Iustitia: Journal of Legal Theory, Politics, and International Relations
Vol 1 No 3 August 2026, Hal 212-219
ISSN: 3163-530X (Print) ISSN: 3163-5296 (Electronic)
Open Access: https://sovereignresearch.org/iustitia

Implementation of The Posyandu Program for Integrated Primary Health Care (ILP) in The Management of Hypertension and Diabetes Mellitus in Tanjungpinang City

Rendy Syafutra[1*], Nur Aslamatturahmah Dwi Putri[2], Eki Darmawan3
[1-3] Universitas Maritim Raja Ali Haji, Indonesia
email: rendysyafutra2104@gmail.com[1]

Article Info :
Received:
26-07-2026
Revised:
12-08-2026
Accepted:
17-08-2026

Abstract

Hypertension and diabetes mellitus require continuous preventive, promotive, and early detection services at the community level. The Integrated Primary Health Care (ILP) Posyandu Program was implemented to expand primary health services through a life-course approach. This study aimed to analyze the implementation of ILP Posyandu for hypertension and diabetes mellitus management in Tanjungpinang City. A qualitative descriptive approach was used, involving observations, in-depth interviews, and documentation. Informants consisted of DKP2KB officials, primary health center personnel, health workers, Posyandu cadres, and community members. The findings indicate that ILP implementation integrates screening, health education, consultation, recording, and referral services. Policy support and coordination among DKP2KB, primary health centers, cadres, and local community structures support program implementation. However, community participation remains uneven, particularly among adolescents and productive-age adults. Implementation is also constrained by limited health personnel, increased cadre workload, variations in cadre capacity, and physical limitations at several service locations. Strengthening health promotion, community outreach, cadre training, human resources, facilities, coordination, and monitoring is required to improve implementation quality and sustain community-based hypertension and diabetes mellitus services.

Keywords: *Integrated Primary Health Care, Posyandu, hypertension, diabetes mellitus, program implementation.*

INTRODUCTION

Non-communicable diseases, particularly hypertension and diabetes mellitus, represent persistent challenges for primary health care systems because their management requires continuous prevention, early detection, monitoring, and community participation. In Indonesia, the burden of non-communicable diseases has increased the demand for preventive and promotive health services that can reach populations beyond conventional clinical facilities (Wahidin et al., 2022).

Hypertension is also closely associated with diabetes mellitus through shared metabolic and cardiovascular risk factors, increasing the need for integrated screening and monitoring at the community level (Damayanti et al., 2023). Health education remains an important intervention for improving public knowledge regarding non-communicable diseases and encouraging appropriate preventive behavior, particularly among high-risk populations (Arifin et al., 2022).

The transformation of primary health care has introduced the Integrated Primary Health Care (ILP) approach to expand community-based services across the life course. Posyandu ILP extends the conventional service orientation by incorporating adolescents, productive-age populations, older adults, and other target groups into integrated preventive and promotive activities. Yoto et al. (2024) reported that Posyandu implementation within primary health care transformation can strengthen community health services through a broader and more integrated service model.

The effectiveness of such a model depends not only on the availability of services but also on organizational readiness, implementation capacity, human resources, and community engagement. Community health cadres constitute a central operational component of Posyandu ILP because they support registration, screening, health education, recording, and communication with community members. Recent evidence indicates that strengthening cadre knowledge and skills is important for

maintaining the quality of integrated primary health services and supporting health promotion across the life course (Hesti et al., 2025). Manglapy et al. (2025) further emphasize the importance of cadre capacity in supporting hypertension and diabetes mellitus screening at the community level. The management of Posyandu information also requires accurate and systematic data practices because service records provide an operational basis for monitoring coverage, identifying target groups, and evaluating program performance (Aris Dwi C et al., 2024).

Program implementation is shaped by interactions among policy, organizational conditions, individual actors, and implementation processes rather than by program design alone. The Consolidated Framework for Implementation Research (CFIR) provides a structured approach for examining these dimensions through the domains of innovation, outer setting, inner setting, individuals, and implementation process (Damschroder et al., 2022).

This framework is relevant for Posyandu ILP because the program involves government institutions, primary health facilities, cadres, and community members operating within different organizational and social conditions. Public-sector implementation also requires effective institutional coordination and management because policy objectives must be translated into operational activities at the service-delivery level (Said et al., 2024). Evidence from community health programs indicates that implementation barriers frequently arise from limited participation, insufficient resources, uneven cadre competencies, and weaknesses in health promotion.

Research on hypertension education demonstrates that increasing community knowledge is necessary for strengthening awareness of disease prevention and health examination (Putra Ritonga et al., 2024). Lifestyle characteristics are also relevant to hypertension incidence among productive-age populations, indicating the importance of preventive interventions that reach individuals before clinical complications develop (Halim & Sutriyawan, 2022). Health promotion has consequently become an important mechanism for increasing public awareness of non-communicable diseases and encouraging healthier behavior (Vilasari et al., 2024).

Digitalization introduces an additional dimension to the implementation of integrated primary health services, particularly in relation to information dissemination, data management, and communication with target communities. Susiloningtyas et al. (2025) identify systematic data management as an important component of Posyandu ILP because reliable information supports service administration and program monitoring. Digital and complementary service integration can also strengthen the role of cadres and extend the reach of primary health interventions across different stages of life (Hesti et al., 2025). However, the availability of digital mechanisms does not automatically ensure effective implementation when community access, institutional readiness, human resources, and communication practices remain uneven.

Previous studies have examined Posyandu ILP from several perspectives, including service transformation, cadre capacity, health promotion, data management, and implementation readiness. Mait (2025) highlights the importance of promotional health readiness in implementing ILP at primary health centers, while Dewi and Susilawati (2024) contribute evidence concerning community-oriented health service activities. Studies concerning governance and institutional implementation further indicate that program performance is influenced by the capacity of organizations to coordinate actors, resources, and administrative functions (Kaendung et al., 2021). These studies provide relevant foundations, yet limited empirical attention has been directed toward examining the implementation of Posyandu ILP for hypertension and diabetes mellitus through an integrated CFIR-based analysis at the local government and community service levels.

This study addresses that gap by analyzing the implementation of the Posyandu ILP program for hypertension and diabetes mellitus management in Tanjungpinang City through the five CFIR domains: innovation, outer setting, inner setting, individuals, and implementation process. The analysis focuses on how service integration, policy support, organizational coordination, human resources, cadre competencies, community participation, facilities, and monitoring practices shape program implementation. The study is expected to provide an empirical account of the factors supporting and constraining integrated non-communicable disease services at the community level, including conditions that may limit effective program delivery. The objective of this study is to analyze the implementation of Posyandu ILP in the management of hypertension and diabetes mellitus in Tanjungpinang City and to identify the implementation factors requiring further strengthening.

RESEARCH METHODS

This study employed a qualitative descriptive approach to examine the implementation of the Integrated Primary Health Care (ILP) Posyandu Program for the management of hypertension and diabetes mellitus in Tanjungpinang City. The study was conducted at the Health, Population Control and Family Planning Office (DKP2KB) of Tanjungpinang City and four primary health centers implementing ILP Posyandu, namely Sei Jang, Tanjungunggat, Kampung Bugis, and Tanjungpinang Barat Health Centers. Informants were selected using purposive sampling and included DKP2KB officials, primary health center heads, ILP Posyandu program officers, health workers, Posyandu cadres, and community members participating in ILP Posyandu activities.

Data were collected through observation, in-depth interviews, and documentation to obtain information concerning program implementation, service activities, implementation barriers, and supporting conditions. Data analysis followed an interactive process consisting of data reduction, data presentation, and conclusion drawing. The implementation of the ILP Posyandu Program was analyzed using the Consolidated Framework for Implementation Research (CFIR), which comprises five domains: Innovation, Outer Setting, Inner Setting, Individuals, and Implementation Process. These domains were used to examine the characteristics of the program, external influences, organizational conditions, competencies and commitment of implementation actors, and the processes through which the program was planned, delivered, monitored, and evaluated. The framework provided a systematic basis for identifying factors supporting or constraining the implementation of ILP Posyandu in hypertension and diabetes mellitus management in Tanjungpinang City.

RESULTS AND DISCUSSION

Innovation of Integrated Primary Health Care through Posyandu

The implementation of Integrated Primary Health Care (ILP) Posyandu in Tanjungpinang City represents a transformation in the function of community-based primary health services. Prior to ILP implementation, Posyandu services were predominantly directed toward pregnant women, infants, and toddlers, whereas the integrated model extends service coverage to adolescents, productive-age adults, and older adults. This expansion creates a service structure capable of incorporating routine screening for hypertension and diabetes mellitus at the community level. Yoto et al. (2024) similarly reported that Posyandu transformation under the primary health service reform expanded community health services through a life-course approach.

The field findings indicate that ILP integrates several preventive and promotive activities within the same service location and service period. Blood pressure measurement, body mass index assessment, blood glucose examination for designated targets, health consultation, and health education are performed by health workers with cadre assistance. The integrated arrangement reduces the separation between screening and health education activities and provides residents with access to multiple basic health services through community-based delivery. The principal innovation characteristics identified in the study are presented in Table 1.

Table 1. Innovation Characteristics of ILP Posyandu Implementation

Innovation Aspect	Empirical Finding
Service model	Health services integrated according to the life-course approach
Target groups	Adolescents, productive-age adults, older adults, pregnant women, infants, and toddlers
Screening	Hypertension and diabetes mellitus screening
Supporting services	Health education, consultation, and basic assessment
Service location	Community-based Posyandu
Main implementation actor	Primary health centers, cadres, and DKP2KB

The innovation has strengthened the promotive and preventive orientation of Posyandu by creating opportunities for residents to receive routine examinations before experiencing severe health complaints. This function is relevant to hypertension and diabetes mellitus because both conditions

require early identification and continuous monitoring, while disturbances in blood glucose and blood pressure may occur simultaneously among individuals with diabetes (Maulidah & Julianti, 2021). Natanael et al. (2024) also identifies the clinical complexity associated with diabetes mellitus accompanied by hypertension, supporting the need for integrated monitoring rather than isolated disease management. The observed implementation indicates that ILP provides an operational mechanism for bringing these preventive activities closer to the population.

Table 2. Integrated Screening and Preventive Activities in ILP Posyandu

Service Activity	Target or Function	Implementation Condition
Blood pressure screening	Early identification of hypertension risk	Conducted during Posyandu activities
Blood glucose examination	Identification of diabetes mellitus risk	Conducted for designated target groups
Body mass index measurement	Assessment of nutritional and metabolic risk	Integrated into service activities
Health education	Increasing knowledge of disease prevention	Delivered by health workers and cadres
Health consultation	Basic assessment and health guidance	Provided during service activities
Referral	Further examination for individuals requiring follow-up	Directed to primary health centers

The findings also show that innovation in service design has not produced uniform community participation across target groups. Some residents continue to perceive health examinations as necessary mainly when symptoms are present, limiting routine utilization of preventive services, particularly among productive-age groups. Putra Ritonga et al. (2024) demonstrates the relevance of hypertension education for increasing community awareness, while Rachmawati et al. (2025) reports the use of health promotion to improve knowledge and healthy lifestyle practices related to diabetes and hypertension. The implementation of ILP therefore requires sustained health promotion and community engagement to convert expanded service availability into regular preventive health behavior.

Outer Setting of ILP Posyandu Implementation

The outer setting of ILP Posyandu implementation in Tanjungpinang City is characterized by policy support from the central government and operational coordination at the local level. Interview findings indicate that the program is implemented through DKP2KB and primary health centers with technical guidance, implementation procedures, and interinstitutional coordination. Government organizational capacity is relevant to program implementation because public health policies require administrative coordination and institutional management at the operational level (Said et al., 2024). Yoto et al. (2024) also identifies policy and institutional support as important elements in the implementation of Posyandu under primary health care transformation.

Community needs for hypertension and diabetes mellitus screening are present, but service utilization remains uneven among target groups. Some residents continue to seek health examinations primarily after experiencing symptoms, while productive-age residents face time constraints associated with employment and daily activities. Health promotion has an important function in addressing this pattern because increased knowledge may improve awareness of non-communicable disease prevention and early detection (Vilasari et al., 2024). The principal external conditions identified from the field findings are presented in Table 3.

Table 3. Outer Setting Indicators in ILP Posyandu Implementation

Aspect	Empirical Finding
Policy support	The program is supported by national regulations and implemented by DKP2KB and primary health centers
Institutional coordination	Coordination exists among DKP2KB, primary health centers, cadres, and local administrative structures
Community needs	Communities require screening services, but participation remains suboptimal
Socialization	Information is disseminated through cadres, RT/RW structures, and communication media
Main barriers	Work commitments and limited awareness of routine health examinations

The communication system used to mobilize residents consists of WhatsApp groups, door-to-door information, and announcements through RT/RW representatives. These mechanisms provide basic access to information regarding schedules and service benefits, although their reach is restricted among residents who work during Posyandu operating hours. Putra Ritonga et al. (2024) demonstrates that structured health education can increase public awareness concerning hypertension and preventive health behavior. Rachmawati et al. (2025) similarly reports that health promotion concerning diabetes and hypertension can support improvements in knowledge and healthy lifestyle practices among community groups.

Table 4. Community Participation Conditions in ILP Posyandu

Target Group	Observed Participation	Main Condition
Pregnant women	Variable between Posyandu locations	Attendance remains low at some locations
Adolescents	Relatively low	Limited routine participation
Productive-age adults	Relatively low	Employment and daily activities affect attendance
Older adults	More accessible to community services	Participation is influenced by awareness and mobility
Infants and toddlers	Relatively higher	Established Posyandu utilization pattern

The attendance data for May 2026 demonstrate differences in participation between target groups and service locations. Pregnant women recorded no attendance among five targets at Bukit Harapan and two of six targets at Punai, while Bina Mulia and Bunga Matahari recorded full attendance among their respective targets. The infant and toddler group showed stronger participation, including 45 of 45 targets at Bukit Harapan, whereas adolescent and productive-age participation remained comparatively low across the Posyandu sites. These findings support the observation that the outer setting is influenced by community characteristics, employment schedules, preventive health awareness, and the ability of communication strategies to reach specific target populations.

Inner Setting of ILP Posyandu Implementation

The inner setting of ILP Posyandu implementation is characterized by coordination among DKP2KB, primary health centers, health workers, and Posyandu cadres. The distribution of responsibilities has been established according to the functions of each implementation actor, allowing Posyandu activities to operate according to scheduled service periods. Internal coordination represents an organizational resource that supports continuity of community-based health services. Said et al.

(2024) identifies organizational management and institutional coordination as strategic functions in the implementation of government programs.

The study identifies human resources and physical facilities as the main organizational constraints. Health personnel remain limited, while the integration of additional target groups has increased the workload of cadres and extended service duration during some Posyandu activities. Examination equipment is available, but several service locations have limited physical facilities, including Bina Mulia and Punai Posyandu. The main inner-setting conditions identified from the field findings are presented in Table 5.

Table 5. Inner Setting Indicators in ILP Posyandu Implementation

Aspect	Empirical Finding
Coordination	Coordination operates between DKP2KB, primary health centers, and cadres
Human resources	Health personnel remain limited
Facilities	Examination equipment is available, while some buildings have limited capacity
Cadre workload	Workload has increased following service integration
Service duration	Limited resources contribute to longer service processes

The condition of the inner setting is associated with the capacity of the organization to maintain service quality under expanded program responsibilities. Manglapy et al. (2025) reports that cadre competence is associated with the implementation of hypertension and diabetes mellitus screening, while Syabrullah et al. (2025) emphasizes optimization of cadre roles within primary-level services. The field findings indicate that limitations in personnel and facilities may place additional operational demands on cadres during service activities. Adequate staffing, facilities, and organizational support are required to maintain consistent implementation across Posyandu locations.

Table 6. Organizational Resources and Implementation Constraints

Resource Dimension	Existing Condition	Implementation Effect
Health personnel	Limited	Service workload is concentrated among available personnel
Posyandu cadres	Available and active	Additional workload following service integration
Examination equipment	Available	Supports routine screening
Service buildings	Limited at several locations	Restricts service comfort and operational space
Organizational coordination	Good	Supports continuity of program activities

The physical setting also affects the practical delivery of integrated services because some Posyandu activities are conducted in facilities with limited space, including a mosque used as a service location at Bina Mulia Posyandu. Such conditions may affect the organization of registration, screening, recording, and health education when several target groups attend at the same period. The findings are consistent with the observation that implementation constraints include limited facilities and increased cadre workload, while coordination remains a supporting factor. Strengthening facilities, increasing health personnel, and providing continuous cadre development are required to improve the organizational capacity of ILP Posyandu.

CONCLUSION

The implementation of the Integrated Primary Health Care (ILP) Posyandu Program for hypertension and diabetes mellitus management in Tanjungpinang City has expanded community-based primary health services through a life-course approach. The program integrates screening, health education, consultation, recording, and referral within Posyandu activities, with implementation supported by DKP2KB, primary health centers, health workers, and cadres. The innovation has strengthened the promotive and preventive orientation of Posyandu and provided a mechanism for earlier identification of hypertension and diabetes mellitus risks. The implementation also reflects the findings of Yoto et al. (2024) regarding the expansion of Posyandu services under primary health care transformation.

The main implementation constraints involve uneven community participation, limited health personnel, increased cadre workload, differences in cadre capacity, and inadequate physical facilities at several service locations. Participation remains relatively low among adolescents and productive-age adults, while community awareness of routine screening is still limited. Strengthening health promotion, community outreach, cadre training, human resources, service facilities, and interinstitutional coordination is required to improve implementation consistency. Systematic monitoring and data management are also necessary to support service continuity and identify implementation gaps in hypertension and diabetes mellitus control.

REFERENCES

Arifin, Z., Purqoti, D. N. S., Rusiana, H. P., Fatmawati, B. R., Ilham, & Zuliardi. (2022). Peningkatan Pengetahuan Penyakit Tidak Menular (PTM) Pada Masyarakat Resiko Tinggi Melalui Pendidikan Kesehatan. LOSARI: Jurnal Pengabdian Kepada Masyarakat, *4*(2). Diambil dari http://ojs.losari.or.id/index.php/losari

Aris Dwi C, Luluk S, Fannindya HZ, S. (2024). *Data Management of Posyandu Management Information System of Integrated Primary Care Services (ILP) in Karangrejo Village, Ngasem District, Kediri Regency in 2024*, *2*(1), 16–24. https://doi.org/10.70574/d6r9mx33

Beno, J. (2022). Dampak Pandemi Covid-19 Pada Kegiatan Ekspor Impor (Studi Pada Pt.Pelabuhan Indonesia 11 (persero) Cabang Teluk Bayur. *New Phytologist*, *51*(1), 2022. https://doi.org/10.33556/jstm. v22i2.314

Damayanti, V. W., Yonata, A., & Kurniawaty, E. (2023). *Hypertension in Diabetes Melitus: Pathophysiology and Risk Factor Abstract. Medula, 14*(1), 1253–1257. https://doi.org/10.53089/medula.v13i7.896

Damschroder, L. J., Reardon, C. M., Widerquist, M. A. O., & Lowery, J. (2022). *The Updated Consolidated Framework for Implementation Research Based on Sser Feedback. Implementation Science, 0*, 1–16. https://doi.org/10.1186/s13 012-022-01245-0

Dewi, V. P., & Susilawati. (2024). Jurnal Pengabdian Masyarakat Akademisi Jurnal Pengabdian Masyarakat Akademisi. Jurnal Pengabdian Masyarakat, 2(2), 170–175.

Halim, & Sutriyawan, A. (2022). *Retrospective Study of Lifestyle and Incidence of Hypertension in Productive Age. Journal of Nursing and Public Health, 10*(1), 121–128. https://doi.org/10.37676/jnph.v10i1.2376.

Hesti, N., Iswandy, E., Kurniadi, T., Amir, A. B. T., Kebidanan, S., Kesehatan, F., Mercubaktijaya, U. (2025). Optimalisasi Peran dan Keterampilan Kader Posyandu melalui Integrasi Layanan (Primer , Komplementer , dan Digitalisasi) untuk Meningkatkan Kesehatan Sepanjang Daur Kehidupan, *5*(5), 335–340. https://doi.org/10.55382/jurnalpustakamitra.v5i5.1296 Vol.

Kaendung, E., Pangemanan, F., & Undap, G. (2021). *Jurnal governance*, *1*(2), 1–11.

Luluk Susiloningtyas, Aris Dwi Cahyono, Fannidya Hamdani Zeho, S. (2025). Pengelolaan Data Sistem Informasi Posyandu Integrasi Layanan Primer (ILP) Manajemen Data Management Information System Posyandu Management, *7*(1), 96–110.

Mait, T. O. (2025). Evaluasi Kesiapan Promkes dalam Impelementasi Program Integrasi Layanan Primer (ILP) di Puskesmas, *5*(1), 133–140. https://doi.org/https://doi.org/10.54082/jupin.1029

Manglapy, Y. M., Fani, T., Muthoharo, N. A., Kesehatan, P., Universitas, M., & Nuswantoro, D. (2025). APMa, *5*(207), 91–97. https://doi.org/10.47575/apma.v5i2.716

Maulidah, I., & Julianti, D. (2021). Hubungan Antara Kadar Gula Darah Dengan Tekanan Darah pada Pasien Diabetes Melitus Tipe II, Jurnal Penelitian Kedokteran, 4(2), 93-101., 1–7.

Natanael, J., Damayanti, E., Himayani, R., & Oktafany. (2024). Literature Review: Kajian Potensi Interaksi Obat Antidiabetes Pada Pasien Diabetes Melitus Tipe 2 Dengan Komplikasi Hipertensi. Sains Medisina, *2*(3), 93–98. https://doi.org/https://doi.org/10.63004/snsmed.v2i6.468

Nur Syamsi Norma Lalla, J. R. (2022). Ketikdakstabilan Kadar Glukosa Darah Pada Pasien Diabetes Melitus Tipe II Type https://doi.org /10.35816/jiskh.v11i2.816 Research

Putra Ritonga, E., Silaban, N. Y., & Sagala, D. S. P. (2024). Edukasi Tentang Hipertensi Kepada Masyarakat Di Kelurahan Payah Pasir Kecamatan Medan Marelan. Jurnal Ilmiah Pengabdian Kepada Masyarakat *(Ji-SOMBA)*, *3*(2), 82–87. https://doi.org/10.52943/ji-somba.v3i2.1682

Rachmawati, C., Pramudya, D. A., Putri, A., Annajah, N., Tuanani, M. F., Nur, C., & Garnisa, R. Z. (2025). Upaya Promosi Kesehatan melalui Penyuluhan Diabetes dan Hipertensi untuk Meningkatkan Pengetahuan serta Gaya Hidup Sehat bagi Lansia di Panti Jompo Yayasan Peduli Kasih KNDJH, *9*(3), 723–732. https://doi.org/https://doi.org/10.20956/pa.v9i3.38179

Riduwan. (2023). Kerangka berfikir penelitian. Tarbiyah: Jurnal Ilmu Pendidikan dan Pengajaran, *2*(1), 160–166. Diambil dari https://jurnal.diklinko.id/index.php/tarbiyah/

Rukhmana, T. (2021). Memahami Sumber Data Penelittian. *Jurnal Edu Research : Indonesian Institute For Corporate Learning And Studies* (IICLS), *2*(2), 28–33.

Said, R. W., Saputra, A., & Ruhana, F. (2024). Organisasi dan Manajemen Pemerintah Sebagai Fungsi Strategis Dalam Tata Kelola Penyelenggaraan Pemerintah, *5*(2), 1391–1399. https://doi.org/https://doi.org/10.55681/jige.v 5i2.2832

Syabrullah, A., Priyanto, A., & Mawarti, H. (2025). Optimalisasi Peran Kader dalam Program Layanan Primer, *14*(2), 2008–2019. Diambil dari https://journal.uhamka.ac.id/index.php/solma

Vilasari, D., Ode, A. N., Sahilla, R., Febriani, N., & Purba, S. H. (2024). Peran Promosi Kesehatan Dalam Meningkatkan Kesadaran Masyarakat Terhadap Penyakit Tidak Menular (PTM) : Studi Literatur: *Jurnal Kolaboratif Sains*, *7*(7), 2635–2648. https://doi.org/DOI: 10.56338/jks.v7i7.5626

Wahidin, M., Ika Agustiya, R., & Putro, G. (2022). *Burden of Diseases and Program for the Prevention and Control Of Non-Communicable Diseases in Indonesia. Jurnal Epidemiologi Kesehatan Indonesia, 6*(2), 105–112. https://doi.org/https://doi.org/10.7454/epidkes.v6i2.6253

Yoto, M., Afif, M., Antika, C. S., Ridwanah, A. A., Firdausi, N. J., Qoyyimah, M., History, A. (2024). Implementasi Posyandu pada Era Transformasi Layanan Primer di Kabupaten Kediri 1, *6*(1), 279–284. https://doi.org/https: //doi.org/10.36312/jml.v6i1.3975