Health communication and vaccine hesitancy

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**ABSTRACT**

Health communication is an evolving field that has shifted from an emphasis on health education towards behaviour and social change. The evidence that communication can help people adopt positive health behaviours and create demand for preventive and curative services is growing. Much of the growth in this field was stimulated by the AIDS epidemic starting in 1985 when there was no antiretroviral treatment and the only tool for prevention was social and behaviour change. Lessons from communication experiences for improving child survival \cite{[2]} and for encouraging family planning \cite{[3]} underpinned these early HIV prevention communication strategies. Given this breadth, not surprisingly, definitions of health communication are neither simple nor brief. In 2013, Schiavo defined health communication as “A multifaceted and multidisciplinary field of research, theory, and practice concerned with reaching different populations and groups to exchange health-related information, ideas, and methods in order to influence, engage, empower, and support individuals, communities, health-care professionals, patients, policymakers, organizations, special groups, and the public so that they will champion, introduce, adopt, or sustain a health or social behaviour, practice, or policy that will ultimately improve individual, community, and public health outcomes” \cite{[4]}. There is less information in the literature about communication interventions for promotion of vaccination, although community dialogues and mass media have received some attention \cite{[1,3,5–9]}.

The Strategic Advisory Group of Experts on Immunization (SAGE) Working Group on Vaccine Hesitancy (WG) \cite{[10]} considered whether poor communication was a determinant of vaccine hesitancy and concluded that communication was a tool to address vaccine hesitancy, rather than a determinant. The WG also noted that poor communication can undermine vaccine acceptance in any setting. For example, in 1999, the rationale for the decision to minimize the use of thimerosal as a preservative in some vaccines in the USA was poorly communicated. As a consequence, public confidence in vaccines and the vaccine delivery system decreased, leading to increased vaccine hesitancy and refusal. In middle and low income countries, sparse communication resources limit the capacity to counter negative information about vaccines and achieve community support for vaccination programmes. For example, the Independent Monitoring Board on polio eradication noted deep concern about “the Global Programme’s weak grip on the communications and social mobilization that could not just neutralize communities’ negativity, but generate more genuine demand.”
Within the Programme, communication is the poor cousin of vaccine delivery, undeservedly receiving far less focus. Communications expertise is sparse throughout and needs to be strengthened” [11]. Thus, regardless of the setting, poor communication to promote vaccination needs to be addressed generally, in addition to developing quality targeted communication to specifically address hesitancy and improve vaccine uptake. The WG also noted that community engagement and social mobilization have an important role in encouraging and fostering trust in vaccines and vaccination and that communication is an essential tool in accomplishing this. Where and who the messages come from is significant when lack of trust is a driver of hesitancy.

In the past two decades, a number of lessons learnt about effective health communication from other fields, as well as a few from immunization, have highlighted cautionary points that need to be considered as communication plans concerning vaccination and vaccine hesitancy are formulated. These points are elaborated below.

Firstly, it is necessary to be proactive. A communication strategy should be integrated into the planning of any immunization programme from its inception. Last minute communication planning compromises the quality of the communication, the immunization intervention and its impact. Lack of communication at the outset can lead to serious problems with implementation of the programme, and leaves open the space for communication by people and organizations with vested anti-vaccine interests or religious convictions.

The need for a methodical and proactive communication strategy to respond to misinformation and anti-immunization activities was recognized in the European region [12].

Secondly, communication is a two-way process. It is in equal measure a process of listening and telling. Underlining the perspectives of the people for whom immunization services are intended, and their engagement with the issue, is as important as the information that experts want to communicate. Formative research is therefore an essential component of communication planning. This creates opportunities to engage people in discussion and debate and provides opportunities for listening and learning. Formative research can also involve consulting existing epidemiological and social data about the specific population being targeted. Mobilizing populations through their religious and community leaders has proven to be an effective communication tool to promote polio eradication efforts in endemic countries [11].

Thirdly, knowledge is important but is not sufficient to bring about changes in health behaviours or to ensure their adoption [13,14]. Different change models have been developed and validated, and may be appropriate in different contexts [15,16]. While the merits of each model can be debated, the importance of underpinning a communication strategy on one or a combination of validated models cannot be overestimated. Communication is more effective when it is based on theory.

Fourthly, many communication tools are available. They include mass electronic media, digital media, print media, social mobilization, mobile technology, and service-based communication. These tools can be selected and used creatively together to engage target groups in dialogue. The appropriate mix of mediums and tools should be determined based on a thorough analysis of media patterns. All tools need to be used thoughtfully, monitored for their impact, constantly honed and refined, and discarded if they are not achieving their objectives. The use of social and other new media needs to be embarked upon with care and monitored for impact in view of the complexities of these media, as well as those of vaccine hesitancy. The role social media plays in individual and community vaccine decision-making is still not fully understood. The content of social media needs to be better monitored with respect to attitudes to vaccines and the influence of online social networks, both for adults and children and within different social networks. Mass communication campaigns – both online and offline – may be more effective in building support for vaccination programmes or maintaining revaccination social norms. They may also prove counterproductive with subgroups which are ardently opposed to vaccination [7]. For any communication approach to be successful, it is critical that it be grounded not only in theory, but also in social data that informs accurate targeting of subgroups.

A concern about communication on vaccine hesitancy raised by some in the immunization community is that public discussion of hesitancy may, by drawing attention to it, “legitimize” it through familiarity so that it becomes a self-fulfilling prophecy, thus aggravating the situation. In addressing this, the WG stressed the importance of reinforcing public perception of immunization as a social norm. They also reviewed data from UNICEF and the Global Polio Eradication Initiative on community and individual concerns raised about polio immunization in Nigeria and India. Noteworthy findings were that by 2014, only 1.2% of unvaccinated children in Nigeria were not vaccinated because of refusal, and the refusal rates were highest where insecurity and social strife were highest. Many of the unvaccinated children had been missed, i.e. not at home when called, rather than having refused the vaccine (although in some settings this was interpreted as a “silent refusal”). When organized resistance to polio immunization was present, it was typically correlated with political opposition to the government or an outside group seen to be supporting immunization, and the resistance usually had a dynamic leader at the centre of the movement. Grievances were often linked to lack of other services and amenities (i.e. immunization provided a bargaining chip to leverage access to other services or demands for political actions of government or international players such as “stopping the drones”). Addressing vaccine hesitancy, especially through building the trust of the local leaders and community communication did lead to increases in polio vaccine acceptance in communities and reduce vaccine hesitancy. Thus, the evidence from the Global Polio Eradication Initiative does not support the hypothesis that discussing/addressing hesitancy makes the situation worse.

In conclusion, there is evidence that communication can be an effective tool, if utilized in a planned and integrated strategy, to make a significant difference to the behaviours of individuals and populations on a number of health issues including acceptance of vaccination. Despite the complexity of vaccine hesitancy and the broad range of its determinants, a carefully devised communication strategy should be an integral component of any immunization programme, addressing the specific factors that influence vaccine uptake in the targeted population. The incorporation and implementation of a well thought-through immunization communication plan should be a regular – and inextricable – part of good immunization programme practice. Given their vast experience in the field of polio and expertise in civil society organization, in communications and in behavioural change, UNICEF is encouraged to continue its work with WHO and member states to ensure competencies in the field of vaccine hesitancy worldwide. Communication strategies can and should be harnessed for vaccination, as a means of countering vaccine hesitancy and promoting optimal vaccine uptake.

Conflict of interest statements

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None of the other authors had any potential conflict of interest.

Some of the authors are World Health Organization staff members. The opinions expressed in this article are those of the authors and do not necessarily represent the decisions, official policy or opinions of the World Health Organization.

Appendix. SAGE Working Group on Vaccine Hesitancy

SAGE Working Group on Vaccine Hesitancy: Juhani Eskola, National Institute for Health and Welfare, Finland (Chair of Working Group since April 2014); Xiaofeng Liang, Chinese Center for Disease Control, China (Member of SAGE until 2014, Chair of Working Group from March 2012 to April 2014); Mohuya Chaudhuri, Independent Journalist and Documentary Filmmaker, India; Eve Dubé, Institut National de Santé Publique du Québec, Canada; Bruce Gellin, Department of Health and Human Services, USA; Susan Goldstein, Soul City: Institute for Health and Development Communication, South Africa; Heidi Larson, London School of Hygiene and Tropical Medicine, UK; Noni MacDonald, Dalhousie University, Canada; Mahamane Laouali Manzo, Ministry of Health, Niger; Arthur Reingold, University of California at Berkeley, USA; Kinzang Tshering, Jigme Dorji Wangchuck National Referral Hospital, Bhutan; Yuqing Zhou, Chinese Center for Disease Control, China with the WHO/UNICEF Secretariat: Robb Butler, World Health Organization, Denmark; Philippe Duclos, World Health Organization, Switzerland; Sherine Guirguis, UNICEF, USA; Ben Hickler, UNICEF, USA; Melanie Schuster, World Health Organization, Switzerland.

References


