

Attitudes amongst Saudi hospital paramedics toward seasonal Influenza and Vaccination

Hany Hosny^{*1}, Sami Fawzy¹, Tarek M. Esmael¹, Omar Al Rashed¹, Tariq Al Anazi¹,
Arulanantham Zechariah Jebakumar²

¹EMS Department, Prince Sultan Military Medical College of Health Sciences, PO Box:946, Dhahran – 31932, Kingdom of Saudi Arabia

²Vice Deanship of Postgraduate Studies and Research, Prince Sultan Military Medical College of Health Sciences, PO Box:946, Dhahran – 31932, Kingdom of Saudi Arabia



Article History:

Received on: 02 Jan 2021
Revised on: 05 Feb 2021
Accepted on: 24 Feb 2021

Keywords:

Infectious viral disease,
Hospital Treatment,
Saudi Arabian's,
healthy male
paramedics,
influenza,
and Vaccinated

ABSTRACT

Paramedics were only given the essentials to deal with influenza vaccination. On the other hand, 67.6 percent of them were actually vaccinated. To reduce the spread of the virus, healthcare providers should work hard to immunize the population around us at any given time. There has been a lot of study into flu, and the general consensus is that it is a type of acute respiratory illness. Influenza is a very contagious and transmissible viral disease that can cause very severe symptoms. This was designed to determine those parents who smoke, how aware they are about the flu symptoms, and how they deal with them. This survey is a part of a study that was conducted by us of healthy male paramedics. When they were given an online questionnaire that included eight questions, all the participants found the questions to be very straightforward. As a result of this survey, we will know exactly what the Saudi parents really know about disease prevention and treatments. The purpose of the study is to find out if the paramedics of Saudi Hospitals would like to be vaccinated against seasonal influenza. The paper uses the word "seriously" to talk about the importance of vaccination (which is an interesting word choice). This research was conducted on a sample of 222 healthy male paramedics assessed by the use of an online questionnaire, along with a personal rating of beliefs regarding influenza vaccination and the status of self-reported vaccination. The paper also identifies the reasons why the people in question are not being vaccinated and the outcomes. By conducting a percentage analysis by reviewing the questionnaire results, it was found that the paramedics were very unaware of the importance of and effectiveness of the Hepatitis B Vaccination. According to what the paramedics found, the vaccine wasn't available in the hospitals, so they couldn't administer it, either.

*Corresponding Author

Name: Hany Hosny
Phone:
Email: hanyhosny@psmchs.edu.sa

eISSN: 2277-4149

DOI: <https://doi.org/10.26452/irjpas.v11i1.1398>



Production and Hosted by

ScienzTech.org

© 2021 | All rights reserved.

INTRODUCTION

Hospitals offer a perfect atmosphere for the fast-spreading of influenza and health care workers (HCWs) serve as a significant vector for the spread of influenza within hospitals [1-3]. Similarly, the lack of working days and the disruption of health services [4, 5] was blamed for influenza. HCWs are an important target for influenza immunization [6] because of their ability as vectors.

In 2018, the vaccine coverage of primary health care

staff in the city of Arar was investigated by a newly published report in Saudi Arabia. 204 health care practitioners have been asked to complete the questionnaire (72 doctors [7], 102 nurses and 30 other staff). Investigators confirmed that 65.3 percent of doctors, 55.9 percent of nurses and 33.3 percent of the other staff were vaccinated against influenza during the influenza season [8, 9].

Another Saudi Arabian research found that health care professionals had some misunderstandings regarding the vaccine against influenza [10], the most prominent being that influenza-like symptoms can be acquired during influenza vaccination [9]. In this study carried out in eight major hospitals in Saudi Arabia, 50.5 percent of health care workers believed that influenza vaccination could cause influenza symptoms [6].

We also agreed to examine the behaviours and beliefs of hospital paramedics in the Eastern Area about influenza vaccination since they have the capacity to serve as reservoirs for the transmission of influenza in the prehospital and hospital environment [5]. Two main areas became the main subject of the study [8]: the estimation of the number of paramedics who were vaccinated against influenza during the previous influenza season and the seasonal attitudes towards influenza vaccination [2].

History

Given the availability and efficacy of an effective vaccine, only a limited percentage of health care providers receive the required vaccination due to a lack of knowledge of the vaccine's potency or fear of side effects [9]. Little Saudi Arabian data is available on the reasons for poor compliance among paramedics with vaccinations [10].

OBJECTIVES

The purpose of this research is to understand the prevalence of seasonal influenza vaccination among paramedic staff and also to recognize the reasons of lack of adherence to vaccination [7].

We conducted a cross-sectional survey between 1 March and 30 September 2019 in hospitals in the Eastern Region to evaluate HCW awareness and attitudes towards seasonal influenza [6].

An anonymous online questionnaire was produced consisting of 8 questions describing the following characteristics of paramedics [9]: (i) vaccination status; (ii) their confidence in the protection of the influenza vaccine; (iii) their belief in the efficacy of the vaccine; (iv) my time wasted at work will be minimized by getting vaccinated; (v) the availability of the vaccine [5]; (vi) the flu vaccine may contribute

to the effectiveness of the vaccine;

METHODOLOGY

A total of 222 fit male paramedics in the East Region [1] have been hired from hospitals. Each researcher answered an online questionnaire that consisted of 8 questions. The primary outcome variables is personal convictions about the influenza vaccine and self-reported vaccination status [2].

Findings

In the last 1 year, stable male paramedics have received the influenza vaccine in 150 (67.57 percent) people, while 72 (32.43 percent) have not received influenza vaccination [3]. Thirteen (18 percent) of the non-vaccinated individuals believed that the influenza vaccine was unsafe [5], 33 (45 percent) said they did not realize they wanted influenza vaccination [6], 17 (23.6 percent) said it was not available in their hospital, and 9 (12.5 percent) said they felt they would get sick if they received influenza vaccination [7]. When asked if they assumed that 147 (66.22%) accepted that the influenza vaccine was effective, 38 (17.12%) disagreed, while 37 (16.67%) were unsure [9]. 123 (55.41%) felt the flu vaccine was successful, 56 (25.23%) claimed it was ineffective, and 43 (19.37%) were unaware of its effectiveness [11].

Out of the 250 paramedics contacted, 222 (89%) completed the questionnaire [8] and 250 paramedics who decided to fill out the online questionnaire were contacted between the duration of 1 March and 30 September 2019. 150 (67.57 per cent) citizens have been vaccinated against influenza during the last 1 year, while 72 (32.43 per cent) have not been vaccinated against influenza [9]. Among the non-vaccinated people, 13 (18 percent) claimed that the influenza vaccine was unsafe [4], 33 (45 percent) said they did not realize they wanted influenza vaccination, 17 (23.6 percent) said it was not accessible in their hospital, and 9 (12.5 percent) said they felt they might get sick if they got influenza vaccination. 38 (17.12 percent) disagreed when asked whether 147 (66.22 percent) agreed on whether they felt the influenza vaccine was safe [3], while 37 (16.67 percent) were unsure. 123 (55.41%) thought that the flu vaccine was successful, 56 (25.23%) thought that it was ineffective, and 43 (19.37%) were uncertain of its efficacy [12]. Figures 1, 2 and 3 as follows,

CONCLUSIONS AND RECOMMENDATION

The report indicates that 67.57 percent of the paramedics who engaged in the sample were vacci-

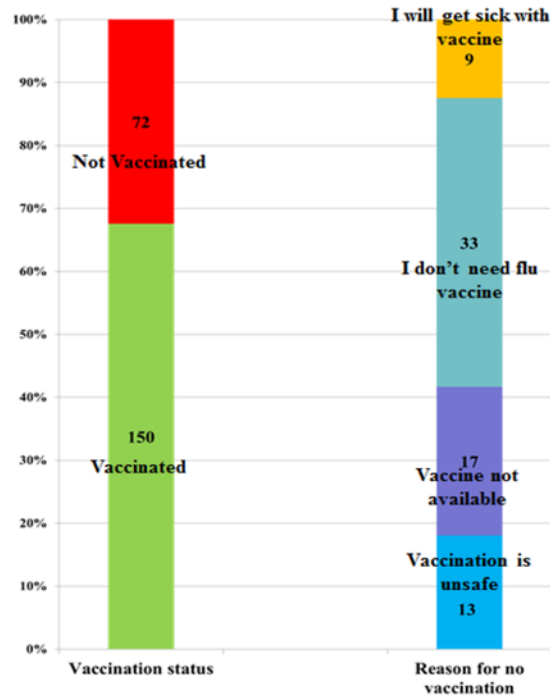


Figure 1: vaccinations status and reasons for not getting vaccination

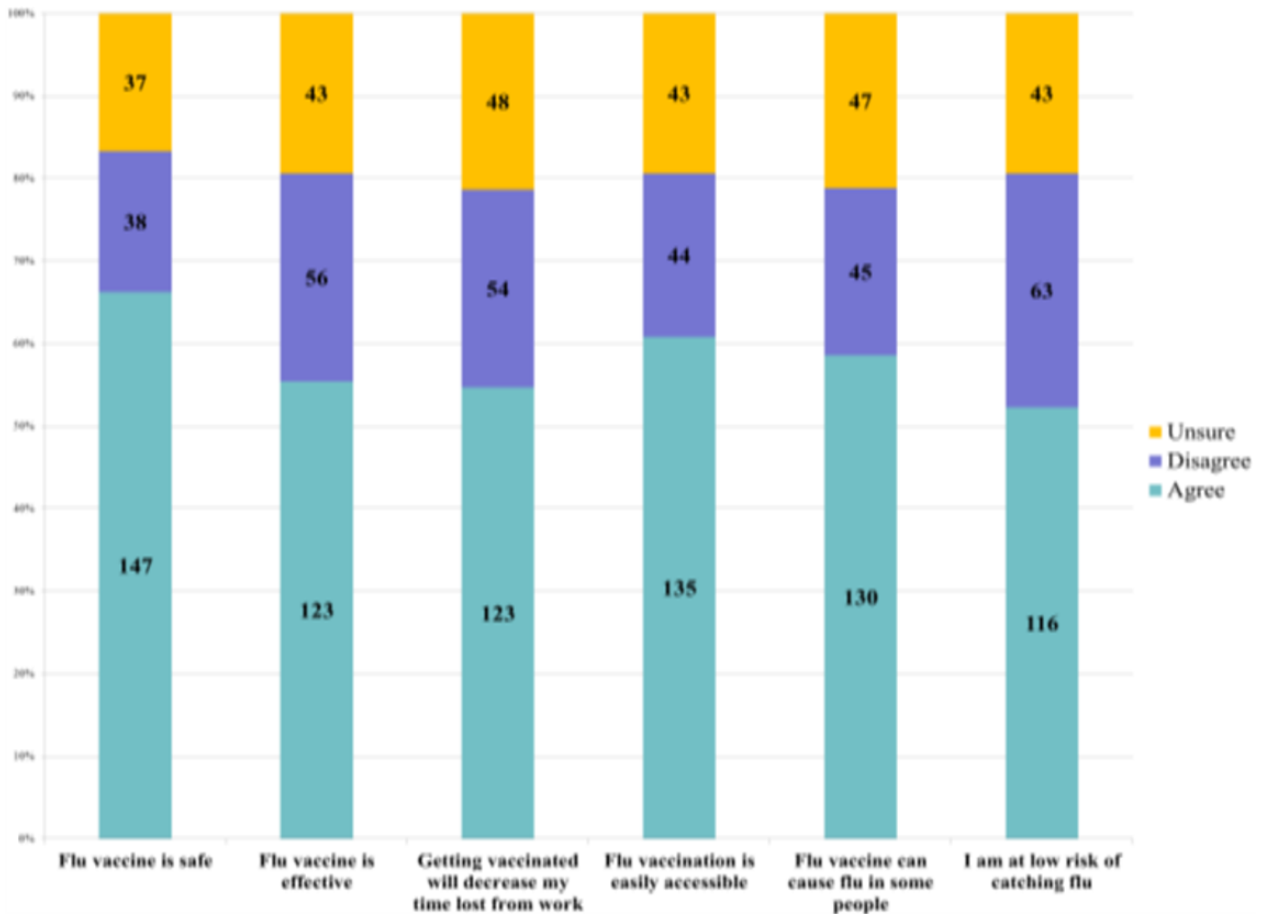


Figure 2: Attitudes amongst Saudi hospital paramedics towards seasonal influenza and vaccination

The flu vaccine is safe	
Agree	147 (66.22)
Disagree	38 (17.12)
Unsure	37 (16.67)

The flu vaccine is effective	
Agree	123 (55.41)
Disagree	56 (25.23)
Unsure	43 (19.37)

Getting vaccinated will decrease my time lost from work	
Agree	120 (54.05)
Disagree	54 (24.32)
Unsure	48 (21.62)

Flu vaccination is easily accessible	
Agree	135 (60.81)
Disagree	44 (19.82)
Unsure	43 (19.37)

The Flu vaccine can cause flu in some people	
Agree	130 (58.56%)
Disagree	45 (20.27%)
Unsure	47 (21.17%)

I am at low risk of catching flu	
Agree	116 (52.25)
Disagree	63 (28.38)
Unsure	43 (19.37)

Figure 3: Attitudes Towards Influenza and Vaccination

nated against influenza in the previous year [3]. The most prevalent cause of not receiving the vaccine was the belief that the flu vaccine is not necessary. A false belief that the vaccine could cause influenza existed among 58.5 percent of respondents [7]. In our study, we observed that only 55.4 percent of participants considered that the vaccine was successful. A strong proportion (52.25 percent) claimed that they were at low risk of contracting influenza, contrary to the evidence [10].

1. Paramedics should be informed about the fact that they are at high risk of contracting influenza when they are interested in transporting ill people. They will also spread the illness to other patients and to their family members as well.
2. They can also be told about the efficacy and usefulness of the influenza vaccine.
3. In clinics, it is appropriate to ensure the provision of vaccines.
4. For hospital staff, annual vaccine programs for influenza should be carried out.

ACKNOWLEDGEMENT

The authors are thankful to everyone who supported this work.

Conflict of Interest

The authors declare that they have no conflict of interest for this study.

Funding Support

The authors declare that they have no funding support for this study.

REFERENCES

[1] Pachucki C, Pappas S, Fuller G, Krause S, Lentino J, Schaaff D, et al. Influenza A among hospital personnel and patients.

Implications for recognition, prevention, and control. Archives of Internal Medicine. 1989;149:77–78. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=1.%09Pachucki+CT%2C+Pappas+SA%2C+Fuller+GF%2C+Krause+SL%2C+Lentino+JR%2C+Schaaff+DM.+Influenza+A+among+hospital+personnel+and+patients.+Implications+for+recognition%2C+prevention%2C+and+control.+Arch+Intern+Med+1989%3B+149%3A77%E2%80%9378.&btnG=#d=gs_cit&u=/scholar%3Fq%3Dinfo%3AJkhQqZiUKF4j%3Ascholar.google.com/%26output%3Dcite%26scirp%3D0%26hl%3Den.

[2] Heimberger T, Chang HG, Shaikh M, Crotty L, Morse D, Birkhead G. Knowledge and attitudes of healthcare workers about influenza: why are they not getting vaccinated? Infection Control & Hospital Epidemiology. 1995;16(7):412–415. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=2.%09Heimberger+T%2C+Chang+HG%2C+Shaikh+M%2C+Crotty+L%2C+Morse+D%2C+Birkhead+G.+Knowledge+and+attitudes+of+healthcare+workers+about+influenza%3A+why+are+they+not+getting+vaccinated%3F+Infect+Control+Hosp+Epidemiol+1995%3B+16%3A412%E2%80%93415.&btnG=#d=gs_cit&u=/scholar%3Fq%3Dinfo%3A7CEmhkWmazUj%3Ascholar.google.com/%26output%3Dcite%26scirp%3D0%26hl%3Den.

[3] Maltezou HC. Nosocomial influenza: need to vaccinate health-care workers. Vaccine. 2008;27(2):177–178. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=3.%09Maltezou+HC.+Nosocomial+influenza%3A+need+to+vaccinate+health%E2%80%90care+workers.

- +Vaccine+2009%3B+27%3A177%E2%80%93178&btnG=#d=gs_cit&u=/scholar%3Fq%3Dinfo%3AKreYkAiQ37cj%3Ascholar.google.com/%26output%3Dcite%26scirp%3D0%26hl%3Den.
- [4] Alenazi BR, Hammad SM, Mohamed AE. Prevalence of seasonal influenza vaccination among primary healthcare workers in Arar city, Saudi Arabia. *Electronic physician*. 2018;10(8):7217. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=4.%09Alenazi+BR%2C+Hammad+SM%2C+Mohamed+AE.+Prevalence+of+seasonal+influenza+vaccination+among+primary+healthcare+workers+in+Arar+city%2C+Saudi+Arabia.+Electron+Physician.+2018%3B10%288%29%3A7217%E2%80%937223.+Published+2018+Aug+25.+doi%3A10.19082/7217&btnG=#d=gs_cit&u=/scholar%3Fq%3Dinfo%3AvES85-go-Zkj%3Ascholar.google.com/%26output%3Dcite%26scirp%3D0%26hl%3Den.
- [5] Alshammari TM, Yusuff KB, Aziz MM, Subaie GM. Healthcare professionals' knowledge, attitude and acceptance of influenza vaccination in Saudi Arabia: a multicenter cross-sectional study. *BMC health services research*. 2019;19(1):1-10. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=5.%09lshammari%2C+T.M.%2C+Yusuff%2C+K.B.%2C+Aziz%2C+M.M.+et+al.+Healthcare+professionals%E2%80%99+knowledge%2C+attitude+and+acceptance+of+influenza+vaccination+in+Saudi+Arabia%3A+a+multicenter+cross-sectional+study.+BMC+Health+Serv+Res+19%2C+229+%282019%29+doi%3A10.1186/s12913-019-4054-9&btnG=#d=gs_cit&u=/scholar%3Fq%3Dinfo%3AoTaAzch3py8J%3Ascholar.google.com/%26output%3Dcite%26scirp%3D0%26hl%3Den.
- [6] WHO. Influenza Transmission Zones. Influenza Update, Number 321, 2018, July. [Accessed 20 August 2018]; 2018. Pages: 1-6.
- [7] Iuliano AD, Roguski KM, Chang HH, Muscatello DJ, Palekar R, Tempia S. Estimates of global seasonal influenza-associated respiratory mortality: a modelling study. *The Lancet*. 2018;391(10127):1285-1300.
- [8] WHO. Seasonal Influenza Fact Sheet. [Accessed 20 Aug 2018]; 2018. Available from: [https://www.who.int/news-room/fact-sheets/detail/influenza-\(seasonal\)](https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal)).
- [9] CDC. Prevention strategies for influenza in healthcare settings. Guidelines and recommendations. [Accessed On October 30, 2018]; 2009. Available from: <https://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>.
- [10] MacDonald NE, Dubé E. Unpacking vaccine hesitancy among healthcare providers. *EBioMedicine*. 2015;2(8):792. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=11.%09MacDonald+NE%2C+Dube+E.+Unpacking+vaccine+hesitancy+among+healthcare+providers.+EBioMedicine.+2015%3B2%288%29%3A792%E2%80%93933.&btnG=#d=gs_cit&u=/scholar%3Fq%3Dinfo%3A2JnY4cB22dYJ%3Ascholar.google.com/%26output%3Dcite%26scirp%3D0%26hl%3Den.
- [11] Verger P, Fressard L, Collange F, Gautier A, Jestin C, Launay O. Vaccine hesitancy among general practitioners and its determinants during controversies: a national cross-sectional survey in France. *EBioMedicine*. 2015;2(8):891-897. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=10.%09Verger+P%2C+Fressard+L%2C+Collange+F%2C+Gautier+A%2C+Jestin+C%2C+Launay+O%2C+et+al.+Vaccine+hesitancy+among+general+practitioners+and+its+determinants+during+controversies%3A+a+National+Cross-sectional+Survey+in+France.+EBioMedicine.+2015%3B2%288%29%3A891%E2%80%93937.&btnG=#d=gs_cit&u=/scholar%3Fq%3Dinfo%3AUxA-6Ebqk4QJ%3Ascholar.google.com/%26output%3Dcite%26scirp%3D0%26hl%3Den.
- [12] Haridi HK, Salman KA, Basaif EA, Al-Skaibi DK. Influenza vaccine uptake, determinants, motivators, and barriers of the vaccine receipt among healthcare workers in a tertiary care hospital in Saudi Arabia. *Journal of Hospital Infection*. 2017;96(3):268-275. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=12.%09Haridi+HK%2C+Salman+KA%2C+Basaif+EA%2C+Al-Skaibi+DK.+Influenza+vaccine+uptake%2C+determinants%2C+motivators%2C+and+barriers+of+the+vaccine+receipt+among+healthcare+workers+in+a+tertiary+care+hospital+in+Saudi+Arabia.+J+Hosp+Infect.+2017%3B96%283%29%3A268%E2%80%93275.&btnG=#d=gs_cit&u=/scholar%3Fq%3Dinfo%3AQtkeljdgfKrgJ%3Ascholar.google.com/%26output%3Dcite%26scirp%3D0%26hl%3Den.

ABOUT AUTHORS



Hany Hosny

Lecturer, EMS Department, Prince Sultan Military Medical College of Health Sciences, PO Box:946, Dhahran – 31932, Kingdom of Saudi Arabia.

Copyright: This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

Cite this article: Hany Hosny, Sami Fawzy, Tarek M. Esmael, Omar Al Rashed, Tariq Al Anazi, Arulanantham Zechariah Jebakumar. **Attitudes amongst Saudi hospital paramedics toward seasonal Influenza and Vaccination.** Int. Res. J Pharm. App. Sci. 2021; 11(1): 6-11.

ScienZTech

© 2021 ScienzTech.org.