

A Survey on the Psychological Impacts of the Covid- 19 Infectious Disease Outbreak among Elderly People

Hemaanhini Tamilmani

Saveetha Dental College and Hospitals,
Saveetha Institute of Medical and Technical Sciences (SIMATS),
Saveetha University,
Chennai- 77
Email id: 151901026.sdc@saveetha.com.
Phone no: +91 7540009130

R. Gayathri

Assistant Professor,
Department of Biochemistry,
Saveetha Dental College and Hospitals,
Saveetha Institute of Medical and Technical Sciences (SIMATS),
Saveetha University,
Chennai- 77
Email id: gayathri.sdc@saveetha.com.
Phone no: +91 9710680545

V. Vishnu Priya

Professor,
Department of Biochemistry,
Saveetha Dental College and Hospitals,
Saveetha Institute of Medical and Technical Sciences (SIMATS),
Saveetha University,
Chennai- 77
Email id: vishnupriya@saveetha.com.
Phone no: +91 9841445599

S. Kavitha

Lecturer,
Department of Biochemistry,
Saveetha Dental College and Hospitals,
Saveetha Institute of Medical and Technical Sciences (SIMATS),
Saveetha University,
Chennai- 77
Email id: kavithas.sdc@saveetha.com.

Phone no: +91 9567263096

***Corresponding Author:**

Dr. R.Gayathri

Phone: +91-9710680545

Email id: gayathri.sdc@saveetha.com

Address: Department of Biochemistry, Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences (SIMATS), Velappanchavadi, Chennai- 600077, Tamilnadu, India.

Abstract

Aim and Introduction

COVID- 19 was first reported in Wuhan, China. It had spread rapidly all over the world and had affected many people. This sudden outbreak caused all parts of the world to go under lockdown. This lockdown had mentally affected many, especially the elderly people. Daily life of people during this lockdown had completely changed. The precautions to be taken to protect from infections make elderly people feel more lonely. As the old people are prone to infection, the psychological impacts caused by the infection spread needs to be studied. The aim of the present survey is to assess the awareness on the psychological impact of COVID 19 on elderly people.

Materials and Methods

An online survey had been spread to 102 participants who are elderly, regardless of their country. After circulating, the data was received and analysed. The results were obtained and statistically analysed through SPSS software, chi square test was done to check the association and a p value of 0.05 was said to be statistically significant. The survey has been completed in the month of May 2020.

Results

From the data of this study, it was noticed that elderly people were psychologically more affected. 45.10% of the participants felt depressed as they were forced to miss their regular routines such as daily walk and chatting with their friends due to the lockdown, while 54.90% did not feel depressed. 93.14% of the participant's family were found to be really . Thus the pandemic has caused psychological impact among the elderly population.

Conclusion

More awareness and knowledge regarding the pandemic must be given to help elderly people to take proper care of themselves and also their mental health. Thus, this survey has indicated the importance of mental health as equal to physical health to fight against an infection outbreak.

Keywords

Elderly people ;COVID- 19 ;mental health ;family;support ; awareness

Introduction

COVID- 19 was first reported in Wuhan, China (Dong and Bouey, 2020). The sudden outbreak had affected many and had also spread rapidly to all over the world (Sood, 2020). COVID- 19 is a type of pneumonia with an unknown cause (Wang *et al.*, 2020)(Mohan, Veeraraghavan and Jainu, 2015). This disease is a communicable disease which can be spread through cough, handshake, sneeze, touch, etc (Lai *et al.*, 2020). The sudden infectious outbreak had changed people's daily lifestyle in many ways such as can't step out of the house, self- quarantine (Lima *et al.*, 2020)(Menon, Priya and Gayathri, 2016). A lot of emotional changes and psychological impacts were seen among the general public especially among elderly people (Mukhtar, 2020)(Rengasamy *et al.*, 2016)(Priya, Jainu and Mohan, 2018). Symptoms like anxiety, depression, and a sense of loneliness were seen among elderly people because of the sudden infectious disease outbreak and lockdown (Torales *et al.*, 2020)(Ramya, Priya and Gayathri, 2018).

During the lockdown period, the public especially elderly people must be given a lot of support and encouragement to overcome the situation and not to overthink about the pandemic (Balkhi *et al.*, 2020)(Rengasamy *et al.*, 2018). This strength could be given by family friends by calling each other every alternative day, suggesting various activities to them so that they get distracted and don't worry about the pandemic too much (Dai *et al.*, no date)(Gan *et al.*, 2019). They may get stressed by overthinking about such factors like the consequence of the pandemic, whether they would be able to overcome the pandemic or not, etc (Kang *et al.*, 2020)(Wang *et al.*, 2019).

According to this article, the author states that the psychological impacts of the participants from China was rated from moderate to severe during the first phase of the coronavirus outbreak (Wang *et al.*, 2020)(Chen *et al.*, 2019). And in another article, the mental health of a lot of health workers such as doctors, nurses and physicians, etc were affected during the outbreak. The participants were from within Wuhan city and outskirts of the city too (Lai *et al.*, 2020)(Z. Li *et al.*, 2020). Few of the challenges which are seen in this article are reaching out to all the elderly people, helping them overcome the pandemic with strong mental health.

It is necessary to know how many elderly people were affected mentally by the pandemic, the exact reason why they feel mentally unstable or disturbed, encourage them with different activities which will keep them distracted, to help overcome loneliness, and take good care of their health (Ponnulakshmi *et al.*, 2019)(Wu *et al.*, 2019)(Shukri *et al.*, 2016). We must also know if the younger generations frequently contact elderly people and also spread awareness (Ke

et al., 2019)(Ma *et al.*, 2019). Through this study, we must help elderly people overcome anxiety, depression, etc, by educating them on different ways to take care of their health [both physically and mentally] and also encourage their families, friends and even their relatives to keep in touch with them by frequently contacting them. Our team has rich experience in research and we have collaborated with numerous authors over various topics in the past decade (Ariga *et al.*, 2018; Basha, Ganapathy and Venugopalan, 2018; Hannah *et al.*, 2018; Hussainy *et al.*, 2018; Jeevanandan and Govindaraju, 2018; Kannan and Venugopalan, 2018; Kumar and Antony, 2018; Manohar and Sharma, 2018; Menon *et al.*, 2018; Nandakumar and Nasim, 2018; Nandhini, Babu and Mohanraj, 2018; Ravinthar and Jayalakshmi, 2018; Seppan *et al.*, 2018; Teja, Ramesh and Priya, 2018; Duraisamy *et al.*, 2019; Gheena and Ezhilarasan, 2019; Hema Shree *et al.*, 2019; Rajakeerthi and Ms, 2019; Rajendran *et al.*, 2019; Sekar *et al.*, 2019; Sharma *et al.*, 2019; Siddique *et al.*, 2019; Janani, Palanivelu and Sandhya, 2020; Johnson *et al.*, 2020; Jose, Ajitha and Subbaiyan, 2020). Our team has rich experience in research and we have collaborated with numerous authors over various topics in the past decade (Ariga *et al.*, 2018; Basha, Ganapathy and Venugopalan, 2018; Hannah *et al.*, 2018; Hussainy *et al.*, 2018; Jeevanandan and Govindaraju, 2018; Kannan and Venugopalan, 2018; Kumar and Antony, 2018; Manohar and Sharma, 2018; Menon *et al.*, 2018; Nandakumar and Nasim, 2018; Nandhini, Babu and Mohanraj, 2018; Ravinthar and Jayalakshmi, 2018; Seppan *et al.*, 2018; Teja, Ramesh and Priya, 2018; Duraisamy *et al.*, 2019; Gheena and Ezhilarasan, 2019; Hema Shree *et al.*, 2019; Rajakeerthi and Ms, 2019; Rajendran *et al.*, 2019; Sekar *et al.*, 2019; Sharma *et al.*, 2019; Siddique *et al.*, 2019; Janani, Palanivelu and Sandhya, 2020; Johnson *et al.*, 2020; Jose, Ajitha and Subbaiyan, 2020). The main aim of this study is to assess the psychological impacts on the COVID- 19 infectious disease outbreak among elderly people.

Materials And Methods

A self-administered questionnaire was designed based on the awareness of the current infection and its psychological impacts. The questionnaire was distributed through an online survey link called Google Forms. The study population belonged to an age group of above 50 years. There were 102 participants who took the survey, they explained about the purpose of the study in detail. The questions were carefully studied and the corresponding answers were marked by the participants. The results were obtained and statistically analysed through SPSS software, chi square test was done to check the association and a p value of 0.05 was said to be statistically significant. . The survey has been completed in the month of May 2020.

Results

From the data collected and analysed, it was seen that elderly people needed more strength and support from family and friends to lead a stress free life. Different protocols or different plans must be made to keep them engaged and not to stress a lot about the pandemic and present situation. From the data collected and statistically analysed, it was seen that out of 102 participants 53 belonged to an age group of 50-65 years old and 49 participants are above 65 years old [FIGURE 1]. All the participants who were above 65 years of age and 51 out of 53

participants who were between the age of 50-65 years were aware of the necessity of lockdown. Only 2 out of 53 participants who were between the age of 50-65 years old were not aware. Though statistically not significant, participants who were above the age of 65 seem to be more aware of the necessity of lockdown, as they were more anxious about their health.[FIGURE 2]. 80.39% of elderly people had stocked the necessary medicines that they needed, while 19.61% had not stocked the necessary medicines [FIGURE 3]. Almost 90.20% of the participants were aware that they won't be able to visit the hospital for general check- up [FIGURE 4]. 37 out of 53 participants who were between the age group of 50 -65 years old and 31 out of 49 participants who were above 65 years of age were anxious about their health. Though statistically not significant, participants who were above the age of 65 seem to be more anxious about their health and well being due to the long lockdown period, age certainly influences the way people think.[FIGURE 5]. 93.14%of the participant's family were really supportive whereas 6.86% of the participant's family were not quite supportive [FIGURE 6]. 45.10% of the participants felt depressed as they were forced to miss their regular routines such as daily walk and chatting with their friends, while 54.90% did not feel depressed because of the above mentioned reasons [FIGURE 7]. 58.82% participants felt missed out,since their loved ones won't be able visit them [FIGURE 8]. Almost 86.27% of the participants get calls from their friends and loved ones while 13.73% do not get calls [FIGURE 9]. Out of 53 participants who were between the age group of 50 -65 years old and 17 out of 49 participants who were above 65 years of age felt more lonely because of the announcement of lockdown. Though statistically not significant, participants who were between 50-65 years old felt more lonely than those who were above 65 years old. It is well understood that though elderly, people who are between 50 -65 were usually more active and missing their routines is the major reason for loneliness. Age certainly had an influence on the way people think [FIGURE 10]. 54.90% were confident that our current protocols would eradicate the pandemic, 39.22% were slightly suspicious and 5.88% disagreed with the current protocols to eradicate the pandemic [FIGURE 11]. There was a 50-50% response on feeling sick and not feeling sick because of the continuous media updates on the pandemic [FIGURE 12]. 67.65% participants were anxious about their spouse's health while 32.35% were not quite anxious [FIGURE 13]. 60.78% practice yoga or do exercises during the lockdown while 39.22% do not practice any such routines [FIGURE 14]. And 54.90% of the participant's eating habits had been changed because of lockdown [FIGURE 15].

Discussion

In a previous article executed in China, it was seen that many people were affected mentally (for example depression, anxiety, insomnia, etc) due to the sudden disease outbreak. To treat the mentally affected people a lot of awareness had been spread and also mental health education and camps had been set- up. Whereas in this study it was seen that only 66.67% participants were affected mentally (W. Li *et al.*, 2020). In another previous article, it was seen that the mental health of elderly people needed more attention. This was also seen in this study, 6.86% participant's family were not supportive as well as 58.82% of the participants felt missed out as

their loved ones won't be visiting them because of the lockdown (Meng *et al.*, 2020). Our institution is passionate about high quality evidence based research and has excelled in various fields ((Pc, Marimuthu and Devadoss, 2018; Ramesh *et al.*, 2018; Vijayashree Priyadharsini, Smiline Girija and Paramasivam, 2018; Ezhilarasan, Apoorva and Ashok Vardhan, 2019; Ramadurai *et al.*, 2019; Sridharan *et al.*, 2019; Vijayashree Priyadharsini, 2019; Chandrasekar *et al.*, 2020; Mathew *et al.*, 2020; R *et al.*, 2020; Samuel, 2021)

The study clearly indicates that though as common man, we think we are prepared to fight against a pandemic by consciously stock provision, medicine and other necessity. It is the time to remember that kind words and attention towards the needy must also to be noted as an important preventive measure. By always talking the facts ,scientific data and spreading information alone is not enough to take care of aged people. They all belong to a class where care takes the place of medicine and strict rules.

Conclusion

More effective education on the psychological impacts of the pandemic on elderly people must be established to prevent depression, anxiety, insomnia, etc. It is important to ensure that the elderly people gain more knowledge regarding the pandemic and also spread awareness to help them to take proper care of themselves and their mental health. Thus, from the survey it is evident that the pandemic has caused psychological impact among the elderly population.

Acknowledgment

We thank Saveetha Dental College for providing us the support to conduct the study.

Author Contribution

Hemaanhini Tamilmani done the literature search, data collection, analysis, manuscript writing, Dr. R.Gayathri helped in data verification, manuscript drafting. Dr. V. Vishnu Priya and Dr. S. Kavitha contributed to the title discussion.

Conflict of Interest

None declared.

Reference

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Figure Legends

Figure 1: Represents the distribution of participants based on their age, where out of 102 participants who took the survey, 53 (blue) belong to the age group of 50- 65years old and 49 (red) were more than 65 years old.

Figure 2: Bar chart showing the association between different age groups among elderly and their awareness on the necessity behind the lockdown period. X axis represents different age groups, Y axis represents the number of individuals who were aware (blue) and not aware (red). Participants who were in the age group of 50- 65 years were more aware of the necessity of lockdown than the participants over 65 years of age. Pearson's Chi square value= 1.886, df= 1, P value=0.170 (>0.05).

Figure 3: Represents the distribution of participants based on whether they had stocked up the necessary medicines, where 80.39% [blue] had stocked the necessary medicines while 19.61% [red] had not stocked the necessary medicines.

Figure 4: Represents the distribution of participants based on whether they were aware of not being able to visit the hospital for general check up due to lockdown, where 90.20% [blue] were aware of not being able to visit the hospital for general check up while 9.80% [red] were not aware.

Figure 5: Bar chart showing the association between different age groups among elderly and whether they were anxious about their health and well being during lockdown period. X axis represents different age groups, Y axis represents number of individuals who were anxious (blue) and who were not anxious (red). Participants who were between 50 - 65 years seem to be more anxious about their health and well being due to the long lockdown period than the participants who were above the age of 60. Pearson's Chi square value= 0.491, df= 1, P value= 0.484 (>0.05).

Figure 6: Represents the distribution of participants based on whether they were being supported by their family members during lockdown, where 93.14% [blue] of the participant's family were really supportive whereas 6.86% [red] of the participant's family were not quite supportive.

Figure 7: Bar chart showing the association between different age groups among elderly and whether they were depressed as their daily routines were missed during lockdown period. X axis represents different age groups, Y axis represents the number of individuals who were depressed (blue) and not depressed (red). Participants who were between 50- 65 years seem to be more depressed as they have missed their daily routines because of the announcement of lockdown. than the participants who were above the age of 65. Pearson's Chi square value= 0.191, df= 1, P value= 0.662 (>0.05).

Figure 8: Represents the distribution of participants based on whether they were feeling missed out during lockdown, where 58.82% [blue] participants felt missed out as no one will be able to visit them during quarantine while 41.18% [red] did not feel missed out.

Figure 9: Represents the distribution of participants based on whether they were in touch with friends and loved ones during lockdown, where 86.27% [blue] of the participants get calls from friends and loved ones during quarantine while 13.73% [red] do not get calls.

Figure 10: Bar chart showing the association between different age groups among elderly and whether they felt lonely during lockdown period. X axis represents different age groups, Y axis represents number of individuals who felt lonely (blue) and not lonely (red). Participants who were between 50 - 65 years seem to feel more lonely due to the long lockdown period than the participants who were above the age of 65. Pearson's Chi square value= 0.809, df= 1, P value= 0.368 (>0.05).

Figure 11: Represents the distribution of participants based on their opinion on the current protocols followed to eradicate the pandemic, where 54.90% [blue] participants were confident that our current protocols will eradicate the pandemic, 39.22% [red] were slightly suspicious and 5.88% [green] disagreed with the current protocols to eradicate the pandemic.

Figure 12: Represents the distribution of participants based on their opinion on how they got affected psychologically due to media during lockdown, where there was an equal response to feeling sick and not feeling sick because of the continuous media updates on the pandemic.

Figure 13: Represents the distribution of participants based on their opinion on whether they felt anxious about their spouse's health because of lack of medical attention due to lockdown, where 67.65% [blue] participants were anxious about their spouse's health while 32.35% [red] were not quite anxious.

Figure 14: Represents the distribution of participants based on their opinion on practising yoga or exercise during lockdown, where 60.78% [blue] of the participants practice yoga or do exercises during the lockdown while 39.22% [red] do not practice any such routines.

Figure 15: Represents the distribution of participants based on their opinion to change in eating habits during lockdown, where 54.90% [blue] of the participant's eating habits had been changed because of lockdown whereas 45.10% [red] of the participants' eating habits hasn't changed.

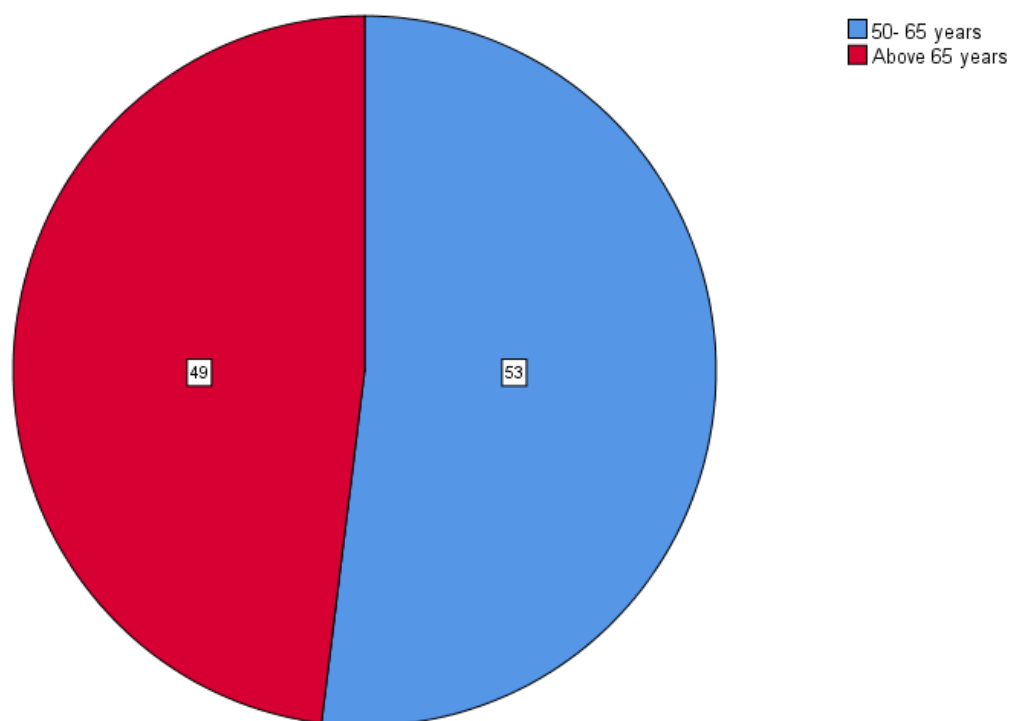


Figure 1: Represents the distribution of participants based on their age, where out of 102 participants who took the survey, 53 (blue) belong to the age group of 50- 65years old and 49 (red) were more than 65 years old.

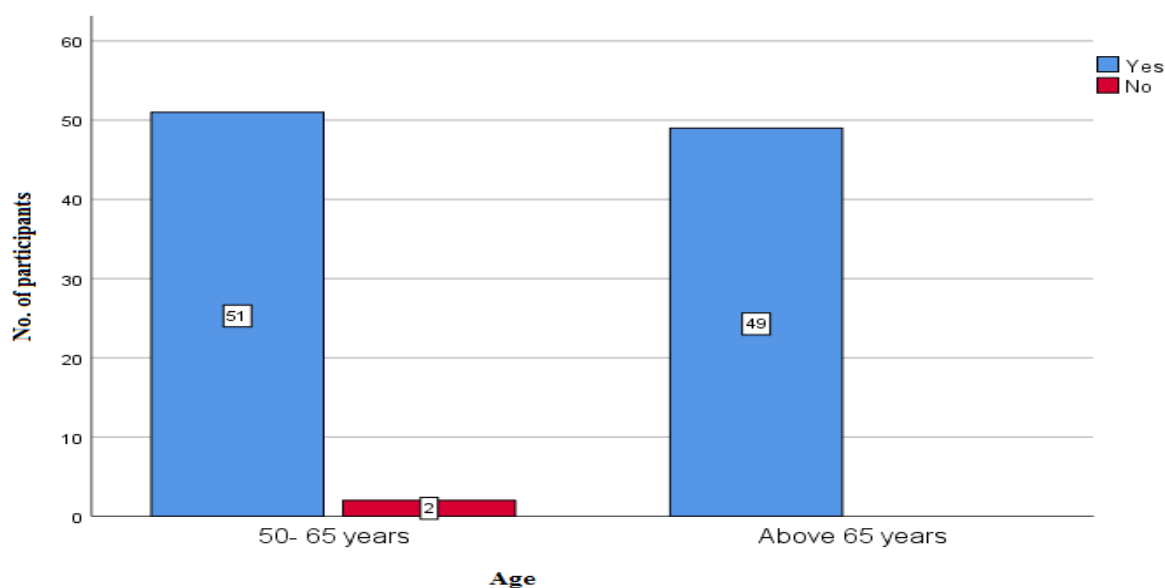


Figure 2: Bar chart showing the association between different age groups among elderly and their awareness on the necessity behind the lockdown period. X axis represents different age groups, Y axis represents the number of individuals who were aware (blue) and not aware (red). Participants who were in the age group of 50- 65 years were more aware of the necessity of lockdown than the participants over 65 years of age, however statistically not significant. Pearson's Chi square value= 1.886, df= 1, p value=0.170 (>0.05).

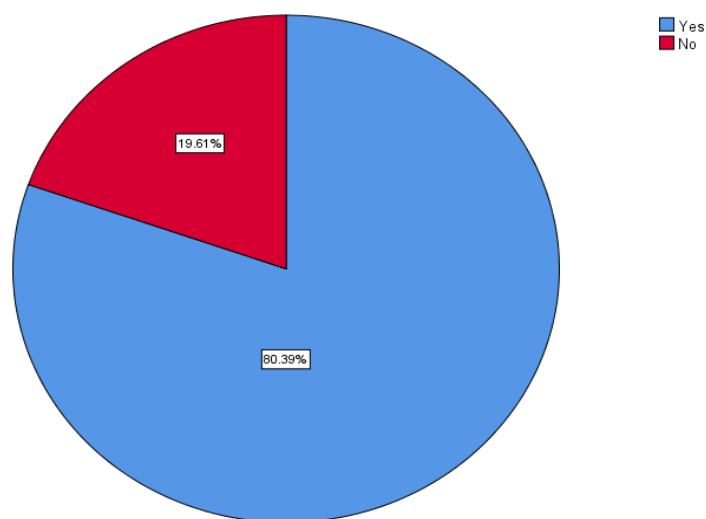


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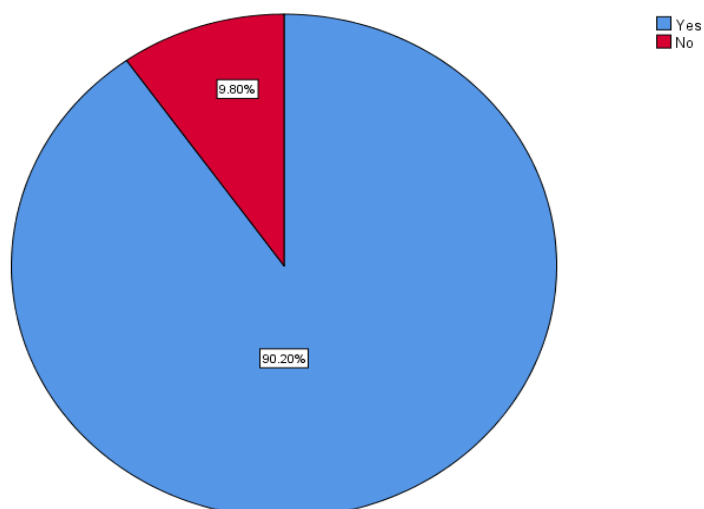


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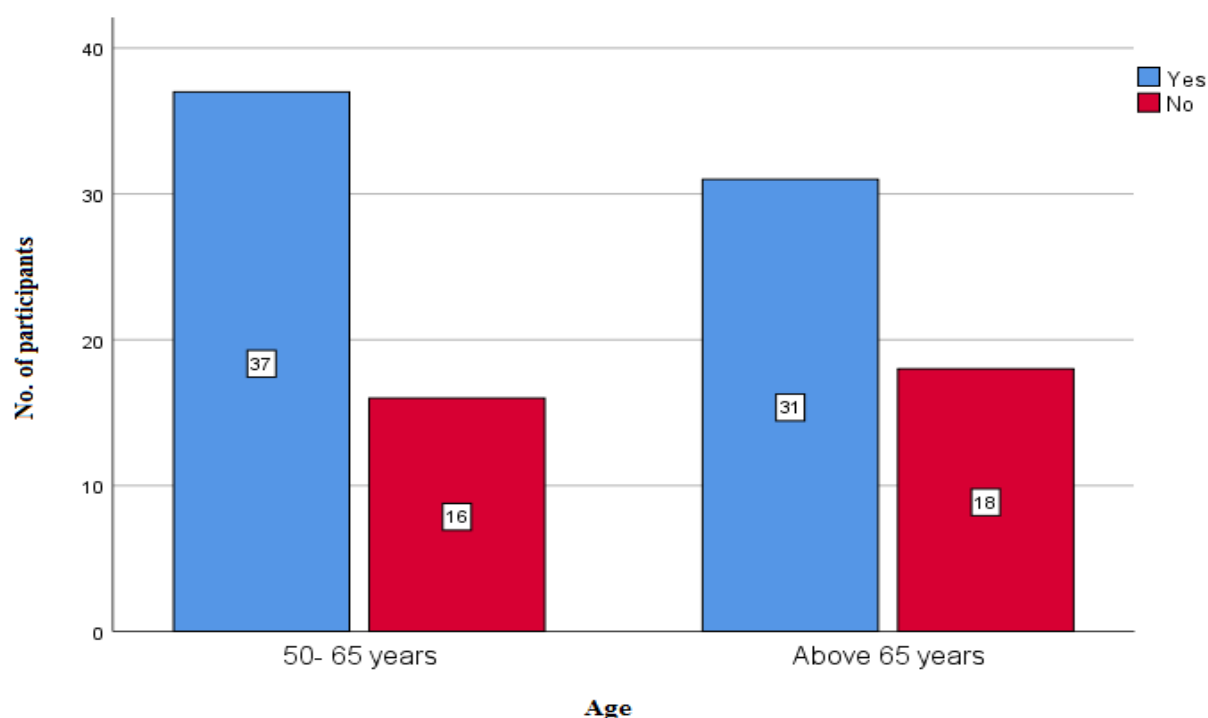


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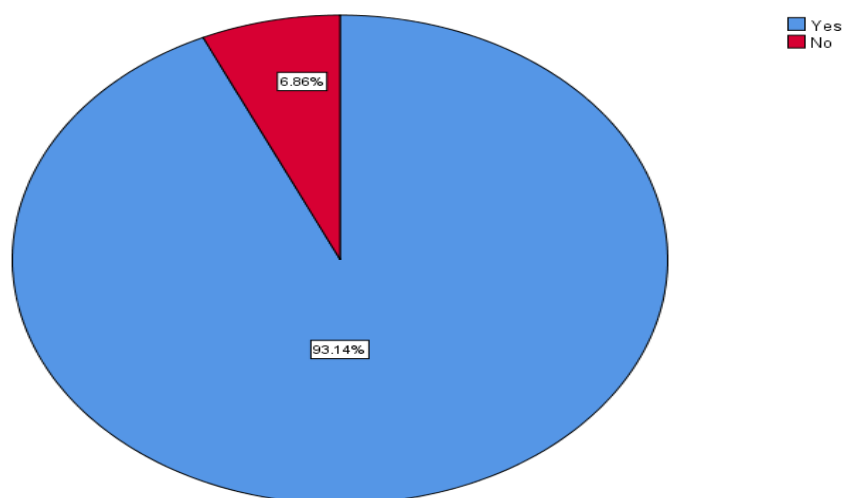


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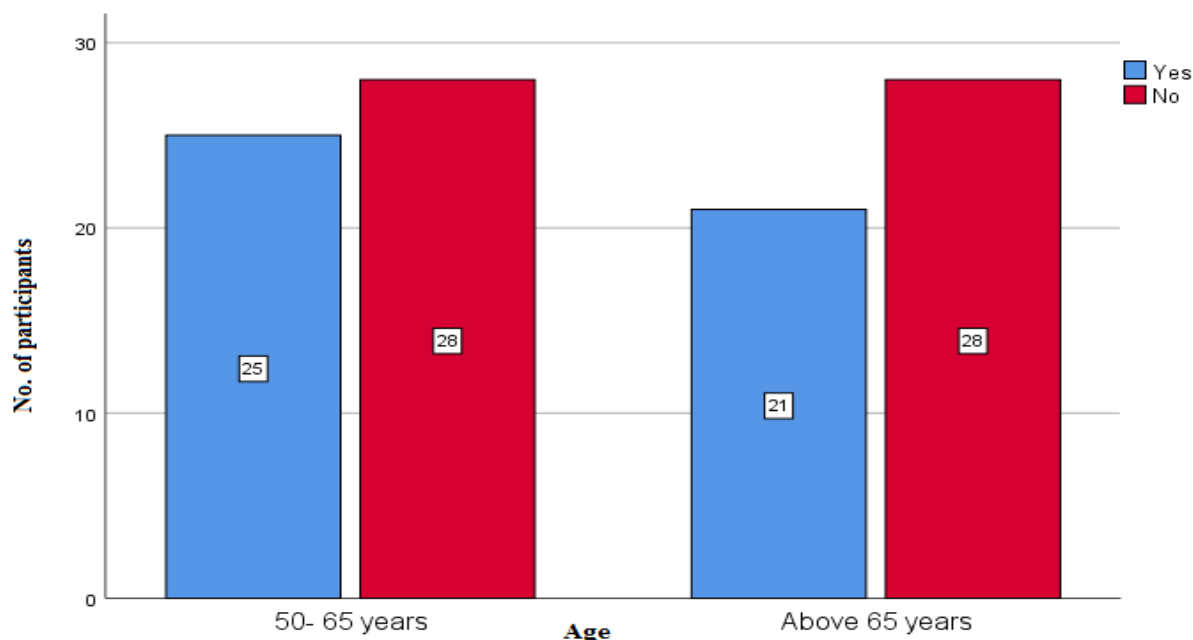


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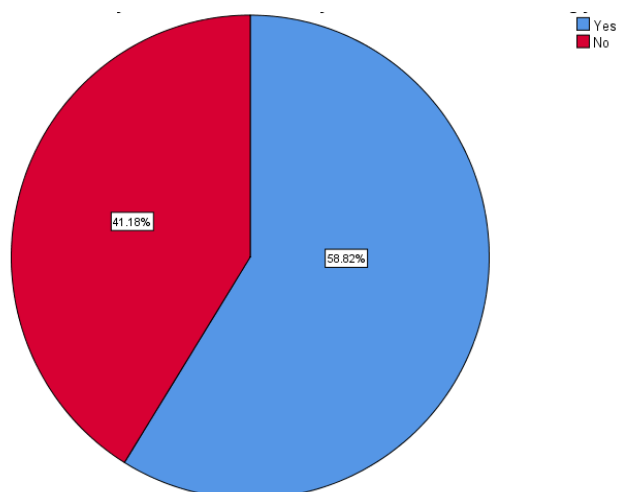


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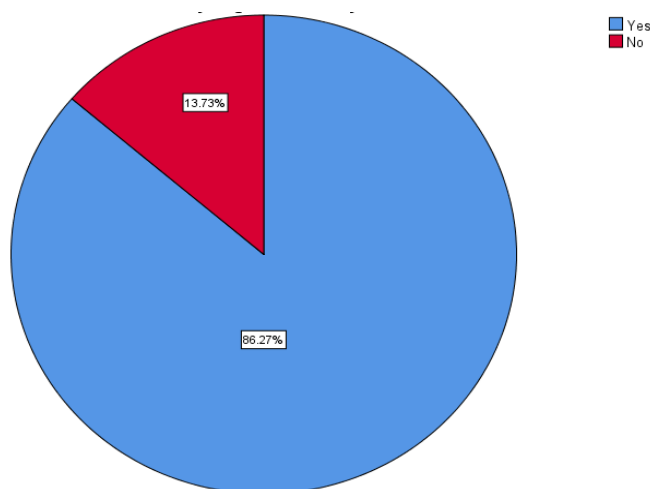


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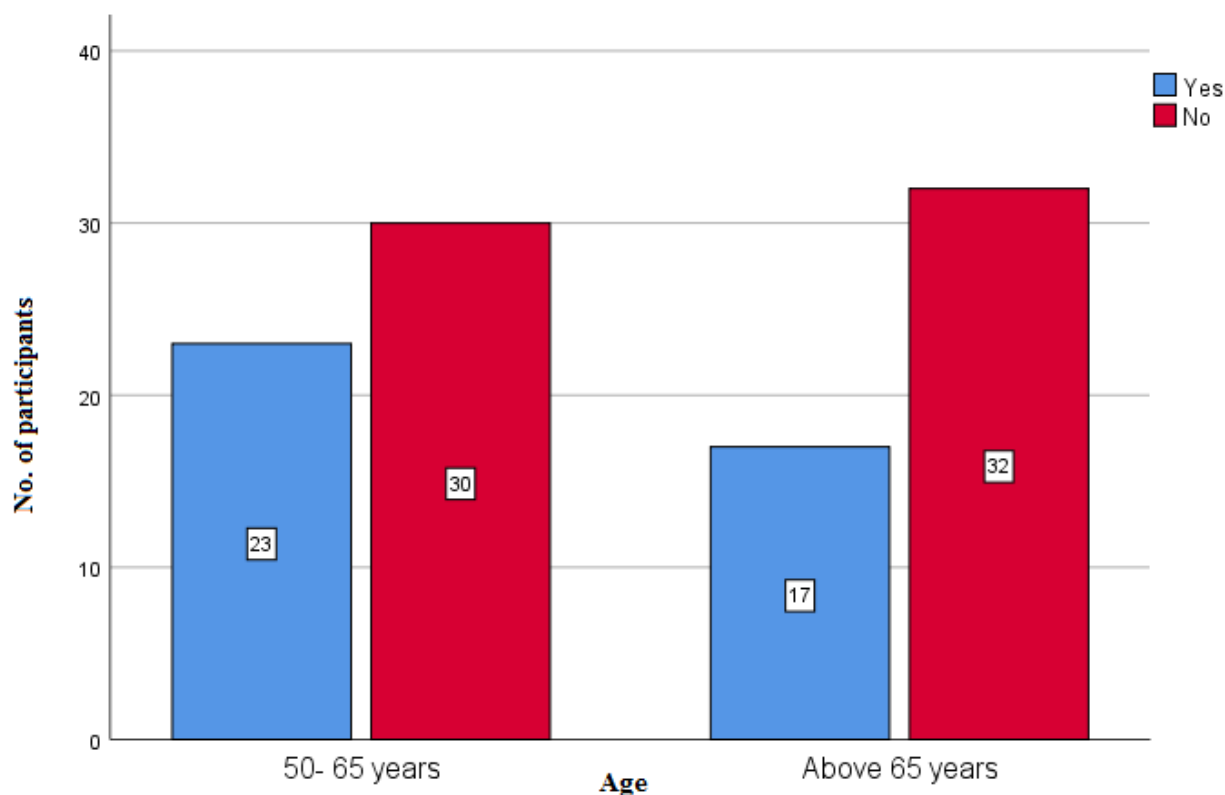


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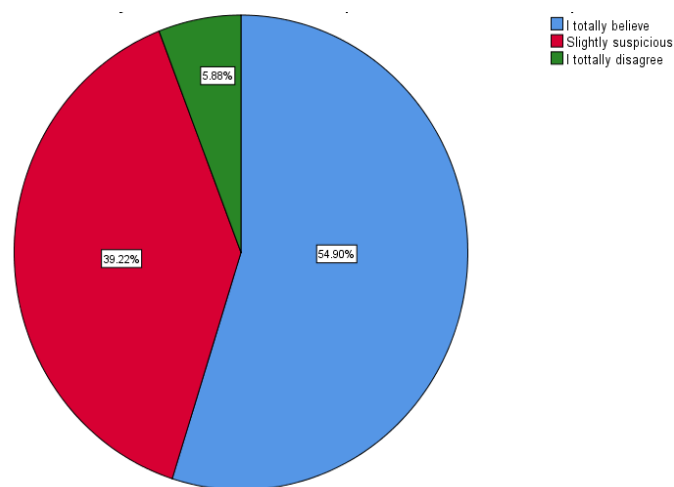


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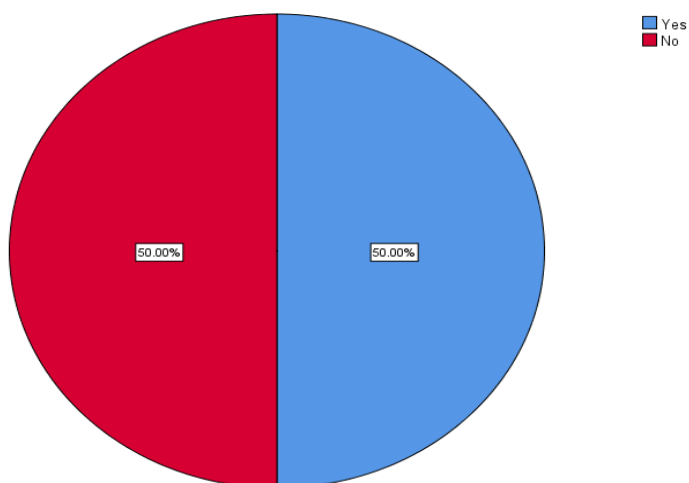


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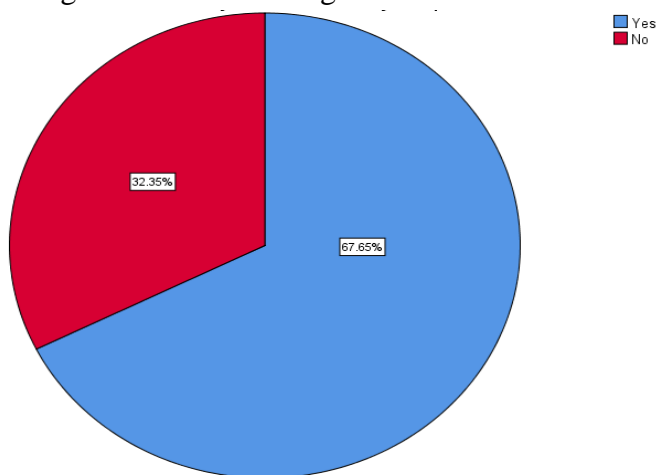


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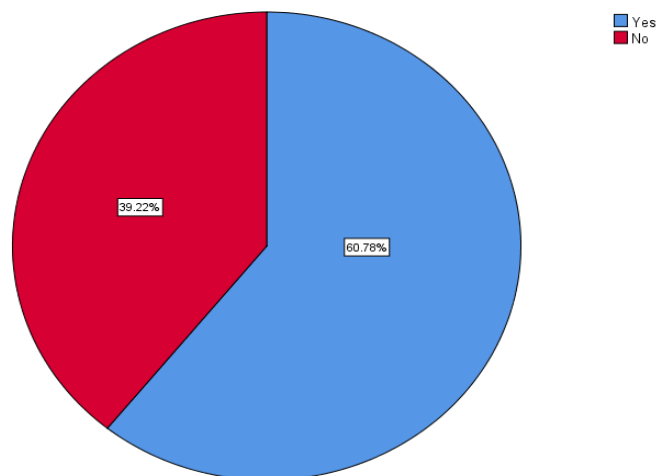


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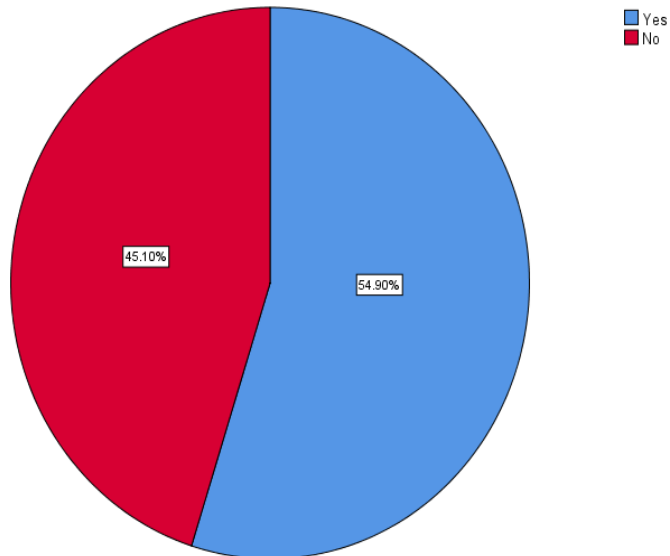


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