ANALYSIS OF COVID-19 VACCINATION COVERAGE AND ADHERENCE AMONG THE ELDERLY POPULATION OF ANÁPOLIS, GOIÁS

Amanda Silva de Mattos[1]
Brunno Sena Bisinoto[2]
Pedro Henrique dos Santos[3]
Karla Cristina Naves de Carvalho [4]

ABSTRACT
Vaccination is an effective and highly cost-beneficial public health policy for preventing and controlling infectious diseases. In Brazil, vaccination coverage has been increasing, despite the challenges faced by an emerging country. However, factors such as poor adherence to vaccination campaigns can limit program effectiveness. Identifying barriers and challenges that impede optimal vaccination adherence is therefore essential.This study aimed to analyze COVID-19 vaccination coverage and adherence among the elderly population in Anápolis, Goiás. A cross-sectional, descriptive, and quantitative study was conducted using a semi-structured questionnaire that assessed vaccination coverage, adherence, and knowledge regarding the COVID-19 vaccine. A total of 35 elderly individuals were surveyed, most of whom were women (68.6%) aged between 60 and 65 years. Regarding the COVID-19 vaccine, 74.3% knew its purpose, but most were unaware of how it works in the body. Adherence to the first and second doses was high (77.1% and 68.6%, respectively), but only 17.6% completed the vaccination schedule with booster doses.The study concludes that there was high initial adherence to COVID-19 vaccination among elderly residents of Anápolis-GO, with confidence in the vaccine's efficacy and safety. However, adherence to booster doses was low, highlighting challenges such as fear of adverse effects and lack of medical recommendation.
Keywords: COVID-19 infections; Vaccination coverage; Knowledge

INTRODUCTION

The National Immunization Program (PNI) is a government initiative aimed at protecting the population through vaccination. Established in 1973, it is coordinated by the Ministry of Health in collaboration with state and municipal health departments. The PNI ensures that all target groups nationwide have access to vaccines necessary to protect against over 20 diseases. It operates through an integrated and hierarchical network to guarantee proper implementation in all regions (Domingues et al., 2020; Brazil, 2023).

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[1] Amanda Silva de Mattos, Universidade Evangélica de Goiás, E-mail: amanda.asmattos@gmail.com
[2] Brunno Sena Bisinoto, Universidade Evangélica de Goiás, E-mail: brunnobisinoto@gmail.com
[3] Pedro Henrique dos Santos, Universidade Evangélica de Goiás, E-mail: pedro-3-henrique@hotmail.com
[4] Karla Cristina Naves de Carvalho, Universidade Evangélica de Goiás, E-mail: medkarcri@yahoo.com.br

Vaccination is one of the most effective and cost-efficient public health policies for controlling and preventing infectious diseases, with proven reductions in mortality and disease propagation. Immunization has been crucial in eradicating numerous epidemic and pandemic-potential diseases (Guimarães et al., 2021; Lopes Junior et al., 2021).

Analysis of COVID-19 vaccine adherence among the elderly in Brazil indicates positive results, particularly due to prioritization of this age group in the PNI. According to the Ministry of Health, elderly vaccination began in January 2021, focusing on protecting a high-risk group. Initial adherence was high, driven by awareness of the virus's severity and vaccine effectiveness. In many states, over 90% of elderly individuals received at least the first dose. Factors such as fear of the disease, previous vaccination campaign experiences, and local vaccine availability contributed to high adherence (Benedetti et al., 2022; Brazil, 2023).

Challenges, however, included vaccine hesitancy linked to misinformation about potential adverse effects and doubts about vaccine safety. Research by Fiocruz indicated that vaccine confidence varied over time, being lower among groups exposed to fake news and conflicting information. Inequalities in healthcare access in remote areas also limited equitable vaccination coverage. Educational campaigns and expanded access to vaccination services helped mitigate these effects and ensured high vaccine coverage among the elderly (Daher et al., 2022; Brazil, 2023).This study aims to analyze COVID-19 vaccination coverage among elderly individuals aged 60 to 79 in Anápolis-GO.

METHODOLOGY

A cross-sectional, descriptive, and quantitative study was conducted using a semi-structured questionnaire administered via Google Forms to assess vaccination coverage, adherence, and knowledge of the COVID-19 vaccine.

The study was carried out at the Central University Outpatient Clinic and the Child and Adolescent Outpatient Clinic. An informative booklet on syphilis was also provided to all participants. A sample size was calculated using population data from Anápolis (Census 2010), estimating 32 elderly individuals. A total of 40 questionnaires were analyzed, with 5 excluded due to incomplete responses, resulting in a final sample of 35 participants.

Data were tabulated and quantified using descriptive statistics, with simple frequency and percentage calculations. The study followed all guidelines established by the Brazilian National Health Council (Resolution 466/2012) and was approved by the Ethics Committee

of UniEVANGÉLICA (CAAE: 79675624.1.0000.5076).

RESULTS

The sociodemographic profile showed that most participants were women (68.6%), with 50% aged 60–65 years. Regarding marital status, 48.6% were married, and 45.7% had education up to elementary school. Concerning occupation, 42.9% were unemployed, and most participants had a monthly income equivalent to one minimum wage.

Regarding COVID-19 vaccine knowledge, 74.3% knew the vaccine's function. However, 71.4% did not know how it is manufactured, and 77.1% were unaware of its mechanism of action. Confidence in vaccine safety and efficacy was high, with 73.9% trusting its safety and 77.1% believing in its efficacy. Table 1 presents knowledge about the COVID-19 vaccine by sex.

Table 1. Knowledge about the COVID-19 vaccine by sex

PERGUNTAS	Sexo masculino n (%)	Sexo feminino n (%)
Você sabe qual a função da vacina?		
Sim	8 (72,7)	18 (75,0)
não	3 (27,3)	6 (25,0)
Você sabe como é feita a vacina?		
Sim	5 (45,4)	5 (20,8)
Não	6 (54,6)	19 (79,2)
Você sabe como ela age no organismo?		
Sim	2 (18,1)	6 (25,0)
Não	9 (81,9)	18 (75,0)
Você confia na segurança da vacina?		
Sim	8 (72,7)	17 (70,8)
Não	3 (27,3)	7 (29,2)
Você acredita na eficácia da vacina?		
Sim	8 (72,7)	20 (83,3)
Não	3 (27,3)	4 (16,7)

n = absolute frequency; % = relative frequency. Source: Authors (2024).

Vaccination analysis revealed that most participants received the first and second doses (77.1% and 68.6%, respectively). However, only 17.6% completed the full vaccination schedule with the recommended booster doses, most of whom were women (85.7%). Additionally, only 38.2% remembered the vaccine manufacturer.

Among the surveyed population, 42.8% had not received any COVID-19 vaccine dose, 46.6% of whom were men. The main reasons for non-vaccination included believing it was unnecessary (18.2%), lack of medical recommendation (18.2%), and fear of short- or long-term adverse effects (72.7%).

CONCLUSION

This study demonstrated significant adherence to initial COVID-19 vaccination among elderly individuals aged 60–79 in Anápolis-GO. Most participants exhibited basic knowledge

about the vaccine's function and general confidence in its safety and efficacy, contributing to high initial vaccination rates.

However, adherence to booster doses was substantially lower, posing challenges for long-term immunization maintenance. Fear of adverse effects and lack of medical recommendation were identified as barriers, emphasizing the need for effective communication and incentive strategies. Educational campaigns that address misinformation and promote understanding of booster importance are crucial to ensure continued protection among the elderly, a highly vulnerable group. Strengthening public policies, in conjunction with healthcare professionals and managers, is essential to overcome these challenges and increase vaccination coverage, enhancing elderly protection against COVID-19.

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