

Measles still spreads in Europe: who is responsible for the failure to vaccinate?

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It is not a secret that the goal of eliminating measles and rubella in Europe will not be met by the targeted year 2010. Over the past 10-12 years, national and international public health authorities have conducted extraordinary efforts that have led to a dramatic reduction in reported measles cases in the World Health Organization (WHO) European Region from 200,000 in 1994, to almost 30,000 in 2003 and 7,411 in 2009 [1]. Nevertheless, measles is still spreading in Europe and there is no time for complacency.

The European Union (EU) countries are still experiencing the highest burden; according to WHO data, some of the lowest vaccination coverage against measles are found in Western Europe where, over the past two years, 96% of measles cases in the Region were reported [1]. According to the annual reports of the EUVAC.NET, a surveillance community network for vaccine preventable diseases, children still die from measles and its complications in the EU and many cases with severe complications are reported every year [2].

No sophisticated epidemiological methods are needed to figure out the reason for this: measles immunisation coverage has fallen below the recommended 95% (for first dose at sub-national level) in many western European countries and vaccination coverage levels for the second dose of measles-mumps-rubella (MMR) vaccine are even lower. Also, many children are not immunised in accordance with the national immunisation schedules but instead they are immunised late.

Consequently, large pockets of susceptible population have been accumulating in many EU countries. When such pockets are concentrated in the same geographical area or belong to the same population group, outbreaks occur earlier and easier. Why are these pockets increasing? While they consist of populations that share the common characteristic of being unimmunised, the reasons for this vary. They may include limited or difficult access to services for vulnerable or high-risk populations, cultural or religious beliefs, vaccine hesitancy due to vaccine safety concerns, and complacency whereby immunisation is considered a low priority with

no real perceived risk of vaccine preventable diseases. The latter is a result of low knowledge and awareness of the means of transmission and severity of the disease. For some, the perceived disadvantages, drawbacks and inconvenience associated with vaccination can overrule the benefits.

Measles is not only a vaccine-preventable disease; it is somehow a predictable disease. It is one of the most infectious diseases and outbreaks have to be expected when vaccine coverage levels in populations fall below 95% for a certain period. Thus it comes as no surprise that we are observing several outbreaks every year in many European geographical areas and that measles has become endemic again in some countries.

The tool and strategy for eliminating measles and rubella is there and works: MMR vaccination is safe, effective and extremely cost-saving. Nonetheless it seems that delivery of vaccination through existing healthcare systems do not achieve the expected coverage needed for elimination.

Three articles related to measles elimination efforts in Poland are presented in this issue: first, H Orlikova *et al.* describe an outbreak in a Roma community in Lubelskie province [3], secondly, the issue includes a review of the outbreaks reported in Poland in 2008-09 highlighting that the majority of these occurred in Roma communities, by J Rogalska *et al* [4]. Finally, P Stefanoff *et al.* [5] describe a study performed during a vaccination campaign in a Roma community, reporting the challenges faced in achieving high vaccination uptake within that community.

Actually, measles outbreaks have been often described in Roma communities. The large outbreak currently occurring in Bulgaria involves mainly Roma people [6]. This is similar to the outbreak in Romania, 2005-2006 [7]. However, emphasising the linkage between outbreaks and Roma populations suggests that measles is only of concern to the EU's marginalised and minority population groups. It is therefore important to note that (i) the overall number of Roma cases represents

a small proportion of the region-wide European burden; and (ii) outbreaks occurring in minority groups are easier to identify, describe and publicise. For the same reasons, during the past, outbreaks within other ethnic or religious communities have received considerable coverage in the scientific literature and mass media [8-10]; (iii) some of these communities are highly mobile which allows spread of the virus through vast areas of Europe.

Therefore, we should not only look for the presence of measles among the Roma population in Europe. As reported in the article by P Stefanoff *et al.*, the current health system does not identify and reach the entire population needing immunisation. As such, the responsibility for measles and rubella outbreaks in Europe, though it may be difficult to accept, lies with us, the public health authorities. With the success of immunisation programmes over the decades, we have forgotten how serious and costly measles and rubella disease can be. The benefit and risk analysis has shifted to focus on the vaccine and not the disease.

It is us, the health authorities, that either fail to put in place all the required infrastructure and effort to implement effective MMR vaccination campaigns, or do not pro-actively campaign to meet the needs of the region's un- and under-immunised children.

It is us, doctors and nurses, who are not fully convinced about the value of MMR vaccination; ignoring the fact that some of our young patients will suffer severe disease, complications, disability or even death because we did not vaccinate them.

It is us, parents of young children, who think we have control over our children's susceptibility to an infectious virus and expose our daughter or son to an unnecessary risk of a potentially severe or fatal disease.

Finally, it is us, vaccination experts that need to remain focussed on the measles and rubella elimination goal at a time when the introduction and promotion of new and underutilised vaccines, while extremely important contributions, compete for our attention. We must recognise that without maintaining the achievements made to date, and unless we remain vigilant against measles and rubella, diphtheria and poliomyelitis, the new vaccines we have so much hope for, will not achieve their potential.

While we will not meet the measles elimination goal in 2010, it does not mean that the goal is not worth striving for and it is feasible, as demonstrated by the experience in the Americas, where the last endemic measles case was reported in 2002.

The European Region needs to show renewed commitment to the goal of eliminating measles and do its best to reach it as soon as possible. For the sake of future generations, it is our duty to make this happen.

We must collectively note where we can improve our response, improve our decision-making, be more diligent in tackling the real issues that face the un- and underimmunised, and continue to attract financial resources to make sure that measles becomes a disease of the past.

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