The role of publics in the introduction of new vaccines

Pauline Paterson1 and Heidi J Larson1,2,3*

1London School of Hygiene and Tropical Medicine, London, UK, 2Harvard Center for Population and Development Studies, Boston, MA, USA and 3Chatham House Centre on Global Health Security, London, UK

*Corresponding author. Infectious Disease Epidemiology Department, London School of Hygiene & Tropical Medicine, Keppel Street, London WC1E 7HT, UK. Tel: +44(0) 207 927 2858. E-mail: heidi.larson@lshtm.ac.uk

Keywords Vaccine, public engagement

KEY MESSAGES

- The ‘public’ in public engagement could be a variety of stakeholders.
- Engaging with the public builds trust and helps to identify concerns that need to be addressed.
- There is a need for more research on the impact of different public engagement strategies on vaccination programmes to improve their effectiveness.

The importance of listening to and engaging publics in the design and implementation of immunization policies and programmes has been well established (Waisbord 2004; Cooper et al. 2008; Obregon 2009; Larson et al. 2010; Larson et al. 2011). There are a number of examples of the costs (financial and social) of not involving publics early, the most acute being the boycott of polio vaccination in five states in Northern Nigeria in 2003 (Yahya 2007).

Several papers in this special issue highlight potential roles of publics in the introduction of new vaccines, mostly at the level of implementation, but some point to the importance of bringing the role of citizen voices earlier into the decision-making process—i.e. not just as players to implement decisions made by central authorities, but to be a part of decision-making processes (Wonodi et al. 2012).

The ‘public’ in public engagement could be a variety of stakeholders; such as individuals, parents, policy-makers (Maniel and Wang 2012), researchers and clinicians (Burchett et al. 2012), immunization programme managers (Brooks and Ba-Nguz 2012; Gordon et al. 2012), ‘global/regional bodies’ (Makinen et al. 2012), advocacy groups, or influential individuals (Makinen et al. 2012), such as religious leaders (Wonodi et al. 2012).

The social network analysis around new vaccine introduction in Nigeria recognized that ‘vaccine programmes can benefit from engaging religious leaders in discussions about the needs of their community and how best to meet them’ (Wonodi et al. 2012). The polio boycott in Northern Nigeria in 2003 highlighted the importance of religious leaders in influencing parents, first negatively and then positively towards the polio vaccine.

There are several different ways of engaging publics, from town hall meetings and focus groups to hotlines, consultations and social mobilization activities (Wonodi et al. 2012), and engaging with religious leaders. Effective public engagement strategies in the polio eradication effort in India contributed to the success, resulting in no polio transmission in over one year since January 2011 (GPEI 2011). Public engagement is not a communications campaign informing the public when to get their vaccines (which is also needed); it is about dialogue with stakeholders and about trust building (see Box 1).

During the introduction of a new vaccine, it is important to engage with the public early on, during the planning stages, in order to anticipate and to identify any potential concerns or issues as well as opportunities. Public engagement should also be carried out throughout the implementation of vaccination programmes to stay alert to any emerging concerns as well as to sustain the support of the public.

The ‘public’ are a broad population with a considerable amount of diversity. We need to understand this diversity and to listen to the views and perceptions of the different sections of the public. We also need to engage with the public as advocates and as implementers and to respond to any concerns as they arise.
Box 1 Engaging with publics: why, and what interactions to have

Why engage with publics?

- **Build trust** to ensure sustained support for immunization and build resilience for times of crisis
- **Learn about public concerns** that need to be addressed and taken into account in policy-making and programme planning
- **Learn about the strengths, skills and ‘agency’** that the public can bring to support immunization programmes

What kinds of interactions to have with the public?

- **Listening and dialogue** to keep immunization programmes attuned to public concerns early, to pre-empt breakdowns in public confidence
- **Engaging the public as advocates** for immunization and to support the implementation of vaccine programmes

We call for more research on the impact of public engagement on vaccination programmes. In order to carry out effective public engagement, it is important to understand contextual factors and to understand what is driving public questions and the specific concerns around vaccines and/or vaccination programmes.

At the London School of Hygiene and Tropical Medicine, we lead a team developing a surveillance system to detect and investigate public concerns about vaccines early in order to identify underlying issues and contextual factors that need to be addressed. This research has emerged following the evidence that public questioning and public concerns can and have led to vaccine refusals, interruptions or suspensions of vaccine programmes, and to consequent vaccine-preventable disease outbreaks.

Examples of when publics have recently challenged vaccines and policies include the suspension of the HPV vaccine demonstration projects in India in 2010 (Sinha 2010), the suspension of H1N1 vaccine in Finland in August 2010 (THL 2010), and the challenges to introducing Hib vaccine in India (Mudur 2010).

In India there was questioning around the introduction of the HPV vaccine, when cervical screening and more ‘needed’ less expensive vaccines were still not universally available (Larson et al. 2010). An HPV vaccine demonstration project in India was suspended in 2010 in response to recurrent and increasing demands from advocacy groups about a number of concerns (Larson et al. 2010; PATH 2010; Sinha 2010).

In another instance, as a reaction to public concerns in Finland about a possible associated link with narcolepsy, the National Institute for Health and Welfare recommended that vaccination with the H1N1 vaccine Pandemrix be discontinued in August 2010 until an explanation was found (THL 2010). Pandemrix was later re-introduced with the recommendation by the European Medicines Agency and the Committee for Medicinal Products for Human Use (CHMP) to restrict its use.

In India, a barrier to the introduction of the Hib vaccine was conflicting views on whether the disease burden in India merited the introduction of the Hib vaccine, especially in light of its cost, while other, more affordable and universally needed vaccines were not available (Mudur 2010).

The lessons that have been learnt around the importance of early public engagement and dialogue should be applied to the introduction of all new vaccines, as well as to sustain the acceptance of already available vaccines. For example, early public engagement and dialogue could arguably have assisted the polio eradication effort and possibly mitigated the vaccine boycott in Nigeria in 2003. Also, timely government response to public appeals for an open forum on the HPV vaccine project in India could potentially have avoided the public pressures that resulted in the government having to suspend the project.

Pneumococcal vaccine is being introduced in several countries, including Central African Republic, Benin, Cameroon and Ethiopia. Meningococcal vaccine is being introduced in Ghana, Benin, Senegal, and HPV vaccine in Rwanda, Macedonia and Tajikistan amongst other countries. With donor support, GAVI plans to introduce rotavirus vaccine in over 40 countries by 2015. These vaccines are being introduced at an accelerated pace. Although each of these vaccines can help in the fight against infectious diseases and save thousands of lives, without the genuine engagement of publics through all phases of introduction, their true benefits will never be fully realized.

**Funding**

H.J.L. and P.P. are funded by the Bill & Melinda Gates Foundation as principal investigator and research fellow for research on public confidence in immunization. The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of their employers. The funding organization had no role in the drafting or direction of this report.

**Conflict of interest**

None declared.

**References**

Brooks A, Ba-Nguz A. 2012. Country planning for health interventions under development: Lessons from the malaria vaccine decision-making framework and implications for other new interventions. Health Policy and Planning 27(Suppl. 2):ii50–ii61.

Burchett H, Mounier-Jack S, Griffiths UK et al. 2012. New vaccine adoption: qualitative study of national decision-making processes in seven low- and middle-income countries. Health Policy and Planning 27(Suppl. 2):ii5–ii16.

Cooper LZ, Larson HJ, Katz SL. 2008. Protecting public trust in immunization. Pediatrics 122: 149–53.

Global Polio Eradication Initiative (GPEI). 2011. Polio this week – As of 07 March 2012. Online at: http://www.polioeradication.org/Dataandmonitoring/Poliotisweek.aspx, accessed 12 March 2012.
Gordon SW, Jones A, Wecker J. 2012. Introducing multiple vaccines in low- and lower-middle-income countries: issues, opportunities, and challenges. *Health Policy and Planning* **27**(Suppl. 2):ii17–ii26.

Larson HJ, Brocard P, Garnett G. 2010. The India HPV-vaccine suspension. *The Lancet* **376**: 572–3.

Larson HJ, Cooper LZ, Eskola J, Katz SL, Ratzan S. 2011. Addressing the vaccine confidence gap. *The Lancet* **378**: 526–35.

Makinen M, Kaddar M, Molland V, Wilson L. 2012. New vaccine adoption in lower-middle income countries. *Health Policy and Planning* **27**(Suppl. 2):ii39–ii49.

Mantel C, Wang A. 2012. The privilege and responsibility of having choices: decision-making for new vaccines in developing countries. *Health Policy and Planning* **27**(Suppl. 2):ii1–ii4.

Mudur G. 2010. Antivaccine lobby resists introduction of Hib vaccine in India. *British Medical Journal* **340**: c3508.

Obregon R. 2009. Achieving polio eradication: a review of health communication evidence and lessons learned in India and Pakistan. *Bulletin of the World Health Organization* **87**: 624.

PATH. 2010. 27 April–last update. Update: PATH’s HPV vaccine project in India. [Homepage of PATH] Online at: http://www.path.org/news/an100422-hpv-india.php, accessed 39 April 2010.

Sinha K. 2010. 09 April–last update. Four deaths not due to flawed cervical cancer vaccine trial. [Homepage of The Times of India] Online at: http://timesofindia.indiatimes.com/india/Four-deaths-not-due-to-flawed-cervical-cancer-vaccine-trial/articleshow/5776065.cms, accessed 21 April 2010.

The Finnish National Institute for Health and Welfare (THL). 2010. 25 August–last update. National Institute for Health and Welfare recommends discontinuation of Pandemrix vaccinations. Online at: http://www.thl.fi/en_US/web/en/pressrelease?id=22930, accessed 27 May 2011.

Waisbord S. 2004. Assessment of Communication Programs in Support of Polio Eradication: Global Trends and case studies. Washington, DC: The Change Project, Academy for Educational Development/ The Manoff Group.

Wonodi CB, Privor-Drumm L, Aina M et al. 2012. Using social network analysis to examine policy decision-making on new vaccine introduction in Nigeria. *Health Policy and Planning* **27**(Suppl. 2):ii27–ii38.

Yahya M. 2007. Polio vaccines—’no thank you!’ barriers to polio eradication in Northern Nigeria. *African Affairs* **106**: 185.