

Report on the role of nurses in COVID-19 Mass Immunisation

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Image credit: OASIS International Hospital

It has been over a year since the COVID-19 pandemic was declared by the World Health Organization (WHO) (World Health Organization, 2020) and the world has seen vaccines for this disease being developed at an unprecedented pace (International Vaccine Institute, n.d.). As of the end of April 2021, most high-income countries have started vaccinations of at least two of three population groups - key workers, the clinically vulnerable groups and older people - while many low- and middle-income countries, especially in the African continent, have not yet started (Our World in Data, 2021).

The progress of vaccination programmes varies significantly between countries for several reasons. Much of the variation is related to the availability of supplies of the vaccines, distribution chains and the availability of human resources to carry out the immunisations. Some countries, including in Europe, are experiencing difficulties in delivering COVID-19 immunisation, despite battling with high

rates of infection. This is the result of supply issues and individuals' fears related to investigations into possible adverse effects of the vaccines (BBC, 2021). Since the beginning of the pandemic, ICN has been closely following how COVID-19 affects nurses and healthcare workers, by estimating its impact in terms of infections, deaths, and its mental health toll. It has also been looking at related issues, such as retention of the nursing workforce, and the role of nurses in mass COVID-19 immunisation programmes (International Council of Nurses, 2021).

Of the total number of vaccines delivered so far, only about 2% have gone to the African continent (International Council of Nurses, 2021). ICN has been calling for more vaccine equity, so that healthcare workers and vulnerable people in poor countries, including in Africa, are vaccinated ahead of younger people and lower-risk groups in richer countries (International Council of Nurses, 2021).

ICN calls on member states to make sure that there is vaccine equity distribution among both low-, middle-, and high-income countries

In 2018, ICN conducted a survey involving 15 of 36 Office for Economic Cooperation and Development (OECD) countries looking at nursing's involvement in immunisations (International Council of Nurses, 2018). It identified a group of 11 countries - Australia, Canada, Greece, Ireland, Israel, Japan, Portugal, Spain, Sweden, Turkey, United States - as "highly effective", based on a set of indicators. On the basis of that study and its findings, a new survey focusing on nurses' roles in mass COVID-19 vaccination in those countries was conducted in the first three months

of 2021. Thirteen respondents from nine of those countries have submitted completed responses, which were taken into account in this analysis (see Annex).

It is important to keep in mind that the survey results are preliminary, and were used to structure interviews conducted in April and May 2021 with representatives of nursing in several countries selected from those surveyed. The following findings are based on the results of the survey and some of the key interviews.

FINDINGS

- **Nurses' involvement in all aspects of vaccinations, and in particular in delivering vaccine information, plays a key role in increasing vaccination rates and reducing estimated vaccine hesitancy.** Previous research has already shown how nurses play a role in reducing vaccine hesitancy (Miller, et al., 2015) (Hoekstra & Margolis, 2016). The 2021 survey highlighted that, based on a set of indicators, the three countries where the nurses were involved the most in the COVID-19 vaccination planning and implementation process, especially regarding training and information - Sweden, Portugal and Israel - had a lower estimated rate of their adult populations (according to the respondents) who were actively against COVID-19 vaccinations (See ANNEX) and an increased proportion of the adult population who were vaccinated.
- **Furthermore, following the resolution of the supply of vaccines,** our findings suggests that nurses have been actively providing information and support to the development of education resources and tools concerning the importance of vaccination. In the countries where the survey respondents have the least amount of information, estimated vaccine rates and resistance is higher or unknown. More research is needed to explore the extent to which nurses' involvement in vaccinations reduces vaccine hesitancy. In a country such as Israel, where the vaccines were available and nurses form the backbone of the Primary Care system, nurses played a leading role in promoting vaccination to the population.
- **In many "highly effective" countries, nurses are included in the committees that plan for COVID-19 mass vaccination at the national**

level. According to 67% of respondents, nurses are included to a greater or lesser degree in national-level committees to plan and implement mass COVID-19 vaccinations. The top three roles that the nurses have in formulating national COVID-19 immunisation strategies are:

- Representing the issues of the nursing community
- Advising on policy and practice
- Participating to the decision-making process.

It is essential to note that in multiple national studies, nurses are ranked by the public as the most trusted professionals, above other healthcare professionals, faith-based leaders or other professionals. Given the public's uncertainty over vaccinations and the many questions they have, nurses are ideally placed to provide "trusted" information to increase the public's engagement in vaccination programmes.

A leading nursing policy maker in Israel said: "I think that here (in Israel) the nurses were the leaders in decision making, how it could be done. A vaccination campaign is a campaign for nurses, at all levels. Nurses have been the real leaders in this event since it started, with the involvement of the Nursing Administration in determining the strategy and participation in the decision making". She added: "At every administrative board meeting, which included all the representatives, all the senior executives in the system, including the Health Minister, including the Prime Minister many times, the profile of the performance, arrival and follow-up of the vaccinations was presented by nurses. They were supported by the logistics people, they were supported by a great many people who accompanied

this operation, but at the end the decision-making processes were nurses.”

- **More than 90% of respondents to the 2021 survey reported that National Nursing Associations (NNAs) have been proactive in influencing their countries’ national strategy for COVID-19 mass vaccinations.** This was done by collaborating on policy, participating to regular meetings with decision-makers, organising educational programmes and [training] seminars, as well as ensuring a good exchange of information, and that nurses are protected in the process. The NNAs were also able to mobilise their nursing workforces when needed. NNAs have established relationships with policymakers, service leaders and regulators, which means that they can act as an important agent to facilitate planning and execution of massive immunisation.

A senior nursing policy leader in Japan said: “Nursing organisations should perform their role especially in constructing the structure of the recruiting of nursing staff for vaccination and appealing for

nurses to contribute to the vaccination [programme] because now [we are] facing the importance of the nursing staff for implementation of the vaccination programme. Nursing associations and people who are working in administrative organisations with licenses of nurses and public health nurses have an important role for the involvement of nursing in the mass vaccination programme, especially in Japan. Public health nurses of each local government have major roles in the public health, such as vaccination, not just for COVID-19.”

In conclusion, ICN calls upon member states to:

Include nurses and nursing organisations in the planning, monitoring, and delivery of the vaccine, as well as in public education. This will lead to increased numbers of people being vaccinated and reduce vaccine hesitancy.

ICN calls on member states to ensure there is vaccine equitable distribution of vaccines among high-, middle-, and low-income countries.

METHODOLOGY

The COVID-19 Immunisation Survey was developed in the second half of 2020 and January 2021. The sample for the study included respondents from nine out of the 11 countries that were previously considered “top performers”, based on the findings of the 2018 Immunisation Survey conducted by ICN (International Council of Nurses, 2018).

Between January and early February 2021, the survey was uploaded on the Survey Monkey platform using logic based on results of dedicated meetings with ICN Associate Director for Nursing and Health Policy David Stewart, and ICN President Emerita Dr Judith Shamian. After the survey was uploaded on the platform, the logic was tested by four volunteers,

who provided comments, after which some final changes were made to the survey.

Once the survey was ready a “collector” was created, allowing for multiple submissions to bypass issues some respondents had with the platforms, and the link to the survey submission page was sent out to contacts in National Nursing Associations (NNAs) of these nine countries. The contacts were also asked either to forward the survey to government-level Chief Nurses (GCNs) in their countries, or to say if they preferred ICN to forward the survey to their GCNs. Only complete submissions were included in the analysis.

LIMITATIONS

- Only **complete submissions** were taken into account for the analysis of **2021 survey**. Some **incomplete submissions** were received, but they were discarded.
- **Thirteen respondents from nine countries out of the 11 preselected have submitted complete responses** and were included in the analysis.
- The **size of the sample and the composition of respondents limits the statistical relevance of the findings**. (Some countries have two respondents: GCN and NNAs, some countries just one, only a limited number of countries were included etc.). Further research is needed to validate these findings.
- The “highly effective” countries were selected according to an analysis of the ICN 2018 survey on immunisation. **As of 2021, this performance data could be outdated, and other countries could be doing better according to the same criteria.**
- The indicator table reports “unknown” where information was explicitly not known or where multiple incoherent pieces of information were received. Further research should go into clarifying conflicting results in the indicators collected.

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ANNEX

Indicator NATIONAL LEVEL	Israel	Portugal	Canada	Greece	Japan	USA	Australia	Ireland	Sweden
Are nurses on national level committee to plan for mass COVID-19 vaccinations?	Yes	Yes	Unknown	No	No	Yes	Yes	Yes	Yes
Is the NNA proactive in contributing/influencing strategy for mass COVID-19 vaccinations?	Yes	Yes	Yes	Yes	Unknown	Yes	Yes	Yes	Yes
Are nurses involved in policy and practice advice?	Yes	Yes	Yes	Yes	Unknown	Yes	Unknown	Yes	Yes
Are nurses involved in training?	Yes	Unknown	Yes	Yes	Unknown	Yes	Yes	Yes	Yes
Are nurses involved in developing guidelines?	Yes	Yes	Yes	Yes	Unknown	No	Unknown	Yes	Yes
Are nurses involved in gathering/analysing information?	Yes	Unknown	Unknown	Yes	Unknown	Yes	No	Yes	Yes
Are nurses involved in decision making/management of vaccinations?	Yes	Yes	Yes	Yes	Unknown	Yes	Unknown	Yes	Yes
Rate of adult population actively against COVID-19 vaccination	Less than 10%	Less than 10%	11-25%	Unknown	Unknown	26-50%	11-25%	11-25%	Less than 10%

REGIONAL (HEALTH SYSTEM) LEVEL	Israel	Portugal	Canada	Greece	Japan	USA	Australia	Ireland	Sweden
Are nurses on Regional (health system) level committee to plan for mass COVID-19 vaccinations?	Yes	Yes	Unknown	Yes	Unknown	Unknown	Yes	Yes	Yes
Is the NNA proactive in contributing/influencing strategy for mass COVID-19 vaccinations?	Yes	Yes	Yes	Yes	Unknown	Unknown	Unknown	Yes	No
Are nurses involved in policy and practice advice?	Yes	Yes	Yes	Yes	Unknown	Unknown	Yes	Yes	No
Are nurses involved in training?	Yes	Unknown	No	Yes	Unknown	Unknown	Unknown	Yes	No
Are nurses involved in developing guidelines?	Yes	Unknown	No	Yes	Unknown	Unknown	Unknown	Yes	No
Are nurses involved in gathering/analysing information?	Yes	Yes	Unknown	Yes	Unknown	Unknown	Unknown	Yes	No
Are nurses involved in decision making/management of vaccinations?	Yes	Yes	No	Yes	Unknown	Unknown	Unknown	Yes	No
Rate of adult population actively against COVID-19 vaccination	Less than 10%	Less than 10%	11-25%	Unknown	Unknown	26-50%	11-25%	11-25%	11-25%

LOCAL (ORGANISATION) LEVEL	Israel	Portugal	Canada	Greece	Japan	USA	Australia	Ireland	Sweden
Are nurses on Local (Organisation) level committee to plan for mass COVID-19 vaccinations?	Yes	Yes	Unknown	Unknown	Unknown	Unknown	Unknown	Yes	Yes
Is the NNA proactive in contributing/influencing strategy for mass COVID-19 vaccinations?	Yes	Yes	Unknown	Unknown	Unknown	Unknown	No	Yes	Yes
Are nurses involved in procedure development?	Yes	Yes	Yes	Unknown	Unknown	Unknown	Unknown	Yes	Yes
Are nurses involved in risk assessment?	Yes	Unknown	Yes	Unknown	Unknown	Unknown	Unknown	Yes	Yes
Are nurses involved in prescription?	Yes	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Yes	Yes
Are nurses involved in education?	Yes	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Yes	Yes
Are nurses involved in management, supervision?	Yes	Unknown	Yes	Unknown	Unknown	Unknown	Unknown	Yes	Yes
Are nurses involved in the administration of the vaccines?	Yes	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Yes	Yes
Are nurses involved in the follow-up?	Yes	Yes	Unknown	Unknown	Unknown	Unknown	Unknown	Yes	Yes
Rate of adult population actively against COVID-19 vaccination	Less than 10%	Less than 10%	11-25%	Unknown	Unknown	26-50%	11-25%	11-25%	11-25%