Letter to Editor

Is There Any Relationship Between Coverage and Achieve Rates of Influenza Vaccination?: A Report from an Endemic Country

Influenza is an important virus infection. The disease usually attacks respiratory tract and cause respiratory problems. This viral infection becomes the present global public health concern. The prevention of influenza by influenza vaccination is accepted for effectiveness.[1] The vaccination is a good primary prevention against influenza. At present, influenza vaccination is included in national immunization policies worldwide. To get a success influenza control, the vaccination should cover the focused risk population.[2,3] As mentioned by Cowling *et al*.,[4] physician might neglect to properly recommended vaccination to their patients at risk. In addition, to get the highest cost effectiveness of vaccination, the management of the vaccination procedure is needed. Achievement of vaccination without unnecessary loss of vaccine is the important target. Here, the authors would like to share ideas from a retrospective analysis on coverage and achieve rates of influenza vaccination in a rural region of Thailand, a tropical country in Southeast Asia where influenza is common.

The retrospective analysis on the primary registry data is done. The setting is south northeastern region of Thailand, a tropical country in Indochina. The registry data in 4 provinces within the studied region in year 2017 are retrospectively assessed. The primary parameters include coverage and achieve rates of influenza vaccination. For calculation, the coverage rate is equal to percent of the target population in each area who got the complete vaccination according to the vaccination schedule and the achieve rate is equal to percent of the vaccine that is completely provided and used under standard quality control process of vaccination. The coverage and achieve rates of influenza vaccination in the four studies provinces are presented in Table 1.

Influenza is a present public health problem worldwide. The control of this infection by vaccination is accepted as a good preventive measurement. In endemic country, influenza vaccination is usually included into the national immunization program. In Thailand, influenza is also prevalent. The influenza vaccination is already included into the national immunization program.[5] In Thailand, the influenza vaccination is given for free to the risk groups annually.[5] Basically, it is promoted to have complete coverage of influenza vaccination. However, there has never complete coverage. In the present report, it can also show that the coverage rate of influenza is still not 100% despite there are local governmental policies to promote the vaccination. Additionally, the authors can show that the achieve rate is also not 100%. Loss of influenza during vaccine administration process is still detectable.

Table 1: The coverage and achieve rates of influenza vaccination in the four studies provinces in south northeastern region of Thailand

Provinces	Coverage rate (%)	Achieve rate (%)
Nakornratchasrima	15.72	58.29
Chaiyaphum	16.06	60.54
Buriram	12.86	49.91
Surin	16.75	63.12

In fact, the good plan for distribution and administration of influenza vaccine is the way to reach the good achieve rate of vaccination. When a practitioner strictly aims at complete use of vaccine in the same lot, one might forget to think about the convenience of the vaccine. This might be a hidden problem that can result in the difficulty to reach the completeness of influenza vaccination coverage. Therefore, a flexible approach to promote vaccination with good plan to allocate the vaccination administration to the focused population is needed.

In conclusion, according to the present analysis, the same trend of coverage rate and achieve rate can be seen. It implies that there is a need to adjust the local policies regarding influenza vaccination to promote both coverage and achieve rates of influenza vaccination. Further study on a more data is planned to further analyze on the interrelationship between coverage and achieve rates of influenza vaccination.

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Conflict of interest

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Rujittika Mungmunpuntipantip, Viroj Wiwanitkit[1]

Private Academic Practice, Bangkok, Thailand, [1]Department of Biological Science, Joseph Ayobabalola University, Ikeji-Arakeji, Nigeria

Address for correspondence:
Dr. Rujittika Mungmunpuntipantip, Private Academic Practice, Bangkok, Thailand.
E-mail: rujittika@gmail.com

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