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Role of the National Immunisation Technical Advisory Groups in 13 European countries in the decision-making process on vaccine recommendations

Martinelli Domenico, Quattrone Filippo, Fortunato Francesca, Di Maggio Elisa, Filia Antonietta, Rota Maria Cristina, Lopalco Pier Luigi, Prato Rosa. Role of the National Immunisation Technical Advisory Groups in 13 European countries in the decision-making process on vaccine recommendations. Euro Surveill. 2023;28(43):pii=2300131.

Adult Immunization Board (AIB) Technical meeting: Strategies for introducing and implementing vaccines for adults into National Immunization Programs in Europe: Exemplary Approaches and Key Insights 18 – 19 April 2024, Hotel Kings Court, Prague, Czech Republic

Background

NITAGs as critical actors in ensuring continuous updates of national immunisation strategies (NIP)

- Independent, well-informed advice based on a review of the evidence
- ✓ Factors should be considered:
 - Burden
 - Public health or political priorities
 - Availability of other preventive and control measures
 - Available products (efficacy, safety, supply)
 - Economic and financial aspects
 - Equity and acceptability of interventions
- In 2015, ECDC highlighted variability in the decision-making process/theoretical frameworks to propose introduction of new vaccinations in EU/EEA countries

Background

- Implementation of NITAGs was a goal of the European Vaccine Action Plan (EVAP) 2015–2020 of the WHO/Europe
 - ✓ In 2022, all WHO European Region countries or territories have an established NITAG except for Kosovo*
 - Recommendations on the introduction of three vaccines: PCV, rotavirus vaccine or HPV vaccine
 - Not all NITAG recommendations have led to an introduction, principal challenges: vaccine availability and financial sustainability
- > European Immunisation Agenda 2030 stressed the centrality of NITAGs in
 - Updating national immunisation schedule
 - Optimising the public health impact of existing and newer vaccines

*This designation is without prejudice to positions on status and is in line with United Nations Security Council Resolution 1244/99 and the International Court of Justice Opinion on the Kosovo Declaration of Independence. Hungary has a committee composed of members from the National Institute of Public Health that acts as decision-support.

Online survey

Introduction of new or improved vaccines and possible upcoming changes to recommendations for existing vaccines

European Joint Action on Vaccination (EU-JAV) (<u>www.eu-jav.com</u>) *European Union Health Programme* 20 countries, 8 WPs WP-6 Vaccine Supply and Preparedness, leaded by Italian NIH

Aim

- > Collecting information about
 - The main criteria for vaccine recommendation development in European countries
 - Any upcoming plans to introduce new vaccine products (new vaccines or vaccine combinations) and/or new vaccine recommendations into NIP during the years 2022-2024

Target

- NITAG representatives or persons in charge of the national or subnational immunisation programmes
 - ✓ List of referents was a deliverable of the WP-4 of EU-JAV project

Questionnaire

> 10 multiple choice and open-ended questions

Vaccine introduction / recommendations planned in the upcoming three years, by target age

Considerations Months Birth 1 2 3 4 5
 6
 7
 8
 9
 10
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 23
Introduced Recommended Antigen BCG Hepatitis B Polio DTP-containing vaccine Haemophilus influenzae type b Conjugate Pneumococcal Polysaccharide Rotavirus MenA conjugate MenC conjugate Meningococcal MenACWY conjugate MenB Measles, Mumps, Rubella Measles, Mumps, Rubella, Varicella Varicella Hepatitis A Nonavalent HPV Quadrivalent Bivalent Quadrivalent Trivalent Inactivated, standard-dose, eggbased Inactivated, standard-dose, cell Seasonal Influenza culture-based Live attenuated, egg-based Inactivated, high-dose, egg-based Inactivated, standard-dose, eggbased with MF59 adjuvant Recombinant HA Live, attenuated Herpes zoster Recombinant, adjuvanted Japanese Encephalitis Yellow Fever Tick-borne Encephalitis Typhoid Cholera Rabies Dengue (CYD-TDV)

Infants and toddlers

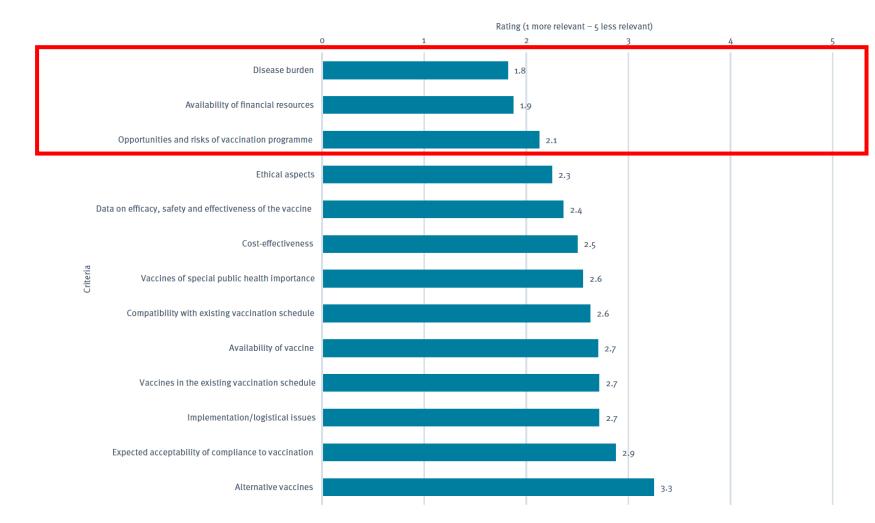
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> Thirteen/28 (46%) invited countries responded to the survey

- ✓ <u>Representatives of NITAGs</u>: Ireland, Latvia and Portugal
- ✓ <u>NITAG Secretariats</u>: Belgium, Norway and Spain
- ✓ Representative of MdH: Italy
- Representatives of National Public Health Institutes: Bosnia-Herzegovina, Croatia, Denmark, Hungary, Romania and Sweden

FIGURE

Criteria for development of vaccine recommendations in 13 European Union/European Economic Area countries



In **all countries** except Romania, where NITAG recommendations are binding for the government or the health authority, NITAGs have an **advisory role**, with the Ministry of Health or other authorities deciding on the recommendations.

Nine/13 countries specified which introductions or recommendations have been planned for the period 2022-2024

| Country | <u></u> | Target group ^b (| | Individuals with medical conditions or other | | | |
|---------|---------|--------------------------------|---------|--|--|--|--|
| | ٢2 | 2–18 | 45−≥ 65 | indications | | | |
| Belgium | 3 | 1 | 1 | 0 | | | |
| Croatia | 0 | 0 | 0 | 1 | | | |
| Denmark | | 1 | 0 | 2 | | | |
| Ireland | 2 | 1 | 1 | 1 | | | |
| Italy | 2 | 2 | 2 | 2 | | | |
| Latvia | | 2 | 0 | 1 | | | |
| Norway | 0 | 2 | 2 | 0 | | | |
| Spain | 1 | 3 | 1 | 0 | | | |
| Sweden | 0 0 1 | | 1 | 0 | | | |
| Total | 8 | 12 | 8 | 7 | | | |

Planned vaccine introductions or recommendations in 13a European Union/European Economic Area countries, by target age group, other indications and disease, 2022-2024

Planned vaccine introductions or recommendations in 13a European Union/European Economic Area countries, by target age group, other indications and disease, 2022-2024

| Number of planned vaccine introductions or recommendations | | | | | | | | | | | | | | |
|--|------------------------|-----|------------------|------------------|--------------|--------------------------|-------------------------|------------------------|-----------------------|-----------|--|--|--|--|
| Country | Disease | | | | | | | | | | | | | |
| | Acellular pertussis | DTP | Herpes zoster | HPV infection | Meningitis B | Meningococcal disease | Pneumococcal disease | Rotavirus infection | Seasonal influenza | Varicella | | | | |
| Belgium | 0 0 | | 1 | | 1 | 2 | 0 | 0 | 1 | 0 | | | | |
| Croatia | | 0 | 1 | 0 | 0 | 0 | | | | | | | | |
| Denmark | | | 0 | 1 | | | | | 2 | | | | | |
| Ireland | | | 2 | 0 | | | | | 0 | 2 | | | | |
| Italy | | | 2 | 1 | 1 | 2 | 1 | | 1 | - O 1 | | | | |
| Latvia | 1 | 1 | 0 | 1 | 0 | 0 | 0 | | | | | | | |
| Norway | 0 0 | | 1 | 0 | 0 | 1 | 1 | | 0 | | | | | |
| Spain | | 0 0 | 0 0 | 1 | 1 | 2 | 1 | 1 | 1 | - 0 | | | | |
| Sweden | | | | 0 | 0 | 0 | 1 | 0 | | | | | | |
| Total | 1 | 1 | (7) | 4 | 3 | 5 | 4 | 1 | 5 | 3 | | | | |

Box

Planned vaccine introductions or recommendations in 13ª European Union/European Economic Area countries, 2022-2024

[...]

Italy:

- Recommendation for meningococcal B vaccination of infants and toddlers (birth-24 months) using reduced schedule of two primary doses and a booster dose
- Recommendation for seasonal influenza vaccination of children (6 months–6 years) with quadrivalent vaccine
- Recommendation for meningococcal vaccination of toddlers (13-24 months) and adolescents (11-18 years) with ACWY conjugate vaccine (instead of meningococcal C vaccine)
- Recommendation for pneumococcal and herpes zoster vaccination of adults (≥65 years)
- Recommendation for herpes zoster vaccination of persons with underlying medical conditions using recombinant, adjuvanted vaccination
- Recommendation for HPV vaccination of women with CIN grade ≥ 2 with nonavalent vaccine

[...]

A cross-check of the ECDC **vaccination tracker** with the information from the present survey found that 15 (**42.9%**) new introductions or changes were already present in the tracker as of **September 2023**

Discussion

- NITAGs have an advisory role, other reasons may impact vaccination programme introduction
- > Performance indicators of NITAG activity are needed
 - ✓ Since 2020, WHO/UNICEF: 6 indicators
 - ✓ Since 2021:
 - the timing of the most recent NITAG review
 - If NITAG issued recommendations
 - if NITAG recommendations were adopted by the MoHs
 - Sophisticated frameworks are required (functional capacity, quality and outputs)
- > Shift towards a life-course approach to immunisation

Limitations

- Respondents: pool NITAG experts, secretariats and persons in charge of the national immunisation programmes
- Survey did not explore the role of NITAGs in the introduction of vaccines during health emergencies
 - ✓ Progressively integrated into the national immunisation programmes
- Recommendations or standard operating procedures were not reviewed

Remarkable points

- Fragmented scenario, where Eurpean NITAGs are working autonomously
 - ✓ Varying of experience
- Stronger collaboration in the introduction of new vaccines among NITAGs is needed
- Instruments (as an updated versions of the questionnaire) can be helpful to share information
 - Manufacturing and supply capacity
 - ✓ Dose-sparing strategies
 - ✓ Real-time knowledge and evidence-based practices sharing

Thank you for the attention!

e-mail address: <u>domenico.martinelli@unifg.it</u>