dobro informirani, da budu dobar izvor autoritativnih, znanstveno utemeljenih savjeta, da otvoreno govore o prednostima i rizicima cijepljenja. Za to su im potrebne komunikacijske vještine, posebno u kriznim situacijama povezanim s cijepljenjem. Zdravstveni stručnjaci su tada suočeni s promjenom stava prema važnosti imunizacije u društvenoj klimi gdje će se rizik manje tolerirati nego prije.