

Factors among Chinese Community Healthcare Workers

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Abstract

The seasonal influenza vaccine hesitancy (IVH) of community health care workers in the southwest Chinese city of Chongqing and its causes are examined in this paper. Methods: A cross-sectional survey of 1030 community health care workers who had either direct or indirect patient contact was conducted from July to September 2021 using a self-administered computerized questionnaire. Adjusted odds ratios (ORs) and 95% confidence intervals (CIs) for potential risk factors for IVH among community HCWs were generated using multivariable logistic regression. Results: In the 2020–2021 season, 658.8% of community health care workers had IVH, and 46.2% of community health care workers had been vaccinated. "Don't know the coverage in China" had a positive correlation with IVH (OR: 1.46, 95% CI: 1.01-2.11; Group of 40-year-olds OR: 3.02, 1.92-4.76) as well as "complacency" 4.55, 95% CI: 3.14-6.60). Local HCWs who had previously been immunized against influenza were more likely to fully accept vaccination (OR: 0.67, 95% CI: 0.48-0.95), as well as those who had more comfort and confidence (OR: 0.08, 95% CI: 0.06-0.12; OR: 0.34, 95% CI: 0.23, and 0.52, respectively). Conclusions: Increasing public awareness of influenza and vaccination, expanding the free vaccination policy, and improving the convenience of the vaccination service will all make it possible to increase the seasonal influenza vaccine coverage among community health care workers in Chongqing.

Keywords: Vaccine hesitancy • Influenza • Community healthcare workers

Introduction

Each year, flu season causes 290,000 to 650,000 respiratory deaths, 3 to 5 million severe illness episodes, and a significant burden of morbidity and mortality worldwide. Healthcare workers (HCWs) face a significant risk of contracting influenza due to their frequent contact with patients who are ill and surfaces that have been contaminated with the virus. A meta-analysis of 29 studies from around the world found that HCWs who were not vaccinated were 3.4 times more likely to get the flu than healthy people. Also, HCWs are continually at risk of contracting flu infections while working, which could additionally spread the sickness to weak patients. In light of the COVID-19 pandemic, annual vaccination is an essential method of influenza prevention. The effectiveness of the influenza vaccine in preventing hospitalization and death in older people is only about 50%, according to a comprehensive review and meta-analysis.

However, when the influenza strains used in the seasonal vaccine and the epidemic viruses currently circulating in the population were well matched, vaccine effectiveness for health care workers approached 90%. The seasonal influenza vaccine, which is recommended for health care workers worldwide by more than 90 health organizations, is one of the target populations that the World Health Organization (WHO) recommends getting. According to the technical guidelines for seasonal influenza vaccination in China, which are published annually by the Chinese Center for Disease Control and Prevention, HCWs should be the primary target group for influenza vaccination during the COVID-19 pandemic. Despite the condition's severity, the lack of effective influenza vaccines and low vaccination rates among healthcare workers pose a global public health challenge. In the United States, HCW vaccination rates exceeded 75% during the 2017–2018 season, and up to 95% of HCWs must comply with their employers' vaccine requirements in the workplace. However, these vaccination rates remain below 30 percent in a number of European nations. The highest vaccine coverage

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rate among Chinese health care professionals for the five epidemic seasons since 2010 was no higher than 15%, according to a comprehensive review [1].

Literature Review

The WHO Strategic Advisory Group of Experts (SAGE) was responsible for the creation of the definition and the variables that make up the VH matrix. Despite the availability of influenza vaccinations and vaccination services, we defined IVH as the inability to choose whether to vaccinate or the persistence of anxiety following vaccination. There were five alternatives: reject completely, reject but think about it, haven't decided or never considered it, accept but think about it, and accept completely. Those who selected options 2, 3, or 4 were those who had IVH.

The IVH scales for community HCWs included a 9-item section on the 3Cs model determinants of influenza vaccination confidence, complacency, and convenience evaluated on a 5-point Likert scale (strongly disagree, disagree, neutral, agree, and strongly agree). The IVH scales' reliability and validity tests were successful in the study. With a score of 5-1, the complacency dimension ranges from "strongly agree" to "strongly disagree." The scores for the other two dimensions range from 1 to 5, and they range from "strongly agree" to "strongly disagree." The flu shot is safe and effective, and I'm concerned about flu shot incidents in relation to vaccination. The factors that rated confidence were these. I'm very likely to catch the flu; the disease represents a serious danger to my wellbeing; and the importance of getting the flu vaccine to prevent me from getting the flu were two of the measures used to assess complacency. The following factors were used to evaluate the convenience of the clinic: the cost of the flu shot; I can easily schedule time to visit the clinic; and the clinic's location is convenient.

Getting vaccinated against influenza is a requirement. The responses were divided into two categories: strongly agree, which indicated complete acceptance, and hesitancy (varying degrees of hesitancy included neutral, which indicated that they had not yet made a decision or had not considered it; partially agree, indicating acceptance while still considering; disagree somewhat, indicating rejection but still considering), in contrast to strongly disagreeing, indicating total rejection [2-5].

Discussion

However, our study had several limitations. First, the cross-sectional research limited our exploration of the causal relationship between IVH and

determinants, and the small sample size in the analysis may lead to the weak power of IVH and, thus, the generality may be hindered. Second, the results were self-reported, and vaccination records were not verified further. However, we think community HCWs are mostly professional, so the possibility of false reports was relatively low. Third, the participants in the current study were from one province in the southwest region of China, and, thus, the conclusions for IVH may not be generalized to other areas in the country. Fourth, potential selection bias may also arise. Since the two community health service centers that implemented the free policy also provided centralized vaccination services, the impact of the free policy and vaccination service could not be evaluated separately [6-8].

Conclusion

It is essential to boost community HCWs' personal confidence, awareness of influenza and vaccination, and accurate knowledge of influenza vaccines in order to engage them in activities aimed at reducing patient vaccine hesitancy. This will increase the seasonal influenza vaccination coverage among community HCWs. Additionally, it is essential to increase the availability of immunisation services and the free vaccination policy. Furthermore, in order to support the general population's immunisation at the individual and social levels, we need keep researching efficient treatments to raise the coverage rate of community HCWs.

Acknowledgement

None

Conflict of Interest

The authors declare that there is no conflict of interest associated with this manuscript.

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