Mig-HealthCare Roadmap & Toolbox

Vaccinations

Co-funded by the European Union's Health Programme (2014-2020)

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Vaccinations

1. Magnitude of the problem

Immunization is a core component of the human right to health. Vaccination programs intend to ensure adequate protection from vaccine-preventable diseases. An important public health measure is to achieve high immunization coverage in order to prevent morbidity and mortality. The effect of immunization is in accordance with its completeness and timely administration. Immunization programs attain the highest level of protection against vaccine-preventable diseases at a young age with high immunization coverage. Improving vaccination coverage depends on the target population and the health system. Vaccine coverage is routinely used as a performance indicator for immunization programs.

Global and regional immunization initiatives support low- and middle-income countries in strengthening immunization program capacity (WHO, 2012). The Global Vaccine Action Plan intends to prevent millions of deaths by 2020 through building capacity of health workers to support strong immunization programs. Despite global support for immunization, there are many problems with vaccinations in low- and middle-income countries throughout the world.

2. Reference to the problem concerning migrants/refugees

Since 2011, Europe is facing one of the greatest migration inflows in its history. Migrants and refugees are exposed to significant risk factors for communicable diseases. They undertake long journeys from affected by war countries that are endemic for poverty-related diseases. National healthcare service in their countries of origin is often disrupted due to political and economic crisis. However, according to WHO, there is little evidence for an association between migration flows and the importation of infectious diseases[1]. The Mig-HealthCare project also offers evidence that migrants/refugees do not pose a threat of infectious disease in the host countries - https://mighealthcare.eu/e-library

Migrants are often exposed to malnutrition, overcrowding and unsanitary conditions. In 2016, WHO-UNHCR-UNICEF stated that migrants, asylum seekers and refugees should have “non-discriminatory and equitable” access to vaccinations and recommended to vaccinate migrants in accordance with the immunization programs of the hosting country[2].

Nevertheless, it is usually difficult to reach migrant populations in order to ensure the full vaccination schedule due to several challenges: 1) movement of migrants and refugees throughout European countries; 2) lack of information about immunization status of migrants and refugees; 3) escape from registration and vaccination; 4) limited access to screening services; 5) lack of coordination among public health services of neighboring countries (Mipatrini et al., 2017).

[1] http://www.euro.who.int/en/health-topics/health-determinants/migrationand-health/migrant-health-in-the-european-region/migration-and-health-key-issues#292115

[2] http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/news/news/2015/11/who,-unicef-and-unhcr-call-for-equitable-accessto-vaccines-for-refugees-and-migrants/who-unhcrunicef-joint-technical-guidance-general-principles-ofvaccination-of-refugees,-asylum-seekers-and-migrantsin-the-who-european-region

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In a 2018 survey study of migrants and refugees in 10 countries across Europe within the MIGHEALTHCARE project demonstrated the alarmingly low rate of vaccination among migrant and refugee populations in Europe. More than 73% of participants did not report having a vaccination card, and very small percentages reported having received vaccinations either in their present country or in the country of entry in the EU (values range from 6.9% for influenza and 21.3% for Tetanus). Immunization numbers for eight diseases are presented in Table 1.

Table 1: Have you received immunization for any of the following diseases? (either in the present country or in the country of entry in the EU)

Disease	% I don't know	% No	% Yes	N*
Hepatitis A	16.9	68.0	15.2	1,030
Hepatitis B	14.9	67.4	17.7	1,024
Influenza	16.3	76.8	6.9	954
Measles	16.0	70.1	13.9	1,006
Pneumococcus (pneumonia)	16.3	70.9	14.8	1,008
Polio (all in adult booster shots)	15.7	69.5	14.8	1,003
Tuberculosis	15.2	68.7	16.1	1,008
Tetanus	14.7	64.0	21.3	1,027

3. Reference to issues of particular interest

Hepatitis B

Investigations on HBV prevalence among migrants and refugees showed a seroprevalence of active infection of 7.2% and an overall seroprevalence (including markers of prior infection) of 39.7% (Rossi, 2012). The risk was higher for migrants from East Asia and Sub-Saharan Africa. A systematic review reported a prevalence of HBsAg in migrants ranging from 1.0 to 15.4%, 2-6 fold higher than that of the general population (Hahne et. al, 2013).

Measles, mumps, and rubella

Investigations showed insufficient data on measles outbreaks and vaccination coverage among migrants in Europe. Prevalence of seronegative individuals among migrants was found to vary between 6 and 13%; children were at higher risk to be unvaccinated (Jablonka et. al, 2016). Foreign-born children in Germany had 3-fold higher risk of being unvaccinated than German-born children (Poethko-Mulle et al., 2009).

Concerning mumps, seronegative individuals were 10.2% among newly arrived refugees in Germany (Jablonka et al., 2016). Similar findings were reported from Sweden and the UK.

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Poliomyelitis

In Germany, less than 15% of Syrian children refugees were vaccinated, while in France, the vaccination coverage among HIV-infected migrants was 64.4% (Bottcher et al., 2015; Mullaert et al., 2015).

Tetanus

Investigations showed lower rate of the vaccination coverage among migrants in comparison to EU-born individuals. In Switzerland, only 27% of newly arrived migrant children had antibodies against diphtheria-tetanus-pertussis (de la Fuente et al., 2013).

Diphtheria

In France, a seroprevalence rate of 69% of antibodies against diphtheria among HIV-infected migrants was found (Mullaert et al., 2015).

Varicella

Investigations in Germany showed that 3.3% of newly arrived in 2016 asylum seekers were seronegative for IgG against varicella virus (de Valliere et al., 2011).

4. Important steps for the Health care sector

To tackle obstacles to vaccination, WHO proposes to tailor immunization services and to strengthen communication toward specific population targets. In particular, communication campaigns should announce the advantages of vaccination together with lack of legal consequences for migrants. In addition, screening campaigns for vaccine-preventable diseases and epidemiological surveillance may be very helpful to reveal the immunization status of migrants and refugee populations.

According to ECDC, the vaccination status of migrants and refugees arriving in Europe should be assessed firstly through their documentation and in case such documentation is not available, migrants should be considered unvaccinated and vaccinated according to the local immunization schedule. MMR and polio vaccines should be prioritized. Priority should be given also to highly contagious diseases and to those diseases causing severe health consequences, such as hepatitis B, diphtheria, tetanus, and pertussis. Vaccination against poliovirus is obligatory for people coming from high-risk countries like Afghanistan, Pakistan, Nigeria and Somalia or from those countries which remain vulnerable to potential international spread, such as Cameroon, Equatorial Guinea, Ethiopia, Iraq, Syria, Israel and Palestine.

5. Prevention

Provision of health care at reception centers of newly arrived migrants and refugees should be comprehensive, integrated and person-centered. Measures to reduce the risk of communicable diseases include implementation of health prevention and management. Access to vaccination is of prime importance. Vaccinations for migrants and refugees should be considered in accordance with national guidelines.

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Vaccination records should be provided to the migrants and refugees, especially when they are moving between countries.

According to ECDC and WHO vaccinations for migrants and refugees may include:

1) Measles-mumps-rubella for children ≤15 years;
2) Poliomyelitis for children and adults originating from countries at high risk;
3) Meningococcal disease (tetravalent vaccines against meningococcal serogroups A, C, W-135 and Y or, against serogroups A and/or C);
4) Tetanus-pertussis-diphtheria;
5) Influenza, according to the season (Bradby et al., 2015).

6. Examples of best practices

Examples of best practices in national immunization strategies targeting migrants were explored in six European countries (Giambi et al., 2018). Four of the countries offer to migrants all vaccinations included in the national immunization plan. Four countries extend the vaccination offer to adults. All countries deliver vaccinations in holding centers and/or community health services. Operating procedures that guarantee access to vaccination at the community level are available in one country. Data on administered vaccine is available at the national level in four countries. Data on vaccination uptake among migrants is available at national level in one country.

In the US, evaluations demonstrated that targeted screening, treatment, and prevention services conducted during the migration process improved the health of refugees. United States-bound refugees undergo a required overseas medical examination to identify inadmissible conditions (e.g. tuberculosis) 2-6 months before resettlement. Treatment and vaccinations were initiated before resettlement. Using this approach, infections in arrivals significantly decreased (Mitchell et al., 2018).

In Spain, migrants from hepatitis B endemic areas who are screened negative are commonly vaccinated (Levi et al., 2014). Vaccination is the best way to prevent hepatitis B infection and its consequences. Implementation of training for health care professional, e.g. introducing vaccinology and vaccination policy courses in the medical and paramedical curriculum, could contribute to application of the recommendations regarding immunization against hepatitis B. Universal vaccination approach, coupled with targeted programs for migrants, represents the only way to make the elimination of hepatitis B a realistic objective.

7. Toolbox

Please access our toolbox for additional tools related to Vaccination among migrants and refugees.

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