

## Optimizing the Health Dimension Program in the Human Development Index to Improve Human Resource Quality in the Kediri City

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### ARTICLE INFO

DOI: 10.32832/jmuika.v17i1.21482

#### Article history:

Received:

10 September 2025

Accepted:

03 Oktober 2025

Available online:

05 Februari 2026

#### Keywords:

human development index (hdi), health dimension, human resource.

### ABSTRACT

*The Human Development Index (HDI) is a vital indicator in measuring the success of regional development, and thru the health dimension, it plays a strategic role in improving the quality of human resources. Kediri City shows a positive trend, increasing from 78.78 in 2020 to 80.97 in 2023. However, it still faces health challenges such as neonatal infant mortality, stunting, and infectious diseases, which require optimization of health programs. This research uses a descriptive qualitative approach with a document study method to analyze official documents related to the HDI in the health dimension of Kediri City. Data is integrated thru document analysis of annual HDI reports, regional development planning documents, and health statistics data from 2019-2023. Data analysis was conducted inductively to identify patterns and relationships between programs. The life expectancy in Kediri City reached 75.74 years in 2023. There are three main challenges: 13 cases of neonatal infant deaths, 784 stunted children under five, and a high number of infectious diseases (201 HIV, 1,379 TB). Strategic programs implemented include The Movement to Reduce Maternal and Infant Mortality (GEMAKIBA), high-risk pregnant women visits, Posyandu for the Life Cycle, and disease prevention programs. Optimizing health programs thru an integrated approach that is promotive, preventive, and curative has proven effective in increasing the Human Development Index (HDI). The sustainability of the program and the strengthening of the monitoring and evaluation system are key to maintaining the positive trend of sustainable human development.*

## INTRODUCTION

The Human Development Index (HDI) encompasses three important dimensions: health, education, and a decent standard of living (BPS Kota Kediri, 2023). The Human Development Index is used as a measure to calculate the level of development success in a region (Aubert et al., 2022). One dimension that plays an important role in the development of a region is the health dimension. This dimension can directly measure the quality of life of the people of Kediri City (BPS Kota Kediri, 2023). Various efforts to improve the health dimension have been made by the Kediri City government, thru promotional, preventive, and curative efforts, but there are still problems that hinder the process of improvement in the health dimension (Bappeda Kota Kediri, 2023). The health dimension is a vital formative dimension in human resources (Bappeda Kota Kediri, 2023). The health dimension is also the root of the human development index, and by improving the root of a health dimension, it is hoped that the quality of life of human resources in Kediri City can be improved (Bappeda Kota Kediri, 2023).

On-the-ground facts still indicate that there are issues that have not been fully resolved. Neonatal mortality, stunting in toddlers, and infectious diseases remain key issues that are the government's primary focus (Bappeda Kota Kediri, 2023). Cross-program optimization should be done annually to address all unresolved issues (Bappeda Kota Kediri, 2023).

The novelty of this research lies in its focus on the health dimension. By narrowing the scope to health dimension issues, this research breaks new ground in examining the continuity between programs within the health dimension to address a problem in Kediri City and optimize the impact on improving human resource quality.

Previous research conducted by (Le et al., 2022) highlighted the process of screening and educating rural communities about infectious and non-communicable diseases. Furthermore, research by Maryati, Annisa, & Amira (2023) highlights the dominant factors contributing to stunting in toddlers. Another study by (Nurhayati et al., 2024) explains the factors related to neonatal infant mortality. However, this study specifically discusses the optimization and programs implemented within the scope of the health dimension to improve the quality of human resources in Kediri City.

Optimizing health programs is crucial to ensure that government interventions are more effective and targeted. Without good synergy between programs, improvements in health dimensions can be slow or off-target (Bappeda Kota Kediri, 2023). This research is expected to provide strategic input in designing more integrated policies.

This research aims to examine and analyze the optimization of health programs within the Human Development Index (HDI) to improve the quality of human resources in Kediri City, as well as to develop actionable strategies and program recommendations to increase the health index within the HDI.

The problem highlighted in this research is how to align or synergize health dimension programs

in problem-solving to improve health indices. Therefore, based on the above problems, the problem formulation was created: "How can program optimization in the health dimension within the human development index improve the quality of human resources in Kediri City, and what efforts and program recommendations are being made to improve the quality of human resources in the context of the health dimension?"

Previous studies have examined the health dimension within the Human Development Index (HDI). According to (Chirgwin et al., 2021), There are deficiencies in the health dimension, including the provision of pure water, the enhancement of community nutrition, and the enhancement of the quality of health services. Furthermore, in Jasasila (2020) research, it was shown that the researcher only analyzed the increase in the Human Development Index (HDI) in Jambi City. In their study, it showed an increase in the health dimension that continued to rise over ten years. Meanwhile, this research, guided by the Human Development Index Evaluation and Improvement Strategy Document sourced from Bappeda Kota Kediri (2023), investigates how to address challenges such as stunting, neonatal infant mortality, and infectious disease cases in order to optimize and synergize programs to reduce the problems that hinder the improvement of health indicators.

## RESEARCH METHODS

This research was examined using a descriptive qualitative approach and employing the research method of document study, utilizing primary documents sourced from the Bappeda Kota Kediri (2023) as the main technique for collecting research data. This document is used to directly explore various issues related to the Human Development Index (HDI) and further narrow its scope to the health dimension, in order to identify the factors causing problems in the health dimension and optimize inter-program efforts undertaken by the Kediri City government. As well as supporting documents sourced from official government websites, such as the Kediri City Regional Development Planning Agency and the Kediri City Central Bureau of Statistics.

This research is designed with the research subject "Health Dimension Program in the Human Development Index" and the research object "Quality of Human Resources in Kediri City". Document study was chosen because this research focuses on the process of analyzing alignment between programs in the health dimension, where the data for this research comes from relevant archives, continuous reports, and official documents from the Kediri City government or related institutions. Thru the document study technique, researchers can trace the policies, strategies, and programs that have been designed and implemented, and at the same time assess their relevance to improving the quality of life of the community in Kediri City. The data analysis process in this research is carried out inductively by processing, interpreting, categorizing, and grouping the content of documents to unify patterns and relationships between programs in order to support the achievement of human resource quality in Kediri City. The

data used in this study were sourced from official documents, such as, Evaluation and Strategy for Improving the Human Development Index for the period 2019 – 2023, Human Development Index (HDI) for Kediri City in 2024, Journals related to the Human Development Index (HDI) with a narrowed scope focusing on the health dimension.

According to (Habsy & Nursalim, 2025), the document study method in qualitative research is a data processing method that uses and utilizes written documents and other documents as the main source to obtain the common thread of a phenomenon.

## RESULTS & DISCUSSION

The Human Development Index (HDI) is a measurement tool used to calculate human development in a region. The Human Development Index (HDI) consists of 3 dimensions: the health dimension, measured by life expectancy; the education dimension, measured by average years of schooling and expected years of schooling; and finally, the dimension of a decent standard of living, measured by gross national income per capita (Santoso et al., 2024). The Human Development Index (HDI) of Kediri City has consistently shown a positive trend between 2019 and 2023. In 2020, Kediri City's HDI was 78.78, and by 2023, it had successfully reached 80.97 (BPS Kota Kediri, 2023). This figure indicates that the quality of human resources in Kediri City has improved year after year. In response to this, the Kediri City government is continuously making efforts to increase the Human Development Index for the next 5 years.

One of the three dimensions in the Human Development Index (HDI) is the health dimension. Essentially, the health dimension is a key factor in shaping the quality of human resources. The reference used in the calculation for the health dimension is Life Expectancy (LE). Life Expectancy (LE) can be defined as the age a person born in a specific year is likely to reach (Bappeda Kota Kediri, 2023).



Figure 1. Life Expectancy by Sex in Kediri City, 2019-2023

Source Bappeda 2023, Kediri

Based on data from Bappeda Kota Kediri (2023), the Human Development Index (HDI) value

increased during the period from 2019 to 2023. This result indicates an improvement in the quality of public health in Kediri City. However, looking at the data, there are still fundamental problems on the ground in the health dimension sector (Bappeda Kota Kediri, 2023). According to the Bappeda Kota Kediri (2023), there are 3 (three) main problems that the Kediri City government

is focusing on to improve figures in the health dimension. These problems also hinder the improvement of the health dimension in the Human Development Index (HDI), such as, neonatal infant mortality, there are still 784 stunted children under five as of December 2023, the number of infectious disease cases in Kediri City remains high.

The first problem that is the main focus of the Kediri City government in increasing the HDI from the health dimension. Neonatal mortality is one of the main focuses of the Kediri City government in the process of increasing the Human Development Index (HDI). The neonatal period is the period of 28 days after a baby is born. After the baby undergoes changes from the differences within the womb until eventually seeing the outside world, this is a critical period (Olza et al., 2020). Bappeda Kota Kediri (2023) explained that the number of neonatal infant deaths in Kediri City in 2023 was 13. The causes of neonatal infant deaths in Kediri City include 2 deaths caused by low birth weight and prematurity, or conditions where babies are born weighing less than 2.5 kg. The causes are direct or indirect, stemming from factors related to the mother, the fetus, or the environment. Next, 3 deaths were caused by asphyxia, which is a condition where the baby lacks oxygen before, during, or after delivery, characterized by bluish skin, shortness of breath, decreased heart rate, and muscle weakness. Next, 3 deaths were caused by infection. There are several things that can trigger infections in newborns, including sepsis, pneumonia, meningitis, tetanus, and others. Additionally, 3 deaths were caused by congenital abnormalities resulting from health disorders present since birth, regardless of the cause. This condition is caused by genetic factors, environmental factors, or a combination of both, which affects the baby's physical structure, organ function, and metabolism. Some of these conditions can be detected while the baby is still in the womb or immediately after birth. And finally, there were 2 deaths caused by other reasons. According to Tresia Pitriani & Rezka Nurvinanda (2023), the relationship between maternal age, pregnancy spacing, parity, and gestational age influences fetal health during pregnancy. Therefore, the Kediri City government provides programs to educate and improve the psychological well-being of pregnant women.

The second challenge that is the main focus of the Kediri City government is the issue of stunting. As of December 2023, there are still 784 stunted children in Kediri City, which is a key issue that needs to be addressed immediately considering this is not a small number (Bappeda Kota Kediri, 2023). Stunting can occur due to a lack of nutrition at a critical level, or in other words, high-level malnutrition. This can happen because of nutritional problems in children while they are still in the mother's womb or after they are born (Sari, 2021). According to Saleh et al. (2021), a mother plays an important role in preventing stunting through the knowledge she possesses. This condition indicates a serious challenge in meeting the nutritional and health needs of children in Kediri City. The 784 children in Kediri City who are stunted reflect that despite efforts to address or improve nutritional issues, many children are still growing in less than optimal conditions (Bappeda Kota

Kediri, 2023). This will impact the quality of human resources in Kediri City for the future.

The third challenge, which is the main focus in improving the quality of human resources thru programs in the health dimension, is the still high number of infectious disease cases in Kediri City. According to data detailed by Bappeda Kota Kediri (2023), there is still a relatively high number of cases related to infectious diseases. Among them, there are 201 cases of HIV, 33 cases of AIDS, 1,379 cases of tuberculosis (TB), and 353 cases of tuberculosis in children aged 0-14 years. This condition indicates that the quality of public health in Kediri City is facing serious challenges. These figures indicate that the prevalence of infectious diseases in Kediri City is still quite high and has the potential to have a long-term impact on the quality of life of human resources in Kediri City, as well as placing a burden on the healthcare system, particularly in the Kediri City area. Diseases such as HIV and AIDS are related to lifestyle and sexual behavior and require special attention in terms of prevention and education (Bappeda Kota Kediri, 2023). Although treatment for HIV/AIDS has advanced rapidly, prevention and early detection remain crucial for reducing the potential for transmission and raising public awareness of the dangers of HIV/AIDS. Similarly, tuberculosis (TB) is an infectious disease that remains a health problem in Kediri City (Bappeda Kota Kediri, 2023). According to Bappeda Kota Kediri (2023), the high number of tuberculosis cases, especially among children aged 0-14 years in Kediri City, indicates a significant transmission line. Infectious diseases should be preventable by providing education and understanding, especially to adolescents. If an infectious disease is already indicated, it is best for the surrounding human resources not to view the victims as a stigma (Bhanot et al., 2021).

Addressing the first issue, neonatal infant mortality, the Kediri City government is evaluating programs already implemented by relevant Regional Government Organizations to determine the success or failure factors of those programs. In addressing the issue of neonatal infant mortality, the Kediri City government, along with relevant Regional Government Organizations, has several program evaluations to improve the Human Development Index (HDI), including:

**The Movement to Reduce Maternal and Infant Mortality (GEMAKIBA).** The GEMAKIBA program is designed to provide intensive support to pregnant women until they enter the postpartum period, as well as to newborns until they reach 6 months of age. This program works directly with the relevant regional government organizations, namely the Health Service. This program aims to reduce maternal and infant mortality by prioritizing health monitoring and providing comprehensive education thru collaboration between regional midwives, health cadres, and health students from midwifery institutions in Kediri City (Bappeda Kota Kediri, 2023). The GEMAKIBA program includes various important activities, such as ensuring pregnant women have their pregnancies checked at adequate healthcare facilities, monitoring the consumption of iron tablets to prevent anemia, and supporting the preparation of emergency transportation for childbirth and the recruitment of blood donors for mothers who need transfusions. The accompaniment also includes motivating mothers to exclusively breastfeed, ensuring infant immunization, and encouraging families to visit posyandu. The results of all these programs will be reported to local health officials or midwives in each village for evaluation and follow-up

(Bappeda Kota Kediri, 2023). Seeing the program's push and support from the Kediri City government, it is hoped that all pregnant women in Kediri City will utilize the facilities, means, and infrastructure that have been created to the fullest extent possible in order to reduce maternal and infant mortality rates. A healthy mother will of course give birth to a healthy baby. A healthy baby will of course improve the quality of human resources in Kediri City for the future.

**Routine Visits for High-Risk Pregnant Women.** The High-Risk Pregnant Women Routine Visit Program focuses on high-risk pregnant women, especially those from low-income families in 46 urban villages in Kediri City. This program aims to support the reduction of maternal mortality, infant mortality, and stunting prevalence (Bappeda Kota Kediri, 2023). This program collaborates with the responsible relevant regional government organizations, which is the Health Department. This program involves various stakeholders, including pregnant women, the head of the community empowerment and welfare mobilization team (TP PKK) of Kediri City, the Health Department and its staff, regional midwives, and companion cadres (Bappeda Kota Kediri, 2023). Thru this collaborative approach, harmonious communication can be established, allowing for a holistic handling of any challenges faced by pregnant women. This program also aims to reduce neonatal mortality by preventing unwanted outcomes from the beginning during the neonatal period.

**Postpartum Visits up to 42 Days & Neonatal Visits 0 – 28 Days.** The postpartum visit program aims to reduce the risk of complications after childbirth and improve the quality of maternal and infant healthcare services in Kediri City thru a community-based approach that involves cross-health facility coordination (Bappeda Kota Kediri, 2023). Based on the data, the number of mothers and babies discharged from the hospital reached 3,804 in 2023. The main focus of this program is to detect signs of emergencies that require referral to higher-level healthcare facilities, and to ensure that mothers and babies receive the necessary follow-up care (Bappeda Kota Kediri, 2023). This program is also supervised and collaborates with relevant regional government agencies, namely the Health Department. Thru this program, it is hoped that neonatal mortality will continue to decline in the coming years, and that prevention can be implemented from the beginning if there are signs of an emergency.

Regarding the second problem, which is the still-high rate of stunting in Kediri City. The Kediri City government naturally collaborates with the Health Department and other stakeholders, to create programs that can reduce the stunting rate, starting from a small scope like the sub-district level, then moving to the district level, and finally to the large scope of Kediri City. The Kediri City government implements various programs to address the stunting problem in Kediri City, including:

**Life Cycle Posyandu.** This program is based on the awareness that each individual has different health concerns, and posyandu serves as an integrated service center to meet those needs (Bappeda Kota Kediri, 2023). Including toddlers, one of the important groups that are the main focus of the life cycle posyandu program. For toddlers, the focus of this life cycle posyandu program remains on monitoring growth and development and providing supplementary feeding to prevent stunting, then immunization which is useful for providing additional vitamins to

toddlers, and the life cycle posyandu also provides nutrition education to parents. With nutrition education for parents, it is hoped that the growth and development of toddlers can develop properly and not experience chronic nutritional deficiencies. With direct supervision by the Health Department, this program is expected to reduce and curb the stunting rate in Kediri City.

**Routine visits for high-risk pregnant women.** This program was created to provide more intensive health monitoring for pregnant women, motivation, emotional support, and health education during pregnancy (Bappeda Kota Kediri, 2023). This program is expected to help pregnant women care about the health of their unborn babies, thus preventing unwanted stunting. According to the Bappeda Kota Kediri (2023), thru this collaborative approach, harmonious communication can be established, so that every challenge faced by pregnant women can be addressed accurately and equitably.

**Movement to Popularize Eating Fish (GEMARIKAN).** Movement to Popularize Eating Fish (GEMARIKAN). A seemingly ordinary program that is very important for a child's growth and development. According to the Bappeda Kota Kediri (2023), this program aims to increase fish consumption among the people of Kediri City thru campaigns and the provision of supplementary feeding made from fish. Fish, as a food source, is rich in nutrients such as protein, omega-3, and other essential nutrients, playing a crucial role in supporting children's growth and development and boosting their immune systems. According to Asmawati (2023), during the 9 months of pregnancy, a mother must ensure adequate nutrition for herself and the child inside the womb. One way to meet their nutritional needs is by using fish as a source of nutrition for children and mothers. This can be done to prevent stunting. Mothers also need to have knowledge, skills, and a healthy lifestyle to ensure balanced nutrition during their pregnancy. This program also aims to improve the quality of human resources in Kediri City.

**Congenital Hypothyroidism Screening.** This Congenital Hypothyroidism Screening program targets newborn babies. According to the Bappeda Kota Kediri (2023), newborn babies require special attention regarding Congenital Hypothyroidism Screening. This program aims to detect early thyroid disorders that can interfere with a child's growth and development. This early detection is also expected to reduce the number of stunting cases in children, especially in the Kediri City area, thus creating better human resource quality in the future.

Addressing the third issue, which is infectious diseases. The Kediri City Government, in collaboration with the Health Department and relevant stakeholders, is providing solutions by creating useful programs to reduce the number of infectious diseases. According to Bappeda Kota Kediri, (2023), given the high transmission rates, it is necessary to address this urgently with more effective health policies, such as increasing public awareness, early diagnosis, and more affordable and equitable treatment. Some policies created by the Kediri City government to minimize the potential for disease transmission are:

**Life Cycle Posyandu.** The life cycle posyandu program is also directly related to the process of preventing infectious diseases. In addition to targeting toddlers, this program also targets the elderly and adolescents with the aim of preventing disease transmission. This program is also

directly supervised by the Department of Health. For the elderly, posyandu provides various activities aimed at maintaining physical endurance and improving quality of life. Activities at the elderly health post include group exercise to maintain physical fitness, blood sugar checks, and regular blood pressure checks. This service aims to detect early and prevent the transmission of common diseases and illnesses affecting the elderly.

By paying attention to the health of the elderly, posyandu contributes to improving the quality of human resources and increasing the overall life expectancy of the community (Bappeda Kota Kediri, 2023). For adolescents, posyandu contributes to providing important health education, such as information on reproductive health, the dangers of HIV/AIDS and how it is transmitted, and the prevention of infectious diseases (Bappeda Kota Kediri, 2023). With the existence of this life cycle posyandu, it is hoped that it will be able to improve the quality of human resources' lives and prepare for early prevention to minimize the possibility of negative outcomes.

**Pre-marital Counselling and Examination.** Pre-marital Counselling and Examination is a program aimed at providing counselling services and reproductive health examinations for couples preparing for a healthy and high-quality married life (Bappeda Kota Kediri, 2023). The types of services provided in this program include reproductive health counselling and education, covering various important topics such as reproductive health, TT (Tetanus Toxoid) immunization, pregnancy nutrition, the importance of exclusive breastfeeding, family planning (KB), prevention of sexually transmitted infections (STIs) like HIV/AIDS, and examinations for the detection of certain diseases such as hepatitis B (HbsAg), syphilis, and HIV (Bappeda Kota Kediri, 2023). This program is directly supervised by the relevant regional government organization, namely the Health Department. This program is highly beneficial, not only in preventing reproductive health problems but also in building healthy and quality families. With this program, it is hoped that it can support efforts to improve the quality of life of the human resources of Kediri City's community sustainably.

**HIV Case Management Program.** Efforts to manage HIV in Kediri City involve various important programs. These include HIV counselling and testing, care, support, and treatment, as well as psychosocial support to improve the quality of life for people living with HIV. Providing supplements and additional meals helps people living with HIV maintain good nutritional status, support treatment, and boost their immune system (Bappeda Kota Kediri, 2023). This program is directly supervised by the relevant regional government organization, namely the Health Service. With this program, it is hoped that HIV transmission can be reduced, the quality of life for patients can be improved, and early prevention can be implemented for those suspected of having HIV/AIDS.

**Prevention and Control of TBC Cases.** The program for the prevention and control of TBC cases aims to curb the spread of tuberculosis (TBC) and effectively improve the detection and treatment of patients. Collaboration between TBC and HIV is also an important part of its prevention. Every TBC patient is required to know their HIV status, and conversely, HIV patients are required to be screened for TBC. This approach allows for a more holistic management of patients with both conditions, considering that they mutually influence each other in reducing the

body's resistance (Bappeda Kota Kediri, 2023). Thru a combination of strong prevention and comprehensive control, this program is expected to reduce the rate of TBC transmission, accelerate recovery, and alleviate the public health burden of Kediri City related to this disease. With an approach based on early detection, supervised treatment, and cross-sectoral collaboration with the Health Department, this program aims to create a healthier and TBC free quality of public health in Kediri City.

## CONCLUSION & SUGGESTION

The Human Development Index (HDI) of Kediri City shows an increase from 78.78 in 2020 to 80.97 in 2023, supported by a significant improvement in the health dimension with a life expectancy of 75.74 years. Although this progress is encouraging, Kediri City still faces serious challenges such as high neonatal mortality rates, the prevalence of stunting in children, and a high number of infectious diseases like HIV and tuberculosis. The city government has responded by implementing various strategic programs involving cross-sectoral and community-based approaches, which have proven effective in improving the quality of healthcare services. To maintain and enhance this positive trend, it is necessary to strengthen early prevention efforts, improve nutrition, and closely monitor infectious diseases, supported by a sustainable monitoring and evaluation system. With consistent commitment and continuous program innovation, Kediri City has the potential to realize a healthy, productive, and competitive society in the long term.

## REFERENCES

Asmawati, L. (2023). Pencegahan Stunting melalui Ketahanan Pangan Lokal Banten dan Pengasuhan Digital. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 7(6), 6915–6926. <https://doi.org/10.31004/obsesi.v7i6.5396>

Aubert, S., Barnes, J. D., Demchenko, I., Hawthorne, M., Abdeta, C., Abi Nader, P., Adsuar Sala, J. C., Aguilar-Farias, N., Aznar, S., Bakalár, P., Bhawra, J., Brazo-Sayavera, J., Bringas, M., Cagas, J. Y., Carlin, A., Chang, C.-K., Chen, B., Christiansen, L. B., Christie, C. J.-A., ... Tremblay, M. S. (2022). Global Matrix 4.0 Physical Activity Report Card Grades for Children and Adolescents: Results and Analyses From 57 Countries. *Journal of Physical Activity and Health*, 19(11), 700–728. <https://doi.org/10.1123/jpah.2022-0456>

Bappeda Kota Kediri. (2023). *Dokumen Evaluasi Dan Strategi Peningkatan Indeks Pembangunan Manusia Kota Kediri*. 1–119.

Bhanot, D., Singh, T., Verma, S. K., & Sharad, S. (2021). Stigma and Discrimination During COVID-19 Pandemic. *Frontiers in Public Health*, 8. <https://doi.org/10.3389/fpubh.2020.577018>

BPS Kota Kediri. (2023). *Indeks Pembangunan Manusia (IPM) Kota Kediri Tahun 2023*. 17, 1–10. <https://kedirikota.bps.go.id/pressrelease/2023/12/19/310/indeks-pembangunan-manusia-ipm-kota-kediri-tahun-2023.html>

Chirgwin, H., Cairncross, S., Zehra, D., & Sharma Waddington, H. (2021). Interventions promoting uptake of water, sanitation and hygiene (WASH) technologies in low- and middle-income countries: An evidence and gap map of effectiveness studies. *Campbell Systematic Reviews*, 17(4). <https://doi.org/10.1002/cl2.1194>

Habsy, B. A., & Nursalim, M. (2025). *Jenis-Jenis Metode Pengumpulan Data (Qualitative Research)*. 9, 9932–9938.

Jasasila, J. (2020). Analisis Dimensi Pembentuk Indeks Pembangunan Manusia (IPM) Provinsi Jambi 2010-2019. *Ekonomis: Journal of Economics and Business*, 4(2), 389. <https://doi.org/10.33087/ekonomis.v4i2.183>

Le, H. T., Le, T. A., Mac, T. D., Nguyen, D. N., Vu, H. N., Truong, A. T. M., Quang Do, A. T., Bui, H. T. T., Do, H. T. T., Nguyen, A. T. H., Nguyen, T. T., The Ngo, N., & Ngo, T. T. (2022). Non-communicable diseases prevention in remote areas of Vietnam: Limited roles of health education and community workers. *PLOS ONE*, 17(9), e0273047. <https://doi.org/10.1371/journal.pone.0273047>

Maryati, I., Annisa, N., & Amira, I. (2023). Faktor Dominan terhadap Kejadian Stunting Balita. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(3), 2695–2707. <https://doi.org/10.31004/obsesi.v7i3.4419>

Nurhayati, N., Abdullah, A., Maidar, M., Hermansyah, H., & Zakaria, R. (2024). Determinan Kematian Neonatal di Rumah Sakit Ibu dan Anak Aceh. *Jurnal Kesehatan Komunitas (Journal of Community Health)*, 10(1), 86–95. <https://doi.org/10.25311/keskom.vol10.iss1.1510>

Olza, I., Uvnas-Moberg, K., Ekström-Bergström, A., Leahy-Warren, P., Karlsdottir, S. I., Nieuwenhuijze, M., Villarnea, S., Hadjigeorgiou, E., Kazmierczak, M., Spyridou, A., & Buckley, S. (2020). Birth as a neuro-psycho-social event: An integrative model of maternal experiences and their relation to neurohormonal events during childbirth. *PLOS ONE*, 15(7), e0230992. <https://doi.org/10.1371/journal.pone.0230992>

Saleh, A., Syahrul, S., Hadju, V., Andriani, I., & Restika, I. (2021). Role of Maternal in Preventing Stunting: a Systematic Review. *Gaceta Sanitaria*, 35, S576–S582. <https://doi.org/10.1016/j.gaceta.2021.10.087>

Santoso, D. H., Arsyi, F., Anshari Clarissa, A., Setiawan, I. N., Kurniati, E., & Delyana, S. (2024). *Indeks Pembangunan Manusia 2023*. 18, 1–282.

Sari, G. M. (2021). Early Stunting Detection Education as an Effort to Increase Mother's Knowledge about Stunting Prevention. *Folia Medica Indonesiana*, 57(1), 70. <https://doi.org/10.20473/fmi.v57i1.23388>

Tresia Pitriani\*, Rezka Nurvinanda, I. P. L. (2023). *Faktor-Faktor Yang Berhubungan Dengan Meningkatnya Kejadian Bayi Berat Lahir Rendah (Bblr)*. 5(November), 1597–1608.