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Letter to the Editor (Pages: 547-5548)

Nasopharyngeal Pneumococcal Colonization among Children after Pneumococcal Conjugate Vaccine Introduction

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Dear Editor-in-chief,

World Health Organization has recommended all countries to introduction of Pneumococcal Conjugate Vaccine (PCV) in routine immunization schedule, especially those countries with higher rate of mortality in children. However, Islamic Republic of Iran and more than 50 other countries including Algeria, Antigua and Barbuda, Belarus, Belize, Bhutan, Bosnia and Herzegovina, Brunei Darussalam, Cabo Verde, Chad, China, Comoros, Cook Islands, Croatia, Cuba, Czech Republic, Democratic People's Republic of Korea, Dominica, Egypt, Equatorial Guinea, Estonia, Gabon, Grenada, Guinea, Haiti, India, Jamaica, Jordan, Malaysia, Maldives, Malta, Montenegro, Nauru, Poland, Romania, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino, Serbia, Seychelles, Slovenia, Somalia, South Sudan, Sri Lanka, Syrian Arab Republic, Tajikistan, Thailand, The former Yugoslav Republic of Macedonia, Timor-Leste, Tonga, Tunisia, Turkmenistan, Tuvalu, Ukraine, Vanuatu, and Viet Nam have not introduced PCV till April 2016.

World Health Organization indicated that after PCV introduction, both targeted and non-targeted vaccination population were affected by direct and indirect effects of PCV immunization (1). Epidemiological profile of *Streptococcus pneumonia* related diseases include meningitis, pneumonia, sepsis and the prevalence of nasopharyngeal carriage will be changed following PCV integration into targeted vaccine countries (2). Published literature reviews (3-6) revealed that transmission and prevalence of nasopharyngeal carriage of *Streptococcus pneumonia* will be decreased because of direct and indirect effects of PCV. Moreover, PCV targeted countries may have experience only change in the prevalence of nasopharyngeal pneumococcal colonization for vaccine-covered serotypes (7). In conclusion, policy makers and public health authorities of non-targeted PCV vaccine countries are highly recommended to consider serotype distribution and replacement before and after vaccine introduction regarding the sustained administration of PCV.

Key Words: Carriage, Children, Pneumococcal Conjugate Vaccine, Streptococcus pneumonia.

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2- CONFLICT OF INTEREST

The author claimed no conflict of interest.

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