

Mobilizing Patient Groups to Change Vaccine Policy

Position Paper

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Introduction

Population ageing, the increased prevalence of noncommunicable diseases and respiratory infections such as influenza and pneumococcal pneumonia are characteristically a global phenomenon. The net effect without escalated attention and investment in vaccination uptake rates is a “perfect public health storm” that has the potential to imperil already burdened health care systems and social and economic growth.

Europe has aged faster than any other region in the world – with the highest proportion of older people in Italy and Germany.¹ There were an estimated 101 million adults aged 65 years and older in 2018 across the 28 European Union (EU) countries – equivalent to 19 percent of the population.² In the next 50 years, an increase in life expectancy and decrease in birth weight are expected to transform the shape of Europe’s population pyramid and also raise the median age. From 2010 to 2060, the population aged 65 years and older will almost double, rising from one older person for every four workers to one for every two.³

NCDs are among the leading public health challenges of the 21st century, and are responsible for 41 million deaths each year, globally.⁴ In Europe, diabetes, cardiovascular diseases, cancer, chronic respiratory diseases and mental disorders together represent ~86 percent of total deaths and 77 percent of the disease burden.⁵ This growing population has also greater vulnerability to infectious diseases and risk serious complications as a result of having influenza.⁶

With age, the incidence of chronic diseases increases, as does the occurrence of multimorbidity (the co-existence of multiple health conditions in an individual). According to an Italian study, 40 percent of adults between the age of 50 and 54 years have least one chronic disease, this proportion increases to 80 percent for adults over the age of 65 years.^{7,8}

Rapid population ageing, combined with the rise in chronic co-morbid conditions that require complex health management, drive an unprecedented demand for health and social care. Globally, lower respiratory infections (including influenza and pneumonia) resulted in more than 1.5 million deaths in adults 50 years or older in 2017 and accounted for 23 million years of life lost due to premature mortality. Infectious diseases (such as influenza, pneumonia, shingles, diphtheria, tetanus and hepatitis) increase the risk of hospitalization, disability and death among older people and are associated with a loss of functional ability and autonomy.

This paper aims to encourage delegates to think critically about important barriers to vaccination (prevention, access and equity), in the current European context, to set the scene for the mobilizing patient groups to change vaccine policy.

Ageing in the European Context

Ageing of the European population has a major health and economic impact on society. In the 50 years from 2010 to 2060 public health expenditure across the 27 European Union member states (EU 27) is expected to increase by 1.4-point percentage (p.p) from 7.1 percent to 8.5 percent GDP– an estimated €183 billion increase. While spending on long term care is predicted to rise by 1.8 p.p. GDP (€235 billion).⁹

A skewed distribution of burdens in association with labour is also expected with a shift in demographics. The working-age population (people aged between 15 and 64 years) will decrease significantly from 333 million in 2016 to 292 million in 2070¹⁰. Persons active in the labour force will face an increasing tax burden and higher social contributions. However, while the total supply of labour in the EU among those aged 20 to 64 years of age is expected to fall by 9.6% between 2016 and 2070, labour force participation rates are projected to rise from 77.5% in 2016 to 80.7% in 2070, particularly among women and older workers.¹¹

The societal and economic opportunities that arise from increased longevity largely depend upon maintaining and improving functional ability in older age. Additional years dominated by poor health and dependency on care have negative implications for older people and the entire society. Policy changes in prevention, access and reducing inequity can save the lives of older people and those with chronic conditions both of whom have weakened immunity against vaccine preventable diseases.

The connection between NCDs, Ageing and Vaccine Preventable Diseases (VPDs)

Older adults and those with NCDs are immunocompromised and susceptible to VPDs and the most serious complications. A progressive reduction in immune function with age and chronic low-grade inflammation or “inflammageing” are significant risk factors for an increase incidence and morbidity associated with VPDs.^{12,13}

In Europe, influenza is responsible for approximately 40,000 deaths each year, 90 percent of which occur in persons aged 65 years and older.¹⁴ In addition, there are non-fatal cases with complications leading to hospitalizations – an estimated 78 cases per 100,000 people every year – and permanent disability, particularly in patients with cardiovascular disease.¹⁵

Pneumococcal disease, another significant source of illness and death globally, is an important infectious disease associated with high morbidity, mortality and health costs for older adults. In 2015, data from the Global Burden of Disease study reported that lower respiratory tract infections, including pneumonia, were the third most common cause of death globally, exceeded only by ischemic heart disease and cerebrovascular disease.^{16,17} In Europe, community-acquired pneumonia (CAP) is a common cause for hospitalizations, with 73 cases per 100,000 people every year in older adults and can be fatal in about 12% of patients. Risk factors for pneumonia are older age, previously having pneumonia, and underlying diseases. The latter factor increases the risk of contracting pneumonia by 3 to 8 times and can often worsen the severity of the disease and status of the underlying disease.¹⁸

The status of Influenza Vaccination in Europe

On average, flu season in Europe lasts 13 weeks, beginning late fall and carrying through to early spring, with a peak in incidence occurring in mid-to-late winter. The 2017/18 influenza season was responsible for 152,000 deaths across Europe: an estimated mortality rate of 25 per 100,000 persons and 118 for adults 65 years and over.¹⁹ The indirect costs associated with influenza including loss of productivity due to reduced functional ability and long-term disability, is significant. In France, the costs associated with doctors’ fees, pharmaceuticals, and compensation for sick days for 2013/2014 season was €220 million. While in the case of large-scale public health events such as an influenza pandemic, the costs associated with loss in productivity from absenteeism, school closures and behavioural responses, can contribute to a decline of between 0.5-4.3 percent GDP.²⁰

Vaccination is a frontline public health action and one of the most successful interventions of modern times, preventing up to six million deaths worldwide every year;²¹ the WHO has rated it second only to clean water. Unfortunately, and despite clear evidence in support of a life course approach to vaccination, access, availability of vaccines and uptake rates are suboptimal in the older adult population with a heavy burden of preventable disease.

Many governments promote the value and importance of vaccination through national and local campaigns; however, so far these activities have failed to improve rates, and some countries have seen a decrease in vaccination. In a scan of 29 European countries, the 70 percent target for adult influenza coverage set by the European Union (EU) was met by only 4 countries during 2014/15 influenza season.²²

Some studies have identified modifiable barriers to vaccination in older adults, such as the value of adult

vaccination, the limited knowledge of existing immunization policies, and logistical issues related to vaccine delivery, including insufficient supply of age-specific vaccines, complex vaccination procedures, and a lack of funding for vaccines or vaccine visits.²³ In the case of vaccination against influenza, the most persistent barriers to effective coverage in adults in Europe is a limited awareness of the potentially serious consequences of the disease, vaccine hesitancy and in some countries out-of-pocket payments for vaccines.²⁴

Social and economic conditions also play a pervasive role in the health equity and opportunities of populations. The unequal distribution of power, income, goods, and services, and information and the resulting unfairness in the conditions of peoples' lives such as access to health care, education, conditions of work and leisure, are markers for health inequities.²⁵ Barriers to vaccination can create unequal access among populations and attenuate the social, health and economic inequalities experienced by vulnerable and marginalized groups.

The targeted use of vaccines across the life course can contribute to generations of healthy older people and level the health risks faced by populations with a greater burden for VPDs. However, a multi-stakeholder and multisectoral collaboration approach is needed to effectively address the barriers in equity, access and prevention for vaccinations.

The role of civil society has a role in improving uptake rates

Older adults and those with underlying chronic conditions can benefit immensely from targeted awareness and education strategies and stronger immunization policies that guarantee them access to safe and appropriate vaccines against VPDs.

Civil society (patient, professional and ageing organisations) are powerful agents of change because they represent millions of citizens, and health care professionals. Moreover, these organizations are recognized as valuable sources for patient-centred support and relied on by patients to provide evidence informed health content, in plain language and through user-friendly platforms that are easy navigate.

Unfortunately, many patient and ageing organizations and associations who are trusted voices to millions of people globally are generally limited in their knowledge about the critical importance of vaccinations in safeguarding the health of at-risk population and therefore ill-equipped to raise awareness and shape policies.

The Urgency: Impact of COVID on the conversation about vaccination

The current COVID-19 pandemic has given urgency to and highlights the need to help maintain and improve the health of those most vulnerable to infectious diseases – namely older people and those with underlying chronic diseases. According to World Health Organization (WHO) estimates that 95% of COVID-19 related deaths are in adults 60 years and 8 out of 10 deaths occur in people with at least one comorbidity, particularly in those with cardiovascular diseases/hypertension and diabetes²⁶

The pandemic also spotlights the catastrophic consequences of poorly sustained public health and social care systems. In addition to higher infection and mortality rates, many older people are subject to age discrimination in health care and triage decisions, isolation with limited access to essential goods and services, and greater exposure and poor treatment in care institutions.

The decisions made by governments in funding and resource allocation as well as in policy priorities following COVID-19 will impact health outcomes and opportunities for vulnerable populations to greater extent than others. Historically, austerity measures following an economic crisis have led to a decline in public health spending. Following the 2008 financial crises, OECD countries observed a greater reduction in spending for pharmaceuticals and prevention compared with frontline services such as inpatient and outpatient care.²⁷ Prevention is an essential component of an effective health

system. Prevention measures that target individuals and populations aim to enhance health status and level the health risks faced by different populations. A lack of government investment in prevention measures such as adult vaccination schedules can be directly related to older people, and those with chronic conditions being hospitalized, left with significantly less function and often dying at the hospital or following discharge because they are not vaccinated.²⁸

Currently, only a fraction of health spending is allocated to prevention activities and even less to vaccines. In a recent OECD report, public health spending accounted for 2.8 percent of all health spending. Of this, an estimated 9 percent was allocated to immunization.

Austerity policies following the COVID-19 pandemic will likely impact investment in prevention and promotion both now and in the future. As they stand, vaccination programs are not equitable. Older people and those with chronic conditions do not receive the same attention in the determination of vaccines schedules. Further, vaccination schedules and uptake rates of influenza and pneumococcal vaccines in the most at-risk populations are inadequate, and at times non-existent, which can impact an older person's health, wellbeing and ability to contribute to the social and economic capital of their family, community and nation.

Vaccinations against respiratory diseases are expected to have immediate and long-term benefits. Along with safeguarding populations against pneumonia and influenza, there is a return on investment and economic benefit for society in maintaining and improving function through avoiding disability, hospitalizations and death by increasing vaccination uptake rates.

Conclusion

Prevention is a key element of sustaining healthy populations and the recent pandemic has only amplified the need for stronger and more unified approach in safeguarding the health and well-being of at-risk populations.

As effective health communicators and powerful advocates, civil society have an important role to play in educating and mobilize at-risk populations of older adults and those with underlying diseases on the simple action of being vaccinated against diseases such as influenza and pneumonia that could save their lives and the lives of those around them.

Greater investment in immunization programs is expected to curtail infectious disease rates and mitigate the worst of the social, health and economic impacts associated with VPDs. "Mobilizing Patient Groups to Change Vaccine Policy," the expert meeting* aims to engage delegates around the following objectives:

1. Inform policy at the EU level and contribute to new and strengthened partnerships and broader coalition-building in accordance with objectives set out by the European Commission Joint Action on Vaccination;
2. Determine how best to position the policy issues and strategies for action of low uptake rates of vaccination within at-risk populations, in the current COVID-19 context; and
3. Capitalizing on lessons learned from COVID-19, identify what cost-neutral actions could be most easily undertaken by member associations to catalyze conversations and policy actions.

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