ABSTRACT

Introduction:

It is believed that the vaccines are critical new tools in the battle against infectious diseases and as for COVID-19. The vaccines for COVID19 were introduced with a view of minimizing the consequences of the disease. In Sri Lanka, special COVID19 vaccination programs were launched initially in high risk and later in other areas targeting vulnerable groups such as sixty and above population. Studying about the vaccine acceptance and related objectives to generate evidence on how successful the implemented vaccination program is therefore vital.

Objective of the study:

The objective of the study was to describe COVID19 vaccine acceptance, the factors associated with vaccine acceptance, adverse events following immunization and perception about the vaccination program among older adults in the District 5 of Colombo Municipal Council area.

Methods:

A descriptive cross-sectional study was conducted among older adults (persons aged 60 years and above) in the District 5 of Colombo Municipal Council. The Calculated sample size (n=512) was selected using systematic sampling technique. A pretested interviewer administered questionnaire (IAQ) was used to collect data through telephone interviews. The data analysis was done using frequencies and the Chi-square test.

Results:

The majority, 91% (95% CI: 87.9-93.1) of older adults had accepted the vaccines. A statistically significant association was noted between vaccine acceptance and ethnicity ($\chi 2$ =18.2, p<0.001), educational level ($\chi 2$ =24.2, p<0.001), monthly income ($\chi 2$ = 34.2, p<0.001), presence of chronic diseases ($\chi 2$ =5.28, p=0.02), knowledge on COVID19 vaccines ($\chi 2$ =17, p<0.001), known persons living abroad ($\chi 2$ =7.9, p=0.005), their vaccination status ($\chi 2$ =9.7, p=0.008), history of previous infection ($\chi 2$ =18.6, p<0.001), history of first contact ($\chi 2$ =5.9, p=0.015), experience of COVID19 infection among known persons ($\chi 2$ = 11.2, p=0.001),

known persons working in the health sector ($\chi 2$ =12.8, p<0.001), and source of information about the vaccines ($\chi 2$ = 83.2, p<0.001).

Majority of the study participants (52.6%; n=206) experienced one or more adverse events following immunization. Of the total events (n=948), a greater proportion of adverse events were reported after the first dose (35.3%; n=355) and it was injection site pain 51.6% (n=490). Majority of vaccine recipients (48,4%; n=124) stated that the symptoms lasted for 11 to 24 hours.

Most of the vaccine recipients received the first (53.6%; n=261) and the second dose (51.3%; n=250) at outreach clinics, but the third (61.8%; n=301) from MOH clinics. Greater proportion of the vaccine recipients went in person to get the first (82.3%; n=401) and the second dose (54.8%; n=262), while the third dose, the majority (66.1%; n=292) received appointments from the MOH office. Most of the vaccine recipients waited one to two hours to receive the first dose (40.7%; n=198), but 30 minutes to one hour for the second dose (52.7%; n=252) and the third dose (60% n=264). Almost all vaccine recipients declared that they didn't receive health education after each session of vaccination. Most of the vaccine recipients did not get a chance to clarify their doubts after first dose (81.7%; n=398) and the second dose (71%; n=337) but 51.5% (n=228) had the chance to clarify doubts after booster dose. Majority declared that the organization of vaccination campaign was satisfactory (70.4%; n=343).

Conclusions and recommendations:

Being a new vaccine introduction, COVID19 vaccination programme in D5 Districts of CMC had achieved a good vaccination acceptance among older adults.

The vaccine acceptance is significantly associated with selected demographic, socioeconomic, diseases related and individual factors such as knowledge, and attitude.

Majority had experienced one or more adverse events, especially after the first dose of vaccine and mostly minor adverse events such as injection site pain, and fatigueability.

Majority of vaccine recipients (70.4%; n=343) were satisfied with the way the campaign was organized and the quality-of-service provision had been improved when moving from first dose campaign to third dose campaign.

The best practices of the current campaign should be extrapolated to other areas, while gaps should be addressed to deliver a better programme of this nature in future.

Key words:

COVID19 vaccination, Tools for COVID19, COVID19 vaccine acceptance, adverse events of COVID vaccines