

Module 3. Cultural sensitivity - Topic 4. Working with vulnerable population and other groups

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1. INTRODUCTION

In recent decades, inequalities in access to basic vaccines persist and their elimination is a global priority goal (Arsenault et al., 2017). Vulnerable groups are often under-vaccinated for a variety of reasons, including lack of awareness of vaccine-preventable diseases, uncertainty or misconceptions about the safety and efficacy of vaccination among patients, parents and health care workers, as well as the cost and inability of health systems to ensure that these patients receive the recommended vaccines (Doherty et al., 2016). Given that many of the benefits of immunization depend on achieving a high level of coverage to interrupt disease transmission, health workers play a crucial role in ensuring that all social groups receive the recommended vaccines, as they are responsible for educating the public about the importance of high-coverage immunization (Paterson et al., 2016).

On the other hand, the COVID-19 pandemic has visualized the importance of vaccines in combating diseases, saving lives, and creating a healthier, safer, and more prosperous future. In the future, robust immunization systems will be needed to ensure that people around the world are protected against COVID-19 and other diseases (WHO, 2022a).

2. AIMS

The aim of this tool is to recognise the significance of working effectively with vulnerable population and other special groups in culturally sensitive and compassionate way in health and social care settings.

3. LEARNING OUTCOMES

When you have working with this tool, you will be able to:

- Obtain an overview of immunization in vulnerable groups.
- Identify factors and barriers influencing under immunization of vulnerable groups.
- Identify strategies and interventions to meet the needs of vulnerable groups.
- To understand the benefits of interventions based on effective teamwork between patient, health personnel and family members to increase vaccination in vulnerable groups.

4. THEORETICAL FRAMEWORK

4.1. Concepts and definitions

The most important concepts related to the topic are described below:

- **Vulnerable groups vaccination:** Pregnant women, premature infants, people with chronic and immunodeficient diseases, the elderly and people from developing countries are considered vulnerable (WHO, 2020).

- **Vulnerable groups for COVID-19 vaccination:** Vulnerable groups for COVID-19 vaccination include those at higher risk based on the risk profile for death and complications from influenza, including pregnant women, age-defined risk groups, and people working in high-exposure settings such as clinical or institutional settings (Fielding et al., 2021).

- **Equity:** The principle of equity in health is linked to the discussion on social justice according to Rawls' theory of justice, which implies the heterogeneous availability of health care and actions for each citizen according to his or her needs, with the objective of homogenizing social, environmental and

economic asymmetries (Simioni et al., 2020). Equitable access to immunization is a fundamental component of the right to health (WHO, 2022b).

- **Vulnerability:** vulnerability in health can be understood as a set of biological/individual, epidemiological, social and programmatic/institutional factors whose interaction increases or reduces the risk or protection of an individual or population against a given disease/condition (Castro-Nunes & Rocha-Ribeiro, 2022). Vulnerability is considered as susceptibility to any type of harm, whether physical, moral or spiritual, at the hands of an agent or agency, a factor that should be recognized and negotiated in healthcare transactions (Hurst, 2008).

- **Multidisciplinary team:** Includes general practitioners, paediatricians, nurses, health visitors and social workers, who provide primary health care services to people on a continuous basis, including disease prevention, health promotion, diagnosis, follow-up and treatment (WHO, 2022a).

4.2. What the research says on the topic

The World Health Assembly, with the support of countries and partners, has endorsed a new global vision and strategy, called the Immunization Agenda 2030 (IA2030), which aims to extend the benefits of immunization equitably to all people, regardless of region and age, in order to improve people's health and well-being. This approach encompasses vulnerable groups at higher risk for vaccine-preventable diseases, such as premature infants, women during pregnancy and puerperium, low and middle-income countries (LMICs), people with chronic conditions that compromise the immune system, elderly and/or institutionalized, people as they are at higher risk for diseases due to immunosenescence (Chaudrey et al., 2015; Rubin et al., 2014).

Focusing on children in low-income countries, GAVI, the Vaccine Alliance, is a global public-private partnership dedicated to saving children's lives and protecting people's health by increasing the equitable use of vaccines in these countries. GAVI routinely tracks inequities in vaccination coverage within the countries it supports (GAVI Alliance, 2013). In households in low- and middle-income countries (LMICs) socioeconomic indicators such as maternal education influence social exclusion and vaccination of children, income and culture, as well as the ability to access children for both vaccine administration and evaluation (Brearley, 2013). Thus, monitoring a country's ability to improve vaccination coverage among children of uneducated women is crucial and is in line with the Sustainable Development Goals (SDGs) and GAVI's focus on gender equality (WHO, 2020).

With respect to children, parental refusal of vaccination is associated with incorrect knowledge of the vaccination schedule or lack of information or training of health professionals on vaccines. Recommendation of vaccination by a health professional, friend or family member has been associated with higher uptake (Smith et al., 2017). In particular, several studies report that parents do not vaccinate their children because they had been advised not to do so, or they did not receive a recommendation from a healthcare professional or the healthcare professional had a negative influence on them (Crawford et al., 2014; Gust et al., 2008). Another factor influencing vaccination is perceived social disapproval of vaccination and refusal, with parental acceptance towards vaccination being higher when children of relatives and friends are vaccinated (Masson et al., 2015).

Regarding the barriers perceived by immigrants for vaccination, inadequate education, financial reasons, access difficulties and family problems stand out. Illiteracy, language barriers, and a lack of knowledge of modern science make it difficult to provide adequate information on vaccine details, indications, and possible complications in the immigrant population (Fairhead et al., 2006). Therefore, it is necessary that the Vaccination is carried out from primary care, mainly in rural areas, in hospital outpatient clinics and in medical-social centres in order to increase the vaccination rates of the immigrant population (Pinaka et al., 2021).

On the other hand, the vaccination coverage rates of the elderly show that the objectives are not reached (Palache et al., 2015). In developed economies, factors related to older adults' acceptance of

vaccines include attitudes and beliefs, recommendations from healthcare providers, vaccine safety and efficacy, and perceived disease susceptibility (Eilers et al., 2014). Furthermore, older adults may not be aware of the need to be vaccinated due to a lack of commitment from national health systems to implement vaccination recommendations (Swanson et al., 2015). Vaccination acceptance rates among older adults can be improved with public education campaigns, and by introducing appropriate operational frameworks (Lefebvre & Haynes, 2013).

Lack of access to immunization records has a major impact on vaccination rates, especially among adults who are a mobile population, often with multiple healthcare providers. Patient recall is considered the primary method of obtaining information about the vaccination history of older adults, and it is known to be inaccurate (Ridda et al., 2008). This has an impact on coverage as, for example, GPs are reluctant to administer pneumococcal vaccines due to incomplete or non-existent vaccination records, due to the possibility that a patient may have previously received it (MacIntyre et al., 2013).

Among the barriers identified in the vaccination of the elderly, access to care, mobility, the multiplicity of health providers, the lack of confidence of health providers in vaccinating adults, the lack of data from clinical trials in the frail elderly and the culture of paediatric immunization (MacIntyre, 2013). Another barrier to vaccinating older adults is the lack of information, as vaccination information campaigns and resources are often directed at children, and there is less promotional material for vaccinating adults (MacIntyre et al., 2016).

Along the same lines, the attitude of health personnel towards vaccination of the elderly and their own vaccination status are factors that influence the vaccination recommendation. In particular, lack of awareness of adult vaccines among health professionals and the general public is a major barrier to achieving adequate vaccination rates in older adults (MacIntyre, 2013). Adult vaccination may be a low priority during primary care physician visits. Institutional protocols to identify patients who need vaccination and ensure vaccination can improve uptake (Kishel et al., 2009).

On the other hand, healthcare workers are at risk of contracting infectious diseases, and vaccines are effective in preventing transmission between healthcare workers and their patients in elderly care settings (Wicker et al., 2014). However, staff vaccination rates remain low, especially among staff working in care centres for the elderly. Recommending vaccination to healthcare professionals, offering free vaccination at facilities, and requiring vaccination as a condition of employment are associated with higher influenza vaccination rates among healthcare professionals (Apenteng & Opoku, 2014).

In relation to chronic or immunosuppressed patients, the available data suggest that they are usually under vaccinated, even in countries with well-functioning healthcare systems (Alcusky & Pamasauska, 2015; Rubin et al., 2014). This may be due to a lack of awareness about the importance of vaccination and misperceptions about the safety and immunogenicity of vaccines in these groups. Patients may miss routine vaccinations due to frequent hospital admissions and absenteeism from school (Masson et al., 2015). Also, in some countries, such as the United States, patients with chronic medical problems often receive care from a specialist physician rather than primary care health professionals. Therefore, they may not get vaccinated if specialists assume vaccination is the responsibility of the primary care physician. For this reason, it is important that the levels of care (primary and specialized) work in a coordinated manner in order to increase vaccination rates in chronic patients (Doherty et al., 2016).

Vaccination coverage rates among adolescents with chronic illnesses are variable but often lower than their age groups (Hofstetter et al., 2015). The reasons for under-vaccination of young people with chronic diseases are associated with the misperception of the severity and risk of vaccine-preventable diseases and suboptimal coordination of primary and specialized care (Masson et al., 2015).

Factors affecting vaccination of adolescents with chronic diseases are the role of parents in vaccination decision-making often influenced by the complexity of their child's disease and treatment regimens (Hofstetter et al., 2015). Logistical problems are frequently identified by parents as a reason for the delay or lack of vaccination (Pandolfi et al., 2012). Therefore, interventions need to be tailored to address barriers to vaccination for these high-risk patients (Hofstetter et al., 2015), including strategies to educate adolescents, parents, and healthcare providers about the vaccine-preventable diseases and improve communication between provider and family (Hofstetter & Rosenthal, 2014).

In vaccination against COVID-19, the main objective is to reduce the severity and mortality from COVID-19, especially protecting the most vulnerable groups. Having doubts and insecurity about the COVID-19 vaccination is normal, since it is a new disease (Fielding et al., 2021).

4.3. Strategies and recommendations to promote vaccination in vulnerable groups

Vaccination rates and uptake of childhood vaccines in low- and middle-income country settings could be increased through interventions such as face-to-face education, information campaigns, home visits, incentives or training of health providers (Oyo-lta et al., 2011; Shea et al., 2009). Similarly, community mobilization has been associated with increased immunization coverage by providing a point of contact with the health system and trusted members of the community. Community health workers can help overcome barriers to vaccination supply and uptake, leading to increased coverage of essential interventions (LaFont et al., 2012). Expanding vaccination services to the community would help overcome inequalities in immunization coverage (Barros et al., 2012). Likewise, the Pan American Health Organization has promoted a complete transformation of child immunization programs, including family members, for which the countries incorporate adequate vaccines into their national schedules for all family members throughout their lives (Nelson et al., 2015). Along the same lines, the empowerment of district health management teams allows vaccination programs to adapt to local obstacles and promote equitable health coverage, taking into account the socio-economic and cultural characteristics of the target population (Rees & Madhi, 2011).

With regard to interventions to promote vaccination in children, health workers, especially those working in communities, are considered to be the most trusted advisors and influencers in parental decision-making. Health care workers are responsible for promoting vaccination through parental information campaigns to counter misinformation about vaccines (Gust et al., 2008). Along this same line, it is important to create interventions with multidisciplinary approaches and improve the communication skills of professionals and focus on their relationship with parents (Ponce-Blandón et al., 2018). However, to guarantee the success of the interventions, they must be adapted to the context and characteristics of the target population (Jarret et al., 2015).

In relation to premature children who may need additional doses of certain vaccines. The development of education programs for health professionals regarding the guidelines, as well as immunization “stickers” for the health records of preterm infants have been shown to be effective in increasing vaccination of preterm infants (Crawford et al., 2014).

Computerized clinical and immunization records are useful tools for providing detailed information on vaccination coverage in the population throughout life (Jiménez-García et al., 2013). A European study finds that countries with universal mechanisms to register vaccines and the establishment of clear national objectives to increase the acceptance of vaccines by older adults, increase the acceptance of vaccination of both older adults and professionals’ health (Heywood et al., 2014).

Registry-facilitated interventions, such as sending personal letters offering free vaccination, show higher vaccination coverage among older adults relative to settings with less developed vaccine management systems (MacIntyre et al., 2013). The presence of additional regulatory elements, such as the granting of incentives to health personnel, vaccination reimbursement systems and awareness

campaigns leads to an increase in vaccination coverage among older adults (MacIntyre et al., 2016). Text messaging, access to vaccination campaign-related websites, use of patient web portals, and computerized reminders increase immunization coverage rates, especially when recommended by healthcare professionals (Apenteng & Opoku, 2014). Care centers for the elderly should receive special attention and should be required to have a vaccination policy linked to the hiring of staff, preferably free and in the workplace (MacIntyre et al., 2016).

Recommendations to promote vaccination in the elderly (MacIntyre et al., 2016):

- Create a universal registry or immunization registry in older adults - investigate data linkage mechanisms to link adult immunization data from various sources, such as software from primary care services and health care centres.
- Adult vaccination reminder systems should be incorporated into the registry. Create age-based health promotion messages and vaccination reminders.
- Achieve and maintain a high vaccination coverage, for this the vaccines must be financed and/or subsidized by the governments for the elderly.
- Reduce financial barriers.
- Address the imbalance in educational resources on immunization by developing resources for older adults and even their families.
- Include vaccination as a key component of advanced care planning for older adults.
- Include vaccination rates as a quality indicator for health care for the elderly and care centres for the elderly.
- Support informed and respectful discussions among healthcare professionals, patients and families about the benefits of preventive health measures such as vaccinations for older people in the context of advanced care planning. It is important to recognize and reflect on age discrimination and value judgments in health care.
- Compulsory and free vaccination for the staff of care centres for the elderly.
- Continuous and sustainable education for health care providers to increase the well-being of older adults, including increasing vaccination rates, through various means of communication.
- Encourage research funders to support further research on new vaccination strategies for older adults to address immunosenescence and age-associated defects in vaccine response, such as higher doses, combinations of vaccines, the use of boosters, adjuvants, novel technologies and protection through herd immunity.

Interventions that actively involve the patient in the entire clinical decision-making process have shown to be effective in increasing the vaccination rate of chronic patients. Likewise, interventions carried out before (at home) and during the appointment (at the health centre) have shown to increase vaccination in chronic patients (Sanftenberg et al., 2021). Various studies indicate that intervention strategies based on personal contact between chronic patients and primary care health personnel improve acceptance of influenza vaccination. For example, outreach visits to patients, as well as telephone reminders, were more effective if they were established through personal contact (Pich, 2018; Schmid et al., 2017).

Co-design is part of a co-production process, which represents a shift away from isolated experts designing interventions to multi-perspective teams that include end-users (Sicilia et al., 2019), and it is recommended to create better public policy and services (Trischeler & Charles, 2019). The development of interventions carried out by multidisciplinary teams based on messages in favour of vaccination can increase the acceptance of vaccination against COVID-19 in the most vulnerable groups (Schmidtke et al., 2022). Vaccine education interventions that use multimodal formats (e.g., internet and health care providers) and are consumed by family and friends within communities can help curb COVID-19 vaccine uncertainty and increase vaccination in vulnerable groups (Alfieri et al., 2021).

In conclusion, strategies to improve vaccination rates in vulnerable groups should focus on the facilitation that implies ensuring an effective vaccination program, of a comprehensive nature and reducing the many barriers, in terms of cost, distance and time, to achieve high acceptance levels, especially for marginalized or vulnerable populations. Information is crucial, whether in the form of public information campaigns or interactions between health workers and target populations, they must be designed very carefully to avoid the risk of counterproductive results. There is no universal solution to achieve high levels of vaccine acceptance, but rather a combination of options. Along these same lines, accessibility can be improved by expanding the range of health professionals who administer the vaccine. These do not have to be limited to primary care health professionals, but may include pharmacists, nurses, community care providers and other qualified professionals, provided they receive appropriate training. This diversity in provision is important for reaching remote or underserved areas and disadvantaged groups. In this regard, special attention should be paid to groups such as immigrants, especially the undocumented, and ethnic minority populations, who may face multiple barriers to obtaining care (Siciliani et al., 2020).

5. LEARNING ACTIVITIES

Activity 1 (duration: 25 minutes): Watch the compulsory video (<https://www.youtube.com/watch?v=gxbmlugPQo8>) and share your thoughts/opinions/experiences about the issues on this topic on the dedicated forum and give feedback to other participants.

No.	Title and description of the resource	Type	Language of resource	Learning, training, assessment and evaluation activities	Access URL / download
1.	'Vulnerability' and 'othering' during the COVID-19 pandemic	Video 58'52''	English* (optional)	Expert conference Individual learning Self-reflection	https://www.youtube.com/watch?v=xxiQVxU0W-M
2.	Vaccination for the world's vulnerable – Internally displaced populations, refugees and migrants	Video 1 hour 11 min.	English* (optional)	Webinar Individual learning Self-reflection	https://www.youtube.com/watch?v=iVi1x1kjiXw
3.	India's COVID-19 cases multiply, vulnerable groups given vaccine boosters	Video 14'08''	English* (compulsory)	Individual learning Self-reflection	https://www.youtube.com/watch?v=gxbmlugPQo8

* Subtitles auto-generated in all languages

6. ASSESSMENT ACTIVITIES

Activity 1 (duration: 10 minutes): Please indicate below with which concept each of the following definitions corresponds:

1-The set of biological/individual, epidemiological, social, and programmatic/institutional factors whose interaction increases or reduces the risk or protection of an individual or population against a given disease/condition is the: Answer: _____.

2- What is the name of the principle that is linked to the discussion on social justice according to Rawls' theory of justice, which implies the heterogeneous availability of health care and actions for each citizen according to their needs, with the aim of homogenizing social, environmental and economic asymmetries? Answer: _____.

3- What is the name of the team that includes general practitioners, paediatricians, nurses, health visitors and social workers, who provide primary health care services to people on a continuous basis, including disease prevention, health promotion, diagnosis, monitoring and treatment? Answer: _____.

4- What is the name given to the group of pregnant women, premature infants, people with chronic and immunodeficient diseases, the elderly and people from developing countries? Answer: _____.

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