



Pharmacist as vaccinators: the way forward for pharmacist-administered vaccinations in low-resource settings: Editorial

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Dear Editor,

We read with great interest the published article of Solome and colleagues describing the knowledge and attitudes of community pharmacists on vaccination, barriers and willingness to implement community pharmacy-based vaccination services in Ethiopia^[1]. As pharmacist and health informatics specialist, we appreciate the importance of assessing the role of pharmacy in vaccination in low-resource settings. In this editorial, we suggest the possible hindrances and future implementation of pharmacist-administered vaccinations in poor resource settings.

Vaccination is one of the safest, most efficient, and cost-efficient methods for preventing, eradicating, and controlling life-threatening illnesses^[2]. Every year, vaccinations prevent close to 2.5 million deaths^[3,4].

Despite the availability of effective vaccinations, inadequate vaccine uptake continues to be a significant public health concern^[2–7]. As a result, the majority of people are vulnerable to infectious disease that could be fatal^[8].

Pharmacists can play a significant role in disease prevention by promoting and providing vaccines^[5,8]. The Pharmacy Board of Australia recognized immunization as falling under the purview of pharmacy practice in December 2013^[9]. Many nations, including Canada, New Zealand, the Philippines, the United Kingdom, and the United States are currently practice it^[10].

The evidence suggested that allowing pharmacists to administer vaccinations resulted in a number of positive outcomes, including a higher vaccination coverage rate, increased vaccine cost-effectiveness, increased public awareness of the value of immunization, decreased burden on the healthcare system, minimal side effects and high consumer satisfaction^[3,4,10].

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The various obstacles that prevent community pharmacists from providing vaccinations include a lack of authorization, a lack of cooperation between healthcare providers, inadequate storage space, inadequate knowledge, a lack of patient demand, worries about patient safety, a lack of physician support, and a lack of reimbursement^[2,3,11,12]. The study conducted in Turkey found that vaccination among pharmacists and their knowledge on vaccination during pregnancy were low^[13].

Similarly, the study conducted in poor resource settings also revealed that community pharmacist are not involved in vaccination. The attitude of professionals was significantly associated with willingness to provide vaccination service at the community pharmacy level. Those study participants who had a good attitude toward vaccination service were more likely to be willing to provide vaccination service at the community pharmacy level^[11]. The correlation between attitude and willingness highlights the influential role of individual beliefs and perceptions. Therefore, public health authorities and professional associations should capitalize willingness of community pharmacist to provide vaccinations by offering training and incentives to further motivate community pharmacist to actively participate in vaccination services.

The most other prominent barrier is the lack of authorization, followed by concerns about the cost and time associated with professional development and training^[1,2]. Similarly, the study conducted in Lebanon revealed that lack of support from physicians to pharmacists and cost associated with professional development and additional training of pharmacist was inversely associated to pharmacist-administered vaccinations^[2]. The current educational policy should take into account the training courses for pharmacist regarding vaccination techniques.

First of all, overcoming these obstacles is crucial for the effective integration of CPs into vaccination programs. The pharmacist collaborative initiatives with healthcare partners and modification of vaccine administration policy can overcome the problems associated with authorization.

After that government, policymakers, and professional associations may consider reforming the national immunization program to include pharmacists as vaccination providers to enhance vaccination services in poor resource settings.

In the paediatric populations, the issue of ethical dilemmas poses a significant challenge to assess the pharmacist role in vaccinating the children below 16 years. The application of Gillick competency to research requires consideration of whether the children is capable of understanding the nature of the research, the rights of the child as a subject, and the risks and benefits of participating in the research^[14]. The pharmacists' perceptions and experiences for Gillick competence could be assessed before

implementing pharmacy-led administration of vaccinations in children.

The study that intends to provide evidence regarding the ethical dilemmas associated with vaccinations delivered by pharmacists and the level of community pharmacy professionals' participation in vaccination services in low-resource settings should be explored.

Additionally, the study could be utilized as a starting point for new efforts and the creation of policies regarding the vaccination of children in poor resource community pharmacies.

Conclusion

Globally, vaccination rates among adults dropping below the desired targets remain a significant public health concern. As a result, the rising threat of vaccine-preventable diseases and the underutilization of the immunization service in poor resource settings remain a concern. There is scope to expand pharmacist vaccination services to other vaccines and younger children; however, government funding to pharmacists needs to be considered. Therefore, the factors associated with pharmacist-administered vaccinations should be studied in poor resource setting countries.

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