



Essential Elements for the Successful Implementation of Primary Health Care: East Java and South Sulawesi

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Summary

Background: Implementing Integrated Primary Health Care (ILP) in Indonesia is critical for ensuring equitable and long-term access to healthcare services, particularly in locations with varying socioeconomic and geographical circumstances.

Aim: Using a qualitative case study technique, this study looked at the important success elements impacting the Healthy Indonesia Program's implementation in East Java and South Sulawesi.

Material and method: Data were gathered from stakeholders such as policymakers, healthcare personnel, and community representatives.

Results: The findings reveal two major themes: (1) the roles and impacts of District Coordinators (DCs) and Provincial Coordinators (PCs) in fostering inter-agency collaboration and providing guidance to healthcare providers, and (2) institutional strengths, such as policy advocacy, resource allocation, and cross-sectoral partnerships, that support effective ILP integration.

Conclusions: This research emphasizes the necessity of regional adaptation, stakeholder participation, and institutional capability to achieve ILP effectiveness. It includes evidence-based recommendations to improve fair and quantifiable ILP implementation tactics across diverse areas in Indonesia.

Keywords: Integrated Primary Health Care, policy support, cross-sector collaboration, Indonesia, health disparities

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Основные элементы успешного оказания первичной медико-санитарной помощи: Восточная Ява и Южный Сулавеси

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Резюме

Введение. Внедрение интегрированной первичной медико-санитарной помощи в Индонезии имеет решающее значение для обеспечения справедливого и долгосрочного доступа к услугам здравоохранения, особенно в районах с различными социально-экономическими и географическими условиями.

Цель: Используя метод качественного анализа случаев, рассмотреть важные элементы успеха, влияющие на реализацию программы «Здоровая Индонезия» в Восточной Яве и Южном Сулавеси.

Материалы и методы. Данные были получены от заинтересованных сторон, включая политиков, медицинский персонал и представителей сообщества.

Результаты. Результаты раскрывают две основные темы: (1) роль и влияние координаторов на уровне района и провинции в содействии межведомственному сотрудничеству и предоставлении рекомендаций поставщикам медицинских услуг и (2) институциональные сильные стороны, такие как пропаганда политики, распределение ресурсов и межсекторальное партнерство, которые поддерживают эффективную интеграцию первичной медико-санитарной помощи.

Выводы. Проведенное исследование подчеркивает необходимость в региональной адаптации, участии заинтересованных сторон и потенциале организаций для достижения эффективности первичной медико-санитарной помощи. Оно включает основанные на фактических данных рекомендации по улучшению справедливой и поддающейся количественной оценке тактики внедрения такой помощи в различных районах Индонезии.

Ключевые слова: интегрированная первичная медико-санитарная помощь, политическая поддержка, межсекторальное сотрудничество, Индонезия, неравенство в сфере здравоохранения.

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Abbreviations:

PHC: Primary health care
JKN: National Health Insurance (Indonesian context)
ILP: Primary health care (Indonesian context)
PDM: Muhammadiyah Regional Leadership
Puskesmas: community health centers
PDNA: Nasyiatul Aisyiyah Regional
PCNA: Branch Leadership
DC: District coordinator
PC: Provincial coordinator

Background

Primary health care (PHC) ensures that everyone can access quality and affordable healthcare services. It is the foundation of national health systems and plays a crucial role in societal and economic development [1]. Furthermore, PHC is essential for managing health risks and emergencies and fostering the resilience of public and national health systems [2]. According to the World Health Organization (WHO) [3], PHC represents a health system designed to achieve universal coverage and equity by providing fair access to services, emphasizing the right to the highest attainable standard of health through coordinated, continuous, and comprehensive primary care. Countries that prioritize PHC, despite resource limitations, have demonstrated significant progress in achieving the Sustainable Development Goals (SDGs), including the United Kingdom, India, China, and Australia [4,5]. However, the implementation of PHC varies widely across countries owing to political, economic, and cultural differences. Therefore, understanding the success factors that support PHC implementation in various countries is crucial for replicating effective strategies and addressing global health inequities.

Indonesia faces unique challenges in implementing Integrated Primary Health Care (ILP) due to its vast geographical, socio-economic, and demographic diversity. With over 17,000 islands and a population exceeding 270 million, ensuring equitable and affordable healthcare access is formidable. In 2023, the Indonesian Ministry of Health issued Ministerial Decree No. 2015 on the National Health Strategy 2023, aimed at improving the quality of life for Indonesians by strengthening the healthcare delivery system [6]. The introduction of the National Health Insurance (JKN) program in 2014 marked a significant step in fortifying primary health care as the foundation of Indonesia's health system to achieve universal health coverage [7]. Prior to JKN, most healthcare expenses were paid out-of-pocket, with service contracts primarily limited to PT. Askes for civil servants. Following the 2014 reforms, the government encouraged JKN enrollment, resulting in many primary healthcare facilities partnering with BPJS Kesehatan, shifting the payment system to social insurance [8]. However, the effectiveness of PHC in Indonesia varies significantly, influenced by factors such as infrastructure, human resources, local government policies, and health system structures [9-13]. This disparity has led to considerable gaps in access to quality healthcare, particularly in Eastern Indonesia and rural areas, reflecting geographical and socio-economic inequities in healthcare access [7]. Consequently, identifying region-specific challenges

and successes is essential for developing scalable and sustainable national solutions.

East Java and South Sulawesi provide contrasting viewpoints on implementing PHC in Indonesia. East Java is the second most populous province in the country, with 41,644,000 inhabitants in 2023. It also boasts of 23,047 healthcare workers, representing 60.8 % of the national total distributed across Java Island [14]. Despite relatively abundant resources compared to other provinces, the utilization of PHC services is the lowest among Java's provinces, including Jakarta, Yogyakarta, Banten, and Central Java [15]. According to data from Laksono et al. [16], inpatient visits to PHC facilities fluctuated, rising from 418,468 in 2018 to 468,812 in 2019 but declining to 330,776 in 2020. Conversely, outpatient visits to PHC facilities were much higher than those to hospitals, though they gradually declined from 25,463,987 in 2018 to 23,008,107 in 2020. In rural areas, the accessibility of primary care facilities is critical [17]. These statistics indicate that, while PHC in East Java can provide healthcare services, its utilization for inpatient care remains suboptimal, whereas outpatient services remain the community's primary choice.

In contrast, South Sulawesi, one of the major provinces in Eastern Indonesia, demonstrates unique PHC dynamics. Based on the 2018 Healthy Family Indicators, South Sulawesi ranked high alongside provinces such as Riau Islands, Jakarta, Yogyakarta, Bali, East Kalimantan, North Kalimantan, and Gorontalo [18]. Public access to PHC is relatively easy, with each subdistrict hosting one to two health centers, resulting in an average ratio of 1.5 centers per subdistrict [14]. However, the quality of PHC services, such as antenatal and cardiovascular care, tends to be better in urban areas than rural regions [19,20]. These disparities underline the need to identify specific factors contributing to the successful implementation of health centers, enabling tailored strategies to enhance equity and effectiveness across diverse contexts.

Various studies highlight that the success of PHC implementation depends on service integration, technology adoption, and reduction of socio-economic disparities. In mental health services, Munira et al. [21] identified barriers such as stigma and negative attitudes among healthcare workers, which hinder access and treatment outcomes. Task-shifting approaches involving the training of primary healthcare workers have proven effective but remain unevenly implemented across Indonesia [22]. Information and Communication Technology (ICT) also plays a key role in improving service efficiency and quality. Aisyah [23] demonstrated that high ICT maturity levels contribute to improved services, community engagement, and data-driven decision-making. However, Afrizal et al. [24] revealed that ICT implementation, such as electronic health records (EHR), faces infrastructure challenges and resistance to change. The differing technological needs and readiness in East Java and South Sulawesi indicate the necessity for contextual technology strategies.

Moreover, maternal and child health (MCH) services remain a significant challenge. Ryan et al. [13] highlighted suboptimal integration between primary care services

and hospitals in addressing pregnancy complications, while Ekawati et al. [25] emphasized the need for responsive service models, particularly during the pandemic. Socio-economic disparities in healthcare access and use worsen these challenges [26, 27]. Despite notable achievements in PHC implementation in Indonesia, gaps in mental health service integration, technology adoption, and socio-economic disparity reduction persist as significant barriers. Comparative studies between East Java and South Sulawesi could provide deeper insights into how local contexts influence PHC implementation within ILP processes. The findings of this study are expected to lay the groundwork for developing more equitable, efficient, and sustainable strategies contributing to the achievement of universal health coverage in Indonesia.

This study aims to identify the success factors influencing the implementation of Integrated Primary Health Care (ILP) in East Java and South Sulawesi. Specifically, it seeks to analyze how governance, resource utilization, and community engagement shape the effectiveness of ILP in PHC across these provinces. This comparative study is expected to uncover unique local dynamics and provide evidence-based recommendations for improving ILP implementation to achieve more significant equity and sustainability in Indonesia. The novelty of this research lies in its cross-regional approach to understanding variations in ILP implementation within different socio-economic and geographical contexts. By focusing on mental health service integration, technology adoption, and socio-economic disparity reduction, this study offers new perspectives on how PHC strategies can be adapted to meet local needs. This research includes analyzing region-specific factors that shape PHC's success, aiming to address service gaps and enhance equity in healthcare access across Indonesia.

Materials and Method

This study adopted a qualitative research methodology with a case study approach to acquire an in-depth understanding of specific phenomena. [28, 29]

A case study approach was chosen as it aligns with the research objective of identifying the initial factors influencing the successful implementation of Integrated Primary Health Care (ILP) in East Java and South Sulawesi. The study was conducted in September 2024 in these two provinces, selected as pilot regions for ILP implementation in Indonesia.

The research involved three categories of informants: ILP policymakers, ILP policy implementers, and stakeholders outside the government to obtain a comprehensive understanding. Informants included representatives from the provincial and district health offices (Dinas Kesehatan), heads of community health centers (Puskesmas), healthcare workers, village leaders, Muhammadiyah Regional Leadership (Pimpinan Daerah Muhammadiyah, PDM), Nasyiatul Aisyiyah Regional and Branch Leadership (PDNA and PCNA), and the regional leadership of Lazismu. In total, the study involved seven informants from policymakers, 15 from policy implementers, and eight from stakeholders outside the government.

Data were collected using an open-ended questionnaire distributed via Google Forms to the informants. This method was selected as it efficiently gathers data within a short timeframe. The questionnaire items posed to the informants are presented in the Table. Before completing the questionnaire, informed consent was obtained from all participants. The data were analyzed using thematic analysis, which involved several stages: (1) Familiarization with the Data, (2) Generating Initial Codes, (3) Searching for Themes, (4) Reviewing Themes, (5) Defining and Naming Themes, and (6) Producing the Report [30].

Results and Discussion

This study reveals several key factors contributing to the early success of ILP implementation in East Java and South Sulawesi. The findings are organized into two major themes: (1) The Role and Impact of District Coordinators (DC) and Provincial Coordinators (PC), and (2) The Strength of Regional Institutions Supporting PHC Implementation.

Table. Open-ended questions

Таблица. Открытые вопросы

№	Question / Вопрос
1	What are your views on the roles of District Coordinators (DCs) and Provincial Coordinators (PCs) in implementing ILP in your area? / Каково Ваше мнение о роли координаторов на уровне района и провинции в реализации программы первичной медико-санитарной помощи на Вашей территории?
2	What are your institution's strengths in implementing the ILP program in your respective region? / Каковы сильные стороны Вашего учреждения в реализации программы первичной медико-санитарной помощи в Вашем регионе?
3	What weaknesses do you perceive in implementing the ILP program in your institution? / Какие слабые стороны реализации программы первичной медико-санитарной помощи в Вашем учреждении Вы видите?
4	What opportunities do you think your institution can leverage to improve the effectiveness of the ILP program? / Какие возможности, по Вашему мнению, может использовать Ваше учреждение для повышения эффективности программы первичной медико-санитарной помощи?
5	What threats or challenges does your institution face in implementing the ILP program? How do you address them? / С какими угрозами и проблемами сталкивается Ваше учреждение при реализации программы первичной медико-санитарной помощи? Как Вы их решаете?
6	What are your expectations and suggestions for the MENTARI-PHC ILP program? / Каковы Ваши ожидания и предложения относительно программы первичной медико-санитарной помощи MENTARI-PHC?
7	What strategies does your institution have to address threats and challenges in implementing the ILP program? / Какие стратегии есть у Вашего учреждения для устранения угроз и проблем при реализации программы первичной медико-санитарной помощи?

Theme 1. Role and Impact of DC (District Coordinator) and PC (Provincial Coordinator)

Implementing the ILP policy in the two provinces faced initial challenges from cross-sectoral coordination, competent healthcare personnel, and alignment with program objectives. District and Provincial Coordinators were essential to ILP implementation, especially in cross-sectoral collaboration, training, guidance, and aligning with program goals.

Informants from East Java and South Sulawesi consistently highlighted the proactive and facilitative roles of DCs and PCs in the early implementation of ILP. Their contributions were instrumental in establishing cross-sectoral collaboration, such as between community health centers (Puskesmas) and district health offices. Statements from informants underscore this perspective:

“Very good, facilitating Puskesmas, providing guidance, and collaborating/coordinating well with the district health office” (Mr. A, Dinkes Kabupaten, Male, 41, Jawa Timur).

“Their role is very helpful and essential.” (MH, PDM/A, Male, 33, Sulawesi Selatan).

“Very active and important in ILP implementation” (L, Puskesmas, Female, 35, Sulawesi Selatan)

The support provided by DCs and PCs also helped institutions and healthcare personnel understand and effectively direct ILP implementation. Informants shared the following perspectives:

“DCs and PCs helped us understand ILP and provided excellent guidance for its implementation.” (K, Puskesmas, Female, 47, Jawa Timur)

“Quite good, but more frequent guidance is needed to ensure proper implementation at the regional level” (F, Puskesmas, Female, 46, Jawa Timur).

“In our view, DCs and PCs help guide the implementation of ILP services...” (A, Puskesmas, Female, 45, Sulawesi Selatan)

The active involvement of DCs and PCs to facilitate inter-agency coordination and promote ILP implementation reflects the collaborative approach often cited in the literature as key to success. Surendran et al. [31] emphasize the importance of stakeholder engagement in building trust and strengthening joint decision-making, particularly in complex health systems such as Indonesia. This study corroborates these findings, demonstrating that DCs and PCs were pivotal in facilitating and bridging collaboration among district health offices, Puskesmas, and community organizations. It aligns with the argument by Stadnick et al. (2019) that successful ILP implementation requires stakeholder collaboration at every stage. Furthermore, other studies have highlighted that effective health systems depend on robust cross-sectoral coordination mechanisms to ensure that national policies are optimally implemented locally [32].

The mentoring activities conducted by Provincial Coordinators (PCs) and District Coordinators (DCs) have proven to be a critical component in implementing ILP in East Java and South Sulawesi. These mentoring efforts have made ILP implementation more effective and focused, benefiting both healthcare personnel at Puskesmas and the district health offices. Additionally,

mentoring has significantly enhanced the capacity of healthcare personnel to understand and implement ILP effectively. This finding is supported by prior research demonstrating that mentoring healthcare personnel can improve their competencies and enhance the performance of healthcare institutions at the local level [33, 34, 35]. Intensive mentoring for Puskesmas and district health office healthcare personnel has been identified as a key strategy to strengthen ILP implementation [34]. Thus, targeted and intensive mentoring by PCs and DCs supports the effective implementation of ILP and ensures the sustainability of capacity-building efforts for healthcare personnel and the improvement of healthcare service performance at the local level.

Theme 2. Regional Institutions Strengthen and Support ILP Implementation

The initial implementation of ILP in East Java and South Sulawesi benefited significantly from the contributions of governmental and non-governmental regional institutions. These institutions, including provincial and district health offices and community organizations, demonstrated their ability to develop and enforce policies, allocate resources effectively, and build strong collaboration networks across sectors. These strengths facilitated the integration of ILP into existing healthcare systems, ensuring alignment with local healthcare needs.

One of the most significant strengths observed in health offices at provincial and district levels was their ability to advocate for ILP and establish policies supporting its implementation. Advocacy efforts provided a structured framework for program integration, as demonstrated by East Java’s health offices through structured capacity-building teams like the TPCB.

“The health office plays a role in policy-making, advocacy, guidance, and facilitation. Their coaching through the TPCB team is effective.” (Mr. A, Male, 41, East Java).

Similarly, in South Sulawesi, district health offices actively supported the operationalization of ILP:

“Our institution strongly supports ILP implementation.” (A M, Female, 32, South Sulawesi).

Policy-driven leadership strengthens the program’s foundation and ensures alignment with national and regional health priorities, thereby facilitating improved coordination among stakeholders.

The institutional strengths observed in East Java and South Sulawesi share significant similarities with best practices in integrated services from other countries, while displaying unique local adaptations. Provincial advocacy and policy support, exemplified by East Java’s health office, corroborate Harnagea et al. [34] findings on advocacy’s role in prioritizing integrated services.

Similarly, McCuistian et al. [36] highlighted the need to address systemic inequities, aligning with South Sulawesi’s advocacy efforts to ensure inclusivity and equity in ILP implementation. However, structured capacity-building teams, such as the Capacity Development and Guidance Team (TPCB), reflect a localized approach that enhances policy

implementation at the grassroots level. It sets a precedent for an adaptable advocacy framework that can be tailored to different contexts.

Apart from government institutions, civil society organizations (CSOs) and other entities play a crucial role in ensuring the success of ILP. These organizations act as bridges between healthcare institutions and communities. Their proactive engagement enhances community participation and program visibility, making ILP more accessible and impactful. In East Java, PDNA (Pimpinan Daerah Nasyiatul Aisyiyah) actively promotes ILP by engaging with communities and raising awareness:

“PDNA actively supports ILP implementation.” (VR, Female, 33, East Java).

This level of engagement ensures that the program's objectives reach the grassroots level, fostering trust and collaboration between the community and healthcare providers. Similarly, in South Sulawesi, institutions demonstrate a strong culture of collaboration, as noted by one respondent:

“Alhamdulillah, we can easily synergize with various elements.” (MH, Male, 33, South Sulawesi).

The synergy among these actors underscores the importance of institutional networks capable of mobilizing resources, addressing community issues, and sustaining program momentum.

The proactive involvement of organizations in East Java and South Sulawesi aligns with global findings on the importance of stakeholder participation. Vedel et al. [37] emphasize stakeholder engagement in shaping service models, a principle reflected in PDNA's efforts to promote ILP in East Java. Similarly, Ye et al. [38] highlight the significance of national policies that encourage organizational participation, aligning with the collaborative networks observed in South Sulawesi. Moreover, as demonstrated in South Sulawesi, ILP's ability to foster a culture of synergy between organizations and communities represents an exemplary model that transcends conventional frameworks. It highlights the potential for local innovations to inform global practices in integrated service delivery.

The readiness and capacity of regional institutions are crucial in determining the success of ILP. Institutions with strong internal structures and skilled human resources are more effective in addressing program challenges and maintaining operational efficiency. For instance, one informant from the District Health Office in East Java emphasized the organizational strength of their institution:

“Quite strong; we are still providing guidance to Puskesmas, Pustu, and Posyandu” (RS, Female, 38, East Java).

This organizational strength is further supported by the availability of skilled personnel, as noted by a respondent in East Java:

“Our institution has competent human resources who collaborate well.” (K, Female, 47, East Java).

This capacity ensures that ILP activities are implemented systematically and in a manner tailored to local challenges. Strong institutional readiness

also enables flexibility and resilience in overcoming operational obstacles, ensuring that the program delivers the expected outcomes effectively.

As observed in implementing ILP, institutional readiness and capacity provide further evidence of how systems with limited resources can overcome systemic barriers. Marais and Petersen [39] identify capacity building as a critical driver for effective integrated services, a principle reflected in ILP's focus on skilled personnel and robust organizational structures in both provinces. Similarly, Midboe et al. [40] emphasize facilitation strategies for enhancing institutional capacity, aligning with ILP investments in training and infrastructure. These practices underscore the importance of prioritizing institutional readiness to ensure the sustainability and effectiveness of integrated service initiatives.

Cross-sectoral and organizational collaboration emerged as a key theme in implementing ILP successfully. This collaborative approach enables institutions to leverage diverse resources and expertise, fostering collective efforts to address health challenges. One informant noted the effectiveness of partnerships in strengthening program implementation:

“Good, collaboration among all parties.” (Y, Female, 50, South Sulawesi).

These partnerships ensure that ILP is implemented holistically, leveraging the strengths of various stakeholders to maximize the program's impact. Additionally, institutions emphasized their transformative role in improving healthcare systems through collaborative efforts. This sentiment was expressed by one respondent:

“[Institutions] play a transformative role in advancing healthcare.” (L, Female, 35, South Sulawesi).

By combining resources, expertise, and support, these partnerships create a robust ecosystem for the success of ILP, highlighting the importance of inter-agency and cross-sector collaboration in achieving health program objectives.

Cross-sector collaboration in ILP aligns with global best practices while demonstrating innovative approaches tailored to local contexts. Klemenc-Ketiš et al. [41] describe how collaboration among healthcare providers improves chronic disease management, a principle reflected in the partnerships in South Sulawesi. Similarly, Harnagea et al. [42] emphasize the value of interdisciplinary collaboration, such as integrating medical and dental personnel, to enhance healthcare delivery. The involvement of civil society and community leaders in ILP's collaborative efforts reflects a broader and more inclusive approach, underscoring the necessity of multi-sectoral engagement in addressing complex health challenges.

East Java and South Sulawesi have institutional strengths that correspond with global standards and offer important ideas for ILP implementation. Advocacy, organizational involvement, capacity building, and cooperation create a framework for health issues in various situations. These findings emphasize the need to invest in institutional capabilities to sustain integrated service systems and adapt global best practices to local situations.

Conclusions

District Coordinators (DCs), Provincial Coordinators (PCs), and regional institutions are essential to ILP performance in East Java and South Sulawesi, according to the comparative research. DCs and PCs are essential for cross-sectoral coordination, training, and ILP-healthcare alignment. Their proactive engagement and help ensure that health institutions and staff have the skills to offer services.

The success of ILP implementation is strongly supported by regional institutions. These institutions excel at resource allocation, policy advocacy, and cross-sector collaboration. These initiatives promote ILP goals through community involvement and strategic partnerships. East Java's capacity-building teams like the TPCB and South Sulawesi's collaborative culture demonstrate how specialized techniques may solve regional problems and boost ILP locally.

This study highlights ILP advocacy, organizational planning, and cross-sectoral collaboration. Policymakers may enhance ILP implementation by investing in institutional capacity, community involvement, and policy alignment. These steps should be implemented nationwide to address healthcare inequalities and provide equal access in Indonesia.

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