International Federation on Ageing

Vaccines 4 Life

Vaccination in France: Changing the Public Perception

Expert Meeting Report

9-10 December 2019
Lyon, France

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Acknowledgements

The International Federation on Ageing (IFA) wishes to convey their sincere gratitude to the diverse group of experts in the fields of geriatrics and immunology, as well as health care professionals and leaders of patient and advocacy organizations who came together at the expert meeting "Vaccination in France: Changing the Public Perception" in Lyon, France toward mobilizing knowledge to help influence and shape policy to improve uptake rates of adult vaccination.

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"Vaccination in France: Changing the Public Perception" was supported by an unrestricted educational grant from Pfizer Global

Executive Summary

Older adults typically suffer elevated morbidity from infectious diseases, leading to increased demand for healthcare resources and higher costs. Preventive medicine, including vaccination, can play an important role in maintaining and improving the health and autonomy of older adults.

In France, about 13.4 million individuals over the age of 65 years are considered at-risk – a figure that is expected to grow to 20 million by 2050. Despite recommended schedules and evidence on the protective effects, vaccination uptake rates are decreasing in France. Influenza vaccination rates have decreased from 60% in 2010 to 46% in 2017, and pneumonia vaccination remains at an unsatisfactory 20% coverage for adults.

Many national immunization programs, including those in France, are established within sound policy frameworks to encourage vaccination of infants and children. The value of vaccination in later life, however, is often underestimated by society and seemingly also by health care professionals which in part contributes to the serious decline in adult vaccination rates.

“Vaccination in France: Changing the Public Perception” provided a forum for knowledge exchange surrounding a life course approach to vaccination. A common understanding of barriers toward combating vaccine hesitancy, improving collaboration across sectors and disciplines and repositioning life course vaccination as a priority among health care professionals and the community is urgently needed.

Experts agreed that there is a unique set of facts about older adults and vaccination that is not being adequately addressed in France and most countries around the world. Within the curriculum of medical schools and other health disciplines, as an example, there is little or no continuous education on the topic. Furthermore, patient and advocacy organizations in general do not appear to have the knowledge or the capacity to provide members and constituents with facts and guidance about the importance of vaccination.

Co-designing awareness-raising initiatives among professional organizations, civil society and decision-makers is also a valuable method of aligning robust public health messages around the life course vaccination narrative. Improving vaccination uptake requires continued engagement to produce a cohesive voice that supports improvements to vaccination perceptions and practices, including enhanced awareness and education of health professionals and French citizens.

Sommaire

Les adultes plus âgés connaissent un taux de morbidité plus élevé en raison des maladies infectieuses. Cette réalité entraîne tant une hausse dans la demande des soins qu'une hausse des dépenses. La médecine préventive — y compris la vaccination — peut jouer un rôle important dans le maintien et l'amélioration de la santé des personnes âgées, en plus de leur garantir plus d'autonomie.

En France, environ 13,4 millions d'individus âgés de 65 ans et plus sont considérés à risque de contracter une maladie infectieuse. On s'attend à ce que ce chiffre augmente à 20 millions d'individus d'ici l'an 2050. Malgré un calendrier vaccinal établi et la preuve des bienfaits des vaccins, le taux des Français vaccinés est pourtant à la baisse. Le taux de vaccination contre la grippe est passé de 60 % en 2010, à 46 % en 2017. Le taux de vaccination contre la pneumonie est lui aussi insuffisant : on parle de seulement 20 % au sein de la population adulte.

Plusieurs programmes d'immunisation nationaux, dont ceux de la France, ont été mis sur pied de façon bien réfléchie afin de promouvoir la vaccination chez les enfants. La société — et parfois même les professionnels de la santé — tendent toutefois à négliger les bienfaits de la vaccination plus tard dans la vie. Cela explique, en partie, la chute marquée du taux de vaccination que l'on remarque chez les adultes.

La réunion « La vaccination en France : Changer les perceptions publiques » a été une occasion d'échanger des savoirs sur la vaccination à toutes les étapes de la vie. Une meilleure compréhension des obstacles à l'égard de la réticence vaccinale, de la collaboration interdisciplinaire plus approfondie et d'une approche visant à encourager l'importance de la vaccination tout au long de la vie est urgemment souhaitée.

Les experts s'entendent à reconnaître aussi bien les réalités uniques aux personnes âgées que les lacunes de la vaccination et ce, tant en France qu'ailleurs. Le cursus des écoles de médecine et d'autres disciplines met en évidence le manque de formation continue sur le sujet. Par ailleurs, des groupes visant à protéger les droits des patients s'avèrent souvent mal outillés pour sensibiliser leurs membres, faits à l'appui, quant à l'importance de la vaccination.

La création conjointe d'initiatives de sensibilisation entre les organismes professionnels, la société civile et les instances décisionnelles est un bon moyen d'amplifier le message de santé publique entourant l'importance de la vaccination tout au long de la vie. Afin d'augmenter le taux de vaccination, il faudra des efforts soutenus pour créer une voix cohérente visant à corriger certaines perceptions et habitudes. Cela veut aussi dire mieux sensibiliser et éduquer les professionnels de la santé et les citoyens français.

Life Course Vaccination

Population ageing alongside migration and urbanization are demographic upheavals of unprecedented magnitude that independently and collectively are driving many governmental agendas around the world. The United Nations (UN) projects that by 2050 there will be over 2.1 billion citizens aged 60 years and over.[1] While this is cause for celebration, marking advancements in medical technology, as well as a deeper understanding of the social determinants of healthy ageing, there is a tendency for government policy to frame all older people as frail, a burden and costly.[2]

The health care needs for this rapidly growing population are not homogeneous.[2] Behavioural and environmental factors contribute to differences in the quality of life in older age, and with age comes the likelihood of chronic co-morbid conditions and a significantly weaker immunity against infectious diseases.[3]

Evidence shows the life altering consequences of vaccine preventable diseases (VPDs) include diminished functional capacity and independence, and in some cases death.[4] Functional decline from infections such as influenza and pneumonia among these at-risk individuals is disproportionately more severe compared with a healthier population. Greater attention is required to effectively raise the importance of life course vaccination to policymakers, patient and advocacy groups, citizens, as well as health care professionals.[5,6]

Vaccination has greatly reduced the burden of infectious diseases. According to the World Health Organization (WHO) Global Advisory Committee on Vaccine Safety, only clean water (a basic human right) performs better than vaccination.[7] While vaccination is a proven tool in reducing the burden of infectious diseases, the uptake rates of adult vaccination is inadequate at best.[8]

Many national immunization programs, including those in France, are established within sound policy frameworks to encourage vaccination of infants and children.[9] The value of vaccination in later life, however, is often underestimated which in part contributes to the serious decline in adult vaccination rates.[8]

At-risk Groups

In Europe, the percentage of people with at least one chronic condition reaches 40% between the ages of 50 to 54 years and increases up to 80% after the age of 65 years.[4,10] Older people and those with chronic conditions such as diabetes, respiratory conditions, cardiovascular disease and cancer (known as non-communicable diseases) as well are people with rheumatoid arthritis are considered at-risk because of significantly weakened immune systems.[4]

To illustrate this fact, the risk of experiencing severe complications of a pneumonia infection is four times higher in the presence of an existing chronic condition such as diabetes, and between 23-48 times higher among highly immunocompromised individuals.[11] Studies have shown that infectious diseases like seasonal influenza, pneumonia and herpes zoster cause an increased risk for cardiovascular complications, which can persist for 10 years post-hospitalization.[12]

There is an emerging and consistent body of research demonstrating the protective effects of influenza vaccination beyond that of preventing or minimizing the impact of the disease. In a longitudinal study of patients with Chronic Obstructive Pulmonary Disease (COPD), influenza vaccination was reported to decrease the number of hospitalizations for acute coronary syndrome,

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and this effect was amplified with multiple vaccinations over several flu seasons.[13] Other studies of patients with chronic kidney disease indicate a parallel correlation of influenza vaccination reducing risk of acute coronary syndrome and heart failure.[14] Despite this intelligence which adds to the scientific and social case for a comprehensive and well resourced strategy to improve the uptake rates of adult vaccination, targets remain well below WHO standards in many European countries including France.

France Context

Immunization policies in France are developed by the Ministry for Health (The Ministry) in consultation with the High Council for Public Health and the National Immunization Technical Advisory Group (NITAG).[9,15] Despite current policies recommending seasonal influenza vaccination for people over the age of 65 years, and pneumonia vaccination to at-risk groups, the rates remain seriously low.[16]

Influenza vaccination rates amongst older people decreased from 60% in 2010 to 46% in 2017 and mortality was 9,000 deaths, 11% of all-cause deaths.[17,18,19] For those with liver and heart conditions, coverage rates are even lower ranging from 11% to 20% respectively.[19] For pneumonia, studies estimate that between 1,600 and 3,500 deaths may be attributable to the infection annually among adults, with up to 95% of those in older age groups.[20,21] The High Council has indicated an average 20% of adults are vaccinated against pneumonia, compared with over 90% of children.[22]

Given the decreasing coverage rates of influenza and pneumonia, with resulting loss of functional capacity and death, there is an urgent need to examine not only barriers but realistic actions.[4,12]

Barriers to Vaccination

Despite sustained efforts from various stakeholders in promoting the effectiveness and availability of vaccines, barriers to vaccination in France remain, including negative public perceptions, limited interdisciplinary collaboration, and a low prioritization on patient and ageing agendas.[6,8]

Perceptions and Knowledge Gaps

Negative perception of vaccination and low confidence in its effectiveness and value are key drivers to vaccine hesitancy and poor uptake rates which appear to persist across all ages, professions and socioeconomic groups.[8,23]

Health care professionals and specifically physicians play a critical role in immunization program.[8] They are universally known as a trusted and influential group in the vaccination discourse, and a primary source of information. Therefore it should be of considerable concern that an increasing number of physicians are choosing not to be vaccinated.[24] Also studies show a relatively poor awareness of the positive impact of vaccination on VPDs in adulthood.[24] In a study of final-year medical students there was unanimous agreement (99%) that knowledge of vaccination is important for the profession, but only 66% felt prepared to convey vaccine-related information and address patient concerns.[24] Remarkably, in some medical schools just 24% of final year medical students were vaccinated against influenza.[24] Similarly only 20% of employees of long term care homes in Western France were vaccinated against influenza, which was largely attributed to the perception of vaccine ineffectiveness and fear of potential side effects.[25]

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In addition to the lack of confidence, there is often mistrust in the information promoting vaccination.[8] Some believe that vaccines are not effective while others view homeopathic medicines as a way to protect against infection.[6,26] There is also often skepticism about the pharmaceutical industry, especially if a vaccine is not mandated by a public health authority.[23,26] These misconceptions may be related to knowledge gaps which in turn lead to uninformed patients and families.[27]

Collaboration

The pathway to vaccination is a major systemic barrier for older people in France.[23,28] In order to receive a vaccination, a person must first visit their doctor, request a prescription for a vaccine, purchase the vaccine from a pharmacist, and return to the practitioner to receive the vaccine.[23] This pathway is complex, time consuming and may also be physically impossible for an older person with many medical conditions.[28]

In addition the electronic infrastructure necessary for accurate and real-time updates of patient medical histories, and more specifically vaccination histories, is inadequate and in some cases non-existent which in turn limits innovative practices that pharmacists could offer in improving vaccination rates.[23]

The European Joint-Action on Vaccination (EU-JAV) has identified information sharing systems as a potential tool to augment real-time monitoring of public vaccination rates and automatically update schedules.[23] Although these tools could serve as mechanisms of cooperation between health care professionals and citizens, implementation of a digital data sharing tool has not yet been achieved.[23]

A multi stakeholder approach (across disciplines and sectors) is critical to the discourse on a life course approach to vaccination with attention to older adults.

Prioritization

While a growing number of patient organizations are recognizing the complex interactions of chronic disease, comorbidities and VPDs, it is often challenging to position vaccination as a priority.[29]

Competing healthcare priorities throughout adult life often result in the devaluation of health promotion and prevention campaigns and action such as vaccination.[30] With the onset of chronic conditions, civil society (patient and advocacy organizations) have a responsibility to effectively communicate good practices in managing illness as well as knowledge creation and dissemination.[31]

The cost of foregoing preventive treatment has been shown in many at-risk groups to include hospitalization, prolonged recovery, outpatient clinic follow-up, antibiotic treatment and in severe cases death.[32] This long-term perspective of the burden of VPDs is undervalued among the generally healthy, which contributes to the lack of prioritization of adult vaccination among many individuals.[30]

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Next Steps

There is increasing urgency to improve adult vaccination rates in France, particularly given the rapidly ageing population and those most at-risk of VPDs. Though barriers are interconnected and complex, there are potential ways forward which rely upon the active participation of multiple stakeholders to improve negative perceptions and reinforce the importance of the life course approach to vaccination.

Improving the Adult Vaccination Narrative

Adult vaccination is an essential component of a comprehensive public health strategy and action plan. The WHO Report on Ageing and Health in 2015 marked a deeper understanding of the ageing process and the determinants of healthy ageing.[33] Successful ageing, defined by the absence of disease, physical, and cognitive disability was replaced by the term "healthy ageing" which talked of a "process of developing and maintaining the functional ability that enables well-being in older age." [33]

It is within this framework that the IFA and others embed the importance of life course vaccination. The rights of older people to have access to appropriate vaccines against preventable diseases is a human right, as is the right to be informed and be part of the decision-making process with general practitioners and other health care professionals.

To date, limited serious research has been undertaken on the development of a narrative that reflects the protective value of adult vaccination in the context of healthy ageing, and moreover the social and economic contributions of older people. Knowledge is a foundational step to improving the vaccination narrative and combating negative perceptions about older people.

Studies show that education, and resulting behavioral change, has a strong effect on stakeholder engagement.[26] However, in order to be effective, education about the social and economic importance of adult vaccination must be geared towards policymakers, health care professionals and patient and advocacy organizations.[23]

Using multi-pronged educational approaches to improve the life course vaccination narrative provides an opportunity for outreach through a variety of channels, including policymakers, health care professionals and members of civil society.

- **Decision-makers** need to be informed by national and/or regional level data on long-term resource allocation requirements to develop adult vaccination policies for the growing ageing population.[21]

  This data will enable decision-makers to align future vaccination campaigns with existing policy infrastructure while also considering new evidence on the preventive aspects of new vaccines throughout the life course.[21]

- **Health care professionals** including physicians, pharmacists and care workers in long term and residential care facilities are trusted sources of information and guidance.[6]

  Initiatives such as Massive Open Online Courses (MOOCs) that educate individuals on trends in prevalence and incidence, interactions with chronic conditions and impact to patient outcomes can better inform health providers.[9]

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- **Patient and advocacy organizations** are important partners in the effort to raise awareness and share knowledge gains on adult vaccination using a bottom-up approach.[9]

  Collaborations between patient organizations in France comprising representatives of cardiovascular, respiratory, and other chronic conditions, exhibit willingness to raise vaccination initiatives as strategic priorities, though fundraising is required in order to action the initiatives.[31]

  This ongoing work must be continuously informed by the scientific and medical communities, and would benefit from participation in continuing education initiatives, thereby increasing their collective empowerment.[23]

Building Good Practices

Grassroot initiatives such as *Immuniser Lyon* that facilitate knowledge dissemination throughout the community are important models in improving vaccine uptake rates on a national scale.[23] This initiative is an example of a municipal public health campaign that uses multidisciplinary collaboration to promote vaccination to government, health care providers, patient organizations to name a few. [34] Good practices are anchored to the municipal scale, and informed by interdisciplinary perspectives from a steering groups that consider links to global initiatives.[34]

Though *Immuniser Lyon* has attracted attention from other municipalities, collecting quantifiable data on the results to date could be beneficial in modelling similar initiatives in other regions in France.[23] As a means of increasing the influence and reach of grassroot initiatives promoting life course vaccination, municipalities may consider establishing links to broader global healthy ageing frameworks through WHO initiatives.[35] One such opportunity is the WHO Global Network for Age-friendly Cities and Communities, of which Lyon is a member.

Other good practices lie in the development of more diverse groups of vaccinators including pharmacists. While physicians have traditionally been the sole gateway to vaccination, pilot projects expanding the roles of pharmacists beyond influenza vaccination are proving effective in many countries. [36]

Conclusion

The "Vaccination in France: Changing the Public Perception" expert meeting served as an opportunity for knowledge exchange among experts in the fields of ageing and immunology, leaders in civil society, and health care professionals on challenges to increasing adult vaccination.

Limited knowledge dissemination, vaccine hesitancy, lack of collaboration and low prioritization within the health system and community are key barriers for which a pathway for change was in-part established. At the heart of future collaboration is a series of actions that help build the capacity through education and advocacy.

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"Vaccination in France: Changing the Public Perception" was supported by an unrestricted educational grant from Pfizer Global

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