Jurnal Pengabdian UNDIKMA:
Jurnal Hasil Pengabdian & Pemberdayaan kepada Masyarakat
https://e-journal.undikma.ac.id/index.php/jpu/index
Email: pengabdian@undikma.ac.id

Vol. 7, No. 4 (November 2026)
E-ISSN : 2722-5097
Pg : 1382-1392

Assistance for Mothers and Community Health Cadres in Detecting and Stimulating Motor Development in Toddlers Using the Pre-Screening Developmental Questionnaire (KPSP)

Lusiana Gultom*, Nilda Yulita Siregar, Alfrianne
Department of Midwifery, Politeknik Kesehatan Kementerian Kesehatan Medan, Indonesia.
*Corresponding Author. Email: analusigultom@gmail.com

Abstract: Early detection and appropriate stimulation are essential for optimizing child development, particularly during the toddler years. Mothers and Posyandu cadres play important roles in identifying developmental delays and providing age-appropriate stimulation. This community service program aims to enhance the knowledge and practical skills of mothers and Posyandu cadres in conducting early developmental screening and providing appropriate stimulation using the Pre-Screening Developmental Questionnaire (KPSP). The program was conducted in Kutalimbaru Village, Deli Serdang Regency, involving 46 mothers of toddlers aged 12–36 months and 15 Posyandu cadres. The activities included demonstrations, role-playing, group discussions, hands-on mentoring, and developmental screening using the KPSP. Participants received practical guidance on selecting age-appropriate KPSP forms, conducting developmental screening, interpreting assessment results, and providing appropriate developmental stimulation. Developmental screening was conducted on 46 toddlers aged 12–36 months. The results showed that 34 children (73.9%) exhibited age-appropriate development, 2 (4.3%) demonstrated questionable developmental outcomes, and 10 (21.7%) showed suspected developmental delays. The highest proportion of suspected developmental delays was observed among 12-month-old children, affecting 9 of 21 children (42.9%). These findings underscore the importance of continuous developmental monitoring and age-appropriate stimulation, particularly for children requiring further assessment and attention. The program provided mothers and Posyandu cadres with practical experience in early developmental screening and stimulation. However, pre-intervention and post-intervention skill assessment scores were unavailable; therefore, improvements in participants' technical skills could not be quantitatively determined. Continued engagement of mothers and Posyandu cadres is essential to sustaining developmental screening and stimulation services at the community level.

Article History:
Received: 04-08-2026
Reviewed: 17-09-2026
Accepted: 25-10-2026
Published: 20-11-2026

Key Words:
Child Development; Early Detection; KPSP; Posyandu Cadres; Toddler Stimulation.

How to Cite: Gultom, L., Siregar, N. Y., & Alfrianne. (2026). Assistance for Mothers and Community Health Cadres in Detecting and Stimulating Motor Development in Toddlers Using the Pre-Screening Developmental Questionnaire (KPSP). *Jurnal Pengabdian UNDIKMA*, *7*(4), 1382-1392. https://doi.org/10.33394/jpu.v7i4.22180

https://doi.org/10.33394/jpu.v7i4.22180

This is an open-access article under the CC-BY-SA License.

Introduction

Children represent the nation's future generation and their parents' hopes. Therefore, their growth and development require special attention, particularly during the first five years of life, which constitute a crucial period for establishing the foundation of future development. This period is known as the golden period and critical period because the brain develops rapidly and has greater plasticity than that of adults, making children highly receptive and sensitive to various learning experiences and environmental influences, both positive and negative (Bustan, 2007). The golden period begins when the fetus reaches three

Jurnal Pengabdian UNDIKMA:
Jurnal Hasil Pengabdian & Pemberdayaan kepada Masyarakat
https://e-journal.undikma.ac.id/index.php/jpu/index
Email: pengabdian@undikma.ac.id

Vol. 7, No. 4 (November 2026)
E-ISSN : 2722-5097
Pg : 1382-1392

months in the womb and continues until the child is three years old. During this period, nutrition, health, parenting, and stimulation play essential roles in supporting optimal growth and development (Prado et al., 2017). Although relatively short, this period significantly determines subsequent development and cannot be repeated (Izah et al., 2019; Siti Maryam et al., 2021). Therefore, comprehensive monitoring through stimulation, early detection, and intervention is essential to identify and address developmental deviations (Sutiari, N. K., & Wulandari, 2011).

Developmental disorders among children remain a significant concern worldwide. More than one-third of children globally experience physical or mental growth and developmental problems, while approximately 5–10% of the child population experience developmental delays (Riskesdas, 2013). The prevalence of developmental disorders varies across countries, reaching 12–16.6% in the United States, 24% in Thailand, 22.5% in Argentina, and 13–18% in Indonesia (Pujiawati & Nur Lina, 2013). In Indonesia, approximately 16% of children under five experience developmental disorders, including gross and fine motor impairments, hearing difficulties, and reduced intelligence. Language disorders are among the most prevalent, affecting 13.8% of children, followed by fine motor development disorders at 12.2% (Anna Uswatun, 2011; Dewi, 2014). Language delays or disorders affect approximately 5–8% of preschool children and may contribute to learning difficulties, socio-emotional problems, and behavioral disorders later in life. Furthermore, an estimated 20% of children experience language disorders by the age of two, increasing to 50–60% by the age of four to five (Eun et al., 2014).

Early stimulation and identification of children with family growth and development problems are often wrong because they are influenced by how the family (especially the mother or caregiver) provides stimulation, recognizes deviations, and decides the results of the detection. Mothers can detect deviations in child development by comparing their peers of the same age when they visit a clinic or pediatrician, with basic knowledge of child growth and development (Andayani & Soetjiningsih, 2001). In addition to identifying growth and development disorders based on previous research, stimulation also plays a very important role in improving children's growth and development.

Stimulation is an activity that stimulates a child's basic abilities so they can grow and develop optimally. Every child needs regular stimulation as early as possible and continuously at every opportunity. Stimulation can be provided by those closest to them, such as parents. Research shows that a lack of stimulation in children can lead to developmental delays and even permanent disorders.

In implementing monitoring or early detection of growth and development, the role of health workers, in this case midwives, is crucial to achieving early detection coverage and stimulating the growth and development of toddlers. In carrying out their role, midwives are responsible not only for direct early detection but are also required to optimize parental awareness in monitoring and providing growth and development stimulation to children according to their age so that delays in achieving growth and development can be minimized.

During the growth and development process, parents need to stimulate their toddlers to develop basic abilities, so they grow and develop optimally. Stimulation should be done as early as possible and should be a routine activity for parents. If parents are too busy to provide stimulation, monitoring and stimulation can be done by a substitute mother or caregiver, other family members, and other adults. Sometimes, children can even be stimulated by playmates. Infrequent stimulation can lead to permanent developmental

Vol. 7, No. 4 (November 2026)
E-ISSN : 2722-5097
Pg : 1382-1392

disorders. Increasingly, age-appropriate stimulation will shape their development according to their characteristics.(Ramírez-Luzuriaga et al., 2021),(Rantina et al., 2021).

The KPSP is a questionnaire administered by parents or health professionals to determine whether a child's development is normal based on established indicators. However, limited public awareness of the KPSP has resulted in limited use. The Pre-Screening Developmental Questionnaire (KPSP) is designed to help health workers, cadres, and especially parents gain a correct and rapid understanding of how to diagnose developmental delays in toddlers.(Suryanto, Purwandari H, 2014),(Ahmad Faozan, 2014).

Considering the importance of mothers' and cadres' roles in monitoring child development through routine child development checks, increasing the participation of mothers and cadres in conducting development checks and child stimulation using KPSP, early detection of growth and development disorders, and child stimulation that can be done independently at home.

Based on these findings, this community service program aimed to strengthen the knowledge and practical skills of mothers and Posyandu cadres in detecting and stimulating toddler development through the use of the Pre-Screening Developmental Questionnaire (KPSP). The program was designed to provide practical guidance on selecting age-appropriate KPSP forms, conducting developmental screening, interpreting examination results, providing appropriate stimulation, and determining follow-up actions for children requiring further attention. Through demonstrations, role-playing, discussions, and mentoring, this program is expected to contribute to improving community participation in early detection of developmental problems, strengthening the role of Posyandu cadres in monitoring child development, and encouraging mothers to provide continuous developmental stimulation at home. Furthermore, the program supports the integration of developmental screening and stimulation into routine Posyandu activities to promote optimal toddler growth and development.

Method

The community service activities were carried out in Kutalimbaru Village, Deli Serdang Regency, one of the villages supported by the Midwifery Department of the Medan Ministry of Health Polytechnic. The community service program involved 61 participants, consisting of 46 mothers of toddlers aged 12–36 months and 15 Posyandu cadres in Kutalimbaru Village, Deli Serdang Regency. The activities included educational sessions, demonstrations, role-playing, discussions, and mentoring on early developmental screening and age-appropriate stimulation using the Pre-Screening Developmental Questionnaire (KPSP). For the evaluation, maternal knowledge data were collected from 46 mothers, while developmental screening was conducted on 46 toddlers using the KPSP. The activities were planned to last for three months, starting in March 2026, and were implemented in conjunction with Posyandu activities in the area.

The activity was implemented through several stages, namely demonstration, role-play, discussion, mentoring, and evaluation. During the demonstration, the community service team demonstrated the child development screening process using the Pre-Screening Development Questionnaire (KPSP). Participants were taught how to select a KPSP appropriate for their child's age, perform the examination techniques, provide developmental stimulation, and interpret the results. The demonstration was conducted live so that mothers and cadres could observe each stage of the child development screening according to procedure.

Jurnal Pengabdian UNDIKMA:
Jurnal Hasil Pengabdian & Pemberdayaan kepada Masyarakat
https://e-journal.undikma.ac.id/index.php/jpu/index
Email: pengabdian@undikma.ac.id

Vol. 7, No. 4 (November 2026)
E-ISSN : 2722-5097
Pg : 1382-1392

The next stage is role-play, where participants take turns simulating child development screening using the KPSP for their age group. Participants are asked to complete a questionnaire based on their child's abilities, provide developmental stimulation as needed, interpret the test results, and communicate the results to the child's mother or caregiver. Through this activity, participants are trained not only in conducting screenings but also in providing education and follow-up recommendations based on the results of the child development screening.

The discussion method involved discussing various developmental issues likely to be encountered in children aged 12–36 months. The issues covered gross motor skills, fine motor skills, language, socialization, and independence. The discussion aimed to improve mothers' and cadres' ability to recognize potential developmental delays and determine appropriate forms of stimulation for the child's age and condition.

Support is provided to mothers and cadres, especially for children whose development, based on the KPSP results, is questionable. The community service team assists mothers in providing developmental stimulation for areas not yet achieved and provides education on regularly monitoring child development. Cadres are also involved in continuing to monitor and support families through integrated health post (Posyandu) activities.

Child development evaluation is conducted using the KPSP according to age. Each "Yes" answer is given a score of 1 if the child can perform the activity asked. In contrast, a "No" answer is given a score of 0 if the child is not yet able to perform the activity or the mother/caregiver does not know the child's ability. The examination results are categorized as appropriate development (S) if the number of "Yes" answers is 9–10, doubtful development (M) if the number of "Yes" answers is 7–8, and possible deviation (P) if the number of "Yes" answers is 6 or less. The "No" answers are then identified based on the developmental aspects that have not been achieved, including gross motor skills, fine motor skills, language, socialization, and independence.

The evaluation of the community service activities focused on maternal knowledge regarding child development stimulation and the implementation of developmental screening using the Pre-Screening Developmental Questionnaire (KPSP). The program involved 61 participants, consisting of 46 mothers of toddlers aged 12–36 months and 15 Posyandu cadres. The evaluation included assessing maternal knowledge and conducting developmental screening among 46 toddlers using age-appropriate KPSP forms. Children identified with questionable developmental outcomes received further assistance and monitoring to support appropriate developmental stimulation and follow-up.

Partners contributed to the implementation of the activities by informing community members and local leaders about the program, providing the activity venue, assisting with administrative procedures and correspondence, and actively participating in the implementation process. Partner involvement was expected to support the sustainability of child development screening and stimulation activities through integrated health post (Posyandu) services in Kutalimbaru Village.

Data were analyzed descriptively using frequency distributions and percentages. Maternal knowledge regarding child development stimulation was classified into good, sufficient, and poor categories. Children's developmental screening results obtained through the KPSP were also classified into developmental categories and presented as frequencies (n) and percentages (%). The findings were summarized in tables and supported by descriptive explanations. No inferential statistical tests, such as paired t-test or Wilcoxon signed-rank

Jurnal Pengabdian UNDIKMA:
Jurnal Hasil Pengabdian & Pemberdayaan kepada Masyarakat
https://e-journal.undikma.ac.id/index.php/jpu/index
Email: pengabdian@undikma.ac.id

Vol. 7, No. 4 (November 2026)
E-ISSN : 2722-5097
Pg : 1382-1392

test, were performed because paired numerical data from before and after the intervention were not available. Therefore, mean and standard deviation were not calculated.

Result and Discussion

The community service activities were carried out directly, involving mothers of toddler-aged children and cadres in Kutalimbaru Village. The activities began with a presentation on the importance of monitoring child development, followed by a demonstration of the use of the Pre-Screening Development Questionnaire (KPSP), practical developmental assessments, and the provision of stimulation appropriate to the child's age and abilities. Throughout the activities, participants were accompanied by a community service team to help them understand the stages of early developmental detection and appropriate follow-up based on the examination results.

Participants' involvement during the activity was evident through active participation in discussions, practical exercises, and mentoring. Mothers and cadres were allowed to observe, ask questions, and directly practice using the KPSP on children. Documentation of the implementation of mentoring activities for mothers and cadres in detecting and stimulating child development is shown in the following figure.



Figure 1. Implementation of activities to accompany mothers and cadres in detecting and stimulating child development using KPSP.

In addition to detecting development using the KPSP, community service activities also include developmental stimulation through play activities. Children are allowed to engage in activities involving hand-eye coordination, the ability to grasp, arrange, move, and shape objects using play media such as building blocks and playdough. These activities are used as a form of stimulation, especially for fine motor development, while also training children's concentration, coordination, and ability to complete simple activities according to their developmental stage. The implementation of child development stimulation activities can be seen in the following image.

Jurnal Pengabdian UNDIKMA:
Jurnal Hasil Pengabdian & Pemberdayaan kepada Masyarakat
https://e-journal.undikma.ac.id/index.php/jpu/index
Email: pengabdian@undikma.ac.id

Vol. 7, No. 4 (November 2026)
E-ISSN : 2722-5097
Pg : 1382-1392




Figure 2. Activities to stimulate children's motor development through building blocks and playdough.

Table 1. Percentage Distribution of Child Development Aged 12–36 Months Based on KPSP Results in Kutalimbaru Village

Child age	Good n (%)	Fair n (%)	Poor n (%)	Total
12 months	11 (52.4)	1 (4.8)	9 (42.9)	21
18 months	4 (100.0)	0 (0.0)	0 (0.0)	4
24 months	6 (100.0)	0 (0.0)	0 (0.0)	6
36 months	13 (86.7)	1 (6.7)	1 (6.7)	15
Total	34 (73.9)	2 (4.3)	10 (21.7)	46 (100.0)

Based on the results of developmental screening using the Pre-Screening Developmental Questionnaire (KPSP) among 46 children aged 12–36 months in Kutalimbaru Village in 2026, 34 children (73.9%) were classified as having good development, 2 children (4.3%) had sufficient development, and 10 children (21.7%) had poor development.

In the 12-month age group, out of 21 children, 11 (52.4%) had good development, 1 (4.8%) had sufficient development, and 9 (42.9%) had poor development. Among the 4 children aged 18 months, all (100%) demonstrated good development. Similarly, all 6 children aged 24 months (100%) were classified as having good development. In the 36-month age group, out of 15 children, 13 (86.7%) had good development, while 1 child (6.7%) had sufficient development and 1 child (6.7%) had poor development.

Overall, the results of community service activities indicate that most children aged 12–36 months are developing well. However, some children were found to be developing in the adequate and inadequate categories, necessitating regular developmental monitoring and age-appropriate stimulation through the active involvement of parents and health workers.

Table 2. Frequency Distribution of Mothers' Knowledge about Child Development Stimulation Toddler Age in Kutalimbaru Village

No	Category	Frequency (f)	Percentage (%)
1)	Good	34	73.9
2)	Enough	2	4.3
3)	Not enough	10	21.7
	Total	46	100.0

Based on Table 2, of the 46 respondents, the majority were in the good knowledge category, namely 34 people (73.9%). In contrast, mothers with a sufficient level of knowledge were 2 people (4.3%), and a minority were in the poor category, namely 10 people (21.7%). These results indicate that the majority of mothers have good knowledge regarding developmental stimulation for toddlers, so it is hoped that mothers can monitor and provide optimal developmental stimulation for their children according to their age stages.

Copyright © 2026, The Author(s)

Jurnal Pengabdian UNDIKMA:
Jurnal Hasil Pengabdian & Pemberdayaan kepada Masyarakat
https://e-journal.undikma.ac.id/index.php/jpu/index
Email: pengabdian@undikma.ac.id

Vol. 7, No. 4 (November 2026)
E-ISSN : 2722-5097
Pg : 1382-1392

Discussion

Improvement in Cadres' and Mothers' Skills in Early Detection Using KPSP

The community service program aimed to strengthen the knowledge and practical skills of mothers and Posyandu cadres in conducting early developmental screening using the Pre-Screening Developmental Questionnaire (KPSP). The program involved 46 mothers of toddlers aged 12–36 months and 15 Posyandu cadres in Kutalimbaru Village. Activities included demonstrations, role-playing, discussions, and direct mentoring. Participants received guidance on selecting KPSP forms according to the child's age, observing developmental abilities, completing the questionnaire, interpreting screening results, and providing appropriate developmental stimulation.

The assessment of maternal knowledge regarding child development stimulation showed that 34 mothers (73.9%) had good knowledge, 2 mothers (4.3%) had sufficient knowledge, and 10 mothers (21.7%) had poor knowledge. These findings indicate that most mothers demonstrated good knowledge at the time of assessment. However, the presence of mothers with sufficient and poor knowledge highlights the need for continuous education and practical assistance, particularly regarding developmental milestones and appropriate stimulation activities.

The use of demonstrations and practical exercises is relevant to the findings of Huru et al. (2024), who reported improvements in health cadres' knowledge and skills following KPSP training. In their community service program, cadres' knowledge scores increased from 44.0 to 94.1, while practical skills improved from 40% to 100%. Similarly, (Miniharianti, 2023) reported a significant relationship between parental knowledge of child development stimulation and developmental outcomes among children aged 0–12 months. These findings emphasize the importance of strengthening the capacity of mothers and health cadres in supporting early childhood development.

Through demonstrations, role-playing, and mentoring, the program provided opportunities for mothers and cadres to practice developmental screening and understand appropriate follow-up procedures. Mothers were also encouraged to apply developmental stimulation activities independently at home. Nevertheless, the available evaluation data do not include separate pre-intervention and post-intervention measurements of practical skills among mothers and cadres. Therefore, the improvement in their skills cannot be quantified statistically. Continued training and periodic competency assessments are recommended to ensure the sustainability of these skills.

Profile of Toddler Developmental Screening Results and Risk Factor Analysis

Developmental screening using the KPSP was conducted among 46 toddlers aged 12–36 months in Kutalimbaru Village. The results showed that 34 children (73.9%) were classified as having good development, 2 children (4.3%) had sufficient development, and 10 children (21.7%) had poor development. These findings indicate that although most children demonstrated developmental abilities appropriate to their age, some still required further stimulation, monitoring, and follow-up assessment.

Based on age distribution, the 12-month age group consisted of 21 children, of whom 11 (52.4%) had good development, 1 (4.8%) had sufficient development, and 9 (42.9%) had poor development. Among the 4 children aged 18 months, all (100%) were classified as having good development. Similarly, all 6 children aged 24 months (100%) demonstrated good development. In the 36-month age group, 13 of 15 children (86.7%) had good development, while 1 child (6.7%) had sufficient development and 1 child (6.7%) had poor development.

Copyright © 2026, The Author(s)

Jurnal Pengabdian UNDIKMA:
Jurnal Hasil Pengabdian & Pemberdayaan kepada Masyarakat
https://e-journal.undikma.ac.id/index.php/jpu/index
Email: pengabdian@undikma.ac.id

Vol. 7, No. 4 (November 2026)
E-ISSN : 2722-5097
Pg : 1382-1392

The proportion of children with poor developmental screening results was highest in the 12-month age group. This finding highlights the importance of early developmental monitoring and age-appropriate stimulation during infancy and early toddlerhood. At this stage, children experience rapid changes in gross motor, fine motor, language, socialization, and independence skills. Therefore, developmental stimulation and regular monitoring are essential to identify children who may require additional support (Kemenkes RI, 2022; WHO, 2018).

Child development is influenced by several interacting biological, nutritional, health-related, and environmental factors. The Nurturing Care Framework developed by the World Health Organization, UNICEF, and the World Bank Group (2018) identifies five essential components for optimal early childhood development: good health, adequate nutrition, safety and security, responsive caregiving, and opportunities for early learning. These components emphasize that child development depends not only on biological maturation but also on the quality of care and stimulation provided by the surrounding environment.

Furthermore, (Wondmagegn et al., 2024), in a systematic review and meta-analysis of children in low- and middle-income countries, identified maternal education and low birth weight as significant factors associated with developmental delay. Other potential contributing factors include inadequate nutrition, chronic infections, insufficient early stimulation, maternal mental health problems, and socioeconomic disadvantages. These findings demonstrate the importance of considering multiple factors when assessing children's developmental outcomes.

In the context of this community service program, maternal education, birth weight, nutritional status, health history, and home stimulation practices were not systematically assessed as risk factors. Therefore, the higher proportion of poor developmental screening results among 12-month-old children cannot be directly attributed to specific maternal, biological, or environmental factors. The findings should be interpreted descriptively rather than as evidence of a causal relationship. Further assessments are needed to identify factors associated with developmental outcomes among children in Kutalimbaru Village.

Independent Developmental Stimulation Interventions and Follow-up Plans

An important output of this community service program was the introduction of practical developmental stimulation activities that mothers could implement independently at home. The stimulation activities were adapted to the children's ages and developmental abilities, particularly in gross and fine motor development. Gross motor stimulation included practicing walking, running, and jumping, while fine motor stimulation involved stacking blocks, drawing, and handling small objects. These activities were introduced through educational play to encourage children's active participation and learning.

The importance of continuous stimulation is supported by the World Health Organization (2020), which recommends responsive caregiving and early learning activities during the first three years of life. Parents and caregivers play an essential role in providing opportunities for children to explore, interact, and develop new abilities through everyday activities. Similarly, (Amelia et al., 2023) found a significant relationship between maternal psychosocial stimulation and developmental outcomes among children aged 3–5 years. Their findings support the importance of maternal involvement in providing consistent stimulation at home.

To maintain the sustainability of the program, follow-up plans should be integrated into routine Posyandu activities. Mothers are encouraged to provide regular stimulation according to their children's developmental needs, while Posyandu cadres are expected to

Copyright © 2026, The Author(s)

Vol. 7, No. 4 (November 2026)
E-ISSN : 2722-5097
Pg : 1382-1392

support developmental monitoring, provide health education, document screening results, and encourage mothers to attend regular developmental assessments. Healthcare professionals should provide further guidance and determine appropriate interventions for children requiring additional attention.

Follow-up actions should be based on the KPSP screening results and the developmental screening guidelines established by the Indonesian Ministry of Health. Children with age-appropriate development should continue receiving regular stimulation and developmental monitoring. Children with questionable developmental outcomes should receive more frequent and targeted stimulation, followed by a repeat KPSP assessment after two weeks. If the results remain questionable, referral for further evaluation is recommended. Children with suspected developmental deviations should be referred to an appropriate healthcare facility for comprehensive assessment and management (RI, 2017).

The follow-up process requires coordination among mothers, Posyandu cadres, and healthcare professionals. Mothers serve as the primary providers of daily developmental stimulation, cadres support monitoring and education at the community level, and healthcare professionals provide clinical assessment and referral when necessary. Through these coordinated efforts, Posyandu can strengthen its role as a community-based platform for early developmental screening, appropriate stimulation, and timely intervention. The sustainability of these activities is expected to improve community awareness and encourage more active participation in monitoring child development.

Conclusion

The community service program successfully supported capacity building among mothers and Posyandu cadres in Kutalimbaru Village, Deli Serdang Regency, in conducting early childhood developmental screening and providing age-appropriate stimulation using the Pre-Screening Developmental Questionnaire (KPSP). The program involved 46 mothers and 15 Posyandu cadres and was implemented through live demonstrations, role-playing, discussions, hands-on mentoring, and evaluation. These activities provided participants with practical experience in independently selecting age-appropriate KPSP forms, conducting developmental screening, interpreting assessment results, and implementing appropriate gross and fine motor stimulation. The evaluation showed that 34 mothers (73.9%) had good knowledge of child development stimulation. Furthermore, developmental screening among 46 toddlers identified 34 children (73.9%) with good development, 2 children (4.3%) with sufficient development, and 10 children (21.7%) with poor development. These findings highlight the importance of strengthening the roles of mothers and Posyandu cadres in continuous developmental monitoring, home-based stimulation, and appropriate follow-up for children requiring further attention.

Recommendation

Mothers are encouraged to provide developmental stimulation regularly according to the child's age and to monitor development periodically using the KPSP. Posyandu cadres should continue to strengthen their role in providing education, supporting early developmental screening, and assisting children whose developmental outcomes are not yet optimal. Children identified as requiring further attention should receive targeted stimulation and periodic reassessment. Similar community service programs are also recommended to be implemented continuously through Posyandu activities to maintain and improve the ability of

Copyright © 2026, The Author(s)

Vol. 7, No. 4 (November 2026)
E-ISSN : 2722-5097
Pg : 1382-1392

mothers and cadres to detect developmental problems early and provide appropriate developmental stimulation.

References

Ahmad Faozan. (2014). *Rancang bangun aplikasi kpsp sebagai upaya pencegahan gangguan perkembangan anak berbasis android*. SEKOLAH TINGGI MANAJEMEN INFORMATIKA DAN KOMPUTER AMIKOM YOGYAKARTA YOGYAKARTA 2014.

Amelia, A. P., Ayuningrum, L. D., & Dwiarini, M. (2023). Relationship of psychosocial stimulation by mother to development children age 3th-5 th years in Gamping 1st Public Health Center Working Area. *JNKI (Jurnal Ners Dan Kebidanan Indonesia)(Indonesian Journal of Nursing and Midwifery)*, *11*(4), 430–441.

Andayani, P., & Soetjiningsih, S. (2001). Role of mother's perceptions on their child development on early detection of developmental deviation. *Paediatrica Indonesiana*, *41*(9–10), 264–267.

Anna Uswatun, A. W. (2011). S, A. U. Q., Wulandari, A., Berdasarkan, A., & Deteksi, S. (2006). Kata Kunci : Jurnal Involusi Kebidanan, 1(2), 37–44. *Jurnal Involusi Kebidanan*, *1*(2), 37–44.

Bustan, M. N. (2007). *Epidemilologi Penyakit tidak Menular*. . PT Rineka Cipta.

Dewi, F. K. (2014). Efektifitas SDIDTK Terhadap Peningkatan Angka Penemuan Dini Gangguan Tumbuh Kembang Pada Anak Usia Balita Di Posyandu Teluk Wilayah Puskesmas Purwokerto Selatan. *Proseding Seminar Nasional Dan Internasional*.

Eun, J. J., Lee, H. J., & Kim, J. K. (2014). Developmental profiles of preschool children with delayed language development. *Korean Journal of Pediatrics*, *57*(8), 363–369. https://doi.org/10.3345/kjp.2014.57.8.363

Izah, N., Prastiwi, R. S., & Andari, I. D. A. (2019). Stimulasi dan deteksi dini tumbuh menggunakan aplikasi tumbuh kembang balita di wilayah kelurahan margadana. *Jurnal Abdimas PHB*, *2*(2), 21–28.

Kemenkes RI. (2022). Profil Kesehatan Indonesia 2021. In *Pusdatin.Kemenkes.Go.Id*.

Miniharianti. (2023). *Hubungan Pengetahuan Orang Tua Tentang Perkembangan Anak Usia 0–12 Bulan Dengan Menggunakan KPSP di Puskesmas Pidie Jaya. Jurnal Kesehatan Hesti Wira Sakti, 11(2), 153–158.*

Prado, E. L., Sebayang, S. K., Apriatni, M., Adawiyah, S. R., Hidayati, N., Islamiyah, A., Siddiq, S., Harefa, B., Lum, J., Alcock, K. J., Ullman, M. T., Muadz, H., & Shankar, A. H. (2017). Maternal multiple micronutrient supplementation and other biomedical and socioenvironmental influences on children's cognition at age 9–12 years in Indonesia: follow-up of the SUMMIT randomised trial. *The Lancet Global Health*, *5*(2), e217–e228. https://doi.org/10.1016/S2214-109X(16)30354-0

Pujiawati, D., & Nur Lina, dan L. H. (2013). *HUBUNGAN POLA ASUH DAN STATUS GIZI DENGAN PERKEMBANGAN PSIKOMOTOR ANAK USIA 6-12 BULAN (Survei di Desa Karangsembung Kecamatan Jamanis Kabupaten Tasikmalaya Tahun 2013*. *05*.

Ramírez-Luzuriaga, M. J., DiGirolamo, A. M., Martorell, R., Ramírez-Zea, M., Waford, R., & Stein, A. D. (2021). Influence of enhanced nutrition and psychosocial stimulation in early childhood on cognitive functioning and psychological well-being in Guatemalan adults. *Social Science and Medicine*, *275*(March), 113810. https://doi.org/10.1016/j.socscimed.2021.113810

Rantina, M., Hasmalena, H., & Karmila Nengsih, Y. (2021). Pengembangan Buku Stimulasi

Vol. 7, No. 4 (November 2026)
E-ISSN : 2722-5097
Pg : 1382-1392

dan Deteksi Tumbuh Kembang Anak Usia Dini Berbasis ICT. *Golden Age: Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini*, *6*(3), 155–168. https://doi.org/10.14421/jga.2021.63-05

RI, K. K. (2017). *Profil Kesehatan Indonesia 2016*. https://kemkes.go.id/app_asset/file_content_download/Profil-Kesehatan-Indonesia-2017.pdf

Riskesdas. (2013). *RISET KESEHATAN DASAR*.

Siti Maryam, Ernawati Tri Handayani, Lintang Kurnia Dewi, & Yuni Khofifah Kurniawati. (2021). Stimulasi, Deteksi Dan Intervensi Dini Tumbuh Kembang Anak Di Masa Pandemi Covid_19. *Janita : Jurnal Pengabdian Kepada Masyarakat*, *1*(2), 28–31. https://doi.org/10.36563/pengabdian.v1i2.344

Suryanto, Purwandari H, M. W. (2014). DUKUNGAN KELUARGA DAN SOSIAL DALAM PERTUMBUHAN DAN PERKEMBANGAN PERSONAL SOSIAL, BAHASA DAN MOTORIK PADA BALITA DI KABUPATEN BANYUMAS. *Jurnal Kesehatan Masyarakat*, *10*(1), 103–109. https://doi.org/10.15294/kemas.v10i1.3076

Sutiari, N. K., & Wulandari, D. A. R. (2011). Hubungan status gizi waktu lahir dengan pertumbuhan dan perkembangan anak usia pra sekolah di Desa Peguyangan, Kota Denpasar. *Jurnal Ilmu Gizi*, *2*(2), 109–117.

WHO. (2018). *Guidelines on sanitation and health*. World Health Organization Geneva.

Wondmagegn, T., Girma, B., & Habtemariam, Y. (2024). Prevalence and determinants of developmental delay among children in low-and middle-income countries: a systematic review and meta-analysis. *Frontiers in Public Health*, *12*, 1301524.