

International Federation on Ageing



Amplifying Civil Society Voices to Improve Rates of Adult Influenza Vaccination in Germany

Report

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Background

According to the United Nations, there were 962 million older people aged 60 years and older in 2017 globally – equivalent to 13 percent of the world's population. This figure is anticipated to double by 2050 and more than triple by 2100.¹ Europe has aged faster than any other region, with older people likely to represent almost 30 percent of the total population by 2060, increasing from 17.4 percent in 2010.

All sectors of society are impacted by this demographic transformation, with governments being generally challenged by the unprecedented global trend that impacts every facet of policy including employment, health, transportation, pensions, and housing to name a few.

Parallel to the process of ageing is the increasing global prevalence of noncommunicable diseases (NCDs). 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.²

Ageing populations, combined with the rise in chronic conditions that require complex health management, are driving an unprecedented demand for health and social care. 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.³

The societal value of immunization is well-known during childhood years. Unfortunately, and despite clear evidence in support of a life course approach to vaccination, access, availability and uptake rates are suboptimal in the older adult population with a heavy burden of preventable disease.

Threat of Influenza

Seasonal influenza epidemics are a global threat thought to be responsible for three to five million cases of severe illness and anywhere from 250,000 to 500,000 deaths. Of these deaths, 89 percent occur in people aged 65 years and older.⁴

Influenza is a major contributor to functional physical decline and known to cause exacerbations of pulmonary and cardiovascular disease.⁵ It is the primary cause of increased mortality among those with underlying chronic comorbid conditions (such as acute ischemic heart disease, stroke and pneumonia) in the winter season,⁶ and poses serious risks to the health and wellbeing, functional ability and survival of older adults.

Immunization is the cornerstone for preventing adverse health outcomes, and vaccination programs are timed to optimize protection during the annual influenza season. Despite widespread vaccination programs, vaccine coverage rates among older adults and adults with chronic disease remain generally poor.²⁵

Many (but not all) barriers to vaccination in the older adult population are well known and studied, including misconceptions about the adverse effects of the vaccine,⁷ a poor awareness of the seriousness of vaccine preventable diseases (VPDs), a prevailing opinion that only childhood immunization programs are a priority,⁸ beliefs that actions such as exercise and good nutrition boost the immune system to provide protection against influenza infection,⁹ and an inadequate availability of the vaccine at medical or specialist clinics.¹⁰

The Focus on Germany

Due to the converging trends of poor and decreasing rates of influenza adult vaccination, a large and growing ageing population, and increasing prevalence of noncommunicable diseases, Germany is an important templar to investigate the current and potential role that civil society organizations could make to improve uptake rates.

In 2016, Germany had an estimated population of 82 million with one third aged over 60 years. By 2050, 54 percent of the population will be in the older age group and constitute some 40 million people. In addition, the nation's ageing population will reflect an increase in the number of those aged 80 years and over, growing from five percent in 2015, to more than 14 percent (10 million) in 2050.¹¹

Alongside the ageing population, the prevalence of chronic diseases such as diabetes is increasing – with the most recent statistics reporting 7.5 million people living with diabetes and an estimated 0.44 million undiagnosed cases. Germany is ranked third in the world for diabetes-related health expenditures, with an estimated expenditure of \$42 billion USD.¹²

In 2017, Germany saw 82,000 cases of influenza by the end of February,¹³ with a vaccination rate of below 50 percent recorded in recent years.¹⁴ Although annual influenza vaccination is recommended by the German Standing Committee on Vaccinations (STIKO) only 34.8 percent of older people aged 65 years and over were vaccinated which is far below the WHO target of 75 percent in 2016.¹⁵ In the third week of February 2019, the season's flu outbreak hit a peak in Germany, with 24,000 new cases registered. Hospitals in Frankfurt were stretched to the limit with a dramatic increase from 18,700 in the previous week. On occasions no hospitals in the city were able to admit new flu patients, a spokesman for the city health authority told a local newspaper.²²

The explosion of these cases was unprecedented with few parts of the country (other than a handful of areas in the northwest) left unaffected. Dr Zsuzsanna Jakab, WHO Regional director at the time, and now Deputy Director-General of WHO, urged European countries to increase the rate of vaccination, adding that at a minimum, three out of four older people should be given a vaccine.¹⁶

A study by Klett-Tammen et al (2016) found factors associated with low vaccination uptake in Germany included socio-demographic determinants such as living arrangement, low awareness of the vaccine recommendation, attitudes like the perceived low severity of the corresponding disease, and practices including previous uptake of vaccinations.¹⁷ There is however no studies that explore the reasons why German patient and ageing organizations do not prioritize or even acknowledge adult vaccination as part of the healthy ageing agenda.

The Role of Senior and Patient Advocacy Associations

Older people and those with chronic comorbid conditions are represented by and through civil society comprising patient associations, senior organizations, service clubs and professional associations. These bodies are trusted sources of information and have a significant role and responsibility in conveying critical messages about the importance of the influenza vaccine and its protective effects.

A significant gap in our understanding to explain the continually poor uptake rates is the view from civil society who represent millions of citizens potentially at-risk to the life-threatening consequences of influenza. A preliminary scan of a sample of ageing and patient associations in Germany highlights a significant and fundamental gap in information which may in some part explain why influenza vaccination is not on their agenda, and in turn is not viewed as important by its members and the general public.

Purpose

Civil society have a unique and considerable responsibility in conveying accurate, up to date information on preventative actions that support healthy ageing and a good quality of life. While some may argue that ageing organizations should focus efforts on improving the pension or gaining a caregiving allowance (as examples) these policy initiatives are empty without the ability to function on your own terms in the community.

Vaccination is one of the most powerful public health tools in the fight against influenza, yet targeted public health campaigns to older adults and those most at-risk in Germany are sparse at best and non-existent in main. To move the adult influenza vaccination agenda forward, there has been a general assumption that the trusted advocacy and patient associations have a certain base level of understanding – however this is not necessarily the case.

Only through a clear understanding of why seniors, patient and advocacy organizations do not prioritize influenza vaccination as part of a health preventative and promotional program can actions be taken to support improve engagement and awareness.

For these reasons, the International Federation on Ageing (IFA) has led a two-staged project specific to Germany entitled "Amplifying Civil Society Voices to Improve Rates of Adult Influenza Vaccination" which includes:

- 1. An environmental scan of information and messages conveyed by a sample of advocacy and patient organizations as well as the government; and
- 2. In-depth interviews and questionnaires with decision makers of specific seniors, patient and professional organizations to gain a clearer understanding of the organizational perspectives towards adult influenza vaccination.

Environmental Scan of Adult Influenza Messages in Germany

An environmental scan was conducted on a purposeful sample of patient and advocacy organizations in Germany as well as government to gather intelligence on the content and methods of dissemination of messages on adult influenza vaccination, as well as the gaps, examples of good practice and lessons to be learned.

Federal Government

In Germany, multiple authorities within the Ministry of Health are concerned with vaccination issues.¹⁸ The Robert Koch Institute (RKI) leads the identification, surveillance and prevention of VPDs.¹⁹ The RKI is advised by the German Standing Committee on Vaccinations (Ständige Impfkommission - STIKO) which forms national recommendations based on evidence-based research, and then publishes annual vaccination schedules and guidelines.²⁰ The Federal Centre for Health Education (BZgA), the primary authority in the field of health promotion on the national level, takes direct measures to inform the public about risks of VPDs and the importance of vaccination.⁷

Since 2006, the BZgA and RKI have implemented a joint annual campaign, under the theme "We Go Ahead of Flu", as a strategy to increase the seasonal influenza vaccination coverage in all at-risk groups identified by the STIKO. These include adults aged 60 years and over, patients with chronic illness of all ages, pregnant women, and medical personnel.²¹

National Immunization Schedule

The national immunization recommendations and schedule issued by STIKO are published annually by RKI and form the basis for guidance to federal states on the use of licensed vaccines.²² Although federal states within Germany have the ability to modify vaccination schedules to meet the needs of their region, STIKO recommendations and schedule are official directives.²³ Since 2007, health insurance funds are obliged by law to cover costs for vaccinations recommended by STIKO and approved by the Federal Joint Committee.²⁴

Influenza vaccination is recommended for citizens over the age of 60 years, and those with underlying conditions such as diabetes, asthma or cardiovascular disease as well as health care workers and pregnant women.¹¹

The STIKO immunization schedule is available in 20 different languages and regarded as a major source of reliable information on publicly funded vaccines for consumers and health care providers.²⁵ According to the current STIKO schedule, an annual influenza vaccine is recommended and free of charge for people aged 60 years and over.

Government Messages: webpage, fact sheets, posters, brochures and a news release

The Federal Ministry of Health, RKI and BZgA websites all contain influenza-related information to educate Germans about influenza and vaccination facts. The Federal Ministry of Health website includes information on *what is influenza, how to reduce the risk of infection and how is the flu vaccine developed* using both text and animated images.²⁶ Similar information and STIKO recommendations can be found on the RKI website.^{27,28,29}

In addition to the general information about influenza and vaccination, BZgA provides detailed explanations about influenza and vaccines, such as why influenza is far more serious and different from the common cold and the kinds of side effects (if any) that people may have to the influenza vaccine.

In support of the "We Go Ahead of Flu" campaign, BZgA provides specific information for at-risk groups³⁰ with associated messages such as "flu can trigger pneumonia and other life-threating complications, so it is vital to receive the vaccination before the flu season."³¹

RKI and BZgA produce information sheets about influenza and vaccination with that from the RKI being available in 20 languages.^{32,33} Information is about influenza pathogens, symptoms and atrisk groups, vaccine production and components, side effects, post-immunization physical reactions and care. Although this fact sheet is intended for the general population, it mentions that older people and those with a chronic underlying disease are at-risk and a priority for vaccination.

As part of the "We Go Ahead of Flu" campaign, a fact sheet was developed by BZgA in partnership with RKI to describe the safety and efficacy of influenza vaccine with a note that enhanced influenza vaccines offer greater protection to older adults.³⁴

The "We Go Ahead of Flu" campaign also produced a set of posters to attract the attention of people most at-risk of influenza. Featuring an image of an older couple the poster message is that the annual influenza vaccine is highly recommended for people aged 60 years and over.³⁵ Another image features teenagers, adults and a child which is designed to remind both family and community of the collective responsibilities when it comes to the annual influenza vaccination.³⁶

RKI and BZgA jointly produced several brochures to provide targeted information to at-risk

populations including older persons and those with chronic conditions. For older people, the brochure describes possible complications of influenza, available vaccine options, timing, locations and cost of influenza vaccination.³⁷

Similarly, the brochure aimed at patients with underlying chronic diseases describes the consequences of influenza and the preventive measures for this vulnerable group.³⁸ An important message highlighted is that influenza infection can trigger lung or heart disease exacerbations.

The BZgA press release announced the STIKO recommendations and the launch of the "We Go Ahead of Flu" campaign.^{39,40,41} A news article entitled "influenza – the elderly are badly affected" reveals the low vaccine rate among this population and emphasizes vaccination as the most important measure to protect against influenza.⁴²

Civil Society Organizations

While governmental actions to promote vaccination are consistent through a systematic education and awareness campaign, civil society (patient and advocacy organizations) takes a significantly lesser role in promoting the awareness among the public in Germany. Though the organizations examined through the environmental scan was not exhaustive, only few organizations were found to include promotional messages related to influenza vaccination, as are outlined below.

German National Association of Senior Citizens (BAGSO)

BAGSO developed an informative brochure to answer the primary question "Which vaccinations are particularly important and for whom".⁴³ Information was included on how vaccines work, why vaccinations are important, where older people can go to be vaccinated, and information on vaccine safety.

The importance of vaccination for older people and patients with chronic disease was stressed within the messages, emphasizing "vaccinations are especially important for older people and patients with chronic diseases, as they become more susceptible to infectious diseases due to weakening of their immune system."

German Respiratory Society

The German Respiratory Society published several articles to alert citizens with respiratory problems that influenza is a serious illness. The importance and necessity of influenza vaccination for patients with lung disease is reinforced through messages that vaccination demonstrably protects against respiratory diseases and its consequences such as meningitis or blood poisoning.⁴⁴ Winter warnings from the Respiratory Society were directed to people with asthma and other chronic lung conditions who have greater likelihood of being infected by influenza.⁴⁵

The Deutsche Herzstiftung (German Heart Foundation)

The Deutsche Herzstiftung (German Heart Foundation) includes several resources on the benefits and risks associated with influenza for people with heart disease. These resources are provided by experts followed by their contact information and background of expertise.

The importance of influenza vaccinations for individuals with heart disease is expressed through expert recommendations on when it should be taken, who is most at risk and why vaccinations are a useful measure against influenza. These resources also suggest additional ways people with heart disease can protect themselves from influenza, noting that "the flu vaccination does not offer one hundred percent protection against infection."⁴⁶

German Diabetes Association

The German Diabetes Association (DDG) publishes daily news articles through their "Diabetes Newspaper". These new articles include facts and summaries of a variety of research studies related to the health and safety of patients with diabetes across the globe. The topics discussed are diverse and do not solely focus on influenza vaccinations. Recent news articles pertained to adult vaccinations are titled, "What does the flu vaccination do for diabetes?" and "Immunize quickly against influenza".

The importance of influenza vaccinations for people with diabetes is supported by evidence-based research on the benefits from the protective effects, particularly regarding cardiovascular outcome, and risks associated for not getting vaccinated against influenza as a person with diabetes. The German Diabetes Association uses sources from the RKI to convey that people with diabetes are at greater risk of developing influenza and recommend getting vaccinated against influenza annually.⁴⁷

Interview Findings and Discussion

Through their membership base, civil society organizations represent the diverse population of older people in Germany. For example, BAGSO alone boasts that more than 100 associations have joined forces with many millions of older people.

Questionnaires and in-depth interviews were conducted with five key decision makers and leaders of the most prominent and influential members of civil society in Germany. Data was gathered on their knowledge, views and prioritization of adult influenza vaccination within a broad mandate of health promotion.

The semi-structured interviews and questionnaires which included open-ended questions were piloted prior to implementation. With permission, the interviews were recorded and transcribed, and analyzed thematically.

Key decision makers from the following leading civil society organizations either completed a questionnaire or were interviewed during the study. The remainder of the report outlines eyeopening findings from these discussions.

1. Wohlfahrtswerk für Baden-Württemberg (WBW)

The charity for Baden-Württemberg is one of the largest providers of care for older people in the state. The two main tasks have remained unchanged over the centuries: to maintain social services and facilities and to stimulate, test and implement innovations in the social field.

As one of the major providers of geriatric care in Baden-Württemberg, WBW cares for around 2,000 people. At 19 locations, WBW offers the full range of services for the elderly from nursing homes to assisted living as well as senior citizens' communities to support those living at home. With around 1,650 employees, WBW is a large and reliable employer in the social sector.⁴⁸

2. German Cardiac Society

The German Cardiac Society (DGK), based in Düsseldorf, is a non-profit, scientific medical society with more than 10,600 members today. Its aim is to promote science in the field of cardiovascular diseases, to organize conferences, to train its members, and to develop guidelines.⁴⁹

3. German Society of Gerontology and Geriatrics (DGGG)

The German Society of Gerontology and Geriatrics supports gerontologists and geriatricians actively in their research on ageing and the practical implementation of findings. The Society supports research and teaching on ageing within the various disciplines, supports scientific exchange and the distribution of gerontological and geriatric findings, and facilitates a national conference every two years which serves to discuss issues related to gerontology and geriatric on an interdisciplinary basis.⁵⁰

4. The German National Association of Senior Citizens' Organizations (BAGSO)

BAGSO, the German National Association of Senior Citizens' Organizations, represents the interests of older generations in Germany. It stands up for active, self-determined and healthy ageing in social security. BAGSO is an umbrella organization of about 120 civil society organizations that are run by or work for older people. As such, it calls on politicians, society and businesses to offer conditions that allow for a good and dignified life in older age. In important policy areas, BAGSO puts themes on the political agenda that are relevant for healthy and active ageing. In statements and position papers, BAGSO identifies requirements for good quality of life in older age and provides recommendations for political action at federal, state and municipal level.⁵¹

5. Working Group Social Democratic Party 60 Plus (AG SPD 60 plus)

The AG SPD 60 plus is one of 11 SPD working groups of particular importance in the context of political decision-making and the organizational structure of the party. The working groups are specific to the needs of constituents. Topics, positions and suggestions are introduced into the party discussion and campaign for internal and social majorities. The aim is to represent the interests of older people inside and outside the SPD, to promote the commitment of older people, and to win people over to the social democratic program.⁵²

Beliefs and awareness

Beliefs and awareness are often a guide in decision making and response to situations, and participants shared a wide range surrounding influenza vaccination. Older people and those with chronic disease were acknowledged to be at greatest risk to influenza, as well as those on special medications such as chemotherapy. The high risk of health care workers to influenza (due to frequent contact) was also highlighted by participants.

There was also a varied understanding from some participants who attributed the fact that older people are at greater risk to influenza solely due to the higher rates of chronic disease rather than also to the natural process known as immunosenescence.⁵³ Others recognized immunosenescence as a key factor.

"Older adults are at-risk for influenza because of immunosenescence that weakens the immune response and protective barriers against influenza infection. Furthermore, chronic diseases such as comorbidities as well as multimorbidity and functional decline increase the susceptibility for influenza. Living in nursing homes or residential community are additional risk factors."

Overall, participants believed that the COVID-19 pandemic has brought more awareness to the fact that infectious diseases can have severe consequences on older adults, as the following participant emphasizes.

"The corona pandemic showed us that diseases like influenza can have very severe consequences. (...) I learned through the pandemic to have more consciousness about the importance of diseases like influenza, and to think about different measures to prevent it."

The need for multi-sectoral collaboration

The importance of working across sectors to improve influenza vaccination rates among older adults in Germany was a common and agreed statement, as was the need for a multidisciplinary and multisectoral approach to address the issue.

Sectors identified included health care providers, particularly general practitioners (GPs); the Ministry of Health; private and statutory health insurance; professional associations (including general practitioners and geriatricians); the Robert Koch Institute; nursing homes; the Federal Centre for Health Education; local health authorities; specialist medical associations; ageing organizations; patient organizations; patient representatives; and marketing specialists.

Health care professionals, especially GPs and their staff who have frequent contact with patients in at-risk groups, were viewed to play a key role in promoting vaccination. This initiative however would require government funding as is the case in the United Kingdom.

"I think the general physicians should be involved, and the Ministry of Health of each part of Germany, and they can spend the money for advertising and clips in the television. But the first person the patient sees are the GPs. So it is important that they put a poster in the waiting room, for example. I think the money should come from the government for advertisement."

Promoting influenza vaccination in Germany was viewed currently as largely driven by the government.

"We only listen to what was publicly told by the Health Minister. Each year, in September, some Health Minister is shown on TV with his arm, and the tick in his arm. People can see that it is important, but we do not talk about it very much."

Views as to whether civil society should take a role in promoting influenza vaccination was varied - a German care home provider noted that it would be difficult as each resident is considered autonomous, noting any conversation on influenza vaccination should be between the resident and their GP.

"In the care homes, the doctor comes to the resident, and the residents have different doctors. We do not know what the doctors ask the residents about vaccination. (...) It is a bit tricky to answer because every resident is autonomous. We are not a health organization, we are an organization that offers the apartment and the care, but we don't have any contract about health itself."

Some organizations are already involved in the promotion of influenza vaccination, through efforts including working groups devoted to vaccination within the organization; publication of articles and symposia; informational brochures; and Q&As supported by evidence from STIKO.

Other civil society organizations believe that they should support the effort of a leading voice (such as STIKO) who already has a focus on infectious disease. Yet, there appear to be very few champions with a cross cutting understanding of adult vaccination, at-risk populations, and the impact on healthy ageing.

Barriers

Critical insight was shared into key barriers to influenza vaccination in Germany. To begin, in Germany there is little public fear of influenza and its complications for older adults, compared to the working population.

"There is not very much public concern about vaccination for the aged people. There is a lot, to my opinion, of public concern that people working have this vaccination. I don't know why."

Compounding this may be the fact that GPs are not incentivized to administer the vaccine which may impact whether health care professionals have a conversation with their patients about consequences of VPDs. Personal misconceptions GPs hold towards influenza vaccination adds to these barriers, as well as the fact that they are often are too busy with other topics or simply forget to discuss influenza vaccination with their patient.

In a long term care setting, management and care staff are not at liberty to discuss vaccination, it is a topic between the doctor and the resident. For those residents with dementia who may have a decision-making disability it is often the power of attorney (family member or not) who would make the decision on vaccinations.

Several key barriers including lack of evidence surrounding the efficacy of influenza vaccination was alluded to in the course of the study:

"The efficacy and effectiveness of influenza vaccines in older adults is not convincing enough. The vaccination recommendations seem to be too difficult to follow for older adults (general recommendation vs. targeted recommendation). GPs often seem to neglect vaccination recommendations for older adults. Vaccination seems to be a highly prioritised issue in children only. The reimbursement of costs for vaccines seems to be a relevant concern for GPs interested in influenza vaccination when they try to choose a more effective vaccine. To my opinion, vaccination should be offered also by clinicians and nursing home staff or pharmacists and not only by GPs. It should be possible to vaccinate patients whenever they have contact to health system."

Finally, the lack of a continuous vaccine strategy for older adults through neutral trust-building organizations was viewed as an impediment to vaccination rates. The lack of time, funding and human resources within patient and ageing organizations to devote to influenza vaccination efforts was a primary barrier, alongside competing priorities that were fully funded.

Strategies to promote influenza vaccination

Numerous actions were described to promote influenza vaccination in Germany. To begin, care home providers could better distribute brochures for residents and their families and include the importance of influenza vaccination in their newsletter and website homepage. They could then inform the care home staff about the importance of influenza vaccination and encourage residents to have the conversation with their doctor.

Further opportunities included transporting the message to congresses, holding scientific meetings on the topic area, choosing vaccination as the main topic for the next annual meeting to inform members, holding a press conference, and creating television adverts on the topic.

"Determination of the attitudes and needs of the approximately 120 organizations connected, development of needs-based materials print, films, podcast, Internet. Information and exchange with the multipliers of the associations. Bundled actions together with the associations, other cooperation partners and media with a long-term strategy supported by politicians and doctors (associations) / science."

Key messages of an influenza campaign would be within their organization, which encompass meaningful messages suited to their members. As examples:

- "Quality of life is best in a healthy condition. Vaccination helps your health condition and promotes your quality of life."
- "Remember to educate your patients to be vaccinated against influenza, and don't forget to be vaccinated yourself."
- "Influenza vaccination saves lives, particularly in older age."

- "Prevention knows no age limits. Protect health through vaccination."
- "Older people are more likely than young people to have severe flu complications. Protection is easy with vaccination."

While it is complex to measure success, the goal as noted by participants was to increase rates of vaccination among older adults. Other modes of success included measuring the number of people information has reached (through for example, clicks on the website), as well as quantity of materials distributed.

"All geriatricians would know about influenza vaccination; no more myths about influenza vaccination in patients and health care workers; health care insurances would reimburse more immunogenic influenza vaccines for older adults. This could lead to more effectiveness and therefore convince patients of influenza vaccination."

To measure success, baseline information is essential to compare the vaccination uptake rates before and after implementation of the strategy.

The role of the International Federation on Ageing

A neutral organization such as the IFA, said the participants, could play a key role in assisting others to promote influenza vaccination to older adults and at-risk groups. Sustained collaboration could better enable a long-term information strategy.

"IFA is a neutral institution. And if IFA presents itself as an institution that are experts concerning influenza and vaccination, and because of that, they have the opinion it would be good to have this vaccination, that would be good information for our residents. So they should make clear they do not have any profit out of this information, but they only want to help people living healthy."

Through the IFA it was believed that great contact and connection could be made with professional societies (e.g. cardiologists) to introduce the importance of influenza vaccination. Others noted that assistance in providing an overview or summary of European influenza vaccination recommendations as well as the vaccine reimbursement structure in Germany would be valuable.

"To my opinion, it would be helpful to have an overview or summary of European influenza vaccination recommendations, various reimbursement rules, vaccinating occupational groups and kind of communication to promote influenza vaccination to allow "learning from the best". There is an overview of vaccination schedules in Europe by European Centre for Disease Prevention and Control (ECDC), but it is partially incomplete, not updated and not fully assessed."

Examples of successful vaccination strategies from other countries that could be replicated in Germany was also viewed as a valuable contribution to build capacity.

Conclusion

The environmental scan of influenza messages, interviews and questionnaires showcased significant gaps that must be addressed in Germany in order to improve the uptake rates of adult influenza vaccination.

While the environmental scan highlighted there is a lack of messages surrounding influenza provided by civil society organizations, the interviews and questionnaires highlighted a huge potential for this to increase. Participants left the interview and questionnaire with a greater understanding of the importance of influenza vaccination.

"I think it is a really important issue and I too often forget to remind patients and myself to be vaccinated. After this interview, I hope this changes."

Recommendations

It was only through gaining a clear understanding of why seniors, patient and advocacy organizations do not prioritize influenza vaccination as part of health preventative and promotional programs that actions can be taken to support improved engagement and awareness.

Based on the findings IFA has compiled the following recommendations:

- 1. A multi-sectoral approach including health care workers, government, RKI, health insurance, and civil society is critical to improving the uptake rates of adult influenza vaccination in Germany.
- 2. GPs must be better educated on the importance of influenza vaccination for at-risk groups, and incentivization should be considered as a pipeline to encourage GPs to vaccinate.
- 3. Professional organizations representing specialists such as geriatricians, cardiologists, and diabetologists should highlight vaccination as a main topic of focus to their members to inform them of its importance.
- 4. Civil society organizations must be provided with evidence-based information on the importance of influenza vaccination from a neutral entity and be encouraged to think of themselves as a critical stakeholder responsible for educating at-risk groups on the importance of influenza vaccination.

In conclusion, civil society organizations understand what steps they could take to improve the uptake rates of influenza vaccination, however, require the support and resources to do so.

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References

1 United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision, Key Findings and Advance Tables. Working Paper No. ESA/P/WP/248.

2 World Health Organization (2018, June 1). Fact sheets: Noncommunicable diseases. Retrieved from: https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases

3 Doherty, T. M., Connolly, M. P., Del Giudice, G., Flamaing, J., Goronzy, J. J., Grubeck-Loebenstein, B., ... Di Pasquale, A. (2018). Vaccination programs for older adults in an era of demographic change. *European geriatric medicine*, *9*(3), 289–300. doi:10.1007/s41999-018-0040-8

4 World Health Organization (2014) Influenza Fact Sheet No. 211. Retrieved from: http://www.who.int/ mediacentre/factsheets/fs211/en/

5 Lang PO, Mendes A, Socquet J et al. Effectiveness of Influenza Vaccine in Aging and Older Adults: Comprehensive analysis of the evidence. *Clinical Interventions in Aging* 2012:7:55-64.

6 Nichol KL, Nordin J, Mullooly J et al. Influenza Vaccination and Reduction in Hospitalizations for Cardiac Disease and Stroke among the Elderly. *New England Journal of Medicine* 2003:348(14):1322-1332.

7 Chan T-C, Hung IF-N, Luk JK-H et al. Functional Status of Older Nursing Home Residents Can Affect the Efficacy of Influenza Vaccination. *Journals of Gerontology* 2013:68(3):324-330;doi:10.1093/Gerona/gls175.

8 Lang PO, Aspinall R. Immunosenescence and Herd Immunity: With an ever-increasing aging population do we need to rethink vaccine schedules? *Expert Review of Vaccines* 2012:11(2):167+; http://dx.doi.org. myaccess.library.utoronto.ca/10.1586/erv.11.187

9 Ulasevich, A., Jacobs, S., Mbangdadji, D., van Over, M., & Steffens, L. (2017). Understanding Flu Vaccination in a Competitive Context: Influence of Alternative Flu Prevention Strategies on Flu Vaccine Uptake. Social Marketing Quarterly, 23(4), 320-334.

10 Davis, M. M., Taubert, K., Benin, A. L., Brown, D. W., Mensah, G. A., Baddour, L. M., ... & Krumholz, H. M. (2006). Influenza vaccination as secondary prevention for cardiovascular disease: a science advisory from the American Heart Association/American College of Cardiology. Journal of the American College of Cardiology, 48(7), 1498-1502.

11 DataBank (2019). Population estimates and projections. Retrieved from: <u>https://databank.worldbank.</u> org/source/population-estimates-and-projections

12 International Diabetes Federation. *IDF Diabetes Atlas, 8th edn.* Brussels, Belgium: International Diabetes Federation, 2017. <u>http://www.diabetesatlas.org</u>

13 Local, DPA/The. "Where the Flu Outbreak Has Been Hitting Germany the Hardest." *The Local*, The Local, 23 Feb. 2018, www.thelocal.de/20180223/where-the-flu-outbreak-has-been-hitting-germany-worst.

14 Haas, J, et al. "Burden of Influenza in Germany: A Retrospective Claims Database Analysis for the Influenza Season 2012/2013." *The European Journal of Health Economics: HEPAC: Health Economics in Prevention and Care.*, U.S. National Library of Medicine, July 2016, www.ncbi.nlm.nih.gov/pubmed/26143025.

15 OECD. (2017). Seasonal influenza coverage in the EU for over-65s. Percentage of over-65s vaccinated against seasonal influenza in each EU member state.

16 Health Europa, 2018. Flu vaccine uptake low in Europe. Retrieved from https://www.healtheuropa.eu/fewer-flu-vaccine-europe/84019/

17 Klett-Tammen, C J, et al. "Determinants of Tetanus, Pneumococcal and Influenza Vaccination in the Elderly: a Representative Cross-Sectional Study on Knowledge, Attitude and Practice (KAP)." *BMC Public Health.*, U.S. National Library of Medicine, 4 Feb. 2016, www.ncbi.nlm.nih.gov/pubmed/26846202.

18 Federal Ministry of Health. (n.d.). BMG_Hausbroschuere_2016_EN.Pdf. Retrieved 10 October 2019, from https://www.bundesgesundheitsministerium.de/fileadmin/Dateien/Publikationen/Ministerium/Broschueren/BMG_Hausbroschuere_2016_EN.pdf.

19 RKI - Profile. (n.d.). Retrieved 10 October 2019, from https://www.rki.de/EN/Content/Institute/Profile/profile_node_en.html.

20 German Vaccination Schedule. (n.d.). Retrieved 10 October 2019, from https://handbookgermany.de/en/live/vaccination.html.

21 Kampagnen. (n.d.). Retrieved 11 October 2019, from https://www.impfen-info.de/cv/kampagnen/.

22 The organization and delivery of vaccination services in the European Union (2018). (n.d.). Retrieved 10 October 2019, from https://www.euro.who.int/en/publications/abstracts/the-organization-and-delivery-of-vaccination-services-in-the-european-union-2018

23 Germany_ip.Pdf. (n.d.). Retrieved 10 October 2019, from http://venice.cineca.org/documents/germany_ ip.pdf.

24 Standing Committee on Vaccination. (2019). In Wikipedia. https://en.wikipedia.org/w/index. php?title=Standing_Committee_on_Vaccination&oldid=886536704

25 RKI - Informationsmaterial Zum Impfen - Impfkalender in 20 Sprachen. (n.d.). Retrieved 11 October 2019, from https://www.rki.de/DE/Content/Infekt/Impfen/Materialien/Impfkalender_mehrsprachig_Uebersicht_tab.html.

26 Influenza (Grippe). Bundesgesundheitsministerium. (n.d.). Retrieved 10 October 2019, from https:// www.bundesgesundheitsministerium.de/themen/praevention/gesundheitsgefahren/influenza.html.

27 RKI - Vaccinations A - Z - Flu Vaccination: Frequently Asked Questions and Answers. Retrieved 10 October 2019, from https://www.rki.de/SharedDocs/FAQ/Impfen/Influenza/faq_ges.html?nn=2375548.

28 RKI - Influenza - Influenza Vaccination: Frequently Asked Questions and Answers. (n.d.). Retrieved 10 October 2019, from https://www.rki.de/SharedDocs/FAQ/Impfen/Influenza/faq_ges.html?nn=2370434.

29 RKI - Influenza - Frequently Asked Questions and Answers to the Flu. (n.d.). Retrieved 10 October 2019, from https://www.rki.de/SharedDocs/FAQ/Influenza/FAQ_Liste.html?nn=2370434.

30 Grippeimpfung Für Alle Risikogruppen - Impfen-Info.De. (n.d.). Retrieved 11 October 2019, from https://www.impfen-info.de/cv/grippeimpfung/.

31 Fragen und Antworten zur Grippeimpfung. (n.d.). Retrieved 11 October 2019, from https://www. impfen-info.de/cv/grippeimpfung/fragen-und-antworten/.

32 RKI - Informationsmaterial Zum Impfen - Informationsmaterialien Zum Impfen in Verschiedenen Sprachen. (n.d.). Retrieved 11 October 2019, from https://www.rki.de/DE/Content/Infekt/Impfen/Materialien_fremdsprachig_inhalt.html.

33 Grippe (Influenza). (n.d.). Retrieved 11 October 2019, from https://www.infektionsschutz.de/ erregersteckbriefe/grippe-influenza/.

34 Detail. (n.d.). Retrieved 11 October 2019, from https://www.impfen-info.de/cv/mediathek/ printmaterialien/detail/?tx_bzgashop_pi2%5BarticleNumber%5D=2397&tx_bzgashop_ pi2%5BparentArticles%5D=0&cHash=fdbe4992f3d97a9dd7e1bdc5474c4343.

35 Detail. (n.d.). Retrieved 11 October 2019, from https://www.impfen-info.de/cv/mediathek/ printmaterialien/detail/?tx_bzgashop_pi2%5BarticleNumber%5D=2390&tx_bzgashop_ pi2%5BparentArticles%5D=0&cHash=4b2e4c1a4f32aed2bb41466970feb7f7.

36 Detail. (n.d.). Retrieved 11 October 2019, from https://www.impfen-info.de/cv/mediathek/ printmaterialien/detail/?tx_bzgashop_pi2%5BarticleNumber%5D=2117&tx_bzgashop_ pi2%5BparentArticles%5D=0&cHash=75e5ee4cef6bd768a7d59943b48b6366.

37 Detail. (n.d.). Retrieved 17 August 2020, from https://www.impfen-info.de/cv/mediathek/ printmaterialien/detail.html?tx_bzgashop_fe6%5BarticleNumber%5D=1362&tx_bzgashop_ fe6%5BparentArticles%5D=0&cHash=2679546863f7ef40b725bdf9ae1c6d6f

38 Detail. (n.d.). Retrieved 11 October 2019, from https://www.impfen-info.de/cv/mediathek/ printmaterialien/detail/?tx_bzgashop_pi2%5BarticleNumber%5D=1993&tx_bzgashop_ pi2%5BparentArticles%5D=0&cHash=eebca96e9f15308c3de77bc9c3252af8.

39 Aktuelles. (n.d.). Retrieved 11 October 2019, from https://www.impfen-info.de/cv/aktuelles/artikel/dergrippe-zuvorkommen/.

40 Aktuelles. (n.d.). Retrieved 11 October 2019, from https://www.impfen-info.de/cv/aktuelles/artikel/ mehr-schuetzt-mehr/.

41 Aktuelles. (n.d.). Retrieved 11 October 2019, from https://www.impfen-info.de/cv/aktuelles/artikel/zuwenige-menschen-lassen-sich-gegen-grippe-impfen/.

42 Aktuelles. (n.d.). Retrieved 11 October 2019, from https://www.impfen-info.de/cv/aktuelles/artikel/ influenza-vor-allem-aeltere-menschen-stark-betroffen/.

43 Federal Association of Senior Organizations. (n.d.). WEB_Impfbroschuere_deutsch-Englisch_3.Pdf. Retrieved 11 October 2019, from https://www.bagso-service.de/fileadmin/user_upload/redaktion/ Projekte/WEB_Impfbroschuere_deutsch-englisch_3.pdf.

44 German Respiratory Society. (n.d.). 2018-03-06_PM_DGP_Antibiotika_F.Pdf. Retrieved 11 October 2019, from https://pneumologie.de/fileadmin/user_upload/2018-03-06_PM_DGP_Antibiotika_F.PDF.

45 German Respiratory Society. (n.d.). 041217_PM_Asthma_im_Winter_B.Pdf. Retrieved 11 October 2019, from https://pneumologie.de/fileadmin/user_upload/Presse/041217_PM_Asthma_im_Winter_B.pdf.

46 Deutsche Herzstiftung. (n.d.). Influenza wave: heart patients should pay attention to this. Retrieved 27 November 2020, from https://www.herzstiftung.de/ihre-herzgesundheit/gesund-bleiben/grippeimpfung-und-grippewelle.

47 The German Diabetes Association.(2020). Immunize quickly against influenza. Retrieved from https://www.deutsche-diabetes-gesellschaft.de/pressebereich/ddg-10/2020/zuegig-gegen-influenzaimmunisieren

48 Wohlfahrtswerk fur Baden-Wurttemberg (2021). About Us. Who We are. Retrieved from <u>https://www.</u>wohlfahrtswerk.de/ueber-uns/wer-wir-sind/

49 German Cardiac Society (2021). The DGK. Retrieved from https://dgk.org/ueber-uns/die-dgk/

50 Deutsche Gesellschaft für Gerontologie und Geriatrie e.V. (2017). German Society of Gerontology and Geriatrics e.V. Retrieved from https://www.dggg-online.de/en/about-dggg/

51 BAGSO (n.d.). BAGSO – the voice of older people in Germany. Retrieved from <u>https://www.bagso.de/</u>english/

52 SPD 60 plus (n.d.). AG SPD 60 plus. Retrieved from <u>https://spd.berlin/arbeitsgemeinschaften/spd-60plus/</u>

53 Gruver, A. L., Hudson, L. L., & Sempowski, G. D. (2007). Immunosenescence of ageing. The Journal of Pathology: A Journal of the Pathological Society of Great Britain and Ireland, 211(2), 144-156.

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