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Perceptions of Health Insurance Schemes and Their Role in Reducing Healthcare Disparities Across Asian Populations: Insights into Access, Equity and Policy

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Abstract **Objectives:** This study explores the impact of health insurance schemes on healthcare disparities in Asian countries, focusing on policy implications. It evaluates various insurance models, such as the Basic Healthcare Insurance for Urban Employees in China and the New Cooperative Medical Scheme and their effects on healthcare access and outcomes across different socioeconomic groups. **Methods:** An exploratory design was used with a sample of 446 respondents selected via convenient sampling in Tamil Nadu, India. Data were collected through surveys and analyzed using SPSS, employing tools such as clustered bar graphs, pie charts, ANOVA and linear regression to assess relationships between insurance coverage and healthcare disparities. **Results:** Findings suggest that health insurance schemes have improved healthcare access and reduced disparities but challenges remain, particularly in addressing the needs of marginalized populations. The 26-35 age group showed strong support for increased government funding for rural healthcare. Males were more likely to believe rural populations benefit more from insurance than urban populations. Barriers like high administrative costs and low healthcare professional availability were identified. Urban respondents emphasized government roles in funding and regulation, while semi-urban and rural populations indicated concerns over the effectiveness of insurance policies. **Discussion:** The results highlight the importance of tailored health insurance policies to address the needs of marginalized groups. Despite progress, more targeted interventions are necessary to ensure equitable healthcare access. Addressing administrative costs and professional shortages will enhance the effectiveness of health insurance schemes. **Conclusion:** Health insurance schemes are crucial in reducing healthcare disparities in Asia. However, targeted reforms are necessary to improve equity and accessibility, particularly for marginalized populations.

Key Words Health insurance, healthcare disparities, policy reform, socio-economic groups, asia, equity, rural healthcare

INTRODUCTION

Healthcare disparities, defined as the uneven distribution of healthcare access and outcomes across different populations, represent a critical challenge to public health worldwide. In many Asian countries, where the diversity in economic, social and cultural conditions is vast, disparities in healthcare access, affordability and quality continue to persist despite significant policy efforts. These disparities are often exacerbated by factors such as income inequality, rural-urban divides and marginalization of vulnerable populations. Health insurance schemes, as a policy intervention, have been implemented across various Asian countries with the objective of mitigating these disparities and improving access to quality healthcare services for all segments of the population. However, the extent to which these schemes reduce healthcare disparities remains variable and is influenced by numerous factors, including economic development, governmental policies, infrastructure and implementation strategies.

This study seeks to investigate the impact of health insurance schemes on healthcare disparities in selected Asian countries from a policy perspective. Specifically, it aims to evaluate the effectiveness of existing health insurance programs-such as the Ayushman Bharat in India, the Universal Coverage Scheme (UCS) in Thailand, and the New Cooperative Medical Scheme (NCMS) in China-in bridging

healthcare gaps between socioeconomic groups. By assessing the role of government policies, the structure of health insurance programs and their implementation, this research will provide insights into how health insurance can help reduce healthcare disparities in Asia. In particular, the study explores how different models of health insurance influence healthcare accessibility, affordability and quality, particularly for disadvantaged populations such as rural residents, low-income groups and ethnic minorities.

The study is situated within the broader context of health insurance's potential to promote Universal Health Coverage (UHC), which is a key objective of the World Health Organization (WHO) and various national governments. UHC seeks to ensure that all individuals and communities have access to the health services they need without suffering financial hardship. While progress has been made in many Asian countries toward achieving UHC, significant challenges remain, especially in countries with large populations and disparities in economic and social conditions. For example, while countries like Japan and South Korea have achieved near-universal health coverage with minimal disparities in healthcare access, countries such as India and China still face significant hurdles due to their large, diverse populations and underdeveloped healthcare infrastructure in rural areas.

In this context, this study aims to provide a comparative analysis of the healthcare systems of India, Thailand, China, Japan and South Korea, each of which employs different health insurance schemes. India's Ayushman Bharat, for example, is designed to provide health insurance to low-income households, with a focus on rural areas. However, despite its scale and ambitious goals, it faces challenges such as limited awareness, accessibility and infrastructure. In contrast, Thailand's UCS has been lauded for its successful implementation in achieving near-universal coverage and improving health outcomes, particularly for low-income and rural populations. Similarly, Japan and South Korea offer universal health coverage that has been credited with reducing disparities in healthcare access, but these systems too face challenges related to the aging population and sustainability.

The research will also examine how broader factors such as political will, economic stability and healthcare workforce capacity influence the success or failure of these schemes in reducing disparities. It is important to recognize that the mere presence of a health insurance scheme does not guarantee equitable healthcare outcomes. Even well-established systems can face challenges, including regional disparities in service delivery, insufficient coverage for certain services and barriers to access for marginalized groups.

In addition to evaluating the effectiveness of health insurance programs, the study will explore the barriers that hinder their full implementation. These barriers include logistical challenges, administrative inefficiencies, cultural factors and inadequate public awareness. The findings of this research will contribute to the development of targeted policy recommendations aimed at improving healthcare equity and ensuring that health insurance programs are more effective in addressing disparities across different population groups.

Overall, this study aims to provide evidence-based insights into the role of health insurance schemes in reducing healthcare disparities in Asia, with a focus on policy recommendations that could inform future reforms in the region. By addressing both the strengths and weaknesses of existing health insurance schemes, the study will offer a roadmap for improving the accessibility, affordability and quality of healthcare for all.

Objectives

- To assess the impact of health insurance schemes on healthcare disparities in selected Asian countries, focusing on their influence on the accessibility, quality and affordability of healthcare services
- To investigate the effect of health insurance schemes on healthcare accessibility and equity, particularly for vulnerable populations, including rural residents, low-income groups and minority communities
- To identify the barriers and challenges that hinder the effective implementation and success of health insurance schemes, including administrative, logistical and cultural factors that affect coverage and service delivery
- To analyze the broader economic impact of health insurance schemes on national economies, with particular emphasis on their effects on household financial stability and overall healthcare affordability.

REVIEW OF LITERATURE

The evolution of research on health insurance and its impact on health disparities has been marked by an increasing focus on the intersection of economic, social and healthcare system factors. Early studies explored the foundational elements of health insurance schemes, while more recent work delves into the effectiveness of such programs and their ability to address inequalities.

In the early 1980s, JQ, L. (1982) examined the factors influencing the coverage of China's Basic Healthcare Insurance for Urban Employees (BHI). This study utilized panel data from 1999 to 2007, exploring the dynamics of the expansion of social health insurance (SHI) in China. The research highlights the importance of economic development, strong governmental financial capacities, and social factors such as trade union density in expanding BHI coverage. It found that robust financial and administrative structures were key drivers of the program's success, laying the groundwork for future health insurance reforms in China.

A decade later, in 2004, Ekman [1] conducted a systematic review on community-based health insurance (CBHI) schemes in low-income countries. This study aimed to evaluate how CBHI programs impacted access to healthcare and financial protection for underserved

populations. The review concluded that while CBHI programs could improve healthcare access and reduce out-of-pocket expenses, their effectiveness was highly dependent on factors like program design, management and community engagement. It emphasized that the success of CBHI schemes varied considerably across different regions, reflecting the complex dynamics of healthcare delivery in low-resource settings.

Following these early explorations of health insurance's role in improving access to care, other scholars began to investigate the broader structural and systemic influences on health disparities. Kilbourne *et al.* [2] proposed a conceptual framework for advancing health disparities research, aiming to integrate diverse perspectives and methodologies. This framework highlighted the multifactorial nature of health disparities, including socioeconomic, cultural and systemic factors and underscored the need for a comprehensive approach to addressing these disparities within healthcare systems.

In 2010, Lee *et al.* [3] examined the barriers to healthcare access faced by 13 Asian American communities. Their study identified significant obstacles, including language barriers, cultural misunderstandings, lack of insurance coverage and limited availability of culturally competent care. This research emphasized the need for targeted interventions tailored to the unique needs of diverse ethnic groups, echoing earlier findings that community engagement and understanding of cultural contexts are crucial for improving healthcare accessibility.

By the early 2010s, there was a growing recognition of the critical role that healthcare system reforms played in improving access to care. Lagomarsino *et al.* [4] focused on understanding the impact of different healthcare system structures on healthcare access and outcomes. Their research, particularly in low- and middle-income countries, found that health system reforms and the model of healthcare delivery played a significant role in improving access and health outcomes. This study highlighted the importance of not only expanding coverage but also ensuring the quality and equity of care provided.

In 2014, Cheng *et al.* [5] explored the impact of health insurance on the health outcomes and spending of the elderly in China, particularly through the New Cooperative Medical Scheme (NCMS). The study found that the NCMS effectively reduced out-of-pocket spending and improved access to healthcare for elderly populations, contributing to a significant alleviation of financial barriers. This research highlighted the positive impact of targeted health insurance programs on vulnerable groups such as the elderly, who often face significant challenges in accessing healthcare.

A similar focus on vulnerable populations was seen in the work of Miller *et al.* [6], who investigated how health insurance influenced healthcare disparities among adults with disabilities. Their study found that individuals with more comprehensive insurance coverage experienced fewer disparities in access to care and health outcomes. This reinforced the idea that health insurance is a key determinant of equity in healthcare, particularly for populations that are often marginalized or have additional healthcare needs.

The role of health insurance in addressing inequalities was further explored by Ahlin *et al.* [7], who reviewed the state of health insurance in India. They argued that ethnographic research was essential to understand the lived experiences of individuals impacted by insurance schemes. The study identified gaps in existing research and highlighted the need for a deeper understanding of how different populations experience health insurance, which could inform more effective policy and implementation strategies.

As research continued to highlight the persistence of racial and ethnic disparities in healthcare, Sohn [8] examined how these disparities evolved over the life course. Focusing on racial and ethnic differences in the gaining and losing of health insurance coverage, the study found that some groups faced higher rates of losing coverage and lower rates of gaining it. These findings pointed to the need for policies that ensure more stable and equitable coverage for all racial and ethnic groups throughout their lives.

In 2017, Chandra *et al.* [9] analyzed the challenges of addressing discrimination and health inequity through current Civil Rights Laws. They concluded that while Civil Rights Laws provided a foundational framework for addressing discrimination, they were insufficient in addressing the complex and systemic nature of health disparities. The study called for reforms to strengthen these laws to promote greater health equity.

The growing recognition of the need for systemic reforms continued into the 2020s, with Behera and Dash [10] investigating the role of fiscal capacity in healthcare financing across Southeast Asia. Their research showed that higher fiscal capacity in governments was generally associated with better healthcare financing and improved health outcomes. However, they also noted that the impact of fiscal capacity varied across countries due to differences in economic development and healthcare system structures. This reinforced the idea that effective healthcare financing requires not only adequate fiscal resources but also efficient allocation and management.

The study of Universal Health Coverage (UHC) in the Asian region by Takura and Miura [11] highlighted the key role of economic development, income inequality and social protection policies in achieving UHC. They found that addressing these socioeconomic factors was essential for improving health coverage and equity across the region. Their research underscored the importance of targeted strategies to enhance UHC outcomes, particularly in regions with diverse socioeconomic contexts.

In 2023, Lim *et al.* [12] provided a systematic review of health financing challenges in Southeast Asia. They focused on the financial barriers and sustainability of current health financing methods, identifying revenue-raising methods as

critical for the success of UHC. Their findings reinforced the importance of addressing financial obstacles to achieve sustainable and equitable healthcare systems in the region.

Further, more recent work by Hill *et al.* [13] tracked health coverage disparities across different racial and ethnic groups from 2010 to 2022. Despite improvements in some areas, the study found persistent disparities in health insurance coverage, particularly among minority groups. This highlighted the ongoing need for policies that specifically address these disparities and improve access to healthcare for underserved populations.

The year (2024) saw Selvamuthu *et al.* [14] examining the role of health insurance in mitigating the economic burden of healthcare in low-income countries. Their study focused on sub-Saharan Africa, where health insurance coverage has remained limited. The authors explored various insurance models, including government-subsidized programs and community health insurance schemes. They concluded that while health insurance could significantly reduce out-of-pocket costs and improve healthcare access, the success of these programs was closely tied to the quality of healthcare infrastructure. Their study highlighted the necessity of building strong healthcare systems alongside expanding insurance coverage to ensure the sustainability and effectiveness of health insurance programs.

Liu *et al.* [15] conducted a study focusing on the implementation of health insurance schemes in India. The research critically evaluated the impact of government-led health insurance initiatives such as the Pradhan Mantri Jan Arogya Yojana (PMJAY), which aims to provide health insurance to the underprivileged. Kumar and colleagues found that while the PMJAY had successfully increased healthcare access for millions, many challenges remained, including issues of awareness, administrative inefficiencies and the limited scope of services covered under the insurance plan. The study stressed the need for continued policy innovation, emphasizing the integration of digital health solutions to streamline the delivery and management of health insurance benefits.

Gopalan *et al.* [16] examined the intersection of digital health technologies and insurance schemes in improving healthcare access. Their study reviewed the potential of telemedicine and mobile health services as tools to enhance the reach of health insurance programs, especially in rural and underserved areas. The authors argued that integrating digital health technologies into insurance programs could overcome geographical barriers and reduce healthcare access disparities. The study found promising results in countries like India and Kenya, where mobile-based health insurance schemes helped people access healthcare services remotely, improving both financial protection and healthcare outcomes.

Finally, Manoj *et al.* [17] investigated the evolving relationship between health insurance and mental health services. Their research examined how insurance programs were adapting to better include mental health coverage, which has historically been underfunded and overlooked. Rajan and colleagues found that in several high-income countries, reforms were underway to integrate mental health into general health insurance packages, reflecting an increased recognition of mental health as a critical aspect of overall health. The study emphasized the need for broader reforms in mental health insurance coverage, particularly in countries with limited mental health infrastructure. The authors argued that providing more comprehensive mental health coverage could help address disparities in mental health outcomes, particularly among low-income and minority populations.

METHODS

This study employed an exploratory research design to investigate the impact of health insurance schemes on healthcare disparities in Asian countries, focusing on the role of policy in mitigating these disparities. The research was guided by the objective of understanding how various health insurance schemes influence healthcare access and outcomes across different socioeconomic groups.

Sampling and Participants The sample for this study consisted of 446 respondents, selected using a convenient sampling method. Respondents were drawn from diverse demographic groups to represent a broad cross-section of the population, with attention to age, gender, occupational status and place of residence (urban, rural, semi-urban). The sample size was deemed appropriate for exploratory research, providing sufficient data for analysis of trends and patterns.

Data Collection

Data were collected using a structured survey that incorporated both closed and open-ended questions. The survey was designed to capture respondents' perceptions of health insurance schemes, including their views on government roles in health insurance, barriers to implementation and the distribution of benefits across different populations. The survey was distributed to respondents in various regions of Asia, with a focus on Tamil Nadu as a case study for regional insights.

Data Analysis

The data collected from the surveys were analyzed using SPSS software. The analysis involved several statistical tools and visualizations, including clustered bar graphs, pie charts, stacked area graphs and linear regression. The clustered bar graphs were used to explore categorical data, while linear regression helped assess the relationship between key variables, such as the type of health insurance and respondents' perceptions of healthcare disparities. Additionally, ANOVA was applied to determine whether significant differences existed between groups based on demographic variables.

The analysis shows a highly significant result ($F = 125.473$, $p<0.001$), indicating that there are significant differences between the groups in terms of their perceptions

Table 1: The purpose of examining health insurance schemes to assess their effectiveness in reducing (text cut off)

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36.676	3	12.225	125.473	<0.001
Within Groups	22.897	235	0.097		
Total	59.573	238			

Table 2: Barrier to implementing health insurance schemes in Asian countries

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.882	1	6.882	12.725	<0.001
Within Groups	128.173	237	0.541		
Total	135.054	238			

Table 3: Roles do governments typically play in health insurance schemes

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.279	2	1.639	1.319	0.269
Within Groups	293.215	236	1.242		
Total	296.494	238			

of the effectiveness of health insurance schemes. This suggests that individuals from different groups (based on factors such as socioeconomic status, geographic location, etc.) have differing views on the success and impact of health insurance programs. The low p-value (less than 0.001) confirms that the differences observed are unlikely to have occurred by chance, making these findings statistically robust (Table 1).

The ANOVA results indicate a statistically significant difference ($F = 12.725$, $p<0.001$) between groups regarding the barriers to implementing health insurance schemes in Asian countries. The low p-value (<0.001) suggests that the barriers to health insurance implementation are perceived differently across the groups, and these differences are unlikely to be due to random chance. This highlights the need for a deeper understanding of the various barriers, such as financial, administrative and infrastructural challenges, that impact the success of health insurance schemes in different contexts across Asia (Table 2).

The ANOVA results show that there is no statistically significant difference ($F = 1.319$, $p = 0.269$) between the groups in terms of the roles governments typically play in health insurance schemes. The p-value is greater than the threshold of 0.05, suggesting that perceptions about the roles of governments in health insurance do not significantly differ among the groups studied. This suggests that across the sample, there is a general consensus or shared understanding about the key roles governments should play, such as funding, regulation and policy-making, in health insurance schemes (Table 3).

The results show a highly significant difference between groups ($F = 90.235$, $p<0.001$), indicating that there is a strong agreement that the government should increase funding for health insurance schemes in specific areas. The p-value is less than the threshold of 0.05, suggesting that the belief in the necessity of increased government funding for health insurance varies significantly across the sample. This could imply a widespread recognition of the need for greater financial investment in health insurance schemes, potentially due to disparities in healthcare access and affordability.

RESULTS

Age Distribution and Relationship Status

Figure 1 reveals that the 18-25 age group has the highest proportion of singles, accounting for 37.24%. This proportion gradually decreases with age, dropping to 9.62% for the 46-55 age group and further declining to 4.81% for individuals aged 56 and above. These findings suggest that being single is more common among younger individuals, with a clear trend toward higher marriage rates as individuals age.

Gender Distribution

As depicted in Figure 2, the gender distribution of respondents is nearly equal, with 47% identifying as female and 47% as male. However, the title of the graph could be misinterpreted, as it suggests that the data may pertain to a specific group. Further clarification would be beneficial to ensure the accuracy of the graph's interpretation.

Geographic Distribution

Figure 3 shows the distribution of respondents by place of residence, with 50% of participants living in urban areas,

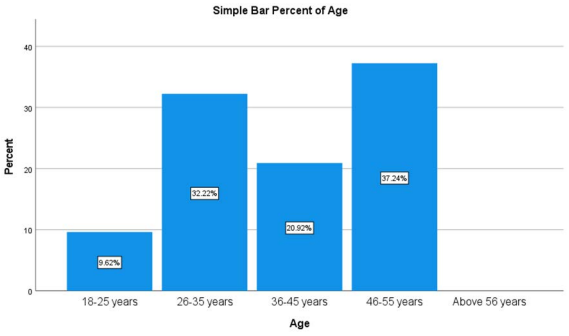

Figure 1: This figure shows the age of the respondents

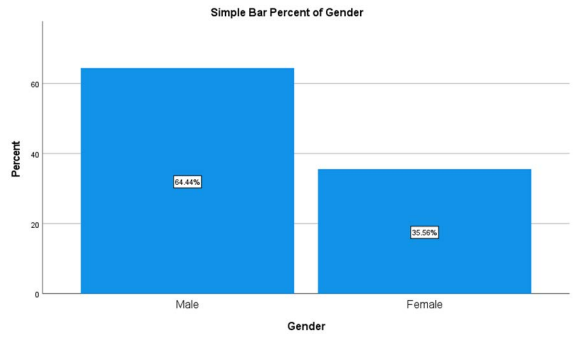

Figure 2: This figure shows the gender of the respondents

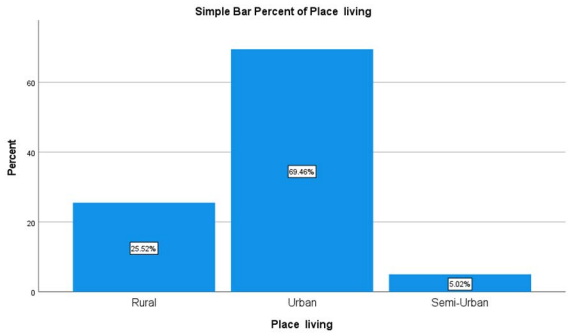

Figure 3: This figure shows the place of living of the respondents

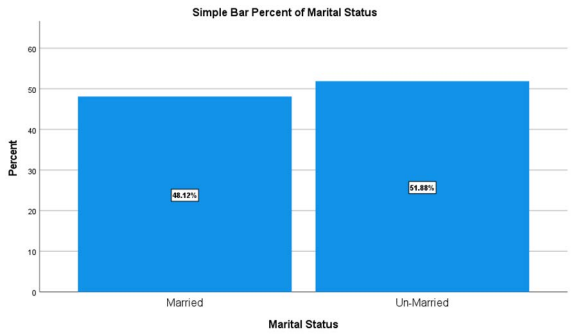

Figure 4: This figure shows the Marital Status of the respondents

25.52% in rural areas and 5.02% in semi-urban areas. This urban-dominant distribution suggests that urban populations were over represented in the sample, potentially skewing regional perspectives on healthcare access and health insurance benefits.

Marital Status

In Figure 4, marital status data shows that 48.12% of respondents are married, while 51.88% are unmarried. This

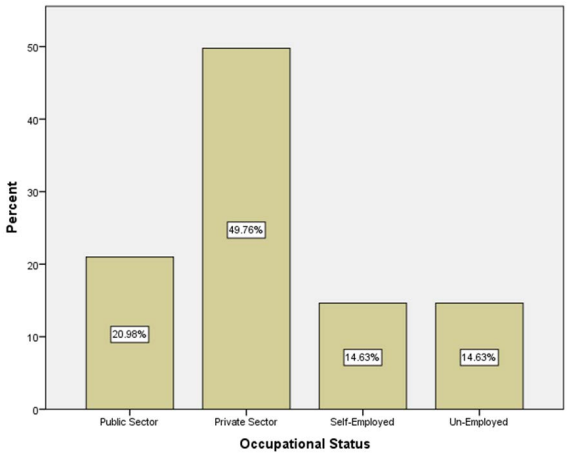

Figure 5: This figure shows the Occupational Status of the respondents

near-even split provides insights into potential differences in healthcare access and coverage between married and unmarried individuals, as marriage may influence eligibility for spousal insurance plans or other family-based benefits.

Occupational Status

Figure 5 presents the occupational status distribution of respondents. The largest proportion of respondents (49.76%) is employed in the private sector, followed by 20.98% working in the public sector, 14.63% self-employed and 14.63% unemployed. This indicates a predominance of private-sector employment in the sample, which may be indicative of differing access to healthcare coverage compared to those in the public sector or self-employed groups.

Barriers to Health Insurance Implementation by Age Group

Figure 6 illustrates the perceived barriers to implementing health insurance schemes in Asian countries across various age groups. Among the 18-25 age group, 9.62% cited high administrative costs as a significant barrier. In contrast, the 26-35 age group reported a higher percentage (31.80%) identifying high administrative costs, with 0.42% mentioning low internet penetration. The 36-45 age group mirrored the 26-35 group in perceiving high administrative costs (20.92%) as a primary obstacle. Additionally, individuals in the 46-55 age group identified an abundance of natural resources (20.92%) as a barrier, while 16.32% highlighted low internet penetration. Notably, data for individuals aged 56 and above was not available, limiting the interpretation of barriers in this age group.

Government's Role in Health Insurance by Age Group

Figure 7 reveals varying perceptions regarding the role of governments in health insurance schemes across different age

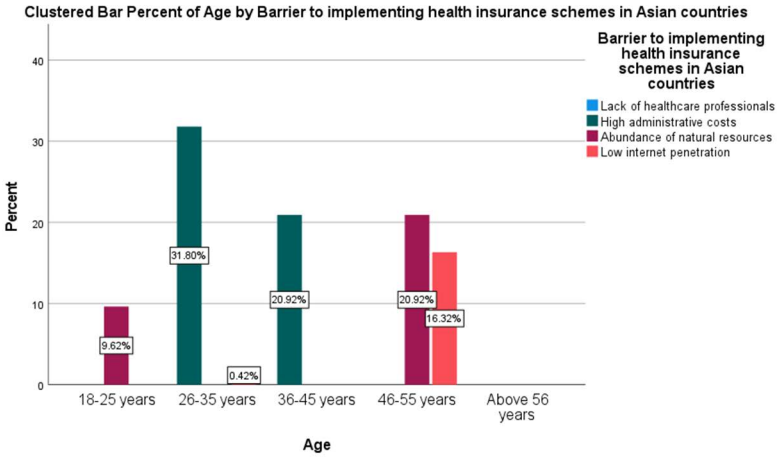

Figure 6: This figure shows the Barrier to implementing health insurance schemes in Asian countries of the respondents

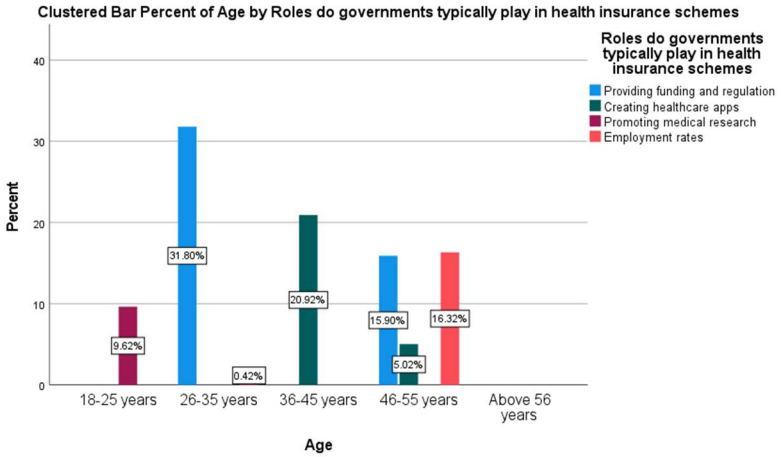

Figure 7: This figure shows the Roles do governments typically play in health insurance schemes of the respondents

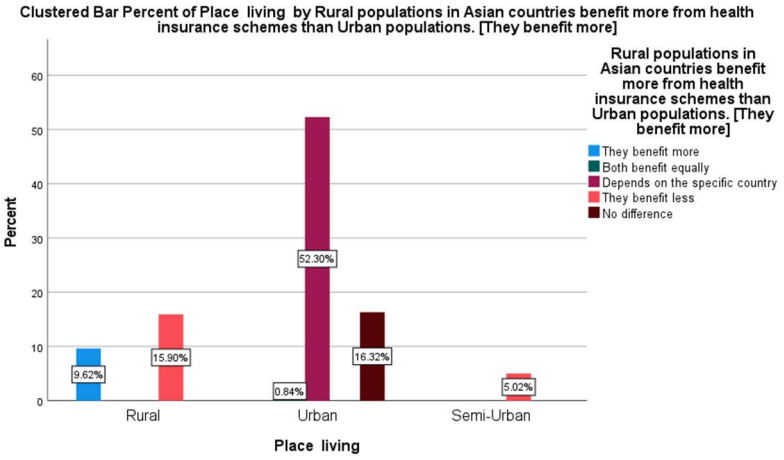

Figure 8: This figure shows the Rural populations in Asian countries benefit more from health insurance schemes than urban population of the respondents

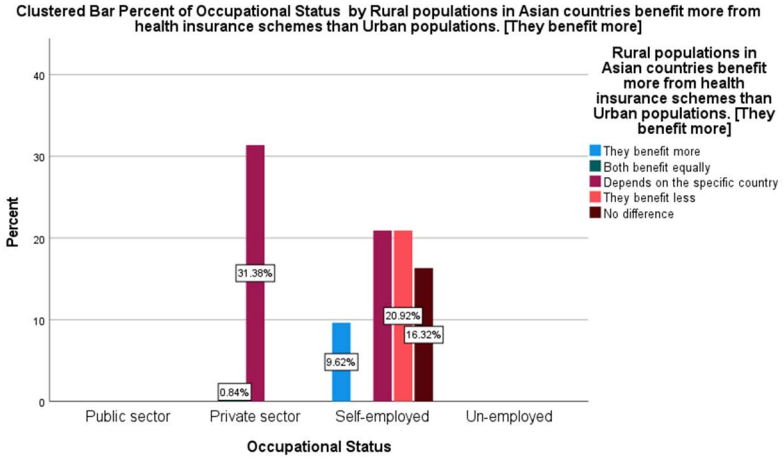

Figure 9: This figure shows the Rural populations in Asian countries benefit more from health insurance schemes than urban population of the respondents

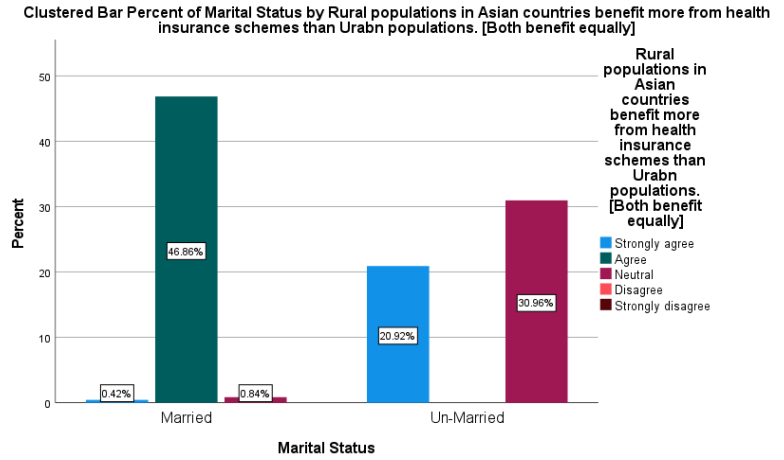

Figure 10: This figure shows the Rural populations in Asian countries benefit more from health insurance schemes than urban population of the respondents

groups. A substantial portion of the 26-35 age group (31.80%) emphasized the government's role in providing funding and regulation. Meanwhile, 9.62% of the 18-25 age group identified employment rates as a key role for the government in relation to health insurance. The perception of creating healthcare apps as a governmental responsibility was notably low across all groups, with only 0.42% of the 26-35 age group mentioning it.

Rural vs. Urban Distribution of Health Insurance Benefits

Figure 9 presents respondents' perceptions of the effectiveness of health insurance schemes in benefiting rural versus urban populations. A significant proportion of respondents (31.38%) believe that rural populations benefit more from health insurance schemes, compared to 16.32% who think urban populations benefit more. These findings suggest that a substantial number of respondents perceive rural populations as receiving greater benefits from health insurance, potentially indicating discrepancies in healthcare access or allocation of resources (Figure 10).

Perceptions by Gender on Health Insurance Benefits

Figure 11 provides insights into the gender-based perceptions of health insurance benefits for rural populations. A higher percentage of males (31.38%) compared to females (15.90%) believe that rural populations benefit more from health insurance schemes. Additionally, 20.82% of females perceive that both rural and urban populations benefit equally, whereas only 9.62% of males share this view. These results reflect gender-based differences in perspectives regarding healthcare disparities between rural and urban populations (Figure 12-15).

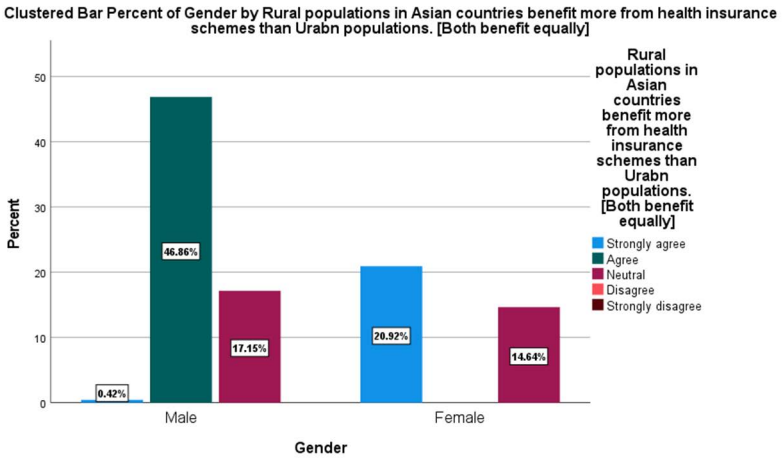

Figure 11: This figure shows the Rural populations in Asian countries benefit more from health insurance schemes than urban population [booth benefit qually]

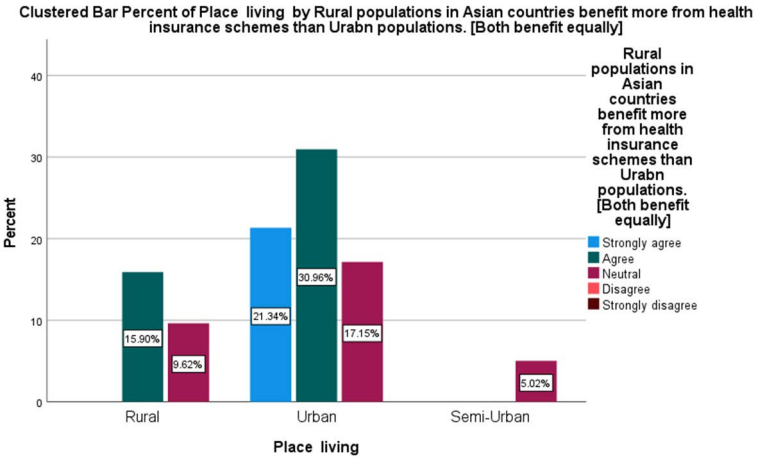

Figure 12: This figure shows the Rural populations in Asian countries benefit more from health insurance schemes than urban population of the respondents

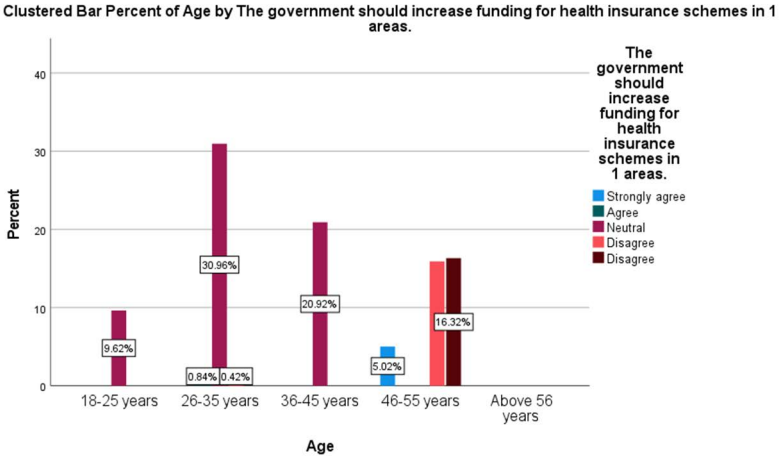

Figure 13: This figure shows the The government should increase funding for health insurance schemes in 1 areas

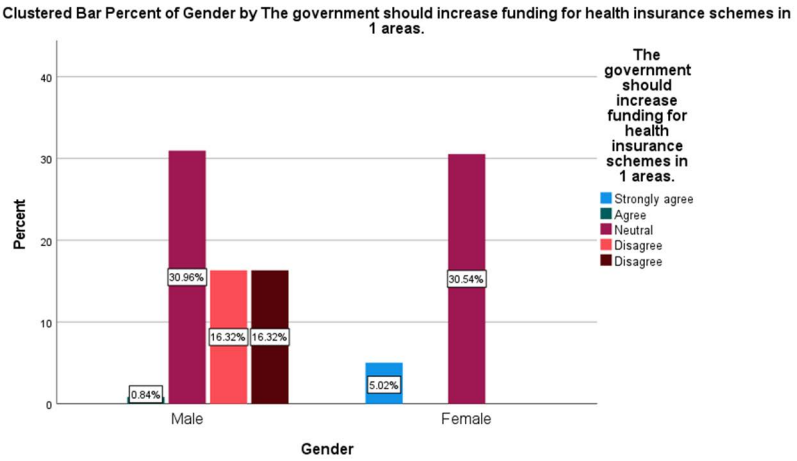

Figure 14: This figure shows the The government should increase funding for health insurance schemes in rural areas of the respondents

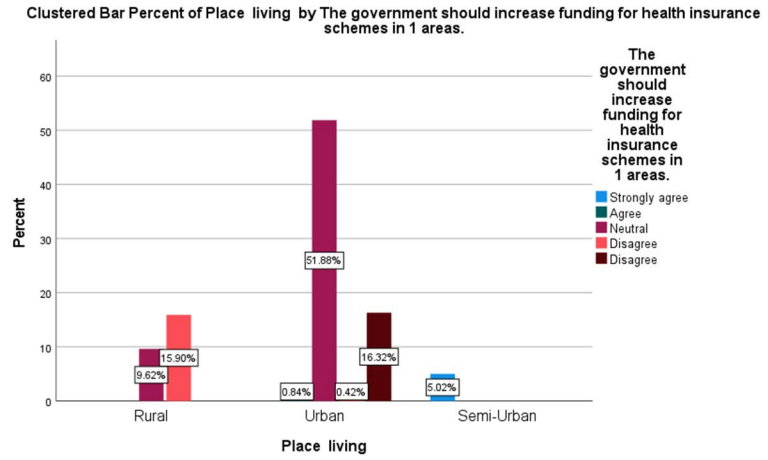

Figure 15: This figure shows the The government should increase funding for health insurance schemes in rural areas of the respondents

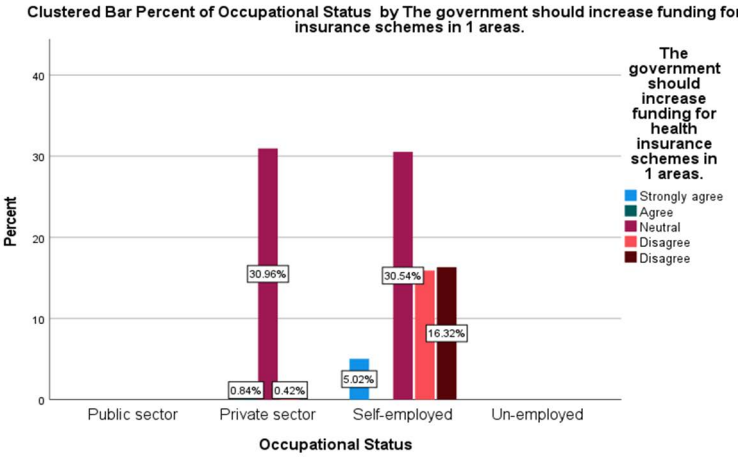

Figure 16: This figure shows The government should increase funding for health insurance schemes in rural areas of the respondents

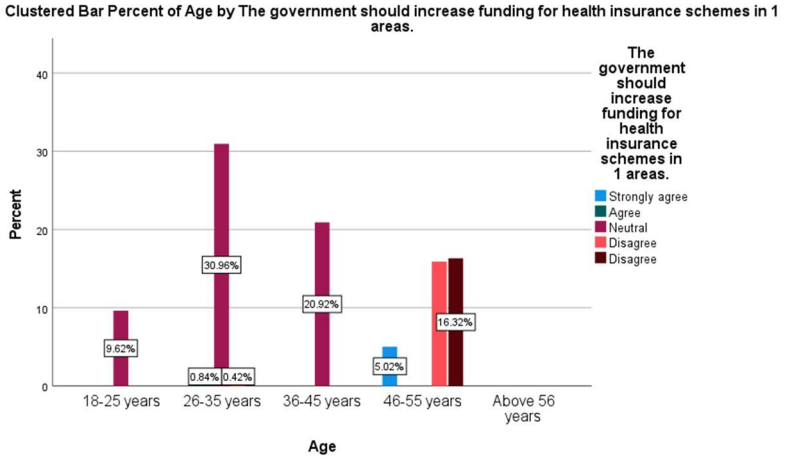

Figure 17: This figure shows the The government should increase funding for health insurance schemes in rural areas of the respondents

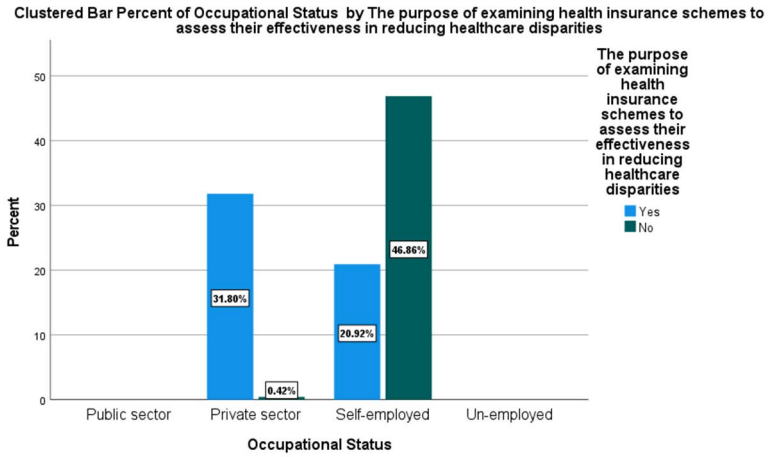

Figure 18: This figure shows the purpose of examining health insurance schemes to assess their effectiveness in reducing healthcare disparities of the respondents

Government Funding for Health Insurance in Rural Areas

Figures 15, 16 and 17 illustrate respondents' views on whether the government should increase funding for health insurance schemes in rural areas, broken down by place of living, occupational status and age group. Urban residents exhibited the strongest support for increased funding, with 51.88% strongly agreeing, followed by 30.96% of the 26-35 age group and 30.98% of private sector employees. Conversely, rural residents (15.90%) and semi-urban residents (5.02%) expressed less enthusiasm for increased funding. These findings suggest that urban populations and younger adults are more likely to advocate for expanded government funding for health insurance in rural areas (Figure 18).

Barriers to Health Insurance Implementation by Occupational Status

Figure 19 reveals the perceived barriers to health insurance implementation across different occupational groups. Private sector employees (31.80%) identified high administrative costs as the primary barrier, followed by a shortage of healthcare professionals (20.92%). The public sector respondents, however, identified an abundance of natural resources (30.54%) as the most significant barrier, with high administrative costs (16.32%) following closely. Both self-employed individuals (20.92%) and the unemployed (18.32%) emphasized high administrative costs as key obstacles to implementing health insurance schemes (Figure 20-23).

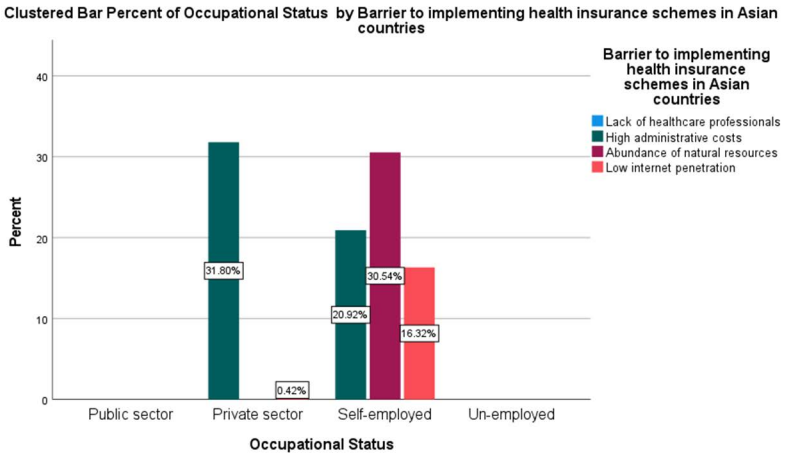

Figure 19: This figure shows the Barrier to implementing health insurance schemes in Asian countries of the respondents

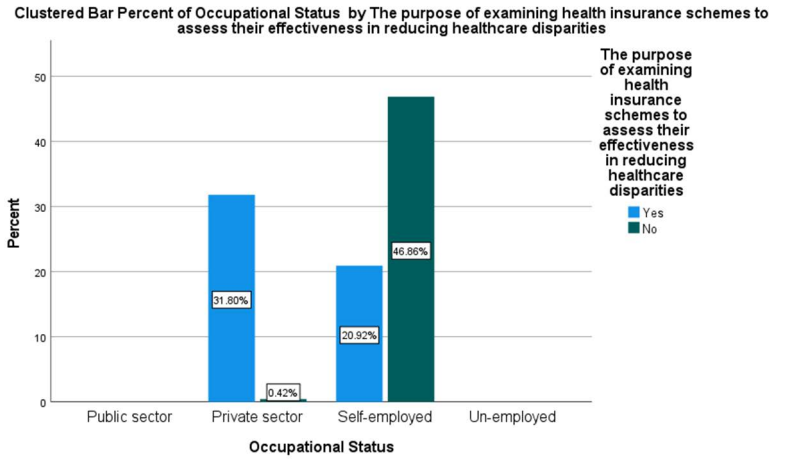

Figure 20: This figure shows the purpose of examining health insurance schemes to assess their effectiveness in reducing healthcare disparities of the respondents

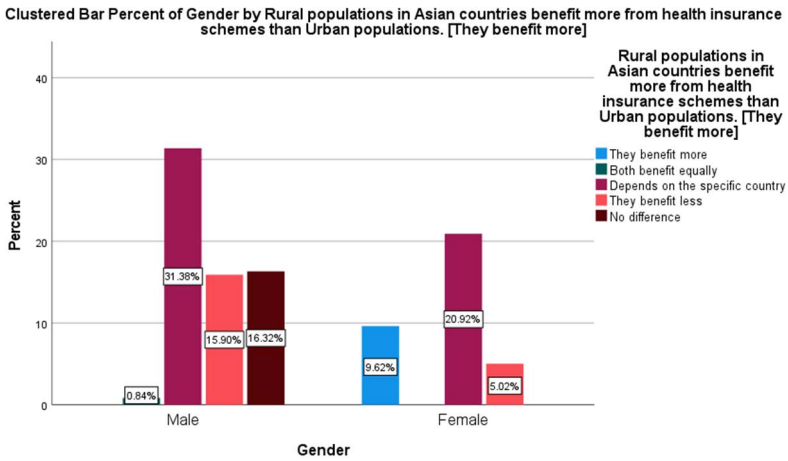

Figure 21: This figure shows the Rural populations in Asian countries benefit more from health insurance schemes than urban population of the respondents

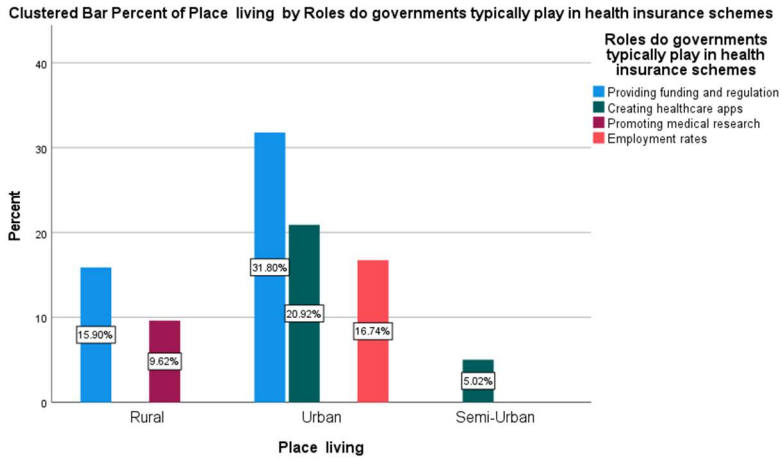

Figure 22: This figure shows the Roles do governments typically play in health insurance schemes of the respondents

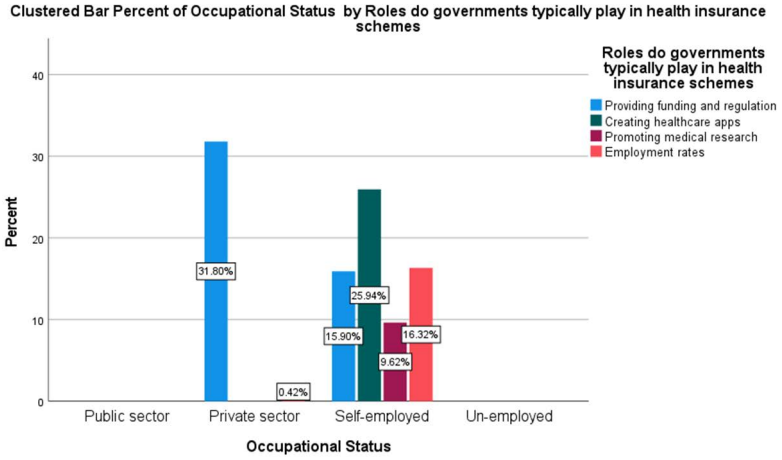

Figure 23: This figure shows the Roles do governments typically play in health insurance schemes of the respondents

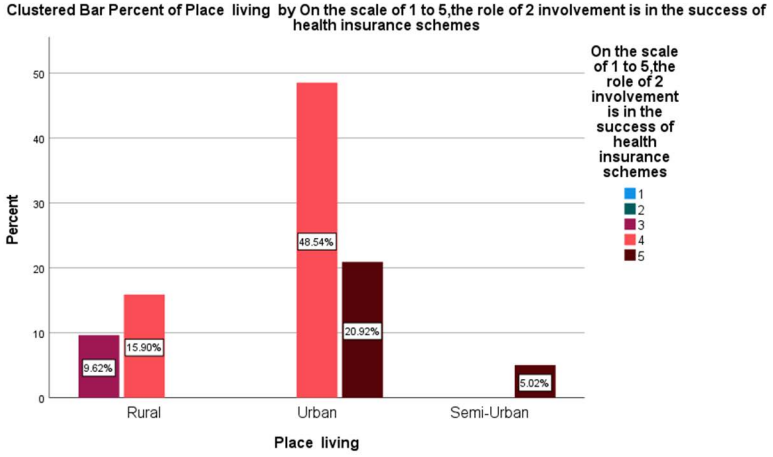

Figure 24: This figure shows the On the scale of 1 to 5, the role of private sector involvement is in the success of health insurance schemes

Perception of the Private Sector's Role in Health Insurance Success

Figure 24 highlights respondents' perceptions of the private sector's involvement in the success of health insurance schemes, rated on a scale from 1 to 5. Urban residents (48.54%) attributed the highest importance to the private sector's role in ensuring the success of health insurance schemes, followed by rural residents (15.90%) and semi-urban residents (5.02%). This indicates a recognition of the private sector's significant influence on health insurance scheme success, particularly among urban respondents.

DISCUSSIONS

The findings from this study reveal several key trends and insights related to health insurance schemes and healthcare disparities across different demographic and geographic groups.

Age and Relationship Trends Figure 1 indicates that the likelihood of individuals remaining single decreases with age, suggesting that personal development, such as education and career establishment, is prioritized in younger years. This aligns with broader societal patterns where younger individuals may focus on career growth before settling down.

Gender Representation Figure 2 presents an equal distribution of male and female respondents, highlighting that gender does not significantly influence participation in health insurance schemes. The relatively balanced gender representation indicates that healthcare disparities are not inherently tied to gender differences in the population sample.

Urbanization and Living Areas Figure 3 demonstrates that urban areas have the highest concentration of the population, with rural areas representing a significantly smaller portion. This urbanization trend may affect the distribution and effectiveness of health insurance programs, as urban areas typically have better healthcare infrastructure and access to private health insurance options.

Marital Status and Occupational Categories Figures 4 and 5 suggest that marital status and employment sectors play distinct roles in shaping perceptions of health insurance. The slight majority of unmarried individuals and the dominant presence of private sector workers indicate that these groups may have unique healthcare needs, potentially influenced by their demographic and professional circumstances.

Barriers to Health Insurance Implementation Figure 6 highlights administrative costs as a primary barrier to implementing health insurance schemes, particularly among middle-aged groups (26-45). These challenges are compounded by regional barriers, such as internet penetration and the abundance of natural resources, which are more relevant to older demographics.

Government Roles and Support Figures 7 and 23 underscore a widespread belief that government funding and regulation are crucial to the success of health insurance schemes. However, differences in perception emerge based on age, gender and geographic location. Younger respondents, particularly those in urban areas, emphasize employment rates and government roles in providing healthcare.

Rural and Urban Healthcare Disparities Figures 9 emphasize the disparity in health insurance benefits between rural and urban populations. Rural populations, often facing greater barriers to healthcare access, appear to benefit more from insurance schemes. However, the perception of these benefits is influenced by various factors, including gender and geographic location, as seen in Figures 11 and 12.

Sector-Specific Insights Figures 16 and 19 reveal differing perspectives across occupational sectors. Private sector employees and the unemployed show stronger support for increased government funding for health insurance schemes, potentially due to differing access to employer-based health coverage. This suggests that tailored policies targeting specific occupational groups are needed.

SUGGESTIONS

To effectively examine the impact of health insurance schemes on healthcare disparities in Asian countries, it is essential to undertake a comparative analysis of different health insurance models across the region. This approach would enable the identification of how various models of health insurance influence both access to and the quality of healthcare services, especially among diverse population groups. Given the varying levels of healthcare access across urban, rural and semi-urban areas, as well as across different age, gender and occupational groups, this study should investigate the disparities in coverage within these sectors. The data on how rural populations, in particular, appear to benefit more from health insurance schemes compared to urban areas suggests that there may be regional differences in how insurance models are implemented and perceived. Understanding these differences will provide key insights into the relationship between the geographical distribution of populations and their access to health insurance benefits.

In addition, this study should explore the correlation between insurance coverage and health outcomes, particularly how the presence or absence of health insurance impacts the quality of healthcare that individuals receive, especially in rural and low-income populations. Given that a significant proportion of respondents, particularly in the private sector, view administrative costs as the primary barrier to effective health insurance, understanding the systemic challenges within these models will be crucial. The research should also assess how these costs can be reduced to ensure that healthcare services remain affordable and accessible to underserved communities. Furthermore, the data indicating that certain barriers, such as low internet penetration, may specifically affect older populations (46-55 years and above) could be important in tailoring policies to meet the needs of different age groups.

Equally important is the examination of government policies, particularly in areas such as funding, regulation and the provision of resources. As the data shows, there is broad support for increased government involvement, especially in rural areas, with a significant portion of both males and females across various regions advocating for more funding for health insurance schemes. This suggests a general public consensus on the need for more robust government intervention. Evaluating the effectiveness of such policies, including whether they address the unique needs of rural and urban populations differently, will be vital in shaping future health insurance frameworks. Additionally, the focus on creating healthcare apps and promoting medical research, as seen in responses, reveals an emerging need for technology to be integrated into healthcare policy, although it remains underutilized. This insight could guide future initiatives that integrate digital solutions with traditional healthcare systems to enhance accessibility and efficiency.

Data should be drawn from a variety of sources to provide a comprehensive view of how health insurance schemes are performing across different contexts. Government reports, national health surveys, and case studies from various Asian countries can be used to evaluate both the successes and limitations of existing health insurance models. This will allow policymakers to identify gaps in coverage, assess the effectiveness of health outcomes and refine policies to better target underserved populations.

In conclusion, a policy-driven study of health insurance schemes in Asian countries must focus on the geographical, demographic and socioeconomic factors that influence healthcare disparities. By analyzing the data on barriers to healthcare access, government roles and public perceptions of health insurance, this research can provide valuable recommendations for designing more inclusive health insurance frameworks. Such policies would not only address the current gaps but also ensure that equitable healthcare access is prioritized, particularly in regions with higher levels of poverty and fewer healthcare resources.

Limitation

As with any exploratory study, the results are subject to limitations, including the use of a convenient sampling method and the potential variability in the quality of data across different regions. Despite these limitations, the study provides valuable insights into the role of health insurance in reducing healthcare disparities.

CONCLUSION

This empirical study underscores the critical role of health insurance schemes in shaping healthcare disparities across Asian countries. It reveals that while health insurance coverage can significantly improve access to and quality of healthcare, particularly for marginalized populations, the extent of these benefits varies widely depending on the specific design and implementation of insurance policies. The findings indicate that a one-size-fits-all approach to health insurance may not be sufficient to bridge the healthcare gaps experienced by diverse populations, as seen in the varied perceptions of government involvement and support across demographic groups, regions and occupational statuses (Figures 14, 16, 23, 24). For instance, urban populations tend to place higher value on government regulation and funding, while rural populations are more likely to emphasize the need for increased access to healthcare resources. This suggests that health insurance models must be tailored to meet the unique needs of different geographical and socioeconomic groups.

The study also highlights those local contextual factors-such as income levels, healthcare infrastructure and cultural attitudes toward health-play a pivotal role in determining the effectiveness of health insurance schemes. The varying support for increased funding and policy changes across different age groups (Fig. 14) and occupational statuses (Fig. 17) reflects the differing priorities and healthcare challenges faced by these groups. Policymakers must, therefore, take these factors into account when designing and implementing health insurance schemes. A more inclusive, adaptable and equitable model of health insurance could significantly reduce existing disparities in healthcare access and outcomes across the region.

While some insurance models are successful in promoting equity and improving healthcare access, others may fail to adequately address the needs of the most disadvantaged populations, as reflected in the lower levels of support for insurance-related policies among rural or semi-urban residents (Figsure 13, 16). These findings suggest that while progress has been made in extending health insurance coverage to underserved populations, considerable gaps remain in the effectiveness of these policies.

Policymakers are encouraged to use these insights to refine existing schemes and develop strategies that bridge gaps in coverage and access, especially in rural and semi-urban areas. The findings point to the importance of government involvement in funding and regulating health insurance, as well as the need for more targeted interventions to address specific healthcare needs in different communities. By adopting a more flexible, locally tailored approach to health insurance, policymakers can ensure that insurance schemes contribute to achieving more equitable healthcare outcomes across the region.

In conclusion, this study affirms that health insurance schemes are essential tools for mitigating healthcare disparities in Asian countries. However, their impact is influenced by a range of factors, including the design, implementation and local contexts in which they are deployed. For health insurance to effectively reduce healthcare inequalities, it must be carefully designed to respond to the unique challenges and needs of each population group, ensuring that the most vulnerable are not left behind.

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