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JUMLAH ANGGOTA KELUARGA DAN KEPATUHAN PEMBAYARAN PREMI ASURANSI KESEHATAN: STUDI PADA PEKERJA BUKAN PENERIMA UPAH DI KOTA SAMARINDA

(Family Size And Health Insurance Premium Payment Compliance: A Study Of Non-Wage Workers In Samarinda City)

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Abstract

The irregular income patterns and financial vulnerabilities of non-wage worker (PBPU) participants in Indonesia's National Health Insurance (JKN) program pose challenges to premium payment compliance. As of September 2023, only 40.3% of Samarinda City's 348,434 PBPU participants actively paid premiums, highlighting the issue. This study analyzed the association between family size and premium payment compliance among 76,773 PBPU families in Samarinda using a retrospective cross-sectional design and chi-square tests. Results revealed a significant relationship between larger families and arrears (p-value = 0.000). The findings emphasize the need for targeted interventions, such as tiered payment schemes for larger families, flexible payment options, and financial support mechanisms to enhance compliance. Future research should explore additional socioeconomic factors across regions to develop more comprehensive solutions for sustaining the JKN program.

Keywords: *National Health Insurance, Non-Wage Workers, Registered Family, Premium Payment.*

Abstrak

Pola pendapatan yang tidak teratur dan kerentanan finansial peserta pekerja bukan penerima upah (PBPU) dalam program Jaminan Kesehatan Nasional (JKN) di Indonesia menjadi tantangan dalam kepatuhan pembayaran premi. Hingga September 2023, hanya 40,3% dari 348.434 peserta PBPU di Kota Samarinda yang aktif membayar premi, menunjukkan adanya permasalahan ini. Penelitian ini menganalisis hubungan antara jumlah anggota keluarga dan kepatuhan pembayaran premi di antara 76.773 keluarga PBPU di Samarinda dengan menggunakan desain potong lintang retrospektif dan uji chi-square. Hasil penelitian menunjukkan adanya hubungan signifikan antara keluarga berukuran besar dan tunggakan pembayaran premi (nilai p = 0,000). Temuan ini menegaskan perlunya intervensi kebijakan yang terarah, seperti skema pembayaran bertingkat untuk keluarga besar, opsi pembayaran yang fleksibel, dan mekanisme dukungan finansial untuk meningkatkan kepatuhan. Penelitian selanjutnya disarankan untuk mengeksplorasi faktor sosial ekonomi lainnya di berbagai wilayah guna mengembangkan solusi yang lebih komprehensif untuk keberlanjutan program JKN.

Kata Kunci: *Jaminan Kesehatan Nasional, Pekerja Bukan Penerima Upah, Keluarga Terdaftar, Pembayaran Iuran.*

1. INTRODUCTION

The Indonesian government enacted Law No. 40 of 2004 concerning the National Social Security System (SJSN) to provide broad health service coverage and protect citizens from financial risks due to health service costs. The implementation of SJSN is managed by the Social Security Administering Body (BPJS) based on Law No. 24 of 2011, which consists of BPJS Kesehatan and BPJS Ketenagakerjaan.

BPJS Kesehatan is responsible for managing the National Health Insurance Program (JKN), which was launched on January 1, 2014 to ensure access to quality health services for all citizens. The main function of BPJS Kesehatan is to collect premiums from participants and employers to fund the JKN program, thereby easing the financial burden of public health costs (Qahar et al., 2024).

BPJS Kesehatan plays an important role in supporting universal health services in Indonesia through the JKN program. This program has succeeded in expanding the scope of health services and encouraging the use of more affordable generic drugs (Daryanto & Daryanto, 2019). By September 2023, more than 96% of Indonesians have registered as JKN participants. However, the implementation of this program faces various challenges, especially in terms of law, administration, and management of premium payments in several regions (Halik & Hamzah, 2019).

The sustainability of the National Health Insurance (JKN) program is highly dependent on the consistency of contribution payments, especially from Non-Wage Worker (PBPU) participants. PBPU participants make important contributions through monthly contributions to maintain their access to health services (Dewan Jaminan Sosial Nasional, 2023). However, the challenge of ensuring timely payment remains an obstacle, especially for individuals with limited financial resources. Delays or inability to pay contributions not only endanger their access to health benefits but also burden the financial stability of the JKN program as a whole. Therefore, a balanced approach is needed in collecting contributions to ensure that the financial burden is not excessive for PBPU participants, while maintaining the sustainability of the program (Sharma et al., 2021).

As of September 2023, BPJS Kesehatan data shows that the number of registered participants in the JKN program nationally has reached 262,769,113 people (96.94% of the population). In East Kalimantan Province, JKN coverage is even higher, namely 4,169,653 participants (109.93% of the population, including participants from outside the region). In Samarinda, the provincial capital, JKN coverage was recorded at 1,035,982 participants or 116.82% of the city's population (Dewan Jaminan Sosial Nasional, 2023).

Despite the high JKN coverage, the PBPU segment in Samarinda faces significant challenges. Of the 348,434 registered PBPU participants, only 140,486 (40.3%) are actively paying their contributions consistently, while 207,948 participants (59.7%) are in arrears. This high percentage of inactive participants could jeopardize the sustainability of the JKN program in Samarinda, affecting access to health services and the financial stability of the program (Dewan Jaminan Sosial Nasional, 2023).

One of the main factors affecting the sustainability of the JKN program is participant compliance in paying monthly contributions, especially from the Non-Wage Worker (PBPU) segment. Among the various influencing factors, the number of registered family members is an important aspect. Large families often face higher financial burdens and more complex health service needs, which can lead to delays or non-compliance in contribution payments (Murniasih et al., 2022).

However, research findings on this relationship are still inconsistend. Murniasih et al. (2022) reported a positive correlation between the number of family members and late payments, while Risdayanti (2021) found no significant relationship. This difference may be due to variations in family financial strategies or differences in income levels (Risdayanti & Batara, 2021). Therefore, further research is needed to understand these dynamics, especially in a local context such as Samarinda, in order to support more effective policies.

A study by Dartanto et al. (2021) found that income level and financial literacy significantly influenced the compliance of informal sector workers in paying JKN premiums. This finding suggests that socio-economic factors, such as income stability and financial management, can mediate the effect of the number of family members on payment behavior. In addition, a study by Sunjaya et al. (2022) confirmed that income stability and awareness of health insurance benefits are the main determinants of compliance, adding a complex dimension to the number of family members variable.

These mixed results suggest the need for further research to understand the specific role of family size in contribution compliance, especially in areas such as Samarinda, which

have unique socio-economic conditions. Such research is important to inform more effective policies to support the sustainability of the JKN program.

The distinct results of previous studies, combined with Samarinda's unique demographic and economic characteristics, highlight the need to examine the relationship between family size and premium payment compliance. As the capital city of East Kalimantan Province, which achieved the third-highest economic growth rate in Indonesia at 6.22% in 2023 (Badan Pusat Statistik Provinsi Kalimantan Timur, 2024), Samarinda demonstrates particularly strong economic performance with an 8.62% growth rate - surpassing neighboring cities Balikpapan (6.49%) and Bontang (4.16%) (Badan Pusat Statistik Kota Samarinda, 2024). Despite this robust economic growth, Samarinda's PBPU segment faces significant challenges. This contrast between economic growth and PBPU payment compliance, combined with the city's diverse economic landscape ranging from small business owners to informal workers, makes Samarinda an ideal setting to investigate how family size impacts payment behavior patterns. This study aims to resolve conflicting findings by offering evidence-based recommendations for BPJS Kesehatan, focusing on premium adjustments, payment flexibility, and targeted financial assistance, ultimately contributing to more sustainable and adaptable health insurance policies for similar urban areas in Indonesia.

The primary objective of this research is to analyze the correlation between family size and premium payment compliance among PBPU participants in Samarinda in 2023. As the first comprehensive study in an urban Indonesian context with high informal sector employment, it contributes to the literature and informs JKN program management. The findings will support evidence-based reforms in premium structures and payment mechanisms, promoting equitable and accessible schemes tailored to family size. The methodology is replicable in other cities with similar socioeconomic profiles, offering practical insights for targeted interventions such as family-size-based premiums, flexible payment schedules, and financial literacy programs, ultimately enhancing JKN's financial sustainability and healthcare access for larger families.

2. METHOD

This study employed a retrospective design using secondary data from BPJS Kesehatan, which offered several advantages including cost-effectiveness, time efficiency, and the ability to analyze comprehensive historical data spanning multiple years. This design was particularly suitable for examining long-term payment patterns and their relationship with family size, while minimizing potential recall bias that might occur in prospective studies.

The study population comprised all PBPU participants registered in Samarinda City, totaling 76,773 families, with data collected in October 2023. The inclusion criteria encompassed all PBPU participants regardless of their payment status, while excluding participants who had changed their membership status during the study period or had incomplete family member registration data. This comprehensive inclusion approach ensured a complete representation of payment behaviors across different family sizes.

A total sampling method was employed to analyze the entire population of 76,773 PBPU families, eliminating potential selection bias and ensuring comprehensive representation of all demographic groups. Cases with missing or inconsistent data (approximately 2% of the initial dataset) were excluded after thorough verification with BPJS Kesehatan's database. This approach maintained data integrity while maximizing the statistical power of the analysis.

Data collection involved a systematic extraction process from BPJS Kesehatan's integrated information system using standardized query protocols. The extracted data underwent rigorous cleaning and verification procedures, including removal of duplicate entries, standardization of family member counts, and validation of payment status records. All variables were categorized using SPSS syntax files to ensure consistent classification: family size was grouped into eleven categories (1-12 members), and payment status was categorized as either current or in arrears (1-24 months).

Data analysis was carried out in two stages. The first stage involved univariate analysis to examine the distribution of registered family members and premium payment statuses. The second stage utilized bivariate analysis with a chi-square test at a 5% significance level ($\alpha = 0.05$) to determine whether a statistically significant relationship existed between registered family members and payment status.

All data were anonymized during the extraction process, with personal identifiers replaced by unique study codes. Data security was maintained through encrypted storage and restricted access protocols. The research team signed confidentiality agreements with BPJS

Kesehatan, ensuring compliance with data protection regulations while maintaining participant privacy throughout the analysis and reporting phases.

3. RESULTS AND DISCUSSION

3.1 Results

This section presents the results of both univariate and bivariate analyses conducted to investigate the relationship between the number of registered family members and the premium payment status of PBPU participants. The analysis begins by describing the distribution of family members registered under the JKN program, followed by an exploration of the distribution of premium payment statuses. Finally, a bivariate analysis is conducted to determine the statistical relationship between registered family members and premium payment compliance using a chi-square test.

Univariate Analysis

Table 1: Distribution of the number of registered family members

Registered Family Members	Total	Percentage (%)
1	27,094	35.34
2	15,761	20.56
3	14,671	19.13
4	12,171	15.87
5	5,172	6.75
6	1,404	1.83
7	309	0.40
8	62	0.08
9	23	0.03
10	5	0.01
12	1	0.00
Total	76,673	100.00

Based on the data presented in Table 1, the distribution of registered family members among PBPU participants exhibits significant variation. The largest proportion of participants, comprising 27,094 families (35.34%), consists of households with only one registered family member. In contrast, the smallest proportion is observed in families with 12 registered members, representing just 1 family (0.001%). This variability highlights the differing household compositions among participants, which may have implications for premium payment compliance.

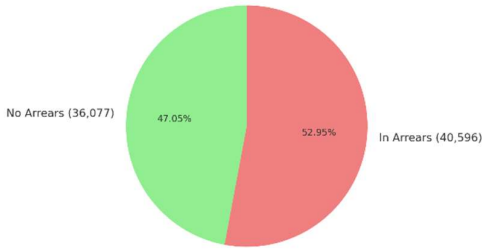

Figure 1. Proportion of No Arrears vs In Arrears

Based on the chart, the data reveals that 47.05% of families (36,077 families) are up-to-date with their premium payments (No Arrears), whereas 52.95% of families (40,596 families) are in arrears. This distribution underscores the challenge faced by a significant portion of participants in maintaining timely payments. The high percentage of compliance suggests a reasonable level of awareness and financial stability among many families. However, the substantial proportion of families in arrears highlights ongoing financial constraints, particularly among larger households, as identified in earlier analyses. This trend raises concerns about the sustainability of the JKN program, given that consistent premium payments are crucial for its financial health. The findings point to the need for targeted interventions, including flexible payment plans and financial assistance programs, to support families struggling to meet their premium obligations. These measures are essential to enhance compliance rates and ensure continued access to health services for all participants.

Table 2: Distribution of Family Premium Payment Arrears

Duration of Arrears (Months)	Number of Registered Family Members	Percentage (%)
1	4,372	10.77
2	1,916	4.72
3	1,351	3.33
4	1,096	2.70
5	784	1.93
6	687	1.69
7	750	1.85

Duration of Arrears (Months)	Number of Registered Family Members	Percentage (%)
8	639	1.57
9	658	1.62
10	541	1.33
11	602	1.48
12	589	1.45
13	610	1.50
14	587	1.45
15	492	1.21
16	424	1.04
17	352	0.87
18	438	1.08
19	395	0.97
20	465	1.15
21	551	1.36
22	364	0.90
23	292	0.72
24	21,641	53.31
Total	40,596	

Table 2 illustrates the detailed pattern of premium payment arrears among PBPU families in Samarinda City. The data categorizes payment delays from 1 to 24 months, providing insights into the varying durations of payment delinquency among the study population. This comprehensive breakdown helps identify patterns in payment behavior and highlights critical points where intervention may be most effective.

In (1-6 months) demonstrate a declining trend, starting with 4,372 families (10.77%) at one month and decreasing to 687 families (1.69%) at six months. Medium-term arrears (7-18 months) show a relatively stable pattern, with monthly percentages fluctuating between 0.87% and 1.85%, suggesting a consistent group of families facing ongoing payment challenges. This middle range accounts for approximately 7,000 families who struggle with maintaining regular premium payments.

The most significant finding is the substantial spike particularly at the 24-month mark, where 21,641 families (53.31%) are in default. This dramatic increase from the 23-month category (292 families, 0.72%) to the 24-month category indicates a critical threshold where payment recovery becomes particularly challenging. The concentration of cases at 24 months suggests that once families fall significantly behind in payments, they face considerable difficulties in returning to regular payment status.

Bivariate Analysis

Table 3: Results of Bivariate Variable Analysis

Variable		Payment Status		Total	*p*-Value
		In Arrears	No Arrears		
Registered Family Members	1	15,658	11,436	27,094	0.000
		57.80%	42.20%	100.00%	
	2	78,54	79,07	15,761	
		49.80%	50.20%	100.00%	
	3	7,241	7,430	14,671	
		49.40%	50.60%	100.00%	
	4	6,168	6,003	12,171	
		50.70%	49.30%	100.00%	
	5	2,659	2,513	5,172	
		51.40%	48.60%	100.00%	
	6	764	640	1,404	
		54.40%	45.60%	100.00%	
	7	192	117	309	
		62.10%	37.90%	100.00%	
	8	38	24	62	
		61.30%	38.70%	100.00%	
	9	18	5	23	
		78.30%	21.70%	100.00%	
	10	4	1	5	
		80.00%	20.00%	100.00%	
	12	0	1	1	
		0.00%	100.00%	100.00%	

Based on the results presented in Table 3, a significant relationship is observed between the number of registered family members and the premium payment status of non-wage worker participants (PBPU). The chi-square test yields a p-value of 0.000, indicating a statistically significant association at the 0.05 level. Families with fewer members, such as those with one registered member, show 57.80% in arrears, while 42.20% have no arrears. As the number of family members increases, the percentage of families in arrears generally rises.

For instance, among families with nine registered members, 78.30% are in arrears. This trend demonstrates that larger family sizes are correlated with higher rates of non-payment, likely due to increased financial burdens. The results emphasize that family size is a crucial factor affecting premium payment compliance, underscoring the need for targeted interventions to alleviate financial strain on larger households to enhance compliance and sustain the financial health of the JKN program.

3.2 Discussion

In this study, statistical analysis revealed a significant relationship between the number of registered family members and PBPU participants' premium payment status in Samarinda City (p-value = 0.000). The data shows distinct patterns across family sizes, with larger families (7 or more members) demonstrating higher arrears rates (62.1-80.0%) compared to smaller families of 1-3 members (49.4-57.8%). Among the study population of 76,773 families, 35.34% were single-member households with a median monthly income of Rp 3.5 million, while 52.95% of all participants experienced payment delays ranging from 1 to 24 months.

These findings can be understood through established theoretical frameworks. Todaro's economic theory, as cited in Yanti & Murtala (2019), explains how larger families face

increased consumption expenditure, creating tension between meeting daily necessities and healthcare obligations. This theoretical perspective is particularly relevant in Samarinda's context, where many PBPU participants work in the informal sector with irregular income patterns. Additionally, the financial capability model proposed by Dartanto et al. (2021) suggests that financial literacy and income stability significantly influence premium payment behavior, helping explain why larger families, who often face more complex financial management challenges, show higher arrears rates.

Our findings support previous research, including studies by Nadi et al. (2021) and Sudarman et al. (2021), showing a similar relationship between family size and payment compliance. Larger families tend to have higher arrears rates, likely due to increased healthcare demands, as also observed in Sari's (2021) study. In our population, families with more members visited healthcare facilities more often, reflecting higher insurance awareness but also facing greater financial strain. The economic context of Samarinda, with many PBPU participants in the informal sector and irregular incomes, contributes to challenges in premium compliance, evidenced by 28.23% of participants having 24 months of arrears. This relationship highlights broader socioeconomic issues, where larger families struggle to balance healthcare needs with limited financial resources.

These results build upon the themes introduced earlier regarding income levels, financial literacy, and healthcare awareness. They suggest that effective interventions must address both economic and educational aspects of premium payment compliance. The high proportion of payment delays among larger families indicates a need for targeted support systems that consider family size in premium structure design while promoting financial literacy and healthcare awareness among PBPU participants.

The implications of this study support the need to reform Indonesia's health insurance premium structure, currently using a flat-rate system that disadvantages larger families, as shown by the 62.1-80.0% arrears rate among families with 7+ members. The family dependency requirements for the Non-Wage Worker (PBPU) segment should be aligned with those of the Wage Worker (PPU) segment. One policy that could be adopted is allowing children over 21 years old or non-nuclear family members to be registered as independent participants who pay premiums separately from their families. Through this approach, family dependencies can be better managed without burdening the entire family (Presidential Regulation No. 82 of 2018). This approach is supported by Muttaqien et al.'s (2021) findings, which revealed that households with larger family sizes show higher willingness to pay health insurance premiums but simultaneously face greater risks of payment inability. By separating premium payment obligations within families based on specific criteria, this policy could potentially reduce the financial burden on large households, improve their ability to meet payment obligations, and strengthen the overall sustainability of the JKN program.

Furthermore, Presidential Regulation No. 64 of 2020 provides an alternative solution through the transfer of family members who do not meet poverty criteria to the Non-Wage Worker (PBPU) and Non-Workers (BP) financed by the local government. This transfer can reduce family premium burdens, especially for large families where not all members qualify for full subsidies. However, implementing this policy requires local government commitment in establishing clear requirements and providing adequate budgets. With proper regulatory support and implementation, these measures are expected to enhance the efficiency and effectiveness of the JKN program overall.

However, there are limitations to this study. The focus on a single region, Samarinda, means that the findings may not be fully generalizable to other areas with different economic or demographic characteristics. Future research should expand the scope to include multiple regions and explore additional factors that may influence payment compliance, such as income level, employment status, and access to healthcare services. By understanding these broader dynamics, more comprehensive policy interventions can be developed to improve compliance rates and sustain the financial health of the JKN program.

4. CONCLUSSION

Based on the results of this study, it can be concluded that there is a significant relationship between the number of registered family members and the payment status of PBPU participants in Samarinda City in 2023. This finding highlights the financial pressures faced by larger families, which impacts their ability to consistently meet BPJS premium obligations. The results align with previous studies, demonstrating that family size is an important

factor in determining healthcare expenditure and payment behavior.

The significance of this study lies in its potential to inform policymakers on how to better structure premium payments and support systems, particularly for larger households that may struggle with compliance. Future research should expand to other regions and incorporate additional factors, such as income level and access to healthcare, to provide a more comprehensive understanding of premium payment behavior and to develop effective interventions.

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REFERENCES

Badan Pusat Statistik Kota Samarinda. (2024). Produk Domestik Regional Bruto Kota Samarinda Menurut Lapangan Usaha 2019–2023 [Gross Regional Domestic Product of Samarinda City by Business Fields 2019–2023]. Retrieved from https://samarindakota.bps.go.id/id/publication/2024/04/04/204f2af1a8f3e4ce02b170d7/produk-domestik-regional-bruto-kota-samarinda-menurut-lapangan-usaha-2019----2023.html

Badan Pusat Statistik Provinsi Kalimantan Timur. (2024). Ekonomi Provinsi Kalimantan Timur Tahun 2023 tumbuh sebesar 6,22 persen [The economy of East Kalimantan Province grew by 6.22 percent in 2023]. Retrieved from https://kaltim.bps.go.id/id/pressrelease/2024/02/05/1120/ekonomi-provinsi-kalimantan-timur-tahun-2023-tumbuh-sebesar-6-22-persen.html

Dartanto, T., Rezki, J. F., Pramono, W., Siregar, C. H., & Suryahadi, A. (2021). The role of income and financial literacy in health insurance payment compliance: A case study of informal workers in Indonesia. Journal of Health Economics, 79, 102496. https://doi.org/10.1016/j.jhealeco.2021.102496

Daryanto, C., & Daryanto, W. M. (2019). Financial performance analysis and evaluation of pharmaceutical companies in Indonesia. International Journal of Innovation, Creativity and Change, 6(3), 207–224.

Dewan Jaminan Sosial Nasional. (2023). Sistem monitoring terpadu [Integrated monitoring system].

Halik, A., & Hamzah, R. (2019). Legal protection for participants of the health social security organising agency. International Journal of Innovation, Creativity and Change, 10(5), 76–91.

Murniasih, M., Suparman, R., Mamlukah, M., & Febriani, E. (2022). Faktor-Faktor Yang Berhubungan Dengan Kepatuhan Pembayaran Iuran BPJS Kesehatan Pada Peserta Mandiri di Puskesmas Kertasemaya Kabupaten Indramayu Tahun 2022 [Factors related to BPJS Kesehatan contribution compliance among independent participants at Kertasemaya Health Center, Indramayu Regency, 2022]. *Journal of Public Health Innovation,* 3(01). https://doi.org/10.34305/jphi.v3i01.604

Muttaqien, M., Setiyaningsih, H., Aristianti, V., Coleman, H. L. S., Hidayat, M. S., Dhanalvin, E., ... & Kok, M. O. (2021). Why did informal sector workers stop paying for health insurance in Indonesia? Exploring enrollees' ability and willingness to pay. *PLoS One*, 16(6), e0252708.

Nadi, K. A., Suhadi, S., & Zainuddin, A. (2021). Hubungan Jumlah Anggota Keluarga, Kemampuan Membayar Iuran, dan Keteraturan Membayar Iuran Peserta BPJS Mandiri di Kecamatan Landono Kabupaten Konawe Selatan Tahun 2021 [Correlation between family size, ability to pay contributions, and regularity of contribution payment among BPJS Mandiri participants in Landono Sub-district, South Konawe Regency, 2021]. *Jurnal Administrasi Kebijakan Kesehatan Universitas Halu Oleo*, 2(2). https://doi.org/10.37887/jakk.v2i2.38065

Pemerintah Indonesia. (2004). Undang-Undang Republik Indonesia Nomor 40 tentang Sistem Jaminan Sosial Nasional [Law of the Republic of Indonesia Number 40 on National Social Security System]. Sekretariat Negara Republik Indonesia.

Pemerintah Indonesia. (2011). Undang-Undang Republik Indonesia Nomor 24 Tahun 2011 tentang Badan Penyelenggara Jaminan Sosial [Law of the Republic of Indonesia Number 24 of 2011 on Social Security Administrative Agency]. Sekretariat Negara Republik Indonesia.

Pemerintah Indonesia. (2018). Peraturan Presiden Republik Indonesia Nomor 82

Tahun 2018 tentang Jaminan Kesehatan [Presidential Regulation of the Republic of Indonesia Number 82 of 2018 on Health Insurance]. Retrieved from https://peraturan.bpk.go.id/Details/94711/perpres-no-82-tahun-2018

Pemerintah Indonesia. (2020). Peraturan Presiden Republik Indonesia Nomor 64 Tahun 2020 tentang Perubahan Kedua atas Peraturan Presiden Nomor 82 Tahun 2018 tentang Jaminan Kesehatan [Presidential Regulation of the Republic of Indonesia Number 64 of 2020 on the Second Amendment to Presidential Regulation Number 82 of 2018 on Health Insurance]. Retrieved from https://peraturan.bpk.go.id/Details/136650/perpres-no-64-tahun-2020

Qahar, M. Y. A., Ruldeviyani, Y., Mukharomah, U. N., Fidyawan, M. A., & Putra, R. (2024). Factor analysis influencing Mobile JKN user experience using sentiment analysis. IAES International Journal of Artificial Intelligence, 13(2), 1782–1793. https://doi.org/10.11591/ijai.v13.i2.pp1782-1793

Risdayanti, & Batara, A. S. (2021). Faktor Yang Berhubungan Dengan Penunggakan Pembayaran Iuran BPJS Kesehatan Mandiri Di Kecamatan Tallo Kota Makassar [Factors related to arrears in BPJS Kesehatan contribution payment among independent participants in Tallo Sub-district, Makassar City]. *Window of Public Health Journal,* 2(3), 1306–1317. https://doi.org/10.33096/woph.v2i3.542

Sharma, N., Devalkar, S. K., & Sohoni, M. G. (2021). Payment for Results: Funding Non-Profit Operations. Production and Operations Management, 30(6), 1686–1702. https://doi.org/10.1111/poms.13336

Sunjaya, A. P., Smith, J. A., & Sutanto, S. (2022). Income stability and health insurance compliance: Evidence from Indonesian households. Asian Economic Journal, 36(2), 132–148. https://doi.org/10.1111/asej.12221

Yanti, Z., & Murtala, M. (2019). Pengaruh Pendapatan, Jumlah Anggota Keluarga dan Tingkat Pendidikan Terhadap Konsumsi Rumah Tangga di Kecamatan Muara Dua [The influence of income, family size, and education level on household consumption in Muara Dua Sub-district]. *Jurnal Ekonomika Indonesia,* 8(2), 72. https://doi.org/10.29103/ekonomika.v8i2.972