ANALYSIS OF VACCINE ACCEPTANCE AMONG THE ELDERLY AT THE "VIVER BEM" COMMUNITY CENTER, IN THE CITY OF JI-PARANÁ/RO

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ABSTRACT

Introduction: In recent years, Brazil has advanced in the protection of the elderly population, especially after the implementation of the Statute of the Elderly in 2003, which ensures fundamental rights for people aged 60 years or older. This progress is evidenced by the increase in life expectancy, which in 2023 exceeded 76 years, reflecting improvements in living conditions and public health, including vaccination. Adherence to vaccination among the elderly still faces challenges such as misinformation and difficulties in accessing health services. The acceptance of vaccines at the "Viver Bem" Community Center in Ji-Paraná/RO is relevant, considering it an essential strategy for the prevention of severe diseases in this vulnerable population. Materials and Methods: The research involved 38 older adults, analyzing their vaccination cards and acceptance of vaccines such as influenza, hepatitis B, diphtheria, tetanus, pneumonia, and COVID-19. Demographic factors, reasons for acceptance or refusal of immunization, and prevalent chronic diseases were also investigated. Results: Most respondents were female (84.2%), and the most common chronic conditions were hypertension (61.3%) and diabetes (22.6%). Only 77.8% were vaccinated against influenza and 43.2% against hepatitis B, while adherence to the COVID-19 vaccine was 97.4%. Fear of side effects was reported by 50% of participants. Final Consideration: Educational campaigns are essential to increase vaccination adherence, since all interviewees showed interest in informative events about vaccination, reinforcing the importance of these initiatives.

Keywords: Vaccination coverage. Public health. Disease prevention. Health promotion.

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INTRODUCTION

In recent years, Brazil has demonstrated a growing commitment to the protection and well-being of its elderly population, especially after the implementation of the Statute of the Elderly in 2003. This document ensures fundamental rights to citizens aged 60 and over and reflects a significant change in the way Brazilian society sees and treats its elderly. In recent years, old age has come to be called better age, a way of overestimating the potentialities and possibilities that old age provides for some people, such as the opportunity to rest, travel and do things that generate pleasure, after retirement (Brasil, 2003).

As a result, Brazil has observed a notable increase in life expectancy, an achievement attributed to the general improvement in living conditions and the evolution of public health practices, including vaccination, which is one of the main strategies for the prevention of infectious diseases, especially among the elderly population, which constitutes a vulnerable group due to the aging of the immune system and the higher prevalence of comorbidities (Santos, et al., 2021). In 2023, life expectancy at birth in Brazil exceeded 76 years, reflecting not only advances in medicine and sanitary conditions, but also the positive impact of vaccines (Brasil, 2023).

In this context, this increase in longevity highlights the importance of effective health strategies, such as immunization, to ensure that the quality of life of older people continues to improve. Despite the importance of vaccination, there are still significant challenges in the adherence of the elderly to the recommended vaccination schedules. Factors such as misinformation, mistaken beliefs, difficulties in accessing health services, and lack of adequate guidance contribute to suboptimal vaccination coverage (Filho, et al., 2023). In addition, the characteristics of aging, such as immunosenescence, can influence the immune response to vaccines, making the administration of specific vaccines and the continuous education of health professionals even more crucial.

In view of these challenges, this project proposes an analysis of vaccination policies and practices aimed at the elderly population in Brazil, with the objective of identifying barriers and proposing strategies to improve vaccination adherence in this group. The promotion of adequate vaccination not only ensures the right to health and prevents diseases, but also contributes to the healthy longevity and well-being of the elderly population, aligning with the principles of equity and human rights in access to health (Silva, et al., 2022).

MATERIAL AND METHODS

This is an observational, descriptive and exploratory research, which was initiated from a comprehensive literature review, consulting several platforms, including academic databases Lilacs, Web of Science, PubMed, Scielo and others to support the study. The place chosen for the execution of the project action was the Living Well Community Center, located in the 2nd district of the city of Ji-Paraná - RO, located at Rua São Luiz, 348 - Nova Brasília, Ji-Paraná - RO, 76908-334. The target audience for carrying out the project were elderly people of both sexes attending the entity, in the same city.

The proposal was submitted to the Research Ethics Committee, in compliance with resolution 466 of December 12, 2012, receiving a favorable opinion for the execution of the research. After the opinion of the CEP, the field research was carried out at the Center for the Coexistence of the Elderly in the municipality of Ji-Paraná-RO.

During the execution of the project, there was the participation of approximately 70 elderly people. To apply the questionnaire, only the elderly who presented the vaccination card were interviewed, and the others participated in the recreational activities offered in the action.

It began with a brief presentation by medical students, discussing the importance of vaccination in an enlightening way, addressing the action of the vaccine in the body, the types of vaccines available within the scope of the Unified Health System (SUS), the updating of the vaccination card and the importance of collective immunization. Then a moment was opened for the reports and testimonies of the participants, as well as for the clarification of doubts, especially about the myths and truths about vaccination. Soon after, some recreational activities were carried out such as gymkhana, raffle of gifts, dance contest, and to finish it was offered a breakfast to everyone.

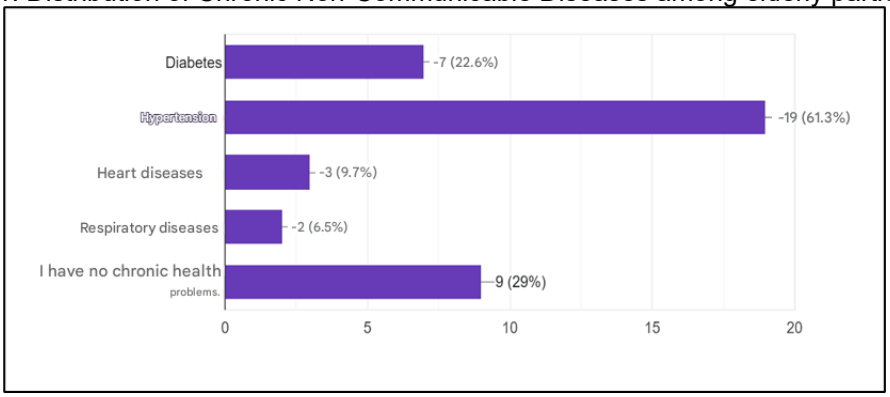
During breakfast, forms with closed questions about vaccination were applied, aiming to assess the level of acceptance and refusal of vaccines as a method of disease prevention among the elderly who frequent the place. Data were collected through a semi-structured form made available via Google Forms. The data obtained were compiled on a specific platform and evaluated, with the objective of being disseminated in scientific means to improve the quality of life of the elderly population of the Community Center.

RESULTS AND DISCUSSION

During the action carried out at the Living Well Community Center, approximately 70 elderly people participated in total, and 38 of both sexes were interviewed. There was a significant predominance of female participants (84.2%) compared to males (15.8%). These

results are similar to the studies by Azambuja (2021) and Santos (2020) conducted with elderly people in the community, which also found a higher percentage of women. This variation can be interpreted considering several factors, such as the fact that women, especially at advanced ages, are generally more present in community health and prevention activities, in addition to having a higher life expectancy than men (Rocha, et al. 2022; CSI, 2020). This difference may directly impact public health communication and engagement strategies, suggesting that actions aimed at the male public may be necessary to increase their participation and adherence to vaccination campaigns.

Figure 1: Distribution of Chronic Non-Communicable Diseases among elderly participants.

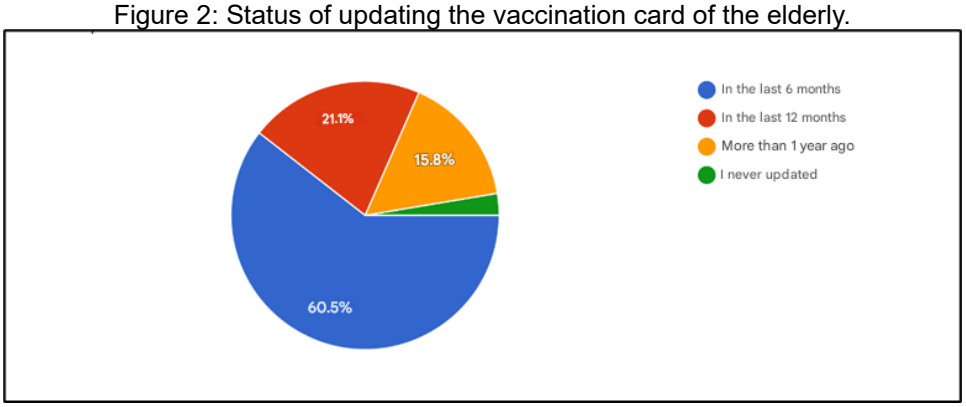


Source: Authors, 2024.

As for chronic health problems, figure 1 shows arterial hypertension as being more prevalent, affecting (61.3%) of the participants, while diabetes affecting (22.6%). This finding is in line with the Brazilian scenario, in which Ribeiro (2020) and Melo (2023) highlight systemic arterial hypertension (SAH) and diabetes as the most prevalent chronic disease among the elderly. In this context, it is noted that these diseases are often associated with a higher risk of complications in respiratory infections, such as influenza. On the other hand, (29%) of the elderly reported not having any chronic health problems. This result may be associated with the fact that most participants were female, as they tend to seek more preventive care such as vaccination, health care, and adopt healthier lifestyle habits compared to men (Azambuja, et al.2021).

Other diseases observed in the elderly, depression stood out in the largest number of participants (16.7%), which affects individuals of all age groups, although the incidence is higher among the elderly. This increase is characterized by several factors in the aging process, such as the loss of loved ones and the emergence of multiple diseases. These factors can significantly impact the mental health of this population, increasing vulnerability to the development of depressive conditions (Seguerri, 2023).

Figure 2: Status of updating the vaccination card of the elderly.



Source: Authors, 2024.

Regarding the updating of the vaccination card, it was observed that (60.5%) of the interviewees stated that they had updated their vaccination card in the last 6 months, demonstrating significant adherence to recent vaccine campaigns and ease of access to health services. On the other hand, (21.1%) of the elderly reported having updated in the last 12 months, data that corroborates the findings of Matos, et al. (2021) on the knowledge and vaccination adherence of the elderly to the specific vaccination schedule, in a study conducted in Cáceres/MT, in which most individuals kept their vaccines up to date. However, these results differ from the study by Ferreira et al. (2021), which identified that most elderly people had an incomplete vaccination card. Adherence to vaccination in this population is strongly associated with the guidance provided by health professionals, in addition to the ease of access to the service and attitudes and beliefs regarding this practice (Ferreira, 2021).

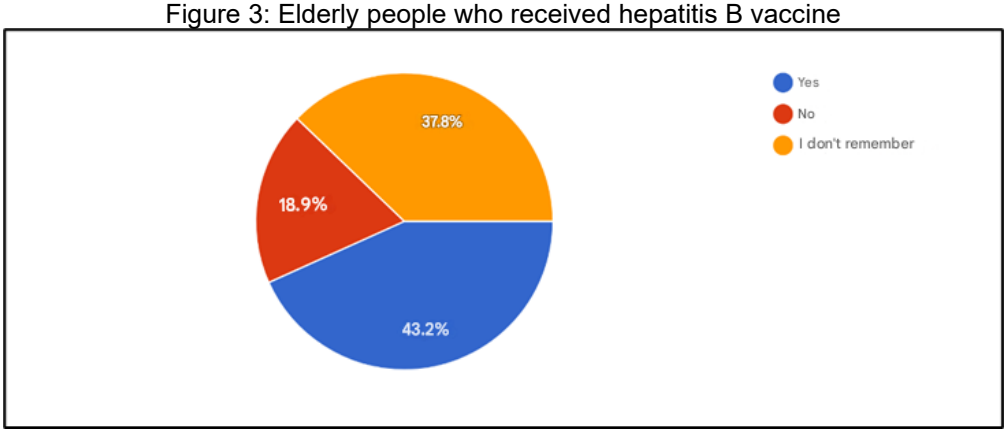
Still on the vaccination card, 89.2% of the participants know the importance of keeping the card up to date, while 10.8% are unaware of this fact. This shows a positive impact of public health campaigns, but there are still challenges in accessing information about vaccination, as pointed out by Duarte et al. (2018), who highlight barriers to access and misinformation as factors that affect vaccine adherence. Silva et al. (2021) reinforce that Primary Health Care plays an essential role in overcoming these barriers, through the training of professionals and the use of technologies to promote the vaccination schedule.

It was observed that 77.8% of the 38 participants were vaccinated against the flu in 2024, while 22.2% did not receive the vaccine. These data, especially among at-risk populations such as the elderly, are compared to three studies. Campos et al. (2023) reported an adherence of 70% among the elderly, identifying misinformation and fear of adverse effects as the main barriers, while Azambuja et al. (2021) found a rate of 65.3%, attributed to the difficulty of access in rural areas. However, according to Nobre et al. (2022) it was identified that even in universal health systems, vaccine hesitancy, influenced by fake

news and misinformation, affects between 15% and 30% of the population, which is consistent with the 22.2% refusal observed in the graph. The discussion points out that, although the adherence of 77.8% is positive, the non-adherence rate of 22.2% reflects ongoing challenges, such as misinformation. The comparison with previous studies suggests that the group analyzed had better access to and awareness about vaccination, but vaccine refusal is still an obstacle, especially in countries with universal health systems such as Brazil.

Figure 3 shows that 43.2% of the elderly reported having received the hepatitis B vaccine, a satisfactory coverage, but still below the ideal for this vulnerable age group. In addition, 18.9% were not vaccinated, which is concerning given the severity of hepatitis B, which can cause serious complications such as cirrhosis and liver cancer. Notably, 37.8% of the elderly do not remember if they have been vaccinated, suggesting a lack of awareness and adequate vaccination monitoring. The discussion points to the need for educational campaigns to increase vaccination adherence among the elderly and suggests the use of digital registration systems and vaccination efforts to improve coverage. The lack of remembrance of the elderly about their vaccination highlights the importance of continuous health monitoring (Ministry of Health, Brasília/DF, Manual of Epidemiological Surveillance of Adverse Events After Vaccination, 2nd Edition, [n.d.]).

Figure 3: Elderly people who received hepatitis B vaccine

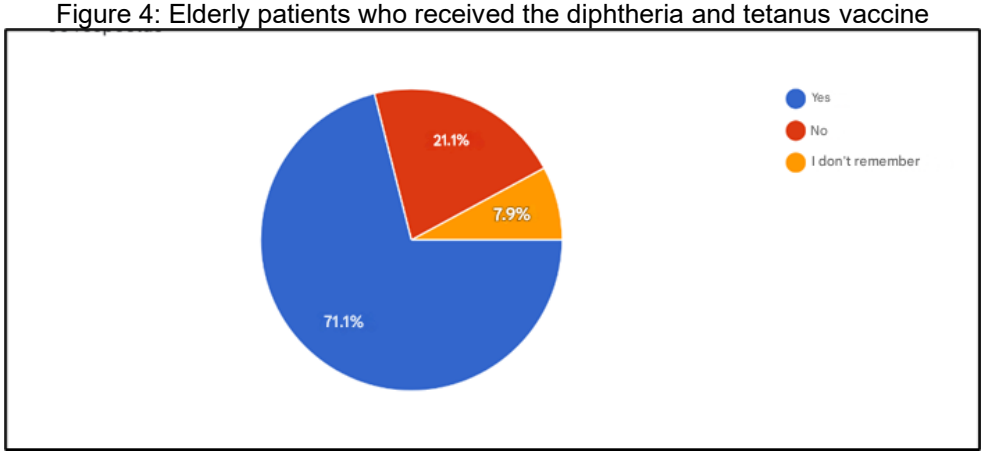


Source: Authors, 2024.

Regarding the diphtheria and tetanus vaccine, it was observed that 71.1% of the interviewees received the dT vaccine (diphtheria and tetanus), indicating good vaccination coverage among the elderly and the efficacy of vaccination campaigns (Figure 4). However, 21.1% have not been vaccinated and 7.9% do not remember, which suggests that part of the elderly population is still unprotected or uncertain about their vaccination status. These data may reflect failures in the follow-up of the vaccination card, lack of knowledge about the necessary boosters, or difficulties in accessing health services. According to Ferreira et

al. (2021), the absence of a vaccination card is associated with lower education, emphasizing the importance of considering the characteristics of the population when planning prevention actions.

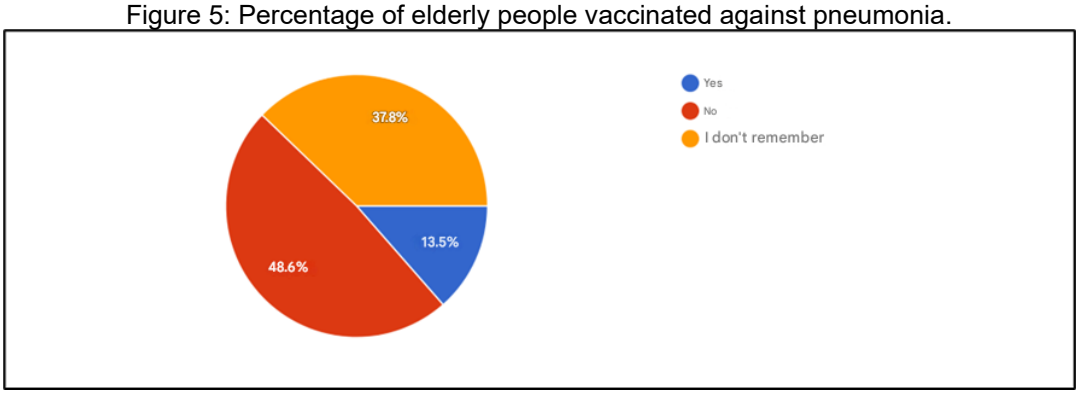
Figure 4: Elderly patients who received the diphtheria and tetanus vaccine



Source: Authors, 2024.

According to the data presented, they corroborate the need for educational campaigns and vaccination efforts to increase adherence to the dT vaccine, which requires reinforcement every 10 years. Digital vaccination monitoring systems and regular follow-up of the vaccination card are also recommended to improve coverage among the elderly, ensuring complete immunization and preventing serious complications.

Figure 5: Percentage of elderly people vaccinated against pneumonia.



Source: Authors, 2024.

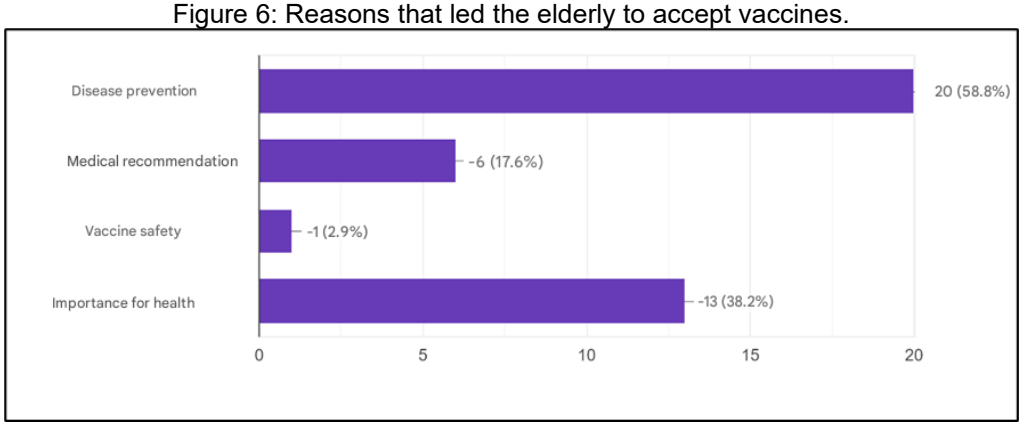
The data identified in figure 5 show that only 13.5% of the interviewees received the pneumonia vaccine, while 48.6% were not vaccinated and 37.8% did not remember. This indicates that most respondents are not adequately protected against this disease, which can cause serious complications, especially in the elderly or people with compromised immune systems. The discussion highlights that vaccination against pneumonia is essential to prevent serious infections, such as pneumococcal pneumonia, which can lead to

hospitalization and death, especially in individuals with comorbidities. Silva et al. (2020) suggest that low adherence can be explained by lack of information and access barriers. Improving communication about the benefits of vaccination is of utmost importance to increase vaccination coverage and protect the most vulnerable populations.

In the question of prevention against COVID-19, it was found that approximately 97.4% of respondents were immunized, while 2.6% did not receive the vaccine. Even with a small percentage of elderly people not immunized against COVID-19, these data indicate a high adherence to vaccination, contributing to the reduction of the risk of transmission and severe forms of the disease. Thus, it is noteworthy that mass vaccination was necessary to control the spread of the virus and reduce hospitalizations and deaths, as pointed out by Gonçalves et al. (2022). Despite the high adherence, the small percentage of unvaccinated people remain at higher risk of serious complications, so it is important to reinforce the need for continuous vaccination, including booster doses, to maintain immunity and prevent new outbreaks.

Figure 6 shows that disease prevention was the main reason for the acceptance of the vaccine, cited by 58.8% of the interviewees. This data reinforces the relevance of vaccines in protecting against infections, as highlighted by Fontana et al. (2021), who point to immunization as an essential public health strategy. In addition, 38.2% of the participants mentioned the importance for health, corroborating the perception of vaccines as fundamental for well-being, as discussed by Barata (2020). The medical recommendation, however, influenced only 17.6% of the interviewees, which may suggest a search for information from sources other than health professionals, as observed by Silva and Ribeiro (2022). Finally, only 2.9% cited the safety of the vaccine as a determining reason, reflecting the population's confidence in the safety of approved vaccines, as discussed by Soares et al. (2021).

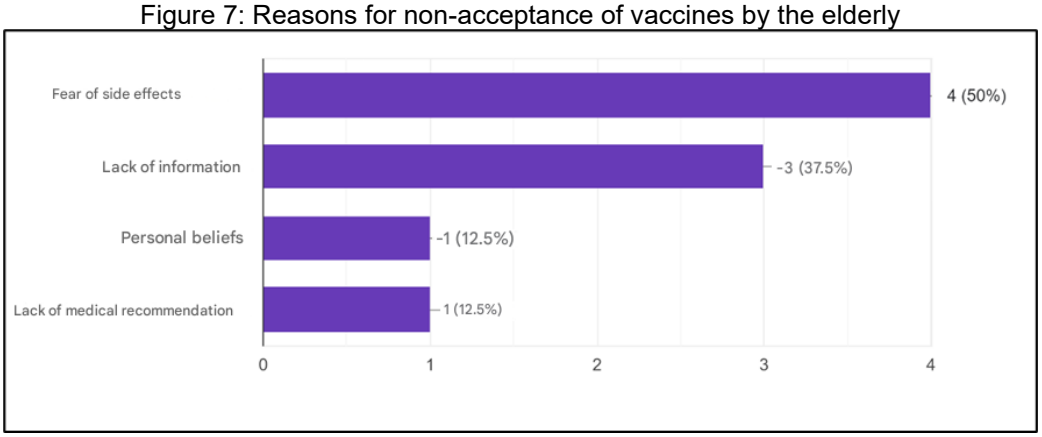
Figure 6: Reasons that led the elderly to accept vaccines.



Source: Authors, 2024.

On the other hand, the elderly who had not been immunized, pointed out, according to figure 7, the reasons why people did not accept vaccination, it is observed that the fear of side effects was the main factor, mentioned by 50% of the respondents. The lack of information was also significant, being reported by 37.5%. In addition, personal beliefs and lack of medical recommendation were cited by 12.5% of respondents. These data suggest that fear and misinformation are the biggest obstacles to vaccine uptake, as reported by Azambuja et al. (2021).

Figure 7: Reasons for non-acceptance of vaccines by the elderly

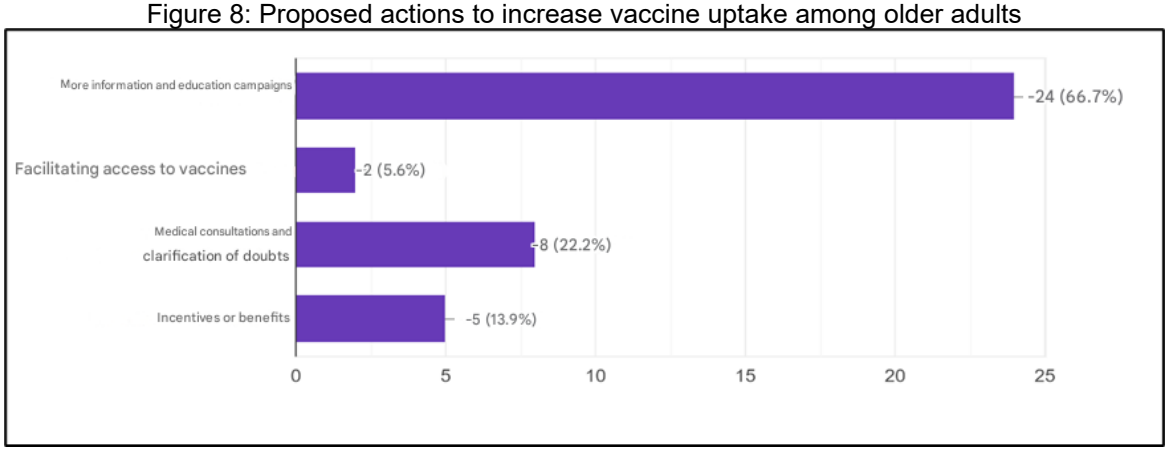


Source: Authors, 2024.

Approximately 20% of the participants, according to data obtained in the survey, stated that they had "accepted the vaccination", indicating a voluntary and conscious adherence. This result is consistent with studies that indicate that, in the absence of logistical or informational barriers, a significant part of the population accepts vaccination as individual and collective protection (Opel et al., 2013; MacDonald, 2015). On the other hand, 13.3% answered "did not inform" as a reason for not accepting the vaccine, which reveals resistance without additional justification.

Previous studies suggest that vaccine rejection may be linked to sociocultural factors, distrust in health institutions, and unfounded beliefs about the safety and efficacy of vaccines (Dubé et al., 2013; Larson et al., 2016). This emphasizes the need for more intensive educational campaigns, as suggested by Larson et al. (2014), who point out that vaccine hesitancy can be mitigated through more effective communication about the benefits of vaccines. As for other responses, (6.7%) ranged from ongoing acceptance to logistical issues such as forgetfulness (Bedford et al., 2018) or vaccine unavailability (Patel et al., 2020). Thus, it is critical for healthcare providers to develop more personalized engagement strategies to address these concerns and combat vaccine hesitancy (Gagneur, 2020).

Figure 8: Proposed actions to increase vaccine uptake among older adults



Source: Authors, 2024.

Thus, it is highlighted that 66.7% of the participants believe that "more information and education campaigns" are essential. This data is in agreement with Brazilian studies, such as that of Domingues et al. (2020), which emphasize the need for communication strategies that address misinformation and promote confidence in vaccines (Figure 8). Vaccine refusal in Brazil, especially among vulnerable groups, can be reduced by campaigns that use accessible and reliable media, as suggested by Silveira et al. (2021).

"Medical consultations and clarification of doubts", pointed out by 22.2% of respondents, are also fundamental, as identified by Luna et al. (2021). The role of the family doctor and Primary Care health professionals is important to provide personalized information, demystify fears and ensure that the elderly feel safe in relation to vaccination. Trust in the health team is a determining factor for vaccine acceptance in the Brazilian context.

On the other hand, only 5.6% of the participants mentioned the "facilitation of access to vaccines". Although this issue has been little highlighted in the graph, studies such as the one by Guimarães et al. (2022) show that accessibility, including the location of vaccination centers and the adequacy of schedules, are still significant barriers to vaccinating older adults in Brazil, especially in rural areas and less favored regions. However, 13.9% of respondents cited "incentives or benefits". Although this strategy has been less mentioned, Brazilian studies indicate that incentives, such as campaigns associated with social benefits, can increase vaccine adherence, especially among low-income populations (Santos et al., 2020).

Therefore, it is concluded that this analysis shows that educational campaigns are essential to increase vaccine acceptance among the elderly, complemented by medical consultations to clarify doubts and improve confidence. Accessibility and incentives also

play important roles, although less prominent. These factors suggest the need for integrated approaches to increase vaccine adherence.

There is a consensus that 100% of the elderly interviewed are willing to participate in educational events about vaccination, indicating a strong interest in being informed about immunization. This provision represents an opportunity to improve adherence to vaccines, especially considering the study carried out by Ferreira et al. (2021), which identified that in addition to low education and income, the fact that the elderly live alone are associated with an incomplete vaccination status among this population. In view of this, it is noted that educational events can help overcome informational barriers, since many elderly people recognize the importance of vaccination, even in the face of challenges. The survey also highlighted that the lack of a vaccination card is related to lower educational levels, emphasizing the need for health education (Ferreira et al., 2021). Therefore, the high willingness of older adults to participate in educational events, coupled with the need for strategies that consider socioeconomic barriers, suggests that these initiatives can significantly increase vaccine adherence, thus promoting better public health for this vulnerable population.

FINAL CONSIDERATIONS

The conclusions of this study highlight the relevance of understanding the characteristics and needs of the elderly in the context of vaccination. The predominance of women among the interviewees and the high prevalence of chronic diseases such as hypertension and diabetes indicate the need for specific communication and engagement strategies to promote adherence to vaccination in this age group.

While most participants kept their vaccination cards up to date and demonstrated high adherence to the COVID-19 vaccine, the data also reveal significant challenges, such as vaccine hesitancy driven by fear of side effects and lack of information. This reinforces the importance of educational campaigns that address these concerns and encourage the search for preventive care and provide clear evidence-based information, debunking the myths surrounding vaccination and reinforcing its importance for public health. In addition, the role of health professionals, especially in Primary Care, is crucial to increase confidence in vaccines, through consultations that offer clarification and adequate guidance.

In this way, the study reaffirms the need to facilitate access to vaccination and to create incentives that motivate adherence, especially among more vulnerable groups. By addressing these barriers, one can not only increase vaccination coverage but also promote healthy aging and a better quality of life in the elderly population.

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