Vaccines Europe Position Paper on Life-long Immunization

Background and Rationale

From a public health perspective, the success of large-scale immunization programs is unequivocal.\(^1\) Childhood vaccination is one of the greatest medical success stories of the 20th century and its benefits have been widely recognised and documented. However, vaccine-preventable diseases also have significant impacts on adult mortality, health and quality of life. Adult vaccination has been given less emphasis than other health priorities and its benefits to societies are not as well recognised. By 2050, the world’s population aged 60 years and older is expected to reach 2 billion, an increase from 900 million today.\(^2\) Increased longevity and lower birth rates are dramatically changing demography in Europe and around the world. With the ageing population, the public health impact of vaccine-preventable diseases and their complications in adults are likely to grow. A stronger focus on disease prevention could play an important role in adapting to population ageing. That involves a commitment to healthier diets, more physical activity, reduction of tobacco and harmful alcohol consumption, and increased adult vaccinations against diseases such as influenza, pneumococcal pneumonia, pertussis and shingles.

Current national vaccination recommendations focusing on childhood vaccines need to be expanded to ensure opportunities for other population groups, such as adults and particularly those ages 65 and older, who are at highest risk for many infections. Vaccinating these groups with available and future adult vaccines would allow them to stay healthy for longer periods of time and to remain active members of society. Not vaccinating these groups reduces the economic benefits of preventive medicine such as fewer and shorter hospital stays, less time off work, less dependency, and a lower burden of chronic illness.\(^3\)

Indeed, ageing is associated with a higher prevalence of non-communicable diseases such as diabetes, cardiovascular diseases and chronic obstructive pulmonary disease but also with more frequent and severe infections such as influenza\(^4\), pneumococcal diseases\(^5\), pertussis\(^6\), and shingles\(^7\) that may increase the severity of underlying pre-existing chronic diseases and lead to functional decline, loss of autonomy, disability or death. Lack of optimal prevention of these diseases also mean increased direct and indirect costs related to the treatment of those conditions. A recent report shows that total costs of primary and secondary diagnoses for community and academic hospitals in people aged 60+ in the Netherlands increased by 56%, from €1,074 million to €1,671 million from 2009 until 2014.\(^8\)
A review of National Immunisation Programmes (NIP) - immunization schedules, across EU countries illustrates the significant variability across EU Member States\(^9\) on their recommendations to adult and elderly vaccination. In countries where vaccination is recommended for adults and the elderly, the vaccination coverage rates are far lower than those for recommended pediatric vaccinations, mainly due to a risk-based instead of an age-based approach to vaccination\(^{10}\) and with an increase in vaccine hesitancy towards vaccination, which puts efficacy of vaccination programs at risk. A recent study on vaccine confidence 2016 concludes that confidence in vaccine safety is less positive, particularly in the European region that has seven of the ten least confidence countries.\(^{11}\)

The ESCMID Vaccine Study Group (EVASG), the European Geriatric Medicine Society (EUGMS) and the World Association for Infectious Diseases and Immunological Disorders (WAidid) conducted a systematic review of the literature regarding different categories of vaccines among various population of interest such as adults and the elderly. This review provides clinical practice guidelines on immunisation for adults in order to provide recommendations for decision makers and healthcare workers in Europe.\(^{12}\)

In this context, the need to extend the vision of vaccination from early life and childhood alone to the whole life span (i.e. adolescents, adults, and the elderly) becomes obvious and aligns with an increased role prevention should play in the current healthcare systems. In addition, increased adult vaccination coverage rates could have an impact on the fight against antimicrobial resistance.\(^{13}\)

The Council Conclusions on vaccinations as an effective tool in public health (December 2014) well highlight the common challenges EU Member States currently face affecting the successful implementation of existing immunisation programmes in Europe. The conclusions invite Member States to “actively offer appropriate vaccination to population groups considered to be at risk in terms of specific diseases and to consider immunization beyond infancy and early childhood by creating vaccination programmes with life-long approach”\(^{14}\)

**Time for Action**

Lack of proper implementation of adult and elderly vaccination in some countries (low coverage rates that do not allow one to perceive full benefits of vaccination) and significant variability across EU Member States towards adult and elderly vaccination, call for stakeholder action in order to unfold the full potential of life-long immunisation\(^{15}\):

- **Strengthen the European surveillance and epidemiological reporting system on infectious diseases [underestimated disease burden]**: Reporting of infectious diseases in Europe needs to be improved to ensure that valid data are available for public health decisions on time (speed up the process). Although, obtaining standardised data over the whole EU is relatively advanced for the administrative health outcomes, e.g. hospitalisation and mortality, it is less comprehensive for diseases that require consensus over case definition and consistency about confirming a case.
• Implement and harmonise immunisation registers to collect reliable coverage data to evaluate the impact of vaccination on infectious disease burden, e.g. on underlying chronic illnesses. Inadequate data collection of individual citizen's vaccinations also results in poor information collected by public health departments, who are unable to track the real life clinical effectiveness of immunization programmes.

• Increase awareness and education of healthcare professionals (HCPs) and the population on the benefits of life-long vaccination. EU and national authorities should establish education and training programs for physicians, other healthcare professionals and lay public to increase the understanding of the health outcomes of immunizations and their cost-effectiveness, to ensure that vaccination discussions becomes a routine part of doctor visits for all older adults, and especially those at-risk. This will also empower them to address individual vaccine hesitancy issues.

• Establish tracking systems for adults to enable follow-up and reminders on necessary vaccinations. During early stages of life there is an established system to track children’s record of immunisation history and maintain its accuracy. This system allows an easy follow up with parents via midwives, health visitors and GPs. However, at later stages of life, a tracking system is not in place. Therefore, this removes the ability for vaccine delivery services to proactively identify citizens eligible for immunisation.

• Improve access to vaccination: There is a need to facilitate access via enlarging the adults’ points of access to vaccination and expand to other HCPs (e.g. pharmacists). Member States should share best practices (e.g. private health insurance involvement, healthcare system benefit programs to optimise the availability of vaccination to the population).

• Drive a shift in mindset towards prevention through establishment of common preventive measures, e.g. linking adult vaccination schedules, wellness and healthy lifestyle.

Vaccines Europe Call

In spite of a sound public health and medical rationale, not all European countries have a life-long approach to vaccination. Prevention plans (including adult vaccination programmes) are a key contributor to sustainability of healthcare systems in time of demographic challenge in EU16

Vaccines Europe calls on public health authorities to set up a structured dialogue/platform bringing together all stakeholders with the objective of establishing a roadmap for putting at the top of national agendas a life-long vaccination approach in Europe, as proposed in the Council Conclusions.
References


