Analysis of the reasons and factors for not being vaccinated with pneumococcal vaccines: A questionnaire survey in Miyazaki prefecture, Japan

Moeka Honda^a, Tomoyuki Fujii^a, Makoto Sumiyoshi^a, Yasuhiro Yamanari^a, Yuuki Yokoo^a, Kensuke Setoguchi^a, Akiko Kitamura^a, Yasuharu Oda^a, Hironobu Tsubouchi^a, Shigehisa Yanagi^a, Yasutoshi Hirabara^b, Ichiro Takajo^a, Taiga Miyazaki^a

Division of Respirology, Rheumatology, Infectious Diseases and Neurology, Department of Internal Medicine, University of Miyazaki, Miyazaki, Japan ^b Department of Pharmacy, University of Miyazaki Hospital, Miyazaki, Japan



Background/Objective

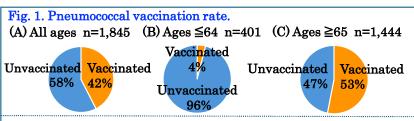
Miyazaki Prefecture, located in the southern part of Japan, has an aging population and a lower rate of pneumococcal vaccination than the national average. The aim of this study was to analyze the characteristics of the unvaccinated population and clarify the reasons and factors for not being vaccinated.

Methods

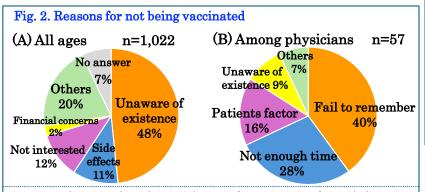
Between September and November of 2023, we conducted a cross-sectional, paper-based questionnaire survey for prefectural residents and physicians in the same area.

Results&Discussion

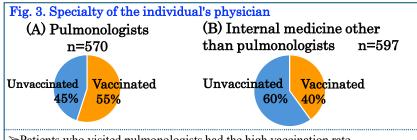
- Background: Of the forms handed out to the general public, 3,148 were distributed, and 2,931 were analyzed. Among physicians, 83 questionnaires were distributed, and 81 were analyzed.
- The Japanese government is sending emails to people aged 65 and older informing them about pneumococcal vaccination. This is expected to increase the vaccination rate. To increase vaccination rates, patient counseling by physicians is also important.



➤ The overall vaccination rate was 42%, with a median age of 72 (range 18–97). The pneumococcal vaccination rate is higher among people aged 65 and older than among those aged 64 and younger.

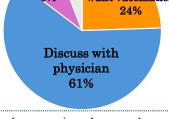


Among the unvaccinated group, the most frequent reason for not being vaccinated was "unawareness of the existence of the pneumococcal vaccine." Among physicians, the most frequent reason for not recommending pneumococcal vaccination was "failure to remember."

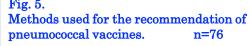


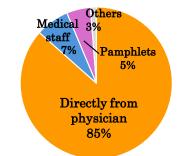
➤ Patients who visited pulmonologists had the high vaccination rate.

Future plans after finishing questionnaire for the unvaccinated group Do not want vaccination anser Immediately 6% want vaccination



➤ Among the unvaccinated group when asked about their future plans after finishing the questionnaire, 24% answered "immediately want vaccination", 61% answered "want to discuss with physician", 9% answered "do not want vaccination"





➤ Pneumococcal vaccines are often recommended by physicians and the other medical staffs rather than through pamphlets.

Conclusions

This multifaceted approach enabled us to understand the key factors contributing to the low vaccination rate and clarify our next steps to improve pneumococcal vaccination in our aging community.

3. Ministry of Health, Labour and Welfare of Japan. Monthly and annual report of vital statistics 2024.



^{1.} Committee for the Japanese Respiratory Society guideline for the management of pneumonia in adults 2024. The JRS guideline for the management of pneumonia in adults 2024. The Japanese Respiratory Society; 2024. 2.Chen H, Matsumoto H, Horita N, Hara Y, Kobayashi N, Kaneko T. Sci Rep 2021;11:11865.