



SIGN JOURNAL OF PUBLIC HEALTH

[E-ISSN: 2962-3723] [P-ISSN: 2962-4347]

<https://jurnal.penerbitsign.com/index.php/sjph/article/view/v4n1-003>

Vol. 4 Issue 1: January – June 2025

Published Online: June 25, 2025

Article Title

Determinants of Low Utilization of Integrated Health Posts (Posyandu) in Tumbang Samba: The Role of Age, Educational Level, Knowledge, and Motivation

Author(s)

Sri Susanti*

Puskesmas Tumbang Samba, Indonesia // hjsrisusanti@gmail.com

**Corresponding Author*

Titik Istiningsih

Poltekkes Kemenkes Palangkaraya, Indonesia // titik.istiningsih@polkesraya.ac.id

How to cite:

Susanti, S., & Istiningsih, T. (2025). Determinants of Low Utilization of Integrated Health Posts (Posyandu) in Tumbang Samba: The Role of Age, Educational Level, Knowledge, and Motivation. *SIGN Journal of Public Health*, 4(1), 26-39. <https://doi.org/10.37276/sjph.v4i1.678>



This work is licensed under a [CC BY-4.0 License](https://creativecommons.org/licenses/by/4.0/)

ABSTRACT

The health monitoring coverage for children under five in Katingan Regency remains low at 45.6%, falling significantly below the national strategic target. This situation necessitates an epidemiological evaluation to identify the underlying determinants of this phenomenon. This study aimed to quantitatively analyze the factors associated with the utilization of Integrated Posyandu by mothers of under-five children within the catchment area of Tumbang Samba Public Health Center. An analytic observational study with a cross-sectional design was conducted among 108 mothers of children under five, selected through purposive and incidental sampling. Data were collected using structured questionnaires and Maternal and Child Health (MCH) handbooks, and bivariate analysis was performed using the nonparametric Chi-Square test ($\alpha = 0.05$). Statistical results demonstrated that consistent utilization was significantly associated with maternal reproductive age ($p = 0.037$), a high level of knowledge ($p < 0.001$), and strong internal motivation ($p < 0.001$). Mothers aged 20–35 years, those with good knowledge (83.33% consistent attendance), and those with high motivation (80.00% consistent attendance) accounted for the majority of Posyandu utilization. Conversely, no significant association was found regarding formal educational level; although the population was dominated by those with basic education (89.81%), this factor did not significantly influence the probability of utilization ($p = 0.398$). In conclusion, the utilization of primary healthcare services in rural areas is primarily driven by cognitive understanding and psychological motivation rather than formal educational attainment. Therefore, policy interventions should transition toward behavioral engineering approaches, in which community health workers (CHWs) are actively empowered as health educators to enhance specific literacy and sustain motivation among the target population.

Keywords: Knowledge; Mothers of Under-Five Children; Motivation; Posyandu Utilization.

INTRODUCTION

Monitoring the growth and development of children under five is a critical preventive measure to achieve optimal public health status. The Integrated Health Post (*Posyandu*) serves as a primary healthcare facility that spearheads early detection of malnutrition and developmental delays and ensures completion of basic immunization requirements (Pramita et al., 2023). The under-five period is a golden age for growth and a phase highly vulnerable to diseases, necessitating continuous and targeted health monitoring (Suharto et al., 2021). Therefore, the regular attendance of mothers at *Posyandu* is not merely a fulfillment of administrative obligations but a primary indicator of the success of maternal and child health programs within the community.

Despite *Posyandu*'s essential role, fluctuations in community interest and low attendance rates remain significant health issues that require serious attention. Based on 2022 national monitoring data, the percentage of weighed under-five children has actually surpassed the Ministry of Health's Strategic Plan (*Renstra*) target of 75%, reaching 78.3% (Kemenkes, 2023). However, regional data reveal a stark disparity. In Central Kalimantan Province, the coverage of weighed under-five children reached only 48.8%. A sharper gap occurred in Katingan Regency, where child monitoring coverage plummeted to 45.6%, far below the government's minimum target (Dinkes Kalteng, 2024). This condition provides strong evidence of barriers within the community in

utilizing nearby health facilities, which could ultimately trigger an increase in child morbidity rates in the future.

These low attendance rates cannot be viewed simply as a matter of negligence but rather as a result of a combination of interrelated social and demographic factors. A mother's decision to consciously and actively bring her child to *Posyandu* is heavily influenced by her environmental and personal conditions (Andri et al., 2023). The factors shaping these healthy behaviors vary, ranging from age and educational background to the mother's ability to process health information and the strength of her internal motivation (Imanuddin et al., 2021). Understanding these factors is crucial because each region possesses distinct cultural habits or characteristics. These differences determine the level of community compliance with medical advice, which ultimately affects the success of programs initiated by Public Health Centers (PHC) (Munjayatun et al., 2022).

To identify the root causes of low *Posyandu* utilization, numerous previous studies have attempted to measure the driving factors. Various studies have demonstrated a strong correlation between a mother's level of knowledge and her consistency in bringing her child to *Posyandu* (Bora et al., 2023; Rahendra & Dwihestie, 2023; Syafitri et al., 2023). Similar findings have been observed regarding motivation, which is consistently assessed as a primary determinant of maternal use of disease prevention services (Dewi & Rozi, 2021; Aurelia et al., 2023; Funna et al., 2023). Conclusions from various literatures establish that the ability to absorb health education and a strong psychological will are the main drivers of mothers' adoption of healthy behaviors (Yusdiana et al., 2023).

However, a more comprehensive review of public health research often reveals conflicting results, particularly concerning age and educational background. This suggests that the drivers of *Posyandu* attendance can vary significantly across regions, depending on their geographical conditions. Some studies suggest that high levels of formal education and specific age groups guarantee compliance with attendance requirements (Rambe & Lase, 2019; Syafnil, 2023; Widiyanti & Wahyono, 2023). Conversely, these conclusions are sharply contradicted by other findings proving that age and education do not always have a significant influence on attendance at primary health services (Andriani et al., 2024). These divergent results underscore that there is no universal formula applicable to all demographic groups.

Driven by the concerning low program achievement in Katingan Regency and the ongoing debate in previous research findings, this study presents strong novelty. This novelty lies in the selection of the research location, which focuses specifically on rural communities namely, the catchment area of Tumbang Samba PHC here attendance rates lag far behind national standards. The originality of this

study lies in re-evaluating the strength of basic factors—age, education, knowledge, and motivation—among rural populations with relatively uniform educational backgrounds. This study is specifically designed to determine whether the attendance drivers typically applicable in urban settings yield the same results or are entirely irrelevant in rural communities.

In-depth analysis of these regional community groups is expected to make a significant scientific contribution to enriching current public health knowledge, particularly regarding maternal and child health programs. From a scientific perspective, this primary field data will broaden policymakers' insights into how communities in remote areas make decisions about healthcare-seeking behavior. Furthermore, statistical verification of the most dominant factors in Tumbang Samba will address the long-standing debate regarding the extent to which age and educational attainment truly influence *Posyandu* attendance. This evidence-based field data will provide a new scientific foundation and shift program evaluation away from mere speculation.

Based on the disparities in attendance achievement, the debate in previous research findings, and the importance of problem-solving as outlined, this study is designed with one primary objective. This study aims to quantitatively analyze the factors associated with *Posyandu* utilization among mothers of under-five children within the catchment area of Tumbang Samba PHC. More specifically, this research examines the extent to which age, educational level, knowledge, and motivation relate to compliance with *Posyandu* utilization. The final results of this study are expected to provide practical benefits, including valid data for the Regional Health Office. This data is essential as a baseline for designing targeted service improvement programs to catch up with weighing targets and prevent future child morbidity risks.

METHODS

This study used an analytic observational design with a cross-sectional approach (Notoatmodjo, 2018). This methodological design was selected for its efficiency and relevance to addressing the research problem and objectives, specifically for analyzing the correlation between independent variables and the dependent variable at a single point in time. Through this approach, predisposing factors—including age, formal educational level, knowledge, and motivation—and the behavioral outcome of *Posyandu* utilization were measured simultaneously without any intervention or prospective follow-up. This analytic design was considered the most precise for objectively capturing and measuring the community's sociocultural dynamics and health behaviors within the catchment area of Tumbang Samba PHC.

The study was conducted in the catchment area of Tumbang Samba PHC, Katingan Regency, Central Kalimantan Province, with the unit of analysis being mothers of under-five children. The target population included all mothers of under-five children registered as active service recipients at Integrated Health Post (*Posyandu*) Anggrek I and Anggrek II. From this population, a representative sample of 108 respondents was selected. Sampling was conducted through a combination of purposive and incidental sampling techniques. Participants were selected based on specific inclusion criteria—such as being officially registered at the study location and residing with their children—and were recruited based on their physical presence during the scheduled *Posyandu* activities.

Data collection utilized both primary and secondary data sources to ensure measurement validity (Sugiyono, 2019). Primary data were acquired directly from respondents using a structured questionnaire that had been tested for reliability. The questionnaire was used to document age, classify educational levels, and quantify clinical knowledge scores and psychological motivation. Secondary data representing the dependent variable—attendance consistency—were extracted from Maternal and Child Health (MCH) handbooks and *Posyandu* recapitulation registers over the past year. Attendance frequency was subsequently dichotomized into consistent attendance (eight or more visits per year) and inconsistent attendance (fewer than eight visits per year).

Following the collection phase, raw data were consolidated through administrative processing, including editing, coding, and cleaning to eliminate bias caused by missing data or anomalies. Data analysis for hypothesis testing relied on univariate and bivariate analysis procedures (Dahlan, 2020). Univariate analysis was performed to describe the frequency distributions and central tendencies of proportions for each independent variable, expressed as percentages. Bivariate analysis was conducted using the nonparametric Chi-Square (X^2) test in modern statistical software. This test aimed to measure the statistical significance of the correlation between independent and dependent variables, with a significance threshold (alpha) of 0.05. An inferential conclusion of a statistically significant correlation was drawn if the resulting p-value was lower than this threshold.

RESULTS

This chapter presents the findings of the study, which used a cross-sectional design involving 108 mothers of children under five in the catchment area of Tumbang Samba PHC. The results are systematically arranged, beginning with univariate analysis to illustrate the percentage distribution of each variable. Subsequently, a bivariate analysis was performed using the nonparametric Chi-Square test. This analysis aimed to determine the significance (p-value) of the relationship between causative

factors—specifically age, formal educational level, knowledge, and motivation—and the utilization of Integrated *Posyandu* for under-five children.

Table 1. *Posyandu* Attendance among Mothers of Under-Five Children

<i>Posyandu</i> Attendance	Frequency (n)	Percentage (%)
≥ 8 times per year	46	42.59
< 8 times per year	62	57.41
Total	108	100.00

Source: Primary Data, 2024.

Table 1 presents the univariate analysis of the *Posyandu* utilization level among respondents. Based on the data, the majority of respondents (57.41%, 62 respondents) fell into the inconsistent attendance category (< 8 times per year). This figure is higher than the group who consistently attended (≥ 8 times per year), which reached only 42.59% (46 respondents).

Table 2. Distribution of Respondent Characteristics

Respondent Characteristics	Frequency (n)	Percentage (%)
Age		
20 – 35 Years	80	74.07
< 20 or > 35 Years	28	25.93
Education		
Higher Education	11	10.19
Basic Education	97	89.81
Knowledge		
Good (80 – 100%)	36	33.33
Fair (60 – 79%)	57	52.78
Poor (< 60%)	15	13.89
High		
High	40	37.04
Moderate	48	44.44
Low	20	18.52
Total	108	100.00

Source: Primary Data, 2024.

Table 2 outlines the demographic, cognitive, and psychological characteristics of the respondents. Most were within the ideal reproductive age range (20–35 years), accounting for 74.07%, and the majority had only completed basic education (89.81%). Regarding health knowledge, most respondents were in the fair category (52.78%). Meanwhile, regarding psychological drive, the largest group showed a moderate level of motivation, accounting for 44.44% of the total study subjects.

Table 3. Bivariate Analysis of the Relationship between Respondent Characteristics and *Posyandu* Attendance

Respondent Characteristics	Attendance ≥ 8 Times/Year		Attendance < 8 Times/Year		Total		p-value
	n	%	n	%	n	%	
Age							
20 – 35 Years	39	48.75	41	51.25	80	100.00	0.037
< 20 or > 35 Years	7	25.00	21	75.00	28	100.00	
Education							
Higher Education	6	54.55	5	45.45	11	100.00	0.398
Basic Education	40	41.24	57	58.76	97	100.00	
Knowledge							
Good (80 – 100%)	30	83.33	6	16.67	36	100.00	0.000
Fair (60 – 79%)	14	24.56	43	75.44	57	100.00	
Poor (< 60%)	2	13.33	13	86.67	15	100.00	
Motivation							
High	32	80.00	8	20.00	40	100.00	0.000
Moderate	12	25.00	36	75.00	48	100.00	
Low	2	10.00	18	90.00	20	100.00	
Total	46	42.59	62	57.41	108	100.00	

Source: Primary Data, 2024.

Table 3 displays the overall bivariate analysis. Regarding age, the ideal reproductive group (20 – 35 years) showed a consistent attendance rate (≥ 8 times per year) of 48.75% (39 respondents). Conversely, in the high-risk age group (< 20 or > 35 years), inconsistency significantly increased, with 75.00% of respondents attending < 8 times per year. Chi-Square statistical results yielded a p-value of 0.037 ($p < 0.05$). This shows a statistically significant relationship between reproductive maturity and the consistency with which women bring their children to *Posyandu*.

Furthermore, Table 3 illustrates the relationship between educational level and attendance consistency. In the majority group with basic education, the rate of inconsistent attendance (< 8 times per year) was relatively high at 58.76% (57 respondents). Meanwhile, in the higher education group, the ratio of consistent (54.55%) to inconsistent (45.45%) attendance was nearly balanced. The statistical test produced a p-value of 0.398 ($p > 0.05$). This indicates that there is no statistically significant relationship between formal education and consistency of child attendance at *Posyandu* in this region.

The analysis of knowledge indicates that attendance rates closely align with maternal understanding. In the group with good knowledge, attendance consistency was optimal, with 83.33% visiting ≥ 8 times per year. However, when knowledge was

at a fair level, the inconsistency rate jumped to 75.44%. This condition worsened in the poor knowledge group, where 86.67% rarely attended. Statistical tests confirmed these findings with an absolute p-value of < 0.001 ($p < 0.05$). This confirms that health knowledge is a very strong determinant of attendance stability.

Finally, the relationship between internal drive (motivation) and actual attendance at *Posyandu* is presented. Respondents with high motivation were able to translate their intentions very well, with 80.00% recorded as consistent attendees (≥ 8 times per year). This positive habit sharply declined in the moderate motivation group, where 75.00% of respondents attended < 8 times. Inconsistency peaked in the low motivation group at 90.00%. Statistical calculations reinforced this pattern with a p-value of < 0.001 ($p < 0.05$), proving that internal motivation is the primary factor driving the utilization of health facilities.

DISCUSSION

The low utilization of Integrated *Posyandu* services in Katingan Regency, previously recorded at 45.6%, can now be scientifically explained by findings within the catchment area of Tumbang Samba PHC. Quantitative data collection from 108 respondents proves that this low attendance phenomenon is not a coincidence but the result of statistically measurable drivers. Bivariate analysis provides the primary conclusion that appropriately addresses the research objectives: the stability of healthcare-seeking behavior in this rural community is significantly influenced by reproductive maturity (age), health knowledge levels, and the strength of internal motivation. Conversely, basic factors such as formal educational level do not exert a statistically significant influence. These figures reinforce public health theories suggesting that achieving health program targets relies heavily on aligning strategies with the local characteristics of the target population (Suharto et al., 2021; Andri et al., 2023).

Based on the analysis of age characteristics, distinct behavioral differences in compliance were observed. Frequency calculations indicate that the low-risk reproductive age group (20 – 35 years) exhibited a more stable attendance rate, with visits remaining consistent at 48.75%. In contrast, a sharp increase in inconsistent attendance was evident in the high-risk age group (< 20 or > 35 years), where 75.00% failed to utilize *Posyandu* services regularly. This measurable behavioral disparity was absolute, as evidenced by the Chi-Square test yielding a p-value of 0.037 ($p < 0.05$). The significance of this statistical figure indicates that age maturity is directly proportional to the ability to make sound health decisions, as the 20–35 age range represents the optimal physical and emotional phase for responding to child monitoring recommendations.

The significant relationship found in the age factor aligns closely with several previous studies that established age maturity as a crucial determinant of attendance compliance. Findings in this rural area confirm the results of [Rambe and Lase \(2019\)](#) and [Syafnil \(2023\)](#), who demonstrated that maternal age categorization significantly determines attendance percentages at *Posyandu*. However, these calculations also contradict health research published by [Andriani et al. \(2024\)](#), which reported no association between age and attendance routines. This discrepancy between studies can be explained by variation in respondent distributions, specifically in Tumbang Samba, where high-risk age groups formed an extreme minority that was almost entirely inconsistent, thereby shifting the overall direction of statistical significance.

Turning to the analysis of formal educational levels, the test results revealed findings that differ from common assumptions in public health science. Frequency data indicate a highly uniform respondent profile: 89.81% of the total sample (97 respondents) had only completed basic education. Within this majority group, the rate of inconsistent *Posyandu* attendance was remarkably high at 58.76%. Meanwhile, in the higher-education group, the ratio of consistent to inconsistent attendance was nearly balanced (54.55% vs 45.45%). This extreme data skew toward the basic education group led the statistical test to fail to detect a correlation, as evidenced by a p-value of 0.398 ($p > 0.05$). Quantitative analysis confirms that a formal educational degree cannot serve as a guarantee or determinant of child attendance routines at *Posyandu* in this region.

The absence of a statistical relationship regarding education provides an essential perspective for health promotion literature. Quantitatively, the field findings at Tumbang Samba PHC contradict the conclusions of [Widiyanti and Wahyono \(2023\)](#), whose study found that educational level increases the probability of *Posyandu* utilization. Nevertheless, the education factor's insignificance in Tumbang Samba is not a methodological error but a direct consequence of the residents' nearly uniform educational status. When a community's educational background lacks variation, statistical tools lose sensitivity in detecting behavioral differences between groups ([Munjayatun et al., 2022](#); [Nur'aini et al., 2024](#)). Therefore, higher education is an irrelevant primary benchmark for assessing community compliance in remote areas with uniform social characteristics.

In contrast to formal education, statistical analysis of health knowledge regarding children under five showed a very strong influence. Cross-tabulation data clearly demonstrate that in the group with good knowledge, attendance compliance surged drastically to 83.33%. However, as understanding dropped to fair or poor categories, the inconsistency rate immediately climbed to 75.44% and peaked at 86.67%. This statistical comparison yielded an absolute p-value of < 0.001 . This significance level

directly addresses the research objective, demonstrating that a clear understanding of the importance of immunization, weight monitoring, and *Posyandu* functions is the fundamental foundation for compliant behavioral actions.

The strength of the relationship regarding the knowledge factor is robustly supported by current public health literature. The positive, linear relationship between high health literacy and attendance consistency aligns with the findings of [Bora et al. \(2023\)](#) and [Rahendra and Dwihestie \(2023\)](#). These consistent calculations also validate the analysis of [Syafitri et al. \(2023\)](#) and [Yusdiana et al. \(2023\)](#), who agree that providing effective education can compensate for deficiencies caused by low formal educational backgrounds. The similarity of results across regions demonstrates that the uptake of accurate health information has strong power to transform passive participation into a sustainable disease-prevention routine.

In parallel to the cognitive aspect, the analysis of internal motivation also showed a strong statistical relationship. Data tabulation shows that the highly motivated group maintained an exceptional compliance rate, with 80.00% consistently weighing their children. This positive behavior declined sharply as motivation weakened; non-attendance jumped to 75.00% in the moderately motivated group and worsened to 90.00% in the low motivation group. Bivariate test results again recorded a perfect significance value of < 0.001 ($p < 0.05$). This precise statistical figure clearly proves that the decision to visit *Posyandu* does not occur spontaneously but must be driven by a strong internal desire.

Motivation as a primary determinant in this study aligns with findings from previous health behavior research. The absolute significance value is consistent with research by [Aurelia et al. \(2023\)](#) and [Funna et al. \(2023\)](#), which found significantly higher compliance probabilities in highly motivated groups than in low-motivation groups. Furthermore, these findings numerically validate the conclusions of [Dewi and Rozi \(2021\)](#), who emphasized that fluctuations in child weighing attendance are specifically controlled by the stability of personal motivation. The strong mathematical link between internal drive and actual action proves that public health programs must not rely solely on physical facility improvements but also require psychological approaches to raise community awareness ([Sartika & Fauziah, 2024](#)).

The statistical results showing strong relationships for knowledge and motivation, but not for formal education, provide new insights into health behavior in Tumbang Samba. Specifically, these figures successfully dispel the assumption that high non-attendance at *Posyandu* is merely due to a lack of high formal education. Instead, the data clarify that the primary issues are a lack of specific health information dissemination (knowledge) and a weak internal drive (motivation). The combination of these two factors elegantly forms the community behavior patterns previously

described sociologically by [Imanuddin et al. \(2021\)](#). Therefore, local government policies to catch up on *Posyandu* attendance targets in Katingan must focus on improving education and motivating the community.

In conclusion, identifying these determinants necessitates adjustments to strategies at primary health service facilities. For the potential of high motivation, sufficient knowledge, and age maturity to truly increase attendance rates, the PHC must take proactive steps. Field motivators, particularly *Posyandu* workers (kaders), must transition from mere record-keepers to health educators capable of providing continuous education and motivation ([Pramita et al., 2023](#)). Based on numerical evidence, this manuscript confirms that consistent *Posyandu* utilization is a pure cause-and-effect result determined by the balance of mature age, high health knowledge, and strong internal motivation.

CONCLUSION AND SUGGESTIONS

This chapter presents the conclusions derived from research findings aimed at addressing disparities in child health monitoring achievement in Katingan Regency. Based on the data, the coverage of child health visits in the region reached only 45.6%, indicating a significant lag behind the national strategic target of 75%. To unravel the causes of this issue within the catchment area of Tumbang Samba PHC, an assessment of 108 respondents was conducted. The primary conclusion of this study confirms that *Posyandu* utilization is predominantly determined by reproductive maturity (age), adequate health understanding, and strong internal motivation. Conversely, formal educational attainment is statistically shown not to guarantee maternal compliance with accessing these primary services.

Specifically, the statistical results demonstrate striking behavioral disparities across demographic groups. Mothers in the healthy reproductive age range (20–35 years) had the highest participation rates, with 48.75% consistently weighing their children at least 8 times per year. This figure contrasts sharply with the high-risk age group (< 20 or > 35 years), where non-attendance rates surged to 75.00%. On the other hand, although the population in this study area was dominated by those with basic education (89.81%), the analysis confirms that a limited educational background is not significantly correlated with their diligence in visiting *Posyandu*.

The most prominent finding of this research is the profound influence of knowledge and motivation. Health understanding and internal will are proven to be the primary engines driving maternal consistency in bringing children to *Posyandu*. Respondents with high knowledge levels achieved consistent attendance rates of 83.33%, while those with poor knowledge exhibited concerning high non-

compliance at 86.67%. A similar pattern was observed in psychological motivation. Highly motivated individuals maintained a routine attendance rate of 80.00%, whereas 90.00% of those with low motivation failed to adhere to the *Posyandu* schedule. These figures convincingly demonstrate that health literacy and internal drive are the fundamental keys to shaping healthy community behaviors.

Based on these conclusions, several practical recommendations and policy implications are proposed for the Katingan Regency Health Office and Tumbang Samba PHC. First, the *Posyandu* program approach must transition from a focus on physical weighing activities to health promotion programs centered on behavioral change. Local governments should specifically train *Posyandu* workers (*kader*) to transition from administrative record-keepers to active field health educators. Education and motivation should be prioritized for high-risk age groups. Given that formal educational level is not a barrier, educational materials should be designed to be as engaging and simple as possible—for instance, through infographics or direct face-to-face communication—to ensure accessibility for the general public.

In the scope of academic advancement, these findings provide new perspectives for future Public Health research. Subsequent researchers are strongly encouraged to move beyond descriptive observations of basic community characteristics. Future health research should lean toward intervention studies or field experiments. For example, researchers could test the effectiveness of intensive cadre mentoring programs or the use of localized educational media in enhancing mothers' understanding, motivation, and attendance in rural areas. Shifting toward intervention research will be instrumental in complementing quality improvement strategies for *Posyandu* services to prevent child morbidity and mortality risks more measurably and sustainably.

REFERENCES

- Andri, M., Sudirman, S., & Sam, H. (2023). Analisis Rendahnya Kunjungan Ibu yang Mempunyai Balita ke Posyandu di Kelurahan Pasangkayu Wilayah Kerja Puskesmas Pasangkayu 1 Kabupaten Mamuju Utara. *Jurnal Kolaboratif Sains*, 6(6), 544-551. <https://doi.org/10.56338/jks.v6i6.3721>
- Andriani, Y., Mastina, M., & Rahmawati, E. (2024). Faktor yang Berhubungan dengan Kunjungan Balita di Posyandu. *Lentera Perawat*, 5(1), 141-148. <https://doi.org/10.52235/lp.v5i1.301>
- Aurelia, A., Setianingsih, A., & Kurniawati, Y. (2023). Hubungan Sikap dan Motivasi dengan Perilaku Memanfaatkan Posyandu bagi Ibu yang Mempunyai Balita. *Jurnal Untuk Masyarakat Sehat (JUKMAS)*, 7(1), 1-9. <https://doi.org/10.52643/jukmas.v7i1.2611>

- Bora, M. M., Nayoan, C. R., & Ndoen, E. M. (2023). Tingkat Pendidikan, Pengetahuan dan Motivasi Ibu dengan Kunjungan Penimbangan Balita ke Posyandu di Puskesmas Manutapen Kecamatan Alak Kota Kupang Tahun 2023. *Medica Tadulako: Jurnal Ilmiah Kedokteran Fakultas Kedokteran dan Ilmu Kesehatan*, 8(2), 41-46. Retrieved from <https://jurnal.fk.untad.ac.id/index.php/mtj/article/view/1045>
- Dahlan, M. S. (2020). *Statistik untuk Kedokteran dan Kesehatan: Deskriptif, Bivariat, dan Multivariat, Dilengkapi Aplikasi Menggunakan SPSS*. Epidemiologi Indonesia.
- Dewi, Y. K., & Rozi, V. F. (2021). Hubungan Motivasi Ibu dengan Frekuensi Penimbangan Berat Badan Balita di Posyandu Wilayah Puskesmas Sumber Waras Kota Lubuk Linggau. *Injection: Nursing Journal*, 1(2), 80-92. Retrieved from <https://jurnal.stikesbhaktihusada.ac.id/index.php/injection/article/view/91>
- Dinkes Kalteng. (2024, January 12). *Profil Kesehatan Provinsi Kalimantan Tengah Tahun 2023*. Dinas Kesehatan Provinsi Kalimantan Tengah. <https://ppid.kalteng.go.id/front/dokumen/detail/500306278>
- Funna, R. U., Amin, F. A., & Aramico, B. (2023). Faktor-Faktor yang Berhubungan dengan Kunjungan Ibu Balita ke Posyandu di Wilayah Kerja Puskesmas Teupin Raya Kecamatan Glumpang Tiga Kabupaten Pidie. *Attractive: Innovative Education Journal*, 5(2), 1108-1116. Retrieved from <https://attractivejournal.com/index.php/aj/article/view/926>
- Imanuddin, I., Fathuraahman, T., Hariani, H., & Rahmawati, R. (2021). Perspektif Sosiologis Faktor-Faktor yang memengaruhi Kunjungan Ibu Balita ke Fasilitas Kesehatan (Studi Kasus Pada Posyandu Mawar Kelurahan Tombula Kecamatan Tongkuno). *Jurnal Ilmiah Ilmu Pendidikan*, 4(8), 908-915. <https://doi.org/10.54371/jiip.v4i8.365>
- Kemendes. (2023, August). *Panduan Pengelolaan Posyandu Bidang Kesehatan*. Ministry of Health of the Republic of Indonesia. <https://puskesmasbanjarsatu.bulelengkab.go.id/panduan-pengelolaan-posyandu-bidang-kesehatan-tahun-2023>
- Munjayatun, S., Anggraini, H., & Afrika, E. (2022). Relationship of Mother Characteristics with Compliance of Visiting Posyandu to Between Ages 1-5 Years Old in Sugihwaras Puskesmas, Teluk Gelam District, Ogan Komering Ilir Regency in 2022. *Science Midwifery*, 10(2), 850-857. Retrieved from <https://www.midwifery.iocspublisher.org/index.php/midwifery/article/view/369>
- Notoatmodjo, S. (2018). *Metodologi Penelitian Kesehatan*. PT. Rineka Cipta.
- Nur'aini, N., Miden, D. K., & Sukriani, W. (2024). Anxiety Levels among Primigravida Pregnant Women at the Menteng Public Health Center, Palangka Raya. *SIGn Journal of Public Health*, 3(2), 17-30. <https://doi.org/10.37276/sjph.v3i2.656>

- Pramita, H. N. K. H. Y., Lutfiana, I., & Ningrum, K. A. P. (2023). Faktor yang Mempengaruhi Kunjungan Ibu Balita ke Posyandu di Wilayah Kerja Puskesmas Gerokgak I: Indonesia. *Prosiding Simposium Kesehatan Nasional*, 2(1), 74-81. Retrieved from <https://simkesnas.stikesbuleleng.ac.id/index.php/simkesnas/article/view/89>
- Rahendra, Y., & Dwihestie, L. K. (2023). The Relationship Between Mothers' Knowledge on Posyandu Services and Their Frequency of Visit to Posyandu in Karangrejo Village Purworejo Regency. *Jurnal Kebidanan Kestra (JKK)*, 6(1), 1-8. <https://doi.org/10.35451/jkk.v6i1.1518>
- Rambe, N. L., & Lase, D. N. (2019). Faktor-Faktor yang Berhubungan dengan Kunjungan Ibu Balita ke Posyandu di Wilayah Kerja Puskesmas Pembantu Hiligodu Ombalata. *Jurnal Ilmiah Kebidanan Imelda*, 5(2), 64-67. <https://doi.org/10.52943/jikebi.v5i2.169>
- Sartika, Y. A., & Fauziah, N. (2024). Analysis of Maternal Anxiety Levels in Breastfeeding Practices at Primary Healthcare Facilities during the Pandemic Transition. *SIGN Journal of Public Health*, 3(2), 57-70. <https://doi.org/10.37276/sjph.v3i2.659>
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Suharto, A., Soedirham, O., Suparji, S., & Hendriyani, F. (2021). Behavior of Mother to Visit Posyandu in Magetan Regency, Indonesia. *Open Access Macedonian Journal of Medical Sciences*, 9(E), 1590-1595. <https://doi.org/10.3889/oamjms.2021.6748>
- Syafitri, H., Arifuddin, D., Nulanda, M., Darussalam, A. H. E., & Gayatri, S. W. (2023). Hubungan Tingkat Pendidikan dan Pengetahuan Ibu tentang Tumbuh Kembang Anak Usia < 6 Tahun dengan Kunjungan Ibu ke Posyandu di Kecamatan Tempe Kabupaten Wajo. *Fakumi Medical Journal : Jurnal Mahasiswa Kedokteran*, 3(12), 926-936. <https://doi.org/10.33096/fmj.v3i12.366>
- Syafnil, L. (2023). Faktor-Faktor yang Mempengaruhi Perilaku Ibu Balita dalam Pemanfaatan Posyandu di Wilayah RW 03 Pasar Minggu pada Tahun 2022. *Jalanan: Jurnal Ilmiah Kesehatan*, 5(1), 16-27. Retrieved from <https://ojskebidanan.stikeskerishusada.ac.id/index.php/jurnal-ilmiah-kesehatan/article/view/47>
- Widiyanti, A., & Wahyono, B. (2023). Analisis Faktor yang Berhubungan dengan Kunjungan Ibu Balita di Posyandu Kelurahan Rejowinangun Utara Kecamatan Magelang Tengah Kota Magelang. *Indonesian Journal of Public Health and Nutrition*, 3(1), 11-19. <https://doi.org/10.15294/ijphn.v3i1.58048>
- Yusdiana, Y., Dewi, A. S., Putri, F. A., & Sari, R. P. (2023). Faktor-Faktor yang Mempengaruhi Kunjungan Ibu Balita ke Posyandu Desa Melayu Besar Kabupaten Rokan Hilir. *Jurnal Ilmu Kedokteran (Journal of Medical Science)*, 17(1), 24-31. <https://doi.org/10.26891/jik.v17i1.2023.24-31>