Hassan Zaraket\textsuperscript{1,2} and Abdinasir Abubakar\textsuperscript{3}

\textsuperscript{1}Department of Experimental Pathology, Immunology & Microbiology, Faculty of Medicine, American University of Beirut, Beirut, Lebanon. \textsuperscript{2}Center for Infectious Diseases Research, Faculty of Medicine, American University of Beirut, Beirut, Lebanon. \textsuperscript{3}Infectious Hazard Management, Department of Health Emergencies, World Health Organization, Regional Office for the Eastern Mediterranean, Cairo, Egypt (Correspondence: A. Abubakar: abubakara@who.int)

**Abstract**

Seasonal influenza epidemics constitute a major burden to human health in terms of morbidity and mortality. Vaccines are available and effective for preventing influenza. However, the optimal impact of these vaccines on a community can be only achieved with proper implementation and adequate coverage among risk groups. Influenza vaccination rates in the Eastern Mediterranean Region remain low and lag behind other regions. This is despite implementation of rigorous vaccination policies in many countries in the Region and can be attributed to various barriers, including lack of knowledge and misconceptions regarding influenza and vaccination. Advocacy to promote the benefits and safety of vaccination and to educate the health sector and the public about the burden of influenza is needed to enhance vaccination coverage in the Region, particularly among high-risk groups. We highlight approaches that have improved vaccination coverage to support the value of advocacy in promoting and improving vaccination rates in the Region.

**Keywords:** advocacy, seasonal influenza, influenza vaccination, vaccination coverage, Eastern Mediterranean Region

Citation: Zaraket H; Abubakar A. Harnessing the power of advocacy to improve seasonal
Seasonal influenza causes considerable morbidity and mortality worldwide (1). The whole population is at risk, but the threat is higher in older people, pregnant women, children, individuals with underlying comorbidity, and healthcare workers as they are susceptible to severe complications from influenza (2). Influenza vaccines are safe and effective in reducing severe outcomes of influenza (1). However, to be effective at the population level, high vaccination rates need to be achieved.

Many countries in the Eastern Mediterranean Region of the World Health Organization (WHO) have implemented vaccination policies for influenza (3). However, the vaccination rates in the Region remain low with fewer than 20 doses distributed per 1000 population as compared to 45, 112 and 275 doses in the Western Pacific, Europe, and Americas WHO regions, respectively (4). The exact reasons for the low vaccination rates in the Eastern Mediterranean Region are not well understood but are multifaceted and include misperceptions and erroneous interpretations of the efficacy and safety of the vaccine, and the threat that influenza poses to health (5–8). Additionally, the lack of regional capacity for vaccine production and consequent reliance on imported supplies may be hurdles to increasing vaccine availability and distribution (4).

Here, we describe examples of various advocacy approaches that have enhanced influenza vaccine uptake. Such approaches among other initiatives and activities such as virus surveillance and burden studies can be implemented in the Eastern Mediterranean Region to improve influenza awareness and vaccine uptake. Vaccine advocacy might be best characterized as the promotion of the best scientific knowledge, moral attitudes, and public health practices to improve immunization rates (9).
Health care workers are an important primary group to be targeted by advocacy campaigns; first, because of their risk for and role in the transmission of influenza in their practice areas and, second, because of their influence on vaccine awareness and acceptance by their patients. Influenza vaccination rates among healthcare workers in two hospitals in Qatar were doubled during the 2014/2015 season following a comprehensive campaign that comprised parallel interventions including promotional and educational tools and resources, leadership engagement, and enhanced vaccine accessibility (10). Nonetheless, simple approaches such as educational sessions and posters targeting vaccine misconceptions and improving vaccine accessibility proved useful by nearly tripling the vaccination rates among healthcare workers at a university hospital in Geneva (11). Another study found that substantial improvements in vaccination rates among nurses can be achieved by merely improving accessibility to the vaccine (12).

Another approach to improve vaccine acceptance among employees, particularly healthcare workers, is through offering gift incentives to vaccinators such as movie tickets and health books. Such incentives coupled with free and conveniently accessible vaccines and peer advocacy resulted in substantial improvement in the vaccination rate (> 75%) among healthcare workers at a major hospital in the United States of America (USA) (13). Another hospital included influenza vaccination as one of the indicators qualifying employees for monetary bonuses that led to increased vaccination rates, from 32% in 2004/2005 to 84.2% in 2005/2006 (14).

Pregnant women are a priority group for vaccination, but vaccination rates among this risk group are reportedly low in the Eastern Mediterranean Region (7). A randomized clinical trial revealed that brief one-on-one education of pregnant women on vaccine safety and availability, as well as the potential complications from influenza, substantially improved vaccine acceptance and coverage in this risk group (15). This type of advocacy and education is likely to prove effective among other risk groups.

At the level of the general population, mass media campaigns provide effective means for vaccine advocacy. A study in the USA investigated the effect of mass media coverage of influenza-related topics on vaccination timing and rates among elderly people (16). Influenza-related reports in various media sources positively influenced influenza vaccination by shifting the timing of vaccination earlier and increasing coverage (16). Similarly, expanded media coverage of influenza illness and the vaccine was associated with improvement in vaccination rates among children with asthma (17).

In resource-limited settings, advocacy through social media, short message service (SMS) or
e-mails is an alternative, low-cost means of improving vaccination rates through sharing educational information or reminders for vaccination. A randomized controlled trial found that influenza vaccine coverage among high-risk patients assigned to receive an SMS reminder improved compared with the control group (18). Similar findings were reported for high-risk general practice patients in the United Kingdom of Great Britain and Northern Ireland and among pregnant women in New York City who received SMS vaccine reminders (19, 20). Telephone and postal reminders effectively improved vaccination rates among people with hypertension who did not seek early seasonal influenza vaccination (21).

In conclusion, despite the good progress made in the Eastern Mediterranean Region in areas related to influenza vaccination, challenges remain, which highlight the need for effective communication and strong advocacy initiatives to lead the way to improve vaccine uptake and to meet public health immunization goals. Reliable information and a good understanding of the current influenza immunization practices, behaviours and policies in the Region are the mainstays of a successful advocacy campaign. Collecting regional data on influenza vaccination as well as understanding the causes of vaccine hesitancy among the target population are critical to designing evidence-based interventions. Moreover, the availability of local and regional surveillance and burden data at country and regional levels provides compelling evidence to educate the health sector and the public about influenza and the importance of vaccination. Nevertheless, every country should decide the type and number of interventions to be implemented in an advocacy campaign based on the local data and available resources.

References


Wednesday 4th of March 2020 09:46:22 AM