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Impact of COVID-19 among otorhinolaryngologists in Malaysia: a cross-sectional online survey

Wpływ pandemii COVID-19 na otorynolaryngologów w Malezji: badanie przekrojowe z wykorzystaniem ankiety internetowej

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Abstract

Background: Coronavirus disease 2019 (COVID-19) has changed the lives of millions of people worldwide, including the lives of healthcare workers. **The aim of this study** was to determine the impact of COVID-19 on the quality of life, financial implications, and fear of COVID-19 among otorhinolaryngologists in Malaysia at the peak of the COVID-19 pandemic. **Methods:** A cross-sectional online survey was conducted for a period of one week from 1 to 7 June 2021 using the World Health Organization Quality of Life Questionnaire (WHOQOL-BREF) and the Consumer Financial Protection Bureau (CFPB) Financial Well-Being Scale and Fear of COVID-19 Scale (FCV-19S) available at a link sent to potential participants. The study's target participants were otorhinolaryngology specialists residing and working in Malaysia. **Results:** A total of 115 participants completed the survey. The majority of them were of the Malay (51.3%) race, of Malaysian (99.1%) nationality, and predominantly female. Most of the respondents were 20–40 years old, working in public hospitals (46.1%). The mean WHOQOL-BREF scores for the physical domain, psychological domain, social domain, and environmental domain were 54.64 ± 12.93 , 53.79 ± 11.09 , 72.70 ± 20.74 , and 67.22 ± 16.32 , respectively. The mean CFPB and FVC-19S scores were 54.57 ± 8.47 and 19.13 ± 6.04 , respectively. A significant difference between the participants with different lengths of professional experience was observed in the social relationship domain ($p = 0.011$) and the financial well-being score ($p = 0.004$). Participants with more than ten years of professional experience had the highest CFPD score (mean \pm SD: 58.07 ± 8.65). **Conclusion:** COVID-19 has affected various domains of the quality of life, financial stability, and fear of COVID-19 across the various groups of otorhinolaryngologists in Malaysia. The findings of this survey identify negative effects and help to plan various strategies to address the issue.

Keywords: quality of life, financial impact, fear of COVID-19, online survey, COVID-19, otorhinolaryngology

Streszczenie

Wprowadzenie: Pandemia choroby koronawirusowej 2019 (COVID-19) zmieniła życie milionów ludzi na całym świecie. Wpłynęła także znacząco na funkcjonowanie pracowników systemów ochrony zdrowia. **Celem badania** było określenie wpływu pandemii COVID-19 na otorynolaryngologów praktykujących w Malezji pod względem jakości życia, skutków finansowych oraz lęku przed COVID-19. **Metody:** W okresie jednego tygodnia, od 1 do 7 czerwca 2021 roku, przeprowadzono badanie przekrojowe z wykorzystaniem ankiety internetowej opracowanej na podstawie kwestionariusza WHOQOL-BREF Światowej Organizacji Zdrowia przeznaczonego do oceny ogólnej jakości życia, a także opracowanej przez amerykańską agencję Consumer Financial Protection Bureau (CFPB) skali oceny dobrostanu finansowego oraz skali oceny lęku przed COVID-19 (Financial Well-Being Scale and Fear of COVID-19 Scale, FCV-19S). Ankieta była dostępna pod linkiem, który rozesłano do potencjalnych uczestników badania. Grupa docelowa obejmowała specjalistów w zakresie otorynolaryngologii mieszkających i pracujących na terytorium Malezji. **Wyniki:** Ankiety wypełniło łącznie 115 uczestników. Byli to głównie przedstawiciele rasy malajskiej (51,3%), narodowości malezyjskiej (99,1%). W grupie przeważały kobiety. Wiek większości respondentów mieścił się w przedziale 20–40 lat, a głównym podanym miejscem zatrudnienia był szpital publiczny (46,1%). Średnie wyniki oceny jakości życia według kwestionariusza WHOQOL-BREF w zakresie czterech dziedzin: funkcjonowania fizycznego, psychicznego i społecznego oraz funkcjonowania w środowisku wyniosły odpowiednio $54,64 \pm 12,93$, $53,79 \pm 11,09$, $72,70 \pm 20,74$ oraz $67,22 \pm 16,32$. Średnie wyniki oceny respondentów w skalach CFPB i FVC-19S wyniosły odpowiednio

54,57 ± 8,47 oraz 19,13 ± 6,04. Zaobserwowano istotną różnicę pomiędzy uczestnikami badania o różnej długości stażu zawodowego w obszarze oceny relacji społecznych ($p = 0,011$) i dobrostanu finansowego ($p = 0,004$). Najwyższy średni wynik oceny w skali CFPB odnotowano u uczestników badania z ponad dziesięcioletnim stażem zawodowym (średnia ± SD: 58,07 ± 8,65). **Wnioski:** Pandemia COVID-19 wpłynęła na różne aspekty jakości życia, a także stabilność finansową i poziom lęku w społeczności otorhinolaryngologów mieszkających i pracujących w Malezji. Wyniki przeprowadzonego badania wskazują na negatywne skutki pandemii i mogą być przydatne przy planowaniu strategii zmierzających do rozwiązania zidentyfikowanych problemów.

Słowa kluczowe: jakość życia, skutki finansowe, lęk przed COVID-19, ankieta online, COVID-19, otorhinolaryngologia

INTRODUCTION

At the moment, coronavirus disease 2019 (COVID-19), is incontestably the most significant health problem worldwide, with a great number of affected patients (766,440,796 as of 17 May 2023)⁽¹⁾. While most efforts are aimed at curbing the pandemic, the ramifications resulting from the pandemic, notably the effects on the general well-being of the population have largely been overlooked. Healthcare workers (HCW) are on the frontline of the global effort to halt the pandemic, which puts them at risk. Rising numbers of COVID-19 cases have taken a tremendous toll on the general well-being of HCW, notably the otorhinolaryngology (ORL) speciality, which deals with the diseases of upper airways. Otorhinolaryngologists are extremely susceptible to the transmission of SARS-CoV-2, as aerosol-generating procedures (AGP) are part of their professional routine. In the same vein, reports on numerous ORL manifestations have been lauded as the presenting symptoms of COVID-19, such as new-onset olfactory dysfunction⁽²⁾, gustatory dysfunctions⁽²⁾, hearing loss⁽³⁾, vertigo⁽⁴⁾, sore throat⁽⁵⁾, and dysphonia⁽⁶⁾, which puts otorhinolaryngologists at an elevated risk on a daily basis. The aim of the survey was to determine the impact of COVID-19 on the quality of life, financial implications, and fear of COVID-19 among otorhinolaryngologists in Malaysia at the peak of the pandemic.

METHODS

Study design and setting

This cross-sectional online survey was conducted for a period of one week from 1 to 7 June 2021, amid the third nationwide lockdown in Malaysia which was announced on 1 June 2021. The target participants of the study were ORL specialists residing and working in Malaysia. The study was performed in accordance with the ethical principles of the Declaration of Helsinki. No ethical approval was obtained, as the study was based on a survey.

Study participants and recruitment

The participants were ORL specialists residing and working in Malaysia, in public and private hospitals, and in

academic settings. In the light of social-distancing protocols, an online survey was regarded as the most feasible means to access the target population during the pandemic. A link to the online survey was circulated through the professional and social networks in these regions. Additionally, the survey link was shared through numerous online communication channels and social media platforms (WhatsApp) in order to maximise its reach. Responders could refuse to participate in the study by not filling in the survey.

Survey items

The online-based survey included demographic data, and information on the quality of life, financial implications as well as fear of COVID-19. The survey was generated using Google Forms, a cloud-based survey development application, and it comprised four parts. In the first part, data were collected on the participants' age, gender, nationality, race, practice setting, years of experience post-specialty, and an estimation of an overall reduction of income.

The second part of the survey, related to the quality of life, was based on the World Health Organisation Quality of Life Questionnaire (WHOQOL-BREF)⁽⁷⁾ version consisting of 26 items measured on a 5-point Likert scale for the quality assessment of domains including physical health, psychological health, social relationships, and environment. All the domains were scored in a positive line, and higher scores represented better quality of life.

The third part of the survey assessed the financial implications of COVID-19 using the Consumer Financial Protection Bureau (CFPB) Financial Well-Being Scale⁽⁸⁾ comprising 10 questions. The total response value was obtained by adding the individual responses. Higher scores represented higher degrees of estimated financial well-being.

The fourth part of the survey intended to assess the fear of COVID-19 among otorhinolaryngologists in Malaysia using the Fear of COVID-19 Scale (FCV-19S)⁽⁹⁾. The FCV-19S is a questionnaire that evaluates the level of fear associated with the ongoing pandemic caused by SARS-CoV-2. The FCV-19S comprises seven items, such as "It makes me uncomfortable to think about coronavirus-19", each with a five-point Likert scale of options. The participants were instructed to choose the option that represented their

| Variables | | Frequency (%) |
|------------------------------------|-------------------|---------------|
| Age | 20–40 | 65 (56.5) |
| | 40–60 | 47 (40.9) |
| | 60–80 | 3 (2.6) |
| Gender | Female | 64 (55.7) |
| | Male | 51 (44.3) |
| Race | Chinese | 25 (21.7) |
| | Indian | 26 (22.6) |
| | Malay | 59 (51.3) |
| | Others | 5 (4.3) |
| Nationality | Malaysian | 114 (99.1) |
| | Non-Malaysian | 1 (0.9) |
| Practice setting | Academic | 30 (26) |
| | Public hospital | 60 (52.1) |
| | Private hospital | 25 (21.7) |
| Years of experience post-specialty | Less than 5 years | 60 (52.1) |
| | 5–10 years | 17 (14.8) |
| | >10 years | 38 (33.0) |
| Reduction in income | 30% | 85 (73.9) |
| | 30–60% | 25 (21.7) |
| | 60–90% | 5 (4.3) |

Tab. 1. Demographic characteristics of the participants

perception of the statement presented. The maximum possible total was 35 points. Based on the scale, the higher the scale, the higher the level of the participant’s fear of COVID-19.

Statistical analysis

Data were processed and analysed using SPSS version 26.0. Results were expressed as proportions and summary measures using appropriate tables. Individual WHOQOL-BREF⁽⁷⁾ domain scores, CFPB Financial Well-Being Scale score⁽⁸⁾ and FCV-19S⁽⁹⁾ were compared with the demographic variables using one-way ANOVA and independent sample *t*-test. WHOQOL-BREF domain scores and FCV-19S were compared with the CFPB Financial Well-Being Scale score using Pearson’s correlation coefficient test. Statistical significance was set at $p < 0.05$.

RESULTS

A total of 115 participants completed the study’s survey. The majority were Malay (51.3%), followed by Chinese (21.7%), Indian 22.6%), and other races (4.3%). Most of the participants were Malaysian (99.1%). Female participants predominated at 55.7%. The majority of the respondents were classified in the 20–40 age group (56.5%), followed by participants aged 40–60 years (40.9%), and participants aged above 60 years (2.6%). Almost half of the participants worked in public hospitals (52.1%), followed by the academic setting (26%), while 21.7% worked in the private setting (Tab. 1).

Participants with less than five years of experience post-specialty (60%) prevailed, followed by participants with 5–10 years of professional experience (14.8%), and finally, 33% involved those with more than ten years of working experience. As for the overall reduction of income, most participants experienced less than 30% reduction (73.9), and only 4.3% of participants suffered more than 60% of income reduction during the COVID-19 pandemic.

The mean scores for the WHOQOL-BREF physical domain, psychological domain, social domain, and environmental domain were 54.64 ± 12.93 , 53.79 ± 11.09 , 72.70 ± 20.74 , and 67.22 ± 16.32 , respectively. The mean score for CFPB and FCV-19S were 54.57 ± 8.47 and 19.13 ± 6.04 .

No significant association was observed between the age group and scores in the WHOQOL-BREF domains and FCV-19S (Tab. 2).

A significant moderate positive correlation was observed between the CFPB score with the physical health domain (coef: 0.314; $p = 0.001$) and the social relationship domain (coef: 0.334; $p < 0.001$). On the other hand, a significant moderate negative relationship was identified between the fear of COVID score and the CFPB score (coef: -0.364 ; $p < 0.001$). A significant positive relationship was found between the CFPB score and the environmental domain (coef: 0.514; $p < 0.001$) (Tab. 3).

| | Mean | Standard deviation | Median | Interquartile range | Minimum | Maximum |
|---------------------------------|-------|--------------------|--------|---------------------|---------|---------|
| WHOQOL-BREF domain score | | | | | | |
| Physical | 56.42 | 12.93 | 57.14 | 14.29 | 25.00 | 85.71 |
| Psychological | 53.79 | 11.09 | 50.00 | 12.50 | 33.33 | 91.67 |
| Social | 72.70 | 20.74 | 75.00 | 25.00 | 0.00 | 100.00 |
| Environmental | 67.22 | 16.32 | 71.88 | 18.75 | 12.50 | 100.00 |
| CFPB score | 54.57 | 8.47 | 54.00 | 9.00 | 29.00 | 75.00 |
| Fear of COVID score | 19.13 | 6.04 | 19.00 | 8.00 | 7.00 | 35.00 |

Tab. 2. WHOQOL-BREF domain scores, CFPB Financial Well-Being Scale scores and Fear of COVID-19 Scale scores

| | WHOQOL-BREF domain score | | | | Fear of COVID-19 score |
|--------------------|--------------------------|---------------|------------------|------------------|------------------------|
| | Physical | Psychological | Social | Environmental | |
| CFPB score: | | | | | |
| • coefficient | 0.314 | 0.049 | 0.334 | 0.514 | -0.367 |
| • <i>p</i> value | 0.001 | 0.616 | <0.001 | <0.001 | <0.001 |

Tab. 3. Comparison of WHOQOL-BREF domain scores and Fear of COVID-19 Scale scores with CFPB Financial Well-Being Scale scores

| | Physical score | | Psychological score | | Social score | | Environmental score | | CFPB score | | Fear of COVID score | |
|-----------------------------|----------------|--------------------|---------------------|--------------------|---------------|--------------------------|---------------------|--------------------|---------------|--------------------------|---------------------|--------------------|
| | Mean ± SD | p | Mean ± SD | p | Mean ± SD | p | Mean ± SD | p | Mean ± SD | p | Mean ± SD | p |
| Age: | | | | | | | | | | | | |
| • 20–40 | 56.35 ± 12.69 | 0.680 ^a | 52.69 ± 10.32 | 0.446 ^a | 72.85 ± 20.35 | 0.841 ^a | 67.01 ± 14.33 | 0.642 ^a | 53.60 ± 8.25 | 0.036 ^a | 19.23 ± 5.51 | 0.356 ^a |
| • 40–60 | 56.00 ± 13.61 | | 54.70 ± 12.09 | | 72.34 ± 21.95 | | 67.05 ± 19.32 | | 55.28 ± 8.40 | | 19.28 ± 6.81 | |
| • 60–80 | 64.29 ± 5.05 | | 60.42 ± 8.84 | | 81.25 ± 8.84 | | 78.13 ± 4.42 | | 68.50 ± 6.36 | | 13.00 ± 0.00 | |
| Gender: | | | | | | | | | | | | |
| • female | 56.03 ± 11.93 | 0.598 ^b | 53.73 ± 11.70 | 0.785 ^b | 73.71 ± 21.55 | 0.910 ^b | 67.78 ± 14.33 | 0.780 ^b | 55.33 ± 8.17 | 0.824 ^b | 18.74 ± 5.79 | 0.980 ^b |
| • male | 57.36 ± 14.05 | | 53.17 ± 9.13 | | 73.25 ± 20.05 | | 68.62 ± 16.51 | | 57.98 ± 8.06 | | 18.71 ± 5.75 | |
| Race: | | | | | | | | | | | | |
| • Chinese | 54.86 ± 14.06 | 0.541 ^a | 53.50 ± 8.89 | 0.739 ^a | 68.00 ± 20.44 | 0.649 ^a | 65.00 ± 17.93 | 0.418 ^a | 56.17 ± 8.74 | 0.016^a | 18.65 ± 5.62 | 0.205 ^a |
| • Indian | 54.86 ± 12.19 | | 54.50 ± 13.39 | | 74.00 ± 21.63 | | 67.63 ± 14.93 | | 53.22 ± 8.64 | | 17.32 ± 6.42 | |
| • Malay | 58.05 ± 12.75 | | 53.23 ± 11.04 | | 74.15 ± 21.26 | | 68.70 ± 14.42 | | 55.36 ± 7.58 | | 19.81 ± 5.70 | |
| • others | 51.79 ± 14.43 | | 59.38 ± 10.96 | | 72.50 ± 10.46 | | 54.17 ± 42.20 | | 43.80 ± 10.55 | | 22.40 ± 8.79 | |
| Practice setting: | | | | | | | | | | | | |
| • academic | 54.55 ± 11.46 | 0.380 ^a | 51.89 ± 9.07 | 0.229 ^a | 73.30 ± 21.23 | 0.646 ^a | 67.61 ± 18.18 | 0.219 ^a | 57.32 ± 8.54 | 0.112 ^a | 19.19 ± 6.39 | 0.942 ^a |
| • public hospital | 55.29 ± 13.67 | | 43.45 ± 12.03 | | 71.23 ± 20.45 | | 65.07 ± 17.88 | | 53.19 ± 8.65 | | 19.37 ± 6.72 | |
| • private hospital | 59.72 ± 11.80 | | 57.84 ± 9.86 | | 76.39 ± 19.60 | | 73.35 ± 10.43 | | 56.50 ± 8.13 | | 18.78 ± 4.62 | |
| Years of experience: | | | | | | | | | | | | |
| • less than 5 years | 56.31 ± 12.95 | 0.144 ^a | 52.45 ± 9.40 | 0.429 ^a | 73.70 ± 19.51 | 0.011^a | 65.69 ± 18.51 | 0.249 ^a | 51.96 ± 8.15 | 0.004^a | 19.37 ± 6.22 | 0.884 ^a |
| • 5–10 years | 50.84 ± 12.91 | | 56.13 ± 14.89 | | 60.29 ± 24.30 | | 64.34 ± 16.16 | | 57.41 ± 7.62 | | 18.53 ± 7.13 | |
| • >10 years | 58.55 ± 12.11 | | 54.91 ± 11.06 | | 78.57 ± 16.27 | | 71.76 ± 14.07 | | 58.07 ± 8.65 | | 19.37 ± 5.82 | |
| Reduction in income: | | | | | | | | | | | | |
| • 30% | 55.02 ± 13.11 | 0.826 ^a | 52.51 ± 11.38 | 0.200 ^a | 70.44 ± 21.95 | 0.536 ^a | 66.54 ± 16.45 | 0.953 ^a | 55.14 ± 8.27 | 0.186 ^a | 19.11 ± 3.28 | 0.708 ^a |
| • 30–60% | 57.14 ± 11.07 | | 54.17 ± 8.19 | | 75.78 ± 17.95 | | 67.97 ± 17.88 | | 53.69 ± 9.42 | | 20.56 ± 6.98 | |
| • 60–90% | 56.46 ± 12.50 | | 62.50 ± 13.18 | | 77.50 ± 10.46 | | 66.67 ± 17.77 | | 48.00 ± 10.12 | | 19.40 ± 4.28 | |

^a One-way ANOVA. ^b Independent sample t-test.

Tab. 4. Comparison of various parameters with mean WHOQOL-BREF domain scores and mean CFPB Financial Well-Being Scale scores

A significant difference between participants with various lengths of experience was observed in the social relationship domain ($p = 0.011$) and the financial well-being score ($p = 0.004$). Participants with more than ten years of experience had the highest environmental scores (mean ± SD: 71.76 ± 14.07) and CFPD scores (mean ± SD: 58.07 ± 8.65) compared to others. Apart from that, there was a significant difference in CFPD scores between races, too ($p = 0.016$). Chinese HCW were observed to have the highest CFPD score (mean ± SD: 56.17 ± 8.74), while the lowest scores were observed in other ethnic groups (mean ± SD: 43.80 ± 10.55) (Tab. 4).

DISCUSSION

Malaysia is currently in the midst of the third wave of COVID-19, with a national lockdown beginning on 1 June 2021. As most parts of the world are returning to their normal routine, Malaysians face yet another challenge with rising numbers of COVID-19 cases. As of 23 May 2023, the total number of COVID-19 cases reached 5,055,591, while the total death count surpassed 37,070. As HCW nationwide are struggling in the battle to stop the pandemic, medical specialists, such as ORL, who continuously deal with AGP, are at a high risk with minimum personal protective equipment.

The ORL speciality was spotlighted when new-onset loss of smell became a prominent manifestation of COVID-19, with a reported prevalence of 47.85% of the

afflicted population⁽¹⁰⁾. This was followed by other ORL-related manifestations resulting in otorhinolaryngologists becoming one of the vulnerable groups. Consequently, the ORL practice has changed substantially over a period of one year, ensuing the pandemic as the number of surgical procedures has reduced tremendously, and only emergency and essential cases were permitted. The ever-changing trend in ORL practice has greatly affected otorhinolaryngologists in all areas, including their general well-being, financial and psychological spheres, as fear of COVID-19 lingers. Nevertheless, numerous reports across the globe on high rates of virus transmission, infection, and mortality among otorhinolaryngologists performing routine procedures, notably endoscopic airway procedures in COVID-19 patients, result in anxiety⁽¹¹⁾.

In the current study, we aimed to determine the quality of life and financial implications and assess the fear of COVID-19 among otorhinolaryngologists at the peak of the pandemic.

WHOQOL-BREF, CFPB Financial Well-Being Scale and FCV-19S scores were determined by completing the online survey.

The overall quality of life was assessed with the WHOQOL-BREF questionnaire encompassing physical, psychological, social, and environmental domains, using 26 questions.

Most participants were aged 20–40 years (56.5%), as representatives of the younger generation are generally keener to complete surveys as well as being more technologically savvy. Parallel to that, the proportion of female participants

was higher (55.7%), as the number of female otorhinolaryngologists is higher compared to male otorhinolaryngologists in Malaysia.

73.9% of them experienced a 30% reduction in their income during the COVID-19 pandemic. This could be due to the fact that the majority of the participants work in public hospitals which have a rather standardised payment scheme according to seniority.

In our survey, we found that the overall WHOQOL-BREF mean score for the social domain was the highest, 72.70 ± 20.74 , followed by the environmental domain 67.22 ± 16.32 , while for the psychological domain it was the lowest at 53.79 ± 11.09 . No significant association was observed between various demographic data, notably age and WHOQOL-BREF domains. Participants over 60 years were found to have the highest mean score for all domains of the WHOQOL-BREF as well as CFPB scores. Similarly, Dosemane et al. reported that advancing age is associated with greater financial stability, contentment, and better professional and financial commitments⁽¹²⁾. Interestingly, a high level of quality of life can be achieved among older adults despite poor physical health considering other areas of life such as psychological, social, and environmental areas are satisfactory⁽¹³⁾.

On the other hand, younger otorhinolaryngologists may need a longer time to adjust to the new reality of COVID-19, while having to juggle family life and personal goals, which may take a great toll on the overall quality of life, correlating to the low overall mean score in the WHOQOL-BREF questionnaire.

Participants from the private setting appear to have a better quality of life in all domains of the WHOQOL-BREF questionnaire compared to participants in other academic and public settings. This could be attributed to the fact that private HCW have a lower workload and experience burnout less often.

Participants with more than ten years of working experience have demonstrated a higher quality of life in all domains of the WHOQOL-BREF questionnaire. Duration of working experience has been revealed to have a significant effect in the social domain ($p = 0.011$).

CFPB's financial well-being score aims to capture the effects of subjective well-being on financial status. The scale encompasses four basic components, including (1) having control of finances throughout the year; (2) ability to absorb a financial shock; (3) ability to meet financial goals; and (4) freedom to make choices that allow enjoyment of life. In our survey, male participants had higher CFPB scores compared to female participants. Similarly, female participants have been reported to have lower financial well-being scores compared to males^(12,14). Females have been reported to be 15% more likely to struggle to cover their expenses in a typical month, which can be attributed to poorer financial knowledge⁽¹⁵⁾. Participants with more than ten years' experience had the highest CFPB score (mean \pm SD: 58.07 ± 8.65) compared to others. Similarly, participants aged over 60

years had higher CFPB scores than the other participants. Older adults generally have adequate savings and a social safety net, which protects them from a potential financial struggle, such as during the pandemic. Furthermore, there was a significant difference in CFPB scores between the races ($p = 0.016$). Chinese HCS were observed to have the highest CFPB scores (mean \pm SD: 56.17 ± 8.74), while the lowest scores were noted among representatives of other ethnic groups (mean \pm SD: 43.80 ± 10.55). Differences in the ability to cope with financial fragility have been reported across various races and ethnicities⁽¹⁶⁾.

The pandemic has taken a great toll on HCW worldwide. Healthcare workers are expected to deal with ill patients while coping with the loss of friends, family, and colleagues. A meta-analysis examining the HCW's psychological well-being in the context of COVID-19 revealed anxiety, depression, stress, post-traumatic stress syndrome, insomnia, psychological distress, and burnout as factors contributing to psychological well-being⁽¹⁷⁾. FCV-19S was developed in order to respond to the need of evaluating mental health issues associated with the psychological response to COVID-19⁽⁹⁾. Fear of COVID-19 has been investigated using FCV-19S across the globe to understand the key elements of stress factors pertaining to the pandemic⁽¹⁸⁾.

FCV-19S demonstrated that participants aged 60 and above had a lower mean score (13.00 ± 0.00) as compared to the younger participants. Younger people living with individuals at a higher risk of contracting COVID-19 exhibited a higher score of anxiety related to fear for their loved ones being infected⁽¹⁹⁾. Nonetheless, higher levels of psychological distress among older HCW were reported by Centers for Disease Control and Prevention (CDC) with regard to a higher risk of complications from COVID-19, notably severe respiratory distress (CDC)⁽²⁰⁾. In our survey, there was no significant gender difference based on FCV-19S. This could be attributed to the study's small sample size. However, various studies examining gender differences with respect to fear of COVID-19 revealed that women displayed greater psychological vulnerability during the pandemic⁽²¹⁾. Parallel to that, women were found to constitute the largest group of professional frontliners during the pandemic, hence compromising their health care and reproductive and sexual rights⁽²²⁾. Additionally, a significant though moderate negative relationship between FCV-19S and CFPB scores (coef: -0.364 ; $p < 0.001$) was noted.

LIMITATIONS

There are several important limitations of this survey. The study group may not be entirely representative of the entire population of otorhinolaryngologists in Malaysia, as only a relatively small number of otorhinolaryngologists responded. The survey was conducted during the peak of the pandemic in Malaysia, so many otorhinolaryngologists were sent out to COVID-19 wards and hospitals, and were unable to participate in the survey.

CONCLUSION

The ongoing pandemic has changed the lives of HCW tremendously. This survey brings to light the effects of COVID-19 on the quality of life, financial aspects as well as fear of COVID-19 among otorhinolaryngologists in Malaysia. The findings of this survey will enable us to plan forward various strategies to address this issue among all affected individuals.

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