EXCELLENCE IN PEDIATRICS INSTITUTE

Improving Child Health Globally

MEETING REPORT

WORKING TOWARDS BROAD (LIFECOURSE) AND OPTIMAL (INCREASED VACCINE COVERAGE RATE VCR) FLU PREVENTION

Policy Focus Group Meeting on Influenza Vaccinations

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Initiative History, Purpose and Work Within the EU Coalition on Vaccination

Since 2015 the Excellence in Pediatrics Institute (EIP) has worked with European and global partners to help overcome the many remaining barriers to vaccination uptake. By connecting and working with colleagues across Adolescent Medicine, General Practice, Pharmacy and Nursing, and uniting behind the **EU Commission's Coalition on Vaccination**, EIP's goals is to promote a LifeCourse approach to vaccines.

Most notably, EIP believes that the following barriers remain: 1) **Policy discrepancies** - Heterogeneous national vaccination policies. Differences in approach, prioritisation and decision making processes. 2) **Overarching barriers** - Lack of policies to increase vaccines confidence, counteract misinformation, increase awareness and mobilise medical communities, and 3) **Failure**

to adopt a life course approach - Prevention Policies not adapted to demographic changes and an increasingly ageing population. Disease prevention in all stages of life is not yet a priority.

As part of EIP's work within the **EU Coalition on Vaccination**, 8 Stakeholder Working Groups, as well as a joint EU Commission and WHO plenary briefing, took place at 11th EIP Annual Conference in Copenhagen in December 2019. During the Working Groups, speakers were asked to share their opinions on ways to increase vaccination uptake in both the general public and the healthcare professionals, on the current state and progress made in increasing vaccination coverage rates in different countries and to mention the obstacles faced in the process of doing so.

The following report summarises the invited expert's briefings, discussions, and proposed action plans that were debated during the proceedings of the **Policy Focus Group focused on Influenza Vaccinations - looking at how we can best work towards broad (LifeCourse) and optimal (increased Vaccine Coverage Rate VCR) Flu Prevention across Europe.**

REGISTER BASED APPROACH TO TEST BRAND SPECIFIC INFLUENZA VACCINE EFFECTIVENESS AMONG CHILDREN

Working Group Briefing

Dr Hanna Nohynek (*Chief Physician, Infectious Disease Control and Vaccinations Unit Department of Health Security, National Institute for Health and Welfare THL Helsinki, Finland)* was invited to brief the Working Group on the register-based approach Finland is implementing to see if other should follow the example.

Dr Nohynek analyzed several aspects of the register-based approach that Finland utilizes, in particular concerning Influenza vaccination, pointing out the need of Vaccine Registers. Dr Nohynek started with a brief display of influenza vaccination timeline in Finland, where she noted that the Influenza vaccine was introduced in the national immunisation program in the 1980s and was initially given to the medical risk groups, mainly due to Burden of Disease reasons. In 2007, after a formal cost-effectiveness analysis[1], Finland introduced influenza vaccine to children aged from 6-35 months but unfortunately after the pandemic of 2009 not only was it hard to further enrol children into the vaccination program but also to increase the universal vaccination rates; in 2011 healthcare workers were included also in the program, as were social workers in 2012, pharmacy workers (in direct contact with customers) in 2014 and children up to 6-years of age in 2018, while in 2017 a semi-mandatory law for healthcare workers vaccination was put in place.

Dr Nohynek then referred to the drastic coverage drop they had in children (from 40% to 13%) due to pandemic and narcolepsy issue in Finland, as influenza vaccines were considered possible reason for causing narcolepsy and the fact they didn't have a steady uptake increase until they introduced a live-attenuated vaccine in 2015.

Moving on to the Vaccine Registers and coverage, Dr Nohynek explained that as mostly nurses are responsible for influenza vaccination in Finland, they need to fill in the patients records which are then transferred to the National Immunisation Register. This has now become easily accessible from a computer, giving as an example that the influenza coverage for the period 2018-2019 in the general population to be 22% in Finland. However, Dr Nohynek also pointed out that it may be an underestimation as some vaccination data of the private sector are not transferred to the National Registers. That said, through the register you can have more trusted results, and see a steady increase in coverage, especially so if you select specific age groups such as children or the elderly who get vaccinated mostly in the public sector. You are also able to choose to categorize your results by region to gain a better understanding of region specific coverage, providing a great tool for community workers to monitor how a region is performing in relation to the neighboring regions for example.

Subsequently, Dr Nohynek emphasized on the usefulness of the Vaccination Registers in influenza vaccine validation. The register-based studies allow for different study designs and long term follow up and more specifically data that is gathered in the Registers as part of healthcare routines and statutory notification systems (infectious disease). The system is also deterministically linked using a unique person

[1] Salo, H., et al., *Cost-effectiveness of influenza vaccination of healthy children.* Vaccine, 2006. **24**: p. 4934-41.

identifier[2] that a person acquires when they are born in Finland or when they move there to stay permanently.

As an example, Dr Nohynek presented Influenza A Vaccine Effectiveness (IVEA=47%) resulting from linking data of the past influenza season for kids 6-months to 6-years of age that had a 40% coverage (160 thousands were vaccinated out of 344 thousands that were eligible) with data from laboratory confirmed influenza cases (outpatient or inpatient), but as in every observation study, she underlined, we need to consider several confounding and biasing factors, possible misclassification as well as vaccine specific reasons that may alter the correctness of the results.

In the second part of the Working Group Briefing, Dr Nohynek went on to look at brand-specific influenza vaccination effectiveness validation by utilizing the vaccine register linkage approach and presented the results that compare two different vaccine brands (Inactivated Vaxigrip Tetra and Nasal spray live attenuated Fluenz Tetra) in the age group of 2 to 6-year olds depicting similar effectiveness results (52% and 41% respectively) concluding that they are equally performing vaccines. Moreover, she introduced the DRIVE (Development of Robust and Innovative Vaccine Effectiveness) initiative (https://www.drive-eu.org/) an IMI funded consortium that is trying to investigate the Influenza brand-specific vaccine effectiveness in Europe, presenting the different centres that are spread throughout Europe but pointing out that **most of the countries still do not have Vaccine Registers in place that are reliable** (except Finland and Denmark that soon will join the DRIVE). Plus, there is a restraint factor as when it comes to brand-specific data the test-negative design studies are so demanding due to sample size that you need all the data from the Vaccine Register.

In conclusion, Dr Nohynek summarized the strengths and weaknesses of the register-based approach and indicated further issues to take into consideration. **In particular, noting that the strengths consist of having a big sample/participation in the register, that's semi-automated and can provide real-time vaccine effectiveness as well as the possibility for long term follow-ups (e.g. study on repeated doses and effect of early imprinting) or by linking to other data sources, the possibility to understand vaccine impact on either lab positive disease or Burden of Disease.** Giving an example of an ongoing study in Finland that is investigating if Influenza is actually protecting against Cardio-Respiratory events. On the other hand, Dr Nohynek added, that there are weaknesses too, possible misclassification, bias or confounding factors and the ability of monitoring IVE to level of type but not subtype. However, actions are taken to surpass them, as for example Finland is currently validating adults by comparing a national cohort study with a test-negative design DRIVE hospital study. Lastly, referring to further issues to consider, Dr Nohynek underlined the need to understand the underlying trends, the need of reliable denominator data when interpreting laboratory positive observations and the need to understand the impact of priming/imprinting and repeated vaccinations, as it's not just a question of Influenza vaccine effectiveness but it's also of interplay of the host and the pathogen.

On various questions and points of clarification asked by the Working Group, Dr Nohynek clarified that the Finish Vaccination Registry has been up and running since 2009, after the narcolepsy issue, while the Infectious Disease Registry has been in place since 1995. She also added that there is trouble including vaccination data from the private sector, like pharmacies for example, as the different software that is used doesn't necessarily communicate with the central Register, but they are working on fixing it. **For influenza vaccination, Dr Nohynek noted that in Finland they use two doses of inactive vaccines.**

VACCINATION OF HEALTHY CHILDREN

Working Group Briefing

Prof. Simon de Lusignan *(Professor of Primary Care and Clinical Informatics, University of Oxford, Nuffield Department of Primary Care, Director, Royal College of General Practitioners Research and Surveillance Centre, United Kingdom)* was invited to present the latest Influenza vaccination data focused on healthy children in the UK. The data presented was extracted from the Royal College of General Practitioners (RCGP) Research and Surveillance Centre (RSC). In addition, Prof. de Lusignan was asked to describe the role, structure and practices of the RCGP's Research and Surveillance Centre.

Prof. de Lusignan started his briefing by explained that RCGP RSC is one of Europe's oldest sentinel systems with more than 50 years of service, it is recruited to be nationally representative, has a long-term collaboration with Public Health England and can be considered a different type of Registry, using dashboards with vaccination data as feedback in order to motivate the healthcare professionals.Prof. de Lusignan then briefly referred to Live Attenuated Influenza Vaccine (LAIV) that was introduced in the period 2013-2014 to 2-3 years old and now, under the PHE advice, it is offered to all children from 2 to 10 years old, as it has reasonable vaccine

[2] Baum, U., et al., *Cohort study design for estimating the effectiveness of seasonal influenza vaccines in real time based on register data: The Finnish example.* Scand J Public Health, 2018: p. 1403494818808635.

effectiveness against A/H3N2 and B, while more controversial against A/H1N1.

Subsequently, Prof. de Lusignan explained the use of their dashboard, pointing out the vaccination page is the most popular; they are using various motivation methods, he added, like financial motivation (reminding the GPs that they are paid extra for vaccination) or competition motivation (as GPs can compare their practices with the rest GPs on the network). In addition, they publish on a weekly basis the incidents with proper categorization and this is considered by the GPs to be highly motivating as the associations that can be produced are numerous (flu vs different respiratory infections – vaccinated vs unvaccinated or eligible population that decline the flu vaccine).

Moreover, Prof. de Lusignan referred to data quality issues they have experienced around school-based vaccination and described disparities in LAIV uptake by socioeconomic status in the UK. Using the Index of Multiple Deprivation (IMD) where the least deprived have the highest uptake as well as disparities in LAIV uptake by ethnicity in the UK, where white ethnicity has the highest uptake, followed by mixed ethnicity and then by Black or Asian ethnicities.

In conclusion, Prof. de Lusignan summarized the key-points of his presentation, while underlining that RCGP RSC is holding individual level data about the administration of LAIV to well children aged 2 to 10 years old, where vaccines for 2 to 3 years old are administered by GP's. Whereas older children are vaccinated at school, and this produces a weekly return with feedback data to practices via a dashboard, in order to improve data quality and especially capture school administered LAIV vaccine. The disparities in uptake by socioeconomic status and ethnicity should be used to target specific educational programs and finally the LAIV vaccine administration to well children is an important part of the routine vaccination program and it is offering enhanced protection across the whole community.

Prof. Sir Terence Stephenson asked why the data showed only around 28% of LAIV vaccination uptake of children 2-10 years old, as the recommendation is for all and Prof. de Lusignan replied that the percentage is an underestimate because **pharmacy vaccination and school vaccination don't come back to the GP record that's why there is an urgent need for a data exchange protocols between non GPs vaccines.**

Prof. Philippe de Wals asked if the decision to stop the vaccination age gap to 10-years was based on epidemiology or operational considerations and Prof. de Lusignan replied that although not an expert on that area as he is mostly collecting data rather than participating in the practical and political negotiations that are going on all the time, he predicts that there is still progress on the age limit and that there are documents looking at the goal to provide coverage from 2 to 16 year of age.

INFLUENZA VACCINATION IN BULGARIA

Working Group Briefing

Dr Mira Kojouharova (*Consultant Epidemiologist, National Centre of Infectious and Parasitic Diseases, Bulgaria)* opened the Group by reporting on the situation on influenza vaccinations in Bulgaria was invited to brief the Working Group on the current situation in Bulgaria with a focus on HCP influenza vaccination uptake and the correlation between vaccination and recommendation levels to the public.

Dr Kojouharova stated that vaccination against influenza started in 1957 with a local production of live-attenuated influenza vaccination for nasal application and this vaccine was only given to adult people working in big enterprises until the mid-80s. The attenuated influenza vaccine has been introduced in Bulgaria since the early '90s and during that time, a series of studies had been performed in order to investigate its safety and efficacy in five high-risk groups, children and adults. Thanks to those studies, in 1994 the Minister of Health issued an official recommendation for annual influenza vaccination for people at high-risk mainly, and during that time the important immunization policy started in Bulgaria.

Dr Kojouharova stated that vaccines are compulsory both for the population and for the medical staff. Mandatory vaccination is free of charge for the population, and as a rule, almost all immunizations are administered in the private sector. However, influenza vaccination is not compulsory, it is not included in the Immunization Calendar and it is just recommended. **Recommendations for influenza vaccination are almost the same as they are for the rest of European countries, except for two cases; pregnant women and children of 6 months to 9 months of age.**

Influenza vaccines are available in the private market, they are often administered by GP's in a special immunization sector, but the patient must cover its full cost. **Nonetheless, in a case of a national influenza crisis, influenza vaccination costs are fully covered by the Ministry of Health and the National Health Insurance is compensating the doctors for the implementation of the vaccine.** In addition, Dr Kojouharova mentioned that a new national program for improvement of seasonal influenza vaccination for Bulgaria starts this season and may finish in 2022. Although the program targets only

people at 65 or older, vaccination will be voluntary and free of charge and hopefully coverage rates will be increased by 2022.

At the moment, coverage rates are extremely low and the registration system for tracking vaccination incidents needs further improvement. Dr Kojouharova speculated that this might be because of the complicated system of acquiring influenza vaccines in Bulgaria. **Low levels of influenza coverage are also observed among health care professionals and this observation may significantly influence influenza vaccine uptake in the general population.** Dr Kojouharova then presented the results of a study conducted in Bulgaria[3]. **In this study, health care professionals do not perceive that it is their responsibility to recommend vaccines that are not compulsory**. In addition, **General Practitioners (GPs) show a lack of knowledge about influenza, they do not perceive that it is their responsibility to inform the patient about the benefits of influenza vaccines and they support only mandatory immunization.** About 76-78% of the general public stated that GPs are the main trusted source of information when it comes to vaccinating children[4]. Although 73.8% of people think that vaccination should be mandatory, only half of them stated that they would indeed vaccinate their children. In another study from 2016, it was observed that around 76% of patients seek information about vaccinations from Public Health authorities and GPs, 64.2% of them admitted that they would be vaccinated in a case of epidemic or pandemic influenza outbreak and 80% of them stated that vaccination should be also mandatory for health care providers[5].

In conclusion, Dr Kojouharova summarised that there is a contradiction between patients and health care providers and that GPs should be closer to the patients. If GPs supported and recommended influenza vaccinations, coverage would be higher in the general public.

ORGANIZATIONS STATEMENTS

European Association of Hospital Pharmacist (EAHP)

Dr Steffen Amann *(Director of Professional Development - European Association of Hospital Pharmacist, Belgium)* very briefly commented that **hospital pharmacists have a very important role to promote vaccination in the hospitals and institutions but judging from his institution (7,000 employees) the vaccination uptake for the healthcare workers Is still too low (30%)** event though there has been a 100% increase the last 5 years.

Following on from Dr Amann's statement, Dr Hanna Nohynek commented that in Finland although pharmacists, both hospital and non-hospital, would want to engage themselves into Influenza vaccination, the Government officials disagree from the perspective that Register data will not be captured. Dr Amann replied that it's very important that pharmacists are involved in influenza vaccination, both for patients but also for employees and that is one of his priorities to promote. Prof. Catherine Weil-Olivier replied that Influenza vaccination uptake rate among pharmacists in France was good, after being questioned by Dr Hanna Nohynek, and added that in France you can get vaccinated in a pharmacy as long as you have a prescription.

Lastly, Prof. Kare Molbak noted that in Denmark, influenza vaccine is widely distributed by pharmacies and drug stores that sell cosmetic products, without the need of a prescription, because they have contracts with doctors who will do the vaccination, while he emphasized on the **importance of vaccine accessibility being a major factor for increased vaccination uptake rates.**

European Pharmaceutical Students' Association (EPSA)

Dr Tilen Kozole *(Vice President of European Affairs, European Pharmaceutical Students' Association, Belgium)* underlined the importance of pharmacists in vaccination, pointing that professions are shifting and reshaping nowadays, and all should promote collaboration in common fields for the same cause. He gave the example of the US where pharmacists have been involved in vaccination against various diseases (Influenza, Pneumococcus, Meningococcus, Pertussis, HPV, Hepatitis A&B etc.) since the 1990's, also in Europe, Denmark for example, people can get vaccinated against these diseases; so pharmacists do not take away the vaccination coverage from GP's but they actual compliment it.

Dr Tilen Kozole emphasized that **pharmacists are maybe the most accessible healthcare point in Europe, as two of three Europeans can reach a pharmacy in 5 minutes and added that in many European countries that pharmacist-led vaccination**

[3] Dimitrova, V., et al., *A study of the attitudes of family doctors in Bulgaria towards influenza vaccines.* General Medicine, 2017. **19**: p. 3-7.

[4] Hadzhieva, s., et al., *Study of parental attitudes to immunization among the population in Varna, Sliven and Shumen regions.* Pediatriya, 2018. **58**: p. 56-59

[5] Dimitrova, V., et al., *Is social media a realistic information channel during epidemics and pandemics? Results from the citizen consultation conducted in Bulgaria.* Asset paper series Epidemics and Pandemics: The response of Society, 2017: p. 6-10.

policy is a reality (Portugal, Ireland, UK, France, Denmark, Malta).

Pharmacists have to go through certified training programs and also refresher courses, where they are trained on vaccine administration amongst other things; in regards to continuity of healthcare, he added, in many countries where they keep Health Records, vaccinations are included and **pharmacists are actually responsible for recording the vaccination by either informing directly the GP or indirectly with another written condition.**

Coalition for Life-Course Immunisation (CLCI)

Dr Daphne Holt *(Chair, Coalition for Life-Course Immunisation, France)*, emphasized two points, as in the dilemma **"Compulsory or Mandatory Vaccination"** describing that in a recent Pharmacist Conference that she participated in, although the consensus was more for voluntary rather than compulsory vaccination, the healthcare professionals came out on the side of mandatory vaccination. She also commented on **Ease of Access**, giving an example from the previous Conference where there was a Vaccine Truck outside of the venue and even though she can't estimate the increase in uptake from that very small initiative, the big queue that was formed indicated that it worked; she also added that judging from her experience in France, the pharmacists are a bit nervous and hesitant in vaccinating because they have very little experience and also patients are a bit concerned about asking the pharmacists to vaccinate them for the same reason. Finally, Dr Holt underlined the **need of giving people the right incentives with the ultimate target of increasing the vaccination uptake and succeeding in giving to everybody an advocacy role in vaccinations.**

COUNTRY UPDATES

Serbia

Prof. Radovan Bogdanovic (*Professor of Pediatrics & Pediatric Nephrologist, Paediatric Association of Serbia*) presented the seasonal Influenza vaccination data from Serbia for 2018-19 (in total of 238400 that were vaccinated, 66% were older than 65-yrs, and 33% was at the age group of 20-64-yrs). Adding that vaccination in Serbia is free of charge whether it is mandatory or compulsory. He then described the mandatory and recommended groups, which both consist of three separate categories of people; the first with people at special risk, with epidemiological indications or the staff in healthcare facilities and the second with people without particular risk, clinical indications or the passengers in international transport.

Prof. Radovan Bogdanovic then commented on some statistical data, he noted that the healthcare workers vaccination was 5.5% of the total vaccination, while from the reported cases of flu-like diseases in 2018 with a total of 171.901 (2388/100.000 population), highly ranked were the age group of 1 to 14-years old. Prof. Bogdanovic also referred to Severe Acute Respiratory Infection (SARI) cases, that were 673, 48,7% of them were tested in laboratory and influenza virus was confirmed in 44.2% of the cases.

In conclusion, Prof. Bogdanovic pointed out that there is an increasing interest in influenza vaccination (since the middle October 2019 more than 300,000 were vaccinated) particularly in older people, but unfortunately not as much in children because it isn't as strongly recommended as it should be and that steps are already taken in order to achieve a larger vaccination coverage.

Ireland

Prof. Roy Philip *(Consultant Neonatologist & Adjunct Professor of Neonatology, University Maternity Hospital Limerick GEMS, University of Limerick, Ireland)* presented an update of Influenza Vaccination in Ireland, highlighting that in the last years there is enormous progress regarding vaccination in Ireland. This increased coverage trend started after the HPV incident and was achieved due to combined public and private participation and advertisement. Together with governmental efforts in spreading the message to the public to get involved in vaccinations, resulting in increased uptakes, for example coverage on healthcare professionals was 25% 6-years ago, 51% last year, while the target is at 60% this year.

Prof. Roy Philip underlined that the increased influenza vaccination uptake was predominantly due to the **Hospital level campaigns, that are specifically targeted to healthcare professionals, promoting and spreading key-issues of Influenza disease.** Citing the campaign and key message example that HCPs in Ireland are up to 10 times more likely to get the flu than the general public or that by getting the vaccine you protect yourself from the virus but also your family and friends. Moreover, Prof. Philip pointed out that there is also a clearly better campaign going on the last two years **using e-learning coupled with the effective use of social media and Twitter in order to go against the Anti-vaccination campaigns.** Prof. Philip also noted that in Ireland, the public are all aware that the GPs are getting paid for vaccinating and that's understandable and acceptable, while the vaccine is free at the point of delivery. Finally, Prof.Philip emphasized the **importance of maternity vaccination, pointing that flu**

vaccination during pregnancy has been significantly improved over the last 3 years.

Germany

Dr Barbara Rath *(Pediatric Consultant and Infectious Disease Specialist, Chair of the Vienna Vaccines Initiative, Germany)* reported the situation of influenza vaccinations in Germany. Regarding recommendations for influenza vaccination, it seems that they are not clear and the general population believes that if someone feels healthy, then they do not need to be vaccinated. **Regarding vaccination policy, the main problem in Germany is that it is not uniform and vaccination recommendations differ from state to state. In addition, paediatric recommendation is still not explicit in Germany which is a contradiction to WHO guidelines.**

Regarding vaccination coverage in pregnant women, the rates are extremely low, about 3-5%, when they should be 100% and in order to increase these rates, Dr Rath said that health care professionals should start focusing on how patients think about vaccinations. In addition, they should better inform and guide women through their pregnancy about vaccinations and try to avoid inconsistencies in their communication that may lead to confusion, at the very best, and mistrust, in the worst-case scenario.

Finally, Dr Rath concluded that **people should be better informed by health care professionals about vaccines, antiviral therapies and antibiotics and their intended use and benefits of each drug category.**

Latvia

Dr Dace Zavadska *(Paediatric Infectious Diseases Specialist, Head of Children Vaccination Centre under Children Clinical University Hospital, Riga, Latvia)* spoke about the influenza vaccination situation in Latvia.

In Latvia, only the inactivated formula of influenza vaccination is available, it is mandatorily administered and its cost is fully covered by the state. According to their National Program, pregnant women and children up to 2-years of age or with an underlying condition must be vaccinated against influenza and their costs are fully covered by the state. **Nonetheless, health care professionals and hospital employees are not compensated for influenza vaccinations and thus only 34% of health care professionals are vaccinated.**
In conclusion, Dr Dace Zavadska pointed out that the minimum economic losses caused by the diseases are very high and that prevention against influenza has ultimately lesser costs, than treating its infection symptoms.

.DISCUSSION POINT 1

Increasing the Routine Vaccination of Healthy Children and All Family Members

During this discussion point, Working Group members were asked to share their opinion on how to increase routine vaccination in children and family members. In previous years, the main obstacle of not introducing influenza vaccination in children was the fact that there was very little data on its efficacy. Since then, experience, deriving from several countries, has been accumulated and clinical trials showing efficacy and benefits of vaccinating children have been conducted. **Nonetheless, the global percentage of vaccinated children is about 5%, the high-risk groups are also not protected and therefore, vaccination policies need to be changed.**

Another point made was that by vaccinating children, we would prevent complications and transmissions to other age groups, such as the elderly. As it was stated, **the main obstacle in increasing routine vaccination is the organizational one. Annual vaccinations demands a large workforce and each country has its own resources and organization. Nonetheless, a way to introduce routine vaccination in children was proposed and that was to implement it in schools, as it has been already applied in some countries.**

Communication was another issue that was mentioned. As it was stated, it is difficult to persuade parents to vaccinate their children against influenza, when this vaccine's efficacy only reaches around 40%, whereas others such as meningococci vaccine touches 90%. Therefore, we should change our communication strategies, by underling and promoting the benefits of influenza vaccination and the complications that could be avoided.

Finally, media campaigns and publicity, through TV, posters and advertisements, regarding the benefits of vaccinating children could also aid in introducing routine influenza vaccination in this age group.

DISCUSSION POINT 2

Healthcare Acquired Influenza and increasing HCP Vaccination Rates

During the second discussion point, speakers were asked to share their views on how to increase influenza vaccination

uptake in healthcare professionals. As it was stated, only 30% of health care professionals vaccinate themselves and this means that not only they do not feel the need to protect themselves, but they also risk transmitting the disease to their patients.

In the Netherlands, although there was a campaign promoting vaccination in health care professionals, the uptake was still low, around 24%. In addition, it was proposed to be mandatorily vaccinated against influenza but there was a lot of protest by the public. Another issue in the Netherlands was the fact that there was no common ground in leaders of hospitals and institutes and therefore, there is not a unanimous effort in promoting vaccination. **This is something that needs to change because if healthcare professionals would increase their vaccination uptake, the general public would be more influenced to be vaccinated too.**

In Spain, although coverage rate in healthcare professionals reaches around 47%, health authorities are trying to increase it even more. Therefore, it was proposed that we should study, take as an example and make public, good initiatives of small regional efforts that have been proven to be working and have greatly increased their vaccination coverage.

In Canada, influenza coverage rate is very high among healthcare professionals, but it is extremely low in other population groups. Making influenza vaccination mandatory was not welcomed by the general public as they were opposed due to the limited data showing the benefits of vaccination. Therefore, there is a crucial need for more data indicating the efficacy, safety and benefits that influenza vaccination could provide.
Another point made was the discrepancy in vaccination coverage between doctors and nurses. Although in doctors, coverage rates are relatively high, in nurses, this percentage is extremely low.

Finally, it was mentioned that there are also diagnostic issues and lack of feedback from vaccinations that need to be addressed in order to increase vaccination coverage rates.

DISCUSSION POINT 3

At Risk Groups and the Crucial Role Community Pharmacists and Nurses can Play

During the last part of the discussion, several points were made on the **crucial role of pharmacists and nurses in promoting vaccination in risk groups.** In Italy, there is an effort to involve pharmacists in order to increase vaccination coverage not only for influenza, but for other diseases too. **Regarding high-risk groups, nurses are thought to play a bigger role in promoting vaccination, whereas pharmacists would help to increase the vaccination coverage of the general public.** Another point made was the fact that by involving more pharmacists, access to vaccination would be easier and therefore, coverage rates could be increased.

As stated during the previous discussion point, although there is a lot of information and education on the subject, coverage rates among nurses are extremely low. **Therefore, the question here was, how to influence people to be vaccinated if healthcare professionals do not protect themselves? In an effort to increase vaccination rates among healthcare professionals in Denmark, they provided badges to those that were vaccinated and vaccination rates were indeed increased.**

Finally, it was underlined that pharmacists and nurses play indeed a crucial role in promoting vaccination, as pharmacists provide easier access to vaccinations and nurses greatly influence the general public that come to hospitals.

CONCLUSIONS

This Working Group was dedicated to influenza vaccination, its uptake rates around Europe and its coverage within different population groups. The Group agreed that Healthcare Professionals should do more to promote the benefits of the seasonal flu vaccination, as it can prevent serious complications caused by the influenza virus. In addition, coverage rates among infants and children are still relatively low and this needs to change, as it would help prevent transmitting the virus into other population groups, such as the elderly. Finally, healthcare professionals should be routinely (but not compulsorily) vaccinated, as this would not only protect their health and their patients, but would also influence the general public to be also vaccinated.

In particular the Working Group has raised the following areas that need to be explored in more detail, with necessary actions taken to achieve Broad (LifeCourse) and Optimal (increased Vaccine Coverage Rate VCR) Flu Prevention, they include:

- **Low levels of influenza coverage are still observed among health care professionals (HCPs)** and this observation may significantly influence influenza vaccine uptake in the general population.

- **Hospital campaigns, that are specifically targeted to healthcare professionals are urgently needed** to promote

HCP uptake and limit the spread of Influenza. *I.e - In an effort to increase vaccination rates among healthcare professionals providing badges to those that were vaccinated would be a simple step to help increase rates and publicise HCP support for vaccines.*

- **Health care professionals and hospital employees should be universally compensated for influenza vaccinations across Europe**.

- **General Practitioners (GPs) often show a lack of knowledge about influenza**, they do not perceive that it is their responsibility to inform the patient about the benefits of influenza vaccines and they support only mandatory immunization.

- **An urgent need for a data exchange protocol between non GPs vaccines is needed.** Pharmacy vaccination and school vaccination are often not updated on GP records that's why there is a need for improved protocols.

- **Vaccination Registers and register-based studies allow for closer monitoring and quick policy changes to vaccination schedules.** Improved Registers as part of healthcare routines and statutory notification systems (infectious disease) should be supported and developed further. Especially as most of the countries still do not have Vaccine Registers in place.

- **Pharmacists are arguably the most accessible healthcare point in Europe and should be better utilized to increase influenza vaccination uptake.** Two of three Europeans can reach a pharmacy in 5 minutes. In addition Hospital pharmacists have a very important role to promote vaccination in the hospitals and institutions

- **Using e-learnings, coupled with the effective use of social media and Twitter, is needed in order to go against the Anti-vaccination campaigns.** People should be better informed by health care professionals about vaccines, antiviral therapies and antibiotics and their intended use and benefits.

    - **Media campaigns and publicity, through TV, posters and advertisements, regarding the benefits of vaccinating children** could also aid in introducing routine influenza vaccination in this age group and should be a priority.

    - **There are often discrepancies in personal vaccination coverage between doctors and nurses.** Nurse vaccination rates are often lower. Also, with high-risk groups, nurses are thought to play a bigger role in promoting vaccination. A campaign directed at increasing the vaccination uptake of allied HCPs and nurses in particular would be a priority.

    - **Importance of vaccine accessibility is a major factor for increased vaccination uptake rates.** Accessibility for all those who want to be vaccinated against influenza should be the focus.

SUGGESTED ACTION PLAN FOR 2020/2021

Target 1
Overcome Continuing Low Levels of HCP Influenza Vaccine Uptake to Offer Direct Protection and Encourage the Public to be Vaccinated.

Need: Low levels of influenza coverage are still observed among health care professionals (HCPs) and this observation may significantly influence influenza vaccine uptake in the general population.

Proposed Actions: A Hospital campaign specifically targeted to healthcare professionals to promote HCP uptake and limit the spread of Influenza. A campaign is needed to increase vaccination rates among healthcare professionals by providing badges to those that were vaccinated would be a simple step to help increase rates and publicise HCP support for vaccines.

Target 2
Make GPs, Pharmacists and Nurses Play a Larger Role in Increasing Influenza Vaccination Uptake Through Advocacy.

Need: 1) General Practitioners (GPs) often show a lack of knowledge about influenza, they do not perceive that it is their responsibility to inform the patient about the benefits of influenza vaccines and they support only mandatory immunization. **2)** Pharmacists are arguably the most accessible healthcare point in Europe and should be better utilized to increase influenza vaccination uptake. **3)** Nurses are thought to play a bigger role in promoting vaccination with with high-risk groups.

Proposed Actions: Three separate, but linked, online training courses developed for GP's, Pharmacist and Nurses. The first two modules of each training course would be Healthcare Professional specific, with the third module a combined

training for GP's, Pharmacist and Nurses on how to better work together and complement each others work in increasing influenza vaccinations.

Target 3
Develop a Universal European Vaccination Register for Vaccines

Need: Improved Registers as part of healthcare routines and statutory notification systems (infectious disease) should be supported and developed to gain a better understanding of vaccine uptake and coverage across borders. There is also a clear need for a data exchange protocol between non GPs vaccines. Pharmacy vaccination and school vaccination are often not updated on GP's record that's why there is a need for improved protocols and a centrally coordinated register.

Proposed Actions: A dedicated Expert Working Group on how HCPs can support the development of a universal vaccination register across Europe. Development of a best-practice approach and protocol on how vaccination information should be shared across GPs, pharmacies, schools based vaccine programmes and all those who administer vaccinations to help all countries work towards a centrally coordinated register system.

Target 4
Directly Counter the Anti-vaccination Campaigns

Need: There's a need to better use e-learnings, and the effective use of social media and Twitter in order to go against the Anti-vaccination campaigns. People should be better informed by health care professionals about vaccines, antiviral therapies. This should be coupled with Media campaigns and publicity, through TV, posters and advertisements, regarding the benefits of the influenza vaccines.

Proposed Actions: Formation of a Pro-vaccine panel of healthcare professionals who have been trained on how to effectively use social media channels to actively counter the Anti-vaxxer activities that are currently taking place online. In particular: 1) A dedicated campaign to arm young healthcare professionals with the skills to counter misinformation on Social Media. 2) Training and mobilising all interested HCPs to engage on Social Media to fight Vaccine Misinformation through a free-to-view modular online training course series of practical webinars.