

Project title: Influenza Vaccine Uptake and Compliance: Addressing Barriers and Promoting Motivators among Health Care Workers (RPPH 18-77)

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Country: EGYPT

SECTION A. GENERAL INFORMATION

- PI name: Prof. Amani Waheed
- Reporting Period: Final report, November 2019

Objectives of the study:

○ **General:**

To assess the motivators and barriers to seasonal influenza vaccination among the HCWs and to promote vaccination coverage of HCWs in different health care settings by developing a tailored communication toolkit.

○ **Specific**

- Assess the status of seasonal influenza vaccination coverage among HCWs
- Raise awareness about vaccine preventable diseases, which pose a particular risk to HCWs
- Identify the motivators and barriers of vaccination uptake/compliance HCWs
- Identify best practices for the immunization of seasonal influenza
- Design an “Immunization Promotion Tool-Kit” comprising recommendations, communication guidelines, and fact sheets for promotion of vaccination

SECTION B. TECHNICAL REPORT:

INTRODUCTION:

Most countries recommend that healthcare workers (HCWs), at least those involved in direct patient care, should be vaccinated against influenza each winter. Seasonal influenza vaccination can help protection not only HCWs but also patients against infection.

A recent systematic review found that vaccination of HCWs significantly reduced influenza-like illness and all-cause mortality among patients, although results for other outcomes such as number of working days saved are more equivocal.

Despite a relevant worker protection that has already been transposed into national regulations, no significant increase in vaccination coverage has been recorded for HCWs. No uniform recommendation exists for the particular vaccinations needed for HCWs, who in turn do not seem to comply with existing guidance and recommendations for vaccination.

Studies have shown that a composite of demographic, behavioral and organizational factors are associated with vaccination uptake. Insights into these factors are important for the development of specific influenza vaccination programs that aim to increase vaccination coverage and promote the workers' health.

METHODOLOGY:

Study Design

- A cross sectional survey was conducted to assess the barriers and motivators of seasonal influenza vaccine uptake and compliance among health care workers (HCWs).

Study Setting/Population

- The study was conducted among health care workers in Ismailia city working at:
 1. Ismailia General Hospital (*the only general hospital in Ismailia district*)
 2. Suez Canal University Hospital
 3. Ismailia Chest Hospital
 4. Ismailia Fever Hospital
 5. *El-Sheikh Zayed* Primary Health Care Center
 6. *El-Shohada* Primary Health Care Center
 7. *El-Salam* Primary Health Care Center
 8. *El-Sabaa Banat* Primary Health Care Center

(*The above four primary health care facilities, are within urban Ismailia city*)

Sampling Method

- A random sample of 1008 subjects was drawn from the list of HCWs (physicians – nurses) at all specified health care facilities mentioned above.

Summary of Data Collection:

- 1) A Structured Interview Form was developed by the project team, it included the following sections:
 - The demographic information and occupational data of the participants,
 - Knowledge and perception of vaccination
 - Past history of influenza illness,
 - Participants' knowledge of the Egyptian MoHP recommendations about seasonal influenza vaccination.
 - Last season vaccination status
 - List of potential barriers and motivators of FLU vaccination
- 2) Focus Groups: Discussions were held to find out the composite factors (*barriers and motivators*) affecting vaccination uptake and compliance; including, personal demographic, financial, organizational factors, attitude and beliefs.
 - The groups were homogenous HCWs as regards occupational categories (physicians –nurses) and affiliation.
 - At the start of each focus group session, informed consent was obtained and a briefing on the objectives of the session was given.
 - Permission obtained for the discussion to be recorded, and participants were informed that their identity would be kept confidential.
 - Each of the focus groups was conducted and facilitated by one of the co-investigators with the other taking written notes and acting as an observer.

Ethical considerations:

The study was approved by the Research Ethics Committee of the Faculty of Medicine, Suez Canal University. The approval number was 3480 (16/5/2018). Permissions to conduct the current study were taken from the Director of the university hospital, the section of Preventive Medicine at the Egyptian Ministry of Health and the local Health Directorate of Ismailia Governorate.

Activity implementation:

<i>Time period</i>	<i>Activities</i>
3 rd of July – 2 nd of October	Literature Review/ Tools development and testing
7 th of August – 10 th of November	Field work for quantitative data collection/ Analysis
20 th of September – 2 nd of October	Focus group preparation
12 th of October – 14 th of November	Focus group training
	Running of focus group qualitative data collection
14 th of November – 14 th of December	Data management
15 th of December -	Preparation of manuscript

Preliminary Results:

Out of 1008 HCWs encountered, 980 interview-forms were eligible for statistical analysis, (28 interview-forms were excluded, since their duration of employment was less than one year). Most participants were health care workers at hospitals and only 7.1% were from primary health care centers (as a large number of HCWs were shifted from PHC facilities to other sites just prior to the project activities in anticipation for introduction of new health insurance program in Ismailia Governorate). Females were 76.8% of participants. Nurses were the major occupational category of the studied sample (80.4%). The FLU vaccination uptake rate for the last season (October2018/March2019) was 13.4%. Among vaccinees; 82.4% received the vaccine at a hospital-based infection control program. Most of the vaccinated HCWs (83.9%) were from Fever Hospital, Chest Hospital and General Hospitals in Ismailia city. The vast majority of HCWs (91.7%) were not acquainted with Egyptian MoHP recommendations of seasonal FLU vaccination. Among vaccinees, the most commonly reported motivator (97.7%) was "protecting myself and my family". Among the different potential barriers among non-vaccinees; "not instructed to receive the vaccine" (73.2%) followed by "non-available vaccine" (51.8%) as they reported. Focus group discussions supported these current findings, Further statistical analysis will be done within the manuscript considered for publication.

Selected References:

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