



# Implementation of a simulation-based vaccination training course for master's degree students in pharmacy

<u>Anne-Lise Delwaide<sup>a</sup>\*</u>, Alice Lallemand<sup>a</sup>, Aurore Gaspar<sup>a</sup>, Jean-Luc Belche<sup>b</sup>, Laetitia Buret<sup>b</sup>, Benoit Cardos<sup>c</sup>, Robin Crunenberg<sup>a</sup>, Charlotte De Bleye<sup>a</sup>, Vincent D'Orio<sup>c</sup>, Didier Giet<sup>b</sup>, Alexandre Ghuysen<sup>c</sup>, Gilles Henrard<sup>b</sup>, Patrick Herné<sup>a</sup>, Fréderic Lecomte<sup>a</sup>, Anne-Laure Lenoir<sup>b</sup>, Justine Piazza<sup>c</sup>, Rebecca Tubes<sup>c</sup>, Geneviève Philippe<sup>a</sup>

\*al.delwaide@uliege.be

- <sup>a</sup> = Department of Pharmacy, Center for Interdisciplinary Research on Medicines, Faculty of Medicine Université de Liège, Liège, Belgium
- <sup>b</sup> = Department of clinical sciences/General medicine, Faculty of Medicine Université de Liège, Liège, Belgium
- <sup>c</sup> = Clinical Simulation, Faculty of Medicine Université de Liège, Liège, Belgium

# Introduction

As a result of the SARS-COV-2 pandemic, a new competence for pharmacists has been introduced in Belgium in 2022. Community pharmacists are now allowed to prepare and administer vaccines for the prophylaxis of COVID-19. To be allowed to vaccinate inside the pharmacy they need to follow and pass a specific training course on vaccination. Specific aspects are defined by the law of 28 February 2022 [1]. The objective of this descriptive work is to define how this simulation-based vaccination training course was created and implemented for master's degree students in pharmacy.

# Description

At the University of Liege, the pharmacist faculty members collaborated with their nursing, general practitioners and emergency physician's colleagues to create a specific 8-hour training course on vaccination for master's degree students in pharmacy based on the requirements of this law. Some elements were further developed based on a comparative analysis of vaccination training courses carried out abroad [2]. This training is divided into a theoretical and a practical part. The theoretical part consists of an e-learning course in which the theoretical notions mentioned in the law were detailed as well as the procedures relating to the preparation of vaccines and their sterile administration. Furthermore, students must obtain the "Save a life" certificate [3] and watch a video-feedback based on the practical experience of the general practitioners. The practical training is organized in two parts. Firstly, in a Didactic Pharmacy, students follow a presentation on the legislative and ethical aspects and participate in role-playing games about vaccine hesitation and eligibility criteria. Secondly, in the Center of Medical Simulation, students participate in four workshops relating to the act of vaccination under the supervision of a physician and a nurse: (1) preparation and injection of the vaccine in an intramuscular injection pad, (2) cardiopulmonary resuscitation on a "little Anne QCPR®", identification, distinction, and management with simulated patients of (3) the vasovagal syncope and (4) the anaphylactic shock. Students are finally evaluated based on competence criteria during the practical training and a knowledge questionnaire in order to receive their certificate of achievement.

# Discussion

Simulation allows students to gain self-confidence particularly because pharmacists are not used to performing clinical gestures, which correlates with safer patient management. Moreover, simulation improves their communication and practical skills [4,5]. Vaccination by the pharmacist gave several public health advantages. Thanks to their accessibility, availability, large patient base and scientific training, this health professional could respond to the deficit in vaccination coverage and capacity [6].

# **Consent to publish**

If selected by the reviewing committee, I agree to be published on the congress website (free access).

References

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