



# Mother's Perspective and Trust Toward Integrated Services Post (Posyandu) in Indonesia

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## Abstract:

**Background:** The Integrated Services Post (ISP), also known as Posyandu, is a program designed to enhance maternal and child health by providing integrated basic health services. For years, communities have relied on ISP as a primary source of health information, particularly for maternal and child health needs. This study seeks to assess mothers' knowledge, perspectives, and family support related to ISP, focusing on maternal understanding, behavior, family support, and trust in ISP services as measured by the Health Collaborative Center Survey.

**Methods:** A cross-sectional study was conducted using an online survey (Google Form) from February to March 2023. A total of 2,155 mothers were randomly selected as respondents. Data were collected via a self-designed questionnaire adapted from multiple sources, measuring knowledge, behavior, and family support regarding ISP. Descriptive statistical analysis was applied to interpret mothers' knowledge, behaviors, and levels of family support.

**Results:** The majority of respondents demonstrated good knowledge of ISP services. Over 98% of mothers correctly identified the appropriate time for weighing children, understood the definition of ISP, and recognized the benefits of weighing children at ISP. More than 70% of mothers correctly answered questions about ISP schedules, recommended child weighing age, and the use of the Health Card (HC). Mothers exhibited positive behavior and high trust toward ISP, with 88.5% strongly believing that ISP can contribute to improving maternal and child health. Family support was generally high, though 4% of respondents reported that their husbands or families opposed immunization, thus limiting their engagement with ISP services.

**Conclusion:** The majority of mothers in this study possess adequate knowledge, exhibit positive behavior, have high trust in ISP services, and receive substantial family support. Nevertheless, further education and community outreach are needed to improve understanding of severe malnutrition management, the importance of ISP services, and the benefits of immunization.

**Keywords:** Integrated services post, Health care, Primary health service, Perspective and trust, Maternal, Health card.

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Cite as: Basrowi R, Farradika Y, Sundjaya T. Mother's Perspective and Trust Toward Integrated Services Post (Posyandu) in Indonesia. Open Public Health J, 2024; 18: e18749445329656. <http://dx.doi.org/10.2174/0118749445329656240930095509>



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Received: May 26, 2024  
Revised: August 31, 2024  
Accepted: September 10, 2024  
Published: ?? ??, 2024



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## 1. INTRODUCTION

Malnutrition remains a significant challenge in Indonesia. In recent years, while certain indicators of malnutrition have shown a decline in prevalence, others have concurrently exhibited an upward trend. According to the 2022 Indonesian Nutritional Status Study (INSS), the prevalence of stunting and overweight in children decreased by 2.8% and 0.3%, respectively, while wasting and underweight increased by 0.6% and 0.1%, respectively, compared with the statistics reported in 2021 [1]. Despite the decrease, stunting prevalence remained high (21.6%) in 2022, still far from the desired prevalence (14%) targeted for 2024. Child malnutrition results from various factors, including family poverty, non-exclusive breastfeeding, and premature birth [2, 3]. Low maternal education, poor access to health care, and rural residence also correlate with child malnutrition in Indonesia [2,4]. In addition to child malnutrition, maternal mortality continues to be a pressing issue in Indonesia. Although the maternal mortality rate in Indonesia declined over five years, from 305 in 2018 to 189 deaths per 100,000 live births in 2020, this improvement must be maintained and further enhanced to reach the 2024 target of 183 deaths per 100,000 live births [4, 5].

The government has implemented several programs to address child malnutrition and maternal mortality, including improved access to health service facilities and a village funds program that can be utilized to enhance or rehabilitate the Integrated Services Post (ISP) [6]. ISP, known as Posyandu in Indonesia, is a program designed to improve maternal and child health through integrated basic health services [7]. Established in 1984, ISP has been continuously operating and progressively enhancing its services. These facilities can be found in every village or neighborhood and offer various programs, including monitoring child growth and development, health services, health education, promotion of dietary diversity, and improvement of family economic conditions [8]. For years, communities have relied on ISP as a source of health information, particularly for mothers and children. Recognizing the significance of ISP for communities, especially mothers, this study aims to examine mothers' knowledge, perspectives, and family support regarding ISPs. This understanding will help fulfill community needs and enhance potential aspects of ISPs that could be expanded.

Although prior research has investigated mothers' knowledge and behaviors concerning Posyandu in specific Indonesian regions, comprehensive nationwide data on mothers' perspectives, trust, and family support regarding this program remains limited. This study aims to address this gap by offering a broader view across Indonesia, potentially informing strategies to enhance Posyandu utilization and effectiveness at a national level.

## 2. METHODS

This study adopted a cross-sectional, web-based design conducted from February to March 2023. Purposive sampling was used to recruit participants who met specific

inclusion criteria aligned with the research objectives. The study targeted Indonesian mothers aged 18 years or older, with at least one child between the ages of 1 and 12, who had attended a Posyandu at least once in the preceding 12 months.

Data were collected using an online survey hosted on Google Forms. The survey link was disseminated through social media channels, community health networks, local health centers, and parenting forums to reach the target population effectively. Moreover, to ensure geographical diversity, the research team collaborated with local health authorities and community leaders across various Indonesian provinces. The survey instrument was developed through a comprehensive process involving a review of Posyandu guidelines from the Ministry of Health, consultation with public health experts, and adaptation from previously validated surveys on maternal and child health knowledge in Indonesia. The final questionnaire consisted of four main sections: demographic information, knowledge about Posyandu services (12 items), behavior and trust toward Posyandu (21 items), and family support (8 items). The survey incorporated both positive and negative behavioral statements to mitigate response bias. These statements were randomly ordered, and respondents indicated their level of agreement on a 5-point Likert scale. During analysis, negative statements were reverse-coded to ensure consistency in result interpretation.

An analytical descriptive approach was employed to analyze mothers' knowledge, behavior, and family support. Informed consent was obtained from all participants prior to survey completion. The participants were assured of anonymity and confidentiality, along with the right to withdraw at any time. The study was conducted in accordance with the principles of the Declaration of Helsinki, and written informed consent was obtained from all participants before their inclusion in the study.

## 3. RESULTS

The study included 2,155 mothers with children aged 1-12 years. Of these, 52.5% were aged between 30 and 39, and the majority (78.1%) had one or two children. Regarding education, 62.2% had completed high school, while only 1.3% had either not completed elementary school or received no formal education. In the past 12 months, 37.9% of mothers visited the ISP 1-3 times, 25% visited 4-6 times, and 29.3% visited 10-12 times. Detailed respondent characteristics are presented in Table 1.

### 3.1. Mother's Knowledge

Twelve questions were administered to assess mothers' knowledge regarding ISP. The majority of mothers (>98%) responded correctly to inquiries about whether children should continue to be weighed after one year, the initial time for weighing a child, the definition of ISP, and the advantages of weighing children at ISP. Over 70% of mothers provided accurate responses concerning ISP schedules, the age at which children should be weighed, the Health Card (HC), known in Indonesia as

Kartu Menuju Sehat, appropriate actions for underweight children, the first immunization given to infants, and vitamin A administration schedules. While mothers demonstrated accurate knowledge in most areas, when asked about appropriate measures for severely wasted children, 57.8% of mothers provided incorrect responses. Detailed results are presented in Fig. (1).

### 3.2. Mother's Behavior and Trust in ISP

Mothers' behavior toward the ISP was assessed and categorized into positive and negative behaviors. The majority exhibited positive behavior, with most respondents selecting "strongly agree" or "agree" for statements indicating trust and approval of ISP services. For instance, 89.1% of mothers strongly agreed that ISP provides essential health services for babies, mothers, and children. Similarly, 88.0% strongly agreed, and 7.1% agreed that ISP is beneficial due to the provision of free vitamin A for children. Furthermore, 69.8% strongly agreed, and 18.7% agreed that ISP contributes positively to the health of mothers and children. Responses were more varied for the statement, "If toddlers need health

services, mothers only need to visit ISP and not other health facilities," with 30.9% strongly disagreeing and 25.8% strongly agreeing, indicating some diversity in reliance on ISP as a sole health resource. Overall, mothers recognized ISP's role in monitoring child growth, educating mothers on health, and supporting pregnant, postpartum, and breastfeeding women. For statements reflecting negative behaviors, the majority of mothers responded with "strongly disagree" across all nine items. However, some mothers indicated negative behavior by selecting "strongly agree" or "agree" for statements such as, "mothers only bring the youngest child to ISP if they have more than two children" and "mothers no longer bring children to ISP once immunizations are complete." Further response details are presented in Table 2.

The behavioral assessment revealed that mothers demonstrated a strong belief in the ISP, as evidenced by a high percentage of agreement (89%) regarding the ISP as a source of more accessible health services. Additionally, a significant proportion of mothers (86.1%) considered the ISP a reliable venue for monitoring the growth and development of children.

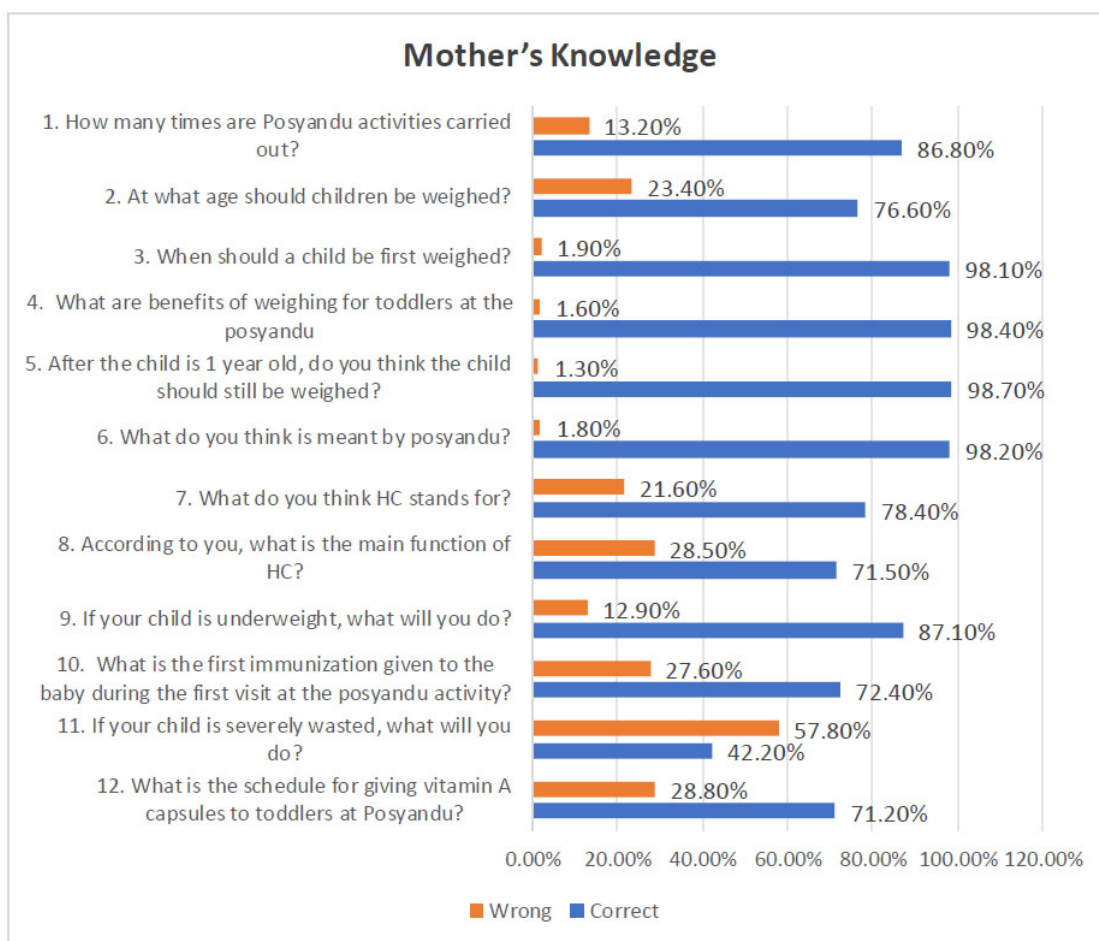


Fig. (1). Mother's knowledge about ISP.

**Table 1. Respondent characteristics.**

	Frequency (N = 2155)	Percentage (%)
<b>Mother's Age</b>		
<20	23	1.1
20-29	819	38.0
30-39	1129	52.4
40-49	168	7.8
>49	16	0.7
<b>Number of Children</b>		
1	836	38.8
2	847	39.3
3	350	16.2
4	82	3.8
5	27	1.3
>5	13	0.5
<b>Youngest Children's Age</b>		
1-2 years old	1058	49.1
3-5 years old	775	36
>5 years old	322	14.9
<b>Mother's Education</b>		
No education/not graduated elementary School	29	1.3
Elementary School/Middle School	283	13.1
High School	1341	62.2
College	502	23.3
<b>Visit Frequency to ISP in the past 12 months</b>		
0 times	53	2.5
1-3 times	817	37.9
4-6 times	540	25
7-9 times	95	4.4
10-12 times	631	29.3
>12 times	19	0.9

**Table 2. Mother's Behavior towards ISP.**

	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
<b>Positive Behavior</b>					
1. Mothers believe monthly ISP visits are essential for monitoring child growth and development	86.1	5.6	2.4	1.0	4.9
2. ISP visits are sufficient for toddler health services, negating the need for other health services	25.8	10.7	21.0	11.6	30.9
3. Mothers believe toddlers require monthly ISP visits for weight measurement	81.7	9.7	4.7	1.4	2.5
4. Toddlers not attending ISP cannot be identified for malnutrition	59.6	14.1	10.0	4.6	11.8
5. ISP activities benefit babies, toddlers, pregnant women, postpartum and breastfeeding mothers	80.0	10.0	5.4	1.6	2.9
6. ISP participation provides free vitamin A for toddlers	88.0	7.1	2.6	0.7	1.5
7. ISP facilitates health services access for babies, mothers, and children	89.1	7.0	1.9	0.5	1.6
8. Mothers of older toddlers (above 1 year) should actively bring them to ISP for weighing	74.1	15.2	7.5	1.7	1.5
9. ISP activities are expected to provide health education for mothers	86.1	9.1	2.7	0.7	1.4
10. Despite busy schedules, mothers prioritize ISP attendance for child health	83.7	10.6	3.2	1.0	1.5
11. Strong belief that ISP improves maternal and child health	69.8	18.7	8.2	1.3	2.0
12. ISP employs digital technology for maternal and child health monitoring	59.9	19.8	13.5	3.2	3.7
<b>Negative Behavior</b>					
13. Mothers should not attend ISP if it is far from home	6.2	3.9	14.3	17.0	58.6
14. Household work takes priority over taking toddlers to ISP	5.1	1.8	3.9	11.9	77.3

	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
15. ISP attendance is unnecessary if the child's immunization is complete	9.5	3.9	11.9	14.8	60.0
16. Mothers with multiple children under five should only bring the youngest to ISP	10.3	3.9	8.7	12.7	64.5
17. Apparently, healthy toddlers do not need to attend ISP	5.3	2.6	6.9	12.5	72.8
18. Working mothers should not bring toddlers to ISP	4.8	1.9	6.6	12.5	74.1
19. Toddlers attend ISP solely for supplementary food (PMT)	5.4	2.0	5.9	13.5	73.2
20. Mothers attend ISP primarily to socialize with other mothers	3.5	0.9	1.9	5.0	88.7
21. Direct consultation with a doctor or midwife is preferable to ISP attendance	6.4	3.7	20.1	18.7	51.1

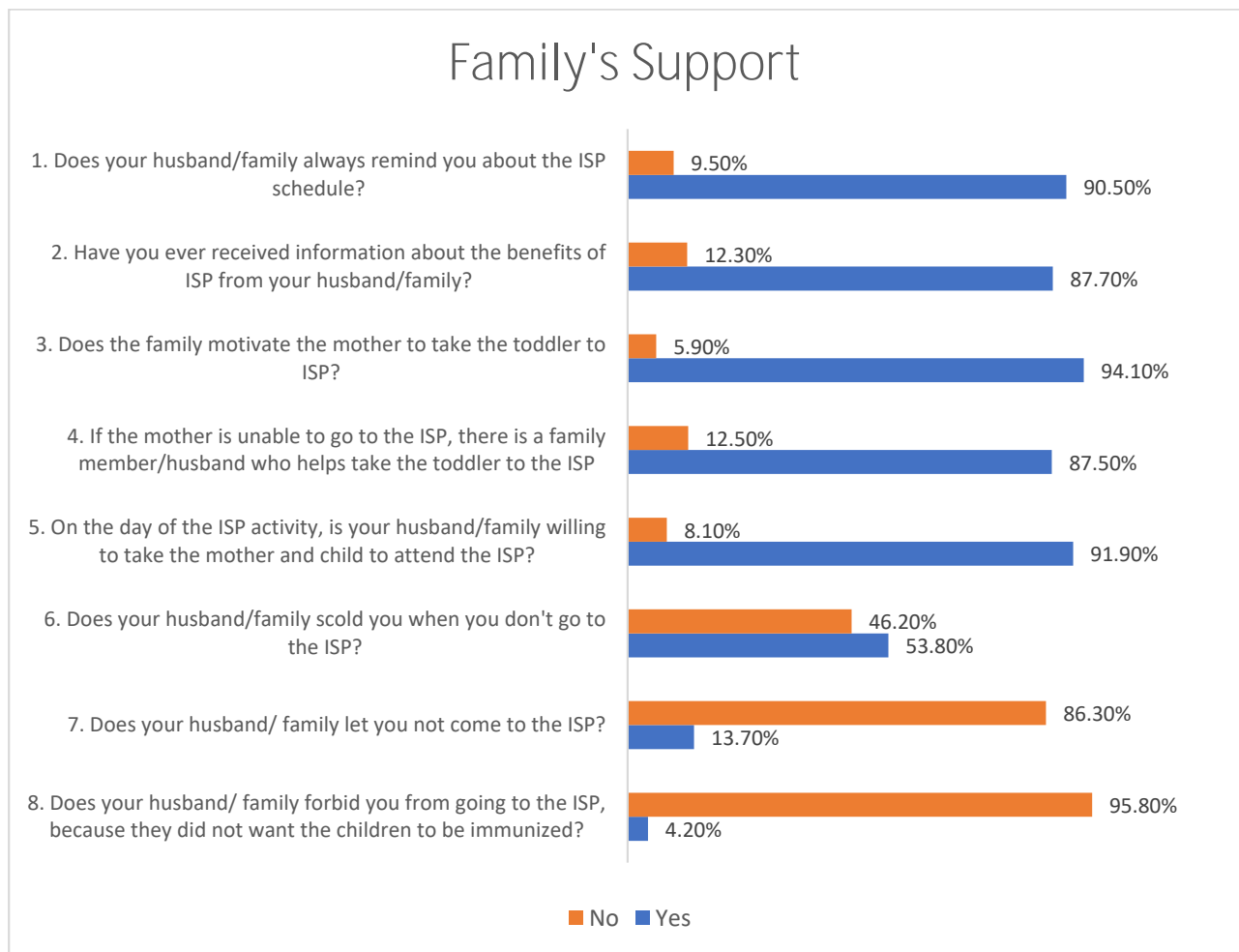


Fig. (2). Family's support for mothers in assessing ISP.

### 3.3. Family Support

In addition to knowledge and behavior, family support was also evaluated. The majority of mothers (87-91%) received various forms of family support, including reminders of ISP schedules, information about ISP benefits, motivation to attend ISP sessions, intervention

when mothers failed to attend ISP, support for immunization, and assistance in transporting mothers/children to ISP. Notably, 53.8% of mothers reported receiving admonishment from their husbands or family members for not visiting the ISP. Nonetheless, 4.2% of mothers reported being prohibited by family members from attending ISP due to opposition to immunization.

Additionally, 8.1% of families expressed reluctance to accompany mothers and children to ISP, and 12.5% did not provide assistance in bringing children to ISP when the mothers were unable to attend, as illustrated in Fig. (2).

The analysis revealed significant patterns in mothers' knowledge, trust, and family support concerning Posyandu services. An overwhelming majority of mothers exhibited a comprehensive understanding of Posyandu, with over 98% accurately responding to inquiries about its fundamental functions and advantages. This extensive knowledge was accompanied by robust trust in the program, as 88.5% of mothers strongly believed in Posyandu's capacity to enhance maternal and child health. Furthermore, the study found that a substantial proportion of mothers (87-91%) reported receiving familial support for Posyandu participation. These findings suggest that interventions focusing on both knowledge enhancement and family engagement could potentially yield effective results in improving Posyandu utilization and outcomes.

## 4. DISCUSSION

### 4.1. Mother's Knowledge

In general, mothers demonstrated substantial knowledge about ISP, although certain areas showed gaps in knowledge. This finding aligns with a previous study by Susanti in Purwakarta regency, which revealed that the majority of mothers aged 20-35 years possessed sufficient knowledge regarding ISP [9]. Mothers with adequate ISP knowledge may indicate active participation and effective utilization of these services. A study conducted in Jantho demonstrated a correlation between ISP use and child nutritional status [9, 10]. However, another study suggested that maternal participation was not associated with toddlers' nutritional status, potentially due to mothers' insufficient knowledge about toddlers' nutritional requirements [11].

The assessment of maternal knowledge revealed that, despite mothers answering correctly on most questions, more than half of the mothers in this study still harbored misconceptions regarding the management of severely wasted children. This discrepancy may be attributed to the fact that the management of severely wasted children is typically conducted in primary health care services rather than in ISP, although preventive measures could be implemented through ISP activities [12].

Although our findings indicate that mothers generally possess adequate knowledge about Posyandu, this understanding does not consistently correlate with high visit frequency across all respondents. This discrepancy suggests that knowledge alone may be insufficient to ensure regular Posyandu attendance. Additional factors, such as accessibility, time constraints, or perceived necessity, may influence visit frequency. Further research is warranted to investigate these potential barriers to attendance despite the presence of sufficient knowledge.

### 4.2. Mother's Behavior and Trust in ISP

The behavior assessment revealed that mothers in this study predominantly exhibited positive attitudes toward ISP and believed that ISP facilitated community access to health services, indicating high trust in ISP. However, this finding contrasts with a previous study conducted in 'Posyandu Melati', sub-district Wajo, Makassar city, which demonstrated that mothers' knowledge and behavior regarding ISP were insufficient. The previous study also indicated that mothers lacked the initiative to visit ISP, with some only willing to attend for vitamin A, supplementary food, and medicine. Work commitments also hindered mothers' attendance, resulting in a limited understanding of ISP systems due to infrequent visits [13]. Reasons identified in previous studies for why some mothers do not attend ISP were also observed in this study, although a relatively small percentage of participants represented them. The disparity in mothers' behavior toward ISP between this study and the previous one could be attributed to socio-demographic factors and maternal characteristics. Different locations may have distinct cultures and health approaches, while varying maternal backgrounds, such as workload and education level, could influence behavior regarding ISP. A study in Aceh demonstrated that husbands' perspectives, family, and social environment were factors affecting mothers' trust in ISP, with maternal knowledge playing a vital role in awareness and willingness to visit ISP [14]. Another study conducted during COVID-19 revealed that community attitudes and social circumstances were associated with maternal anxiety. During the COVID-19 pandemic, mothers reported feeling anxious about visiting ISP due to fears of exposure, especially as some visitors might not comply with recommended health protocols [15]. This finding suggests that external conditions and the behavior of others can substantially impact mothers' willingness to engage with ISP services. Additionally, the range of services available at ISP varies by location, influencing attendance; for instance, rural ISPs typically offer a broader array of activities compared with their urban counterparts [16]. Minimal service offerings at some ISP occurred due to challenges such as financial barriers, medicine and equipment shortages, and location constraints. ISP situated far from mothers' homes often deterred attendance. Additional factors contributing to mothers' reluctance included perceptions that child weight monitoring was less valuable than receiving supplementary food or medicine, lack of knowledge, absence of spousal support, and work commitments [14, 16].

### 4.3. Family Support

The majority of mothers in this study reported having supportive husbands or family members. However, 4% of mothers indicated that their husbands or families opposed immunization and, as a result, prevented them from attending ISP. A study conducted in Blora reported similar findings, with most families demonstrating strong support for mothers concerning ISP visits. Additionally, research has shown a significant correlation between family

support and toddlers' compliance with ISP visits [17]. A study in Aceh also identified negative family perspectives that hindered mothers from attending ISPs, such as husbands scolding their wives and negative views on immunization due to post-vaccination fever in children [14]. Several studies have reported negative attitudes toward immunization from families or mothers. Research at the Public Health Center Culamega revealed that 45% of mothers lacked parental support or were prohibited by their husbands and parents from immunizing their children [18]. A study in Semarang identified a lack of support from parents, husbands, friends, cadres, and religious leaders regarding basic immunization. Mothers obtained information from unreliable sources claiming that immunization was forbidden, leading them to incomplete basic immunization for their children [19]. A 2021 study demonstrated that the majority of mothers had low perceived susceptibility to health issues and consequently did not immunize their children. Furthermore, 55% of mothers had low perceived severity and were unaware of the potential consequences of illnesses without basic immunization, thus considering immunization unimportant [18].

Husbands' support can significantly influence mothers' behaviors regarding ISP attendance, as husbands often hold greater decision-making authority within households, including decisions about whether mothers and children visit ISP [20]. A supportive family environment can also positively impact mothers' attitudes toward ISP. Research conducted in Sukabumi demonstrated an association between family support and children's ISP attendance [21]. Similarly, a study in Pematang revealed significant differences in family support and ISP visit frequency between stunted and non-stunted children, with non-stunted toddlers receiving better family support and attending ISP more frequently than their stunted counterparts [22]. Additionally, midwives may play a crucial role in educating mothers, thus potentially influencing maternal perspectives on ISP [23].

While our study offers a comprehensive overview of maternal perspectives and behaviors regarding Posyandu across Indonesia, it is important to acknowledge that potential regional variations were not specifically examined in this research. Indonesia's diverse geographical and cultural landscape suggests that there may be disparities in Posyandu utilization and effectiveness across different areas. Future studies could investigate these potential variations to inform more tailored approaches to Posyandu promotion and service delivery throughout Indonesia's diverse regions. Such research could contribute to the development of strategies that are sensitive to local contexts and needs, potentially enhancing the overall effectiveness of the Posyandu program nationwide.

Further research should investigate the underlying reasons for families opposing immunization, potentially employing qualitative methods to gain deeper insights into their concerns and beliefs. Moreover, further research is required to examine the specific barriers encountered by

mothers with limited family support and to design targeted interventions that effectively mitigate these obstacles. Longitudinal studies tracking changes in mothers' perspectives and Posyandu utilization over time would also prove valuable in assessing the long-term impact of educational initiatives and policy changes.

The online survey method employed in this study may introduce a potential selection bias, potentially under-representing mothers lacking internet access or those less comfortable with digital platforms. Furthermore, to address this limitation, concerted efforts were made to reach diverse populations through various channels and community networks. However, this constraint should be considered when interpreting the results. Despite these limitations, our methodology aimed to provide a comprehensive and nuanced understanding of mothers' perspectives, knowledge, behavior, and family support regarding Posyandu services across Indonesia.

## CONCLUSION

Most mothers in this study displayed a solid understanding of ISP, demonstrated positive engagement and high levels of trust in ISP services, and reported strong family support. However, knowledge concerning the management of severely wasted children was still lacking, and several challenges hindered mothers from attending ISP, including the distance from their homes and employment commitments. Notably, 4% of mothers reported family members or husbands who opposed child immunization, thus prohibiting ISP attendance. The study concluded that education and socialization regarding the management of severely wasted children, the importance of ISP, and the benefits of immunization are still necessary to optimize ISP utilization and improve family support as well as mothers' behavior regarding ISP.

## AUTHORS' CONTRIBUTION

R.W.B., Y.F.: Study Concept and Design; T.S.: Data Analysis and Interpretation.

## LIST OF ABBREVIATIONS

ISP	=	Integrated Services Post
HC	=	Health Card
INSS	=	Indonesian Nutritional Status Study

## ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study received approval from the Ethics Committee of Universitas Indonesia, Indonesia.

## HUMAN AND ANIMAL RIGHTS

All human research procedures followed were in accordance with the ethical standards of the committee responsible for human experimentation (institutional and national), and with the Helsinki Declaration of 1975, as revised in 2013.

**CONSENT FOR PUBLICATION**

Prior to inclusion in the study, written informed consent was obtained from all participants.

**STANDARDS OF REPORTING**

STROBE guidelines were adhered to when conducting this research.

**AVAILABILITY OF DATA AND MATERIALS**

The data and supporting information are available within the article.

**FUNDING**

None.

**CONFLICT OF INTEREST**

The authors declare no conflict of interest, financial or otherwise.

**ACKNOWLEDGEMENTS**

Declared none.

**REFERENCES**

- [1] Munira SL. Get Survey Status Guzi Indonesia. Commentary on the Republic of Indonesia. 2023. Available from: <https://promkes.ke.mkes.go.id/materi-hasil-survei-status-gizi-indonesia-ssgi-2022>
- [2] Beal T, Tumilowicz A, Sutrisna A, Izwardy D, Neufeld LM. A review of child stunting determinants in Indonesia. *Matern Child Nutr* 2018; 14(4): e12617. <http://dx.doi.org/10.1111/mcn.12617> PMID: 29770565
- [3] Ramli , Agho KE, Inder KJ, Bowe SJ, Jacobs J, Dibley MJ. Prevalence and risk factors for stunting and severe stunting among under-fives in North Maluku province of Indonesia. *BMC Pediatr* 2009; 9(1): 64. <http://dx.doi.org/10.1186/1471-2431-9-64> PMID: 19818167
- [4] Suratri MAL, Putro G, Rachmat B. Risk factors for stunting among children under five years in the province of East Nusa Tenggara (NTT), Indonesia. *Int J Environ Res Public Health* 1640; 20
- [5] Ministry of health. laporan akuntabilitas kinerja instansi pemerintah (LAKIP) direktorat gizi dan kesehatan ibu dan anak tahun anggaran. 2022.
- [6] Fitriani B, Hasan M, Ruslang EH. Where stunting and painting! *Journalism Socioscientific* 2022; 4(2): 64-7. <http://dx.doi.org/10.54339/jurdikmas.v4i2.417>
- [7] Ministry of home affairs. Ministerial regulation of home affairs number 54 year. 2007.
- [8] Ministry of home affairs. Ministerial regulation of home affairs number 19 year. 2011.
- [9] Susanti AI, Rinawan FR, Amelia I. Mothers knowledge and perception of toddler growth monitoring using iposyandu application. *Glob Med Heal Commun* 2019; 7(2): 93-. <http://dx.doi.org/10.29313/gmhc.v7i2.3892>
- [10] Fithria AN. The relationship of Posyandu utilization with the nutritional status of toddler in the Kota Jantho District. *Idea Noursing J* 2015; 6(1): 1-6.
- [11] Rukmasari EA, Maesaroh I, Mamuroh L. The relationship between mothers' participation level in integrated health posts (Posyandu) and the nutritional status of toddlers. *Int J Sci Soc* 2024; 6(1): 877-86. <http://dx.doi.org/10.54783/ijssoc.v6i1.1077>
- [12] Indonesian ministry of health. guidelines for prevention and management of malnourished toddlers during the covid-19 pandemic. Catalog in issue. Indonesian ministry of health. 2020.
- [13] Aswadi SS. Mother's behavior towards Posyandu use. *Al-Sihah Public Heal Sci J* 2018; 10: 12-25.
- [14] Ambarita L, Husna A, Sitorus H. Knowledge of posyandu cadres, mothers of toddlers and perspectives of health workers regarding posyandu activities in west aceh regency. *Health Systems Researcher Bul* 2019; 22(3): 147-57.
- [15] Farahita GA, Hendrati LY. Literature review: Maternal anxiety and participation of integrated services post during pandemic COVID-19. *Journal of Public Health Research and Community Health Development* 2023; 7(1): 57-64. <http://dx.doi.org/10.20473/jphrecode.v7i1.37265>
- [16] Setiawan A, Christiani Y. Integrated health post for child health (Posyandu) as a community-based program in Indonesia: An exploratory study. *Jurnal Keperawatan Indonesia* 2018; 21(3): 150-8. <http://dx.doi.org/10.7454/jki.v21i3.600>
- [17] Hartini S, Winarsih BD, Sunarsih S. Relationship between family support and compliance with toddler posyandu visits in plosorejo village, randublatung district, blora regency. *Menara J Heal Sci* 2023; 2(1): 109-20.
- [18] Putri LTD, Faturrahman Y, Maywati S. Analysis of the behavior of mothers who do not provide basic immunization to babies (Study of Health Belief Model (HBM) Theory in Cipicung Village, UPTD Working Area of Culamega Health Center, Tasikmalaya Regency, 2021). *J Indonesian Community Health* 2022; 18(1): 355-67.
- [19] Sulistiyani P, Shaluhiah Z, Cahyo K. Overview of community refusal to complete basic immunization for toddlers (Study in Sendangmulyo Village, Tembalang District, Semarang City). *J Public Health* 2017; 5: 1081-91.
- [20] Iswanto RKD, Husnida N, Sutioningsih H. Predisposition, enablement and driver factors in increasing male participation in Posyandu activities in Lebak District. *Med J* 2020; 7(1): 91-100. <http://dx.doi.org/10.36743/medikes.v7i1.207>
- [21] Putri Pratiwi K. Relationship of family support with children's Posyandu visits in sukamanis village, working area of Kadudampit Puskesmas, Sukabumi District. *J Health Sci* 2023; 12(2): 47-57. <http://dx.doi.org/10.62094/jhs.v12i2.108>
- [22] Puspitasari V, Nuryanto N, Kurniawati DM. Differences family support and posyandu visit frequency between stunted and non stunted 12-59 months old toddler. *Sport Med Curiosit J* 2022; 1(2): 53-8. <http://dx.doi.org/10.15294/smcj.v1i2.61639>
- [23] Bardosono S, Hildayani R, Chandra D N, Basrowi R W, Wibowo Y. The knowledge retention after continuing health education among midwives in Indonesia. *Med J Indonesia* 2018; 27(2): 128-33.

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