Do European doctors support measles, mumps, rubella vaccination programmes enough?

P L Lopalco (Pierluigi.lopalco@ecdc.europa.eu)¹, M Sprenger¹

1. European Centre for Disease Prevention and Control, Stockholm, Sweden

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Eliminating measles and rubella is a goal that all European countries are committed to meet by 2015 [1]. However, the latest epidemiological trend in the European Union (EU) is unfortunately not reassuring in this respect. In 2011 alone, up to August, more than 28,000 cases were reported already. About one third of them required hospitalisation and in the first six months of the year, measles was responsible for eight deaths and 22 cases of acute encephalitis [2].

Sub-optimal immunisation levels prevented meeting the elimination goal in the World Health Organization European Region in 2010 and are still a cause for concern. Notwithstanding that measles, mumps, rubella (MMR) vaccination is accepted by the vast majority of European parents, there is still a relevant proportion of children that miss the opportunity of being protected with MMR. Even if this proportion is on average lower than 10% of the target population, it hinders reaching the elimination goal [3]. There are many reasons for sub-optimal vaccination uptake, but one of the main obstacles is the false perception of parents that believe MMR vaccination to be more dangerous than the disease itself.

The article by Delaporte et al. in this issue of *Eurosurveillance* adds new evidence to the need for extraordinary efforts that should be put in place also in those settings where vaccination coverage levels may look satisfactory [4]. Concerted, coordinated and politically supported actions are needed in such situations and healthcare workers should be among the main actors.

Paediatricians, family doctors and health visitors/nurses are the backbone of all national immunisation programmes in the EU. According to a recent survey carried out in the 27 EU countries, vaccinations are administered at the paediatrician's office in six, in local healthcare centres in nine, and in multiple settings in 12 countries [5]. Whether directly involved or not in implementing the programme, family doctors are considered by parents as primary and trustworthy

sources of information on childhood vaccination [6-8]. This finding is supported by a recent international poll showing that academics and experts are considered highly credible sources of information in many areas [9]. In the specific case of family doctors, the bond of trust with parents of young children is particularly strong. A systematic review carried out in 2010 by Brown et al. shows that parents are more likely to trust their general practitioner, health visitor or practice nurse than the government: this relationship was observed in all five studies on the topic and was statistically significant in three of these [10]. In fact, information by the government may be perceived as biased by some alleged conflict of interest.

Correct and coherent information of parents plays a key role in the decision making process for vaccinating or not vaccinating children. Consequently, doctors' knowledge and positive attitudes towards MMR vaccination are crucial to meet the elimination goal. Therefore, it is important that information by healthcare providers to parents is balanced and based on evidence. Results of a study by Hilton et al. demonstrated that doctors too resolute about the safety of MMR were questioned by parents about their motives and knowledge; conversely when healthcare providers sounded vague, some parents interpreted this as concern that MMR is unsafe [11]. Also a national survey conducted in Italy in 2003, showed that lack of appropriate information accounted for 22% of the missed or delayed MMR vaccinations [12].

A survey published in 2001 by the French Committee for Health Education among 2,000 general physicians showed that 56% were in favour of MMR vaccination, but vaccinated depending on the situation and did not follow the vaccination calendar systematically [13]. Much worse, 6% were not at all or not in favour of MMR vaccination. Only 41% were strongly in favour of MMR vaccination and vaccinated systematically following the vaccination calendar. Similar evidence has been collected for healthcare workers in other European countries [14-16]. In Germany, for example, a survey

carried out in 2008 among 549 midwives showed that around 25% of them objected to measles vaccination [17].

To reach the elimination goal, the hurdle of at least 95% coverage with two doses of MMR vaccine has to be overcome. Many EU countries are close to reaching the goal, but additional commitment has to be put in place and should involve all stakeholders. National and international public health bodies need to support the elimination programme; doctors and other frontline healthcare workers are in direct contact with parents and children and thus play a paramount role. Often parents of young children are either poorly informed or, confused by an overwhelming amount of information coming from different sources. Evidence from the literature shows that paediatricians and family doctors are in a good position to empower parents to take an informed decision about MMR vaccination for their children. The Council of the EU has recently encouraged the Member States to increase health professionals' awareness of the benefits of vaccines and strengthen their support for immunisation programmes [18]. Public health officers and policy makers should thus actively involve doctors in the elimination effort and call upon them to take an active stand to convince parents of the benefits of MMR vaccination.

References

1. World Health Organization (WHO). Resolution. Renewed commitment to elimination of measles and rubella and prevention of congenital rubella syndrome by 2010 and Sustained support for polio-free status in the WHO European Region. Moscow: WHO; 2010. Available from: http://www.euro.who.int/__data/assets/pdf_file/0016/122236/RC60_eRes12.pdf.
2. European Centre for Disease Prevention and Control (ECDC). European monthly measles monitoring (EMMO). August 2011. Stockholm: ECDC; 2011. Available from: http://ecdc.europa.eu/en/publications/Publications/1109_European_monthly_measles_monitoring_August_2011.pdf
3. World Health Organization (WHO). Centralized information system for infectious diseases (CISID). [Internet]. Available from: <http://data.euro.who.int/cisid/?TabID=260504>
4. Delaporte E, Jeannot E, Sudre P, Wyler Lazarevic CA, Richard JL, Chastonay P. Measles in Geneva between 2003 and 2010: persistence of measles outbreaks despite high immunisation coverage. *Euro Surveill*. 2011;16(39):pii=19980. Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19980>
5. van Esso D, del Torso S, Hadjipanais A, Biver A, Jaeger-Roman E, Wettergren B et al. Paediatric primary care in Europe: variation between countries. *Arch Dis Child*. 2010;95(10):791-5.
6. Mc Murray R, Cheater FM, Weighall A, Nelson C, Schweiger M, Mukherjee S. Managing controversy through consultation: a qualitative study of communication and trust around MMR vaccination decisions. *Br J Gen Pract*. 2004;54(504):520-5
7. Pareek M, Pattison HM. The two-dose measles, mumps, and rubella (MMR) immunisation schedule: factors affecting maternal intention to vaccinate. *British Journal of General Practice*, 2000;50(461):969-71
8. Heininger U. An internet-based survey on parental attitudes towards immunization. *Vaccine*. 2006;24(37-39):6351-5
9. Edelman. Edelman Trust Barometer survey, 2011. Available from: <http://www.edelman.com/trust/2011/uploads/Edelman%20Trust%20Barometer%20Global%20Deck.pdf>
10. Brown KF, Kroll BS, Hudson MJ, Ramsay M, Greene J, Long SJ, et al. Factors underlying parental decisions about combination childhood vaccinations. *Vaccine*. 2010;28(26): 4235-48
11. Hilton S, Petticrew M, Hunt K. Parents' champions vs. vested interests: Who do parents believe about MMR? A qualitative study. *BMC Public Health* 2007; 7:42
12. Ciofi degli Atti ML, Rota MC, Bella A, Salmaso S; ICONA Study Group. Do changes in policy affect vaccine coverage levels? Results of a national study to evaluate childhood vaccination coverage and reasons for missed vaccination in Italy. *Vaccine*. 2004 ;22(31-32) : 4351-57
13. Institut national de prévention et d'éducation pour la santé (INPES). Comité français d'éducation pour la santé. Vaccination rougeole, oreillons, rubéole. Des inégalités persistantes. Dossier de presse, septembre 2001. French. Available from: <http://www.inpes.sante.fr/70000/dp/01/dp010907.pdf>
14. Posfay-Barbe KM, Heininger U, Aebi C, Desgrandchamps D, Vaudaux B, Siegrist CA. How Do Physicians Immunize Their Own Children? Differences Among Pediatricians and Non pediatricians. *Pediatrics*. 2005;116(5):e623-33
15. Cotter S, Ryan F, Hegarty H, McCabe TJ, Keane E. Immunisation: the views of parents and health professionals in Ireland. *Euro Surveill*. 2003;8(6):pii=416. Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?>
16. Hak E, Schonbeck Y, De Melker H, Van Essen GA, Sanders EA. Negative attitude of highly educated parents and health care workers towards future vaccinations in the Dutch childhood vaccination program. *Vaccine*. 2005; 23(24) :3103-7.
17. Robert Koch Institut Epidemiologisches Bulletin. 2008;21: 164-9.. German Available from: http://www.rki.de/CLN_116/nn_199624/DE/Content/Infekt/EpidBull/Archiv/2008/21__08,templateId=raw,property=publicationFile.pdf/21_08.pdf
18. Council of the European Union. Council conclusions on Childhood immunisation: successes and challenges of European childhood immunisation and the way forward. Luxembourg 6 June 2011. Available from: http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/lsa/122391.pdf