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# Perspectives on Reproductive Health Education among Javanese Parents

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**Abstract**

This study aimed to investigate the perspectives of reproductive health education among Javanese parents of children aged 9-11 years. This cross-sectional study was conducted with 12,306 parents in Semarang City, Central Java Province, Indonesia, using a purposive sampling technique. Some parents agreed that reproductive health education at home was unnecessary (29.5%), taboo (45%), difficult (73.1%), and awkward (41.5%). Most parents (72.7%) were not transparent in providing reproductive health information to their children by using other terms to name the genitals, considering the politeness aspect. Good practices of providing reproductive health information are slightly more common in mothers (54.2%), unemployed parents (52.9%), those with a higher education level (69.5%), and those with a family income above the regional minimum wage (59.8%). As many as 76.9% of parents intensely monitor their children; however, 60.63% of parents have poor communications with their children. Parents believe that reproductive health information is essential for their children, but parents find the topic difficult with their children due to taboos and awkward feelings. Accordingly, the Indonesian Ministry of Health should empower parents to discuss reproductive health issues with their children openly. © 2022 Intern. Journal of Profess. Bus. Review. All rights reserved.

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Aisyah Raisa Haninda, Dewi Susanna, Aria Kusuma, Laila Fitria



# SARS-CoV-2 Antibody Seroprevalence in Jakarta, Indonesia

Iwan Ariawan<sup>1,2</sup>, Hafizah Jusril<sup>1,2\*</sup>, Muhammad N Farid<sup>1</sup>, Pandu Riono<sup>1</sup>, Wiji Wahyuningsih<sup>1,2</sup>, Widyastuti<sup>3</sup>, Dwi Oktavia T L Handayani<sup>3</sup>, Endang Sri Wahyuningsih<sup>3</sup>, Rebekka Daulay<sup>3</sup>, Retno Henderiawati<sup>3</sup>, Safarina G Malik<sup>4</sup>, Rintis Noviyanti<sup>4</sup>, Leily Trianty<sup>4</sup>, Nadia Fadila<sup>4</sup>, Khin Saw Aye Myint<sup>4</sup>, Frilasita A Yudhaputri<sup>4</sup>, Neeraja Venkateswaran<sup>5</sup>, Kodumudi Venkateswaran<sup>5</sup>, Venkatachalam Udhayakumar<sup>6</sup>, William A Hawley<sup>6</sup>, Juliette Morgan<sup>7</sup>, Paul M Pronyk<sup>8</sup>

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## Abstract

The SARS-CoV-2 transmission dynamics in low- and middle-income countries remain poorly understood. This study aimed to estimate the SARS-CoV-2 antibodies seroprevalence in Jakarta, Indonesia, and to increase knowledge of SARS-CoV-2 transmission in urban settings. A population-based serosurvey among individuals aged one year or older was conducted in Jakarta. Employing a multistage sampling design, samples were stratified by district, slum and non-slum residency, sex, and age group. Blood samples were tested for IgG against three different SARS-CoV-2 antigens. Seroprevalence was estimated after applying sample weights and adjusting for cluster characteristics. In March 2021, this study collected 4,919 respondents. The weighted estimate of seroprevalence was 44.5% (95% CI = 42.5-46.5). Seroprevalence was highest among adults aged 30-49 years, with higher seroprevalence in women and the overweight/obese group. Respondents residing in slum areas were 1.3-fold more likely to be seropositive than non-slum residents. It was estimated that 4,717,000 of Jakarta's 10.6 million residents had prior SARS-CoV-2 infection. This suggests that approximately 10 infections were undiagnosed/underreported for every reported case. About one year after the first COVID-19 case was confirmed, close to half of Jakarta's residents have been infected by SARS-CoV-2.

**Keywords:** antibodies, COVID-19, immunity, SARS-CoV-2, seroprevalence

## Introduction

Urban areas are home to just over half the world's population yet are estimated to account for 90% of SARS-CoV-2 infections.<sup>1,2</sup> Serosurvey data suggest striking urban-rural gradients across diverse geographic and economic contexts including New York, the United States (20% urban vs 3.4% rural),<sup>3</sup> Spain (14% vs 1.7%),<sup>4</sup> Kenya (9.3% vs 1.7%),<sup>5</sup> and India (33% vs 1%).<sup>6</sup> Specifically, cities in low- and middle-income countries (LMICs) are where the pandemic's effects are likely to be most severe.<sup>2</sup> Greater population size, density, and connectedness alongside poor hygiene and infrastructure increase the frequency of infectious contacts and high-risk exposures.<sup>2,7</sup> Recent urban expansion and growing inequalities amplify these vulnerabilities, with the billion people globally residing in slums at the greatest risk.<sup>7-9</sup> High poverty levels hinder the introduction of public health measures such as mobility restrictions,<sup>10,11</sup> which must be carefully weighed against their adverse

social and economic consequences.<sup>12,13</sup> Finally, inequities in access to basic health and laboratory services constrain the effectiveness of established control measures, including timely case detection and contact tracing.

In the Southeast Asia, 84% of the population resides in LMIC contexts, with nearly half in urban centers.<sup>14</sup> Prior to Delta variant-associated severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission in mid-2021, the region was lauded for its apparent success in controlling the coronavirus disease 2019 (COVID-19).<sup>15</sup> However, data to support these assertions have been limited. With levels of diagnostic testing among the region's LMICs 10- to 15- fold lower than in high-income countries, confirmed cases are likely to be under-reported.<sup>16</sup> Furthermore, the use of serosurveys to detect prior SARS-CoV-2 infection has been of poor quality.<sup>17-19</sup>

Indonesia is the largest LMIC in Southeast Asia and is home to the world's fourth-largest population.<sup>20</sup> Nearly 10% of inhabitants reside in and around the

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# The Effect of Health Promotion Program on Perceived Self-Efficacy and Self-Care Practices among Elderly with Multimorbidity in Chiang Mai, Thailand

Jukkrit Wungrath<sup>1\*</sup>, Nuttida Khumai<sup>1</sup>, Phinphot Phrommasen<sup>2</sup>

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## Abstract

Multimorbidity in the elderly is a major public health issue with serious consequences. This study investigated the effects of health promotion programs on perceived self-efficacy and self-care practices among the elderly with multimorbidity using a quasi-experimental study design from February to July 2021. The study samples were the elderly from Doi Saket District, Chiang Mai Province, Thailand, selected by a multistage random sampling technique. The experimental and control groups each comprised 40 elderly with multimorbidity. All elderly participants took part in a 12-week health promotion program. The perceived self-efficacy and self-care practices of the study samples were assessed using interviews, and the group results were compared using the independent t-test. Repeated measures analysis of variance (ANOVA) was applied at a significance level of 0.05 for three different periods. Follow-up results after the intervention showed that the experimental group had significantly higher mean scores of perceived self-efficacy and self-care practice than the control group ( $p$ -value $<0.05$ ). The health promotion program enhanced perceived self-efficacy and self-care practices in the elderly with multimorbidity. It can also be applied to improve the quality of life of people in other age groups.

**Keywords:** elderly, health promotion, multimorbidity, perceived self-efficacy, self-care practices

## Introduction

With improved health care, aging population has become a worldwide phenomenon. Thailand ranked the third most rapidly aging population in the world.<sup>1</sup> Thailand became an aging society in 2005, with 10.4% of the population aged 60 years and older, increasing to 14.4% ten years later, and reaching 18.6% (around 13 million people) by the end of January 2022.<sup>2</sup> If the aging population continues to grow at the current rate,<sup>3,4</sup> Thai's elderly population will reach 20 million by 2050 (35.8% of the population).<sup>5</sup> In an aging society, caregivers and government agencies (e.g. the Ministry of Public Health) should pay more attention to the availability of utilities to help the elderly live their lives.<sup>5</sup> The majority of the elderly in Thailand suffer from frailty and chronic diseases and need daily care from their family members and healthcare providers.<sup>5</sup>

The elderly are more exposed to both physical and psychological vulnerabilities and at risk of developing a wide range of diseases.<sup>6</sup> As a high-risk group for multimorbidity,<sup>7,8</sup> the presence of two or more chronic dis-

eases is more likely. Previous studies reported that 24-83% of the elderly had multimorbidity depending on the definition of multimorbidity itself (how many chronic noncommunicable diseases (NCDs) an elderly have), age of the population, and data source.<sup>9,10</sup> Multimorbidity is associated with lower disability-adjusted life year (DALY),<sup>7</sup> an increase in mortality and disability, and a decrease in functional capacity and life quality. Multimorbidity also increases health care utilization (costs, length of hospital stays, and number of physician visits).<sup>11,12</sup>

The occurrence of multimorbidity was 11.5% and 25.3% of the Thai elderly population in 2010 and 2014, respectively,<sup>13,14</sup> as one of the most pressing issues confronting Thailand's health care system with increasing prevalence and incidence of chronic NCDs such as hypertension, diabetes, stroke, and coronary artery disease.<sup>4</sup> These diseases seriously disrupt the well-being of the elderly and may render them completely dependent.<sup>4</sup> The elderly with multimorbidity require more primary health care (PHC) than all other age

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# Model Autonomy of Self-Finance Management for Primary Health Care to Enhance Workers' Satisfaction

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## Abstract

This study aimed to find an appropriate model of autonomous self-finance management in primary health care (PHC) to enhance workers' satisfaction. This was a cross-sectional study in which data were collected through self-administered questionnaires from 204 workers in ten Regional Public Service Agency for Primary Health Care (RPSAPHC)/*Badan Layanan Umum Daerah Pusat Kesehatan Masyarakat (BLUD Puskesmas)* in Tangerang District, Banten Province, Indonesia using the partial least squares and structural equation model (PLS-SEM). A total of 73 indicators were used to examine the PHC transformation process to enhance workers' satisfaction. The indicators were grouped into three variables depending on workers' satisfaction: intrinsic, extrinsic, and general satisfaction. In addition, there were five independent variables: financial accountability, generating income, structuring human resources, increasing service quality, and consumer satisfaction. Model autonomy was reflected by all the indicators (cross-loading > 0.70, Cronbach's alpha > 0.70, average variance extracted > 0.5) affecting workers' satisfaction (path coefficient = 0.196, p-value = 0.002). The management should apply five indicators (financial accountability, increasing income, structuring human resources, improving service quality, and customer satisfaction) affecting workers' satisfaction to transform the PHC.

**Keywords:** *BLUD Puskesmas*, unified component, workers' satisfaction

## Introduction

The new public management concept was implemented and reformed in primary health care (PHC), predominantly in local government. This concept has shown improvement; however, public service reform still faces obstacles toward transformation processes; these obstacles are mainly related to human resources.<sup>1-4</sup> Human resources need to be considered as they play an important role in the success of operational management to achieve organizational goals. A previous study showed that three-quarter of the respondents were dissatisfied with their working conditions.<sup>5</sup> Doctors working in public health care facilities feel burdened with higher administrative work compared to those who work in private ones.<sup>6</sup> Furthermore, health workers in the first-level services complain that their salaries are not worth the services they provide.<sup>7,8</sup>

Since 2007, PHC has been granted the autonomy to manage its budget in Indonesia. This regulation is called Regional Public Service Agency for Primary Health Care (RPSAPHC)/*Badan Layanan Umum Daerah Pusat Kesehatan Masyarakat (BLUD Puskesmas)*.<sup>9</sup> However,

less than 50% of the PHC comprehend this autonomy's philosophy and flexibility.<sup>10</sup> Human resources departments are not yet (in terms of reforms) ready for autonomy.<sup>11,12</sup> Some inhibiting factors of autonomy in PHC lie in the transformation process of the operational management and the challenges in terms of fairness as perceived by employees.<sup>11</sup> An evaluation showed that the reform was not balanced to accommodate its function; thus, PHC policies require a comprehensive review.<sup>13</sup> The new autonomy is needed to improve the operational management of public services through an effective transformation process.<sup>14</sup> In organizational environments, such as education, experience, and government support must be considered because they can influence the achievement of organizational goals.<sup>15</sup> Similarly, PHC reform requires key elements as specific indicators to improve performance.<sup>16</sup>

Some components reflecting autonomy are important in the transformation process of PHC management: financial accountability, generating income, structuring human resources, increasing quality services, and customer satisfaction.<sup>17</sup> The PHC needs to reflect financial

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