
COVID-19; VACCINE ADMINISTRATION AND THE ROLE OF NURSES/ MIDWIVES

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The COVID-19 vaccine is finally available in the market and across the globe its public administration has started widely. Safe and effective administration of COVID-19 vaccine is the primary responsibility of nurses, midwives and other healthcare professionals¹. Therefore, nurses and other professionals who are involved in administering vaccines must be knowledgeable, confident and competent. Nurses have main role in the administration of the COVID-19 vaccine therefore it is compulsory that nurses possess accurate knowledge and skills to administer vaccines². Core competencies required of nurses include product knowledge, storage and handling, administration and documentation³.

Before administering vaccine training is required. Depending on the product nurses must have knowledge of the eligibility requirements, vaccination schedule and history, contraindications, precautions and clinical considerations⁴. Moreover, it is important to understand recommended observation time and signs and symptoms of allergic reactions and anaphylactic shock (if any). Safe administration also requires that nurses must possess accurate knowledge of storage and handling of COVID-19 vaccine including inspecting, unpacking, accounting, and storing vaccines⁵. Depending on the product, nurses must demonstrate the knowledge of maintaining cold chain and any protocol in case of cold chain failure. Proper monitoring of temperature and recording it are vital for safe and effective administration of COVID-19 vaccine.

Administration of vaccine is the key competency required of nurses that include infection prevention and control as well as mitigation measures. Identifying proper needle gauge and length is important in addition to best injection site based on route, age and health of the recipient^{6,7}. Correct intramuscular injection technique is the cornerstone to prevent administration errors such as shoulder injury etc. Similarly, nurses should have the knowledge as per standard protocol of how to dispose vials, syringes, needles and other supplies⁸. Finally, proper documentation of vaccination is key in appropriate data systems. Evidence suggest that health care professionals including nurses and midwives are highly trusted when it comes to vaccine information therefore it is vital that nurses provide appropriate information including vaccination report card to vaccine recipient. Nurses should also be able to explain to the patient any adverse effect and what to do in such situations.

For the safe and effective administration of vaccine, it is important that nurses must self-assess themselves in the above areas and where required must improve themselves before embarking on to administer COVID-19 vaccines to public. Facilities and vaccine centers must arrange training and refresher courses for nurses and support staff involved in administration of vaccines.

REFERENCES:

1. Dror AA, Eisenbach N, Taiber S, Morozov NG, Mizrahi M, Zigran A, et al. Vaccine hesitancy: the next challenge in the fight against COVID-19. *Euro J Epidemiol.* 2020;35(8):775-9.
2. Berman AJ, Snyder S, Frandsen G. *Kozier and Erb's Fundamentals of Nursing.* 11th ed. Australia: Pearson; 2020.

3. Centre of Disease Control. COVID-19 vaccine administration competencies Assessment Form. 2021. Available from: <https://www.cdc.gov/vaccines/covid-19/downloads/competencies-screening-checklist.pdf>
4. Thomas KS. Intramuscular injections for COVID-19 vaccinations. *J Nucl Med Technol.* 2021;49(1):11-12.
5. Mills MC, Salisbury D. The challenges of distributing COVID-19 vaccinations. *Eclinical Med.* 2021;31(100674):1-2.
6. Le TT, Andreadakis Z, Kumar A, Román RG, Tollefsen S, Saville M, et al. The COVID-19 vaccine development landscape. *Nat Rev Drug Discov.* 2020;19(5):305-6.
7. Picchio CA, Carrasco MG, Sagué-Vilavella M, Rius C. Knowledge, attitudes and beliefs about vaccination in primary healthcare workers involved in the administration of systematic childhood vaccines, Barcelona, 2016/17. *Euro Surveill.* 2019;24(6):1800117.
8. Murphy K. Administration of the flu vaccination: required skills and knowledge. *Br J Nurs.* 2020;29(20):1168-71.