Enhancing Birth Registration in Indonesia: Addressing Disparities and Strengthening Vital Statistics Systems

1. Introduction

Sustainable Development Goals (SDGs) target 16.9 emphasizes the critical importance of universal birth registration as a fundamental right and a cornerstone of vital statistics systems ((Müller, 2015). Birth registration is crucial for establishing legal identity, safeguarding children's rights, and ensuring their access to essential services (Corbacho et al., 2012; Todres, 2003). Despite its significance, substantial global disparities remain, with UNICEF (2013) noting that 237 million people lack birth certificates and one in four children under age 5 is unregistered UNICEF (2019). The absence of birth registration can lead to serious consequences, including increased risks of early marriage (Bhabha & Jacqueline, 2011; Jayaraman et al., 2016), poor health outcomes (Comandini et al., 2016), hindered development (Jeong et al., 2018), lower educational achievements (Corbacho et al., 2012), and heightened vulnerability to trafficking and exploitation (Dunning et al., 2014).

In Indonesia, while birth registration is legally mandated and significant efforts are underway to achieve universal coverage by 2024—guided by Presidential Regulation 62/2019 and the National Medium-Term Development Planning 2020-2024—challenges remain. The Ministry of Women Empowerment and Child Protection reports national improvements in birth registration rates (Kementerian PPPA, 2023), aligning with the assessments done by UNICEF (2019). However, the 2023 National Socio-Economic Survey reveals that 83% of children under five have birth certificates, leaving more than 3 million children unregistered (BPS, 2023). Persistent regional disparities exacerbate the issue, with varying registration rates across provinces (Alfana et al., 2018).

To enhance birth registration in Indonesia, it is essential to address these disparities and strengthen the vital statistics systems. Current research often focuses on specific regions, such as village-level studies in Riau (Gumilang, 2016) and provincial analyses in Papua (Luthfiyana & Wicaksono, 2021), as well as regional correlations in Nusa Tenggara Timur, Nusa Tenggara Barat, and Jawa Barat (Duff et al., 2016). National-level studies, like those by Pont et al. (2023) using the 2017 Indonesian Demographic and Health Survey, face limitations in sample size and timing. Expanding research with broader surveys, such as Susenas, is crucial for a comprehensive understanding of birth registration dynamics and developing targeted strategies to address existing gaps.

2. Theoretical Focus

Birth Registration as a Fundamental Human Right

Birth registration is a fundamental human right enshrined in the United Nations Convention on the Rights of the Child (UNCRC), which affirms every child's right to be registered immediately after birth and to acquire a nationality (General Assembly, 1989). This right is essential for legal recognition, access to essential services (such as education and healthcare), and protection against exploitation (Corbacho et al., 2012; Todres, 2003). The absence of registration can lead to social exclusion, marginalization, and increased vulnerability to child labor, trafficking, and other forms of exploitation (Dunning et al., 2014; UNICEF, 2019).

States have a critical role in ensuring universal birth registration, as mandated by international agreements. This involves creating and maintaining inclusive systems that address barriers and ensure that all children, regardless of their socioeconomic status or geographic location, have access to registration services (UNICEF, 2019).

Factors Associated with Birth Registration

Household-level decisions on birth registration are influenced by various factors, including socioeconomic status, demographics, and contextual factors. Socioeconomic factors, such as wealth, income, and education, can significantly impact access to registration services. Wealthier families may have better access to resources and be more likely to afford the associated costs (Alfana et al., 2018; Duff et al., 2016; Luthfiyana & Wicaksono, 2021).

Higher levels of parental education often correlate with increased awareness of the importance of birth registration, leading to higher registration rates (Pont et al., 2023). Additionally, access to technology, such as mobile phones and internet, can facilitate birth registration by providing information, notifications, and remote registration options, especially in remote areas (Candia, 2019; Ebbers & Smits, 2022).

The complexity of birth certificate requirements, including the need for parents' marriage certificates as stipulated in Presidential Regulation No. 96 of 2018, can also create barriers to registration. Requirements for marriage registration in Indonesia, which must adhere to both religious and civil standards, can be costly, particularly in places like Nusa Tenggara Timur (Duff et al., 2016). Children born to couples who cannot afford formal marriage registration may receive birth certificates with marking as born out-of-wedlock, leading to stigma and potential discrimination (Sumner & Kusumaningrum, 2014).

Contextual Factors

Furthermore, several studies highlight that identifying contextual levels can significantly enhance the understanding of birth registration challenges (Ebbers & Smits, 2022; Kumar & Saikia, 2021). While decisions are made at the household level, regional contexts may significantly influence these choices. In Indonesia, sub-national context factors are important because birth registration implementation might be governed by more specific local regulations. Additionally, more developed regions often have public service innovations, such as those implemented in Klungkung Regency, Bali (Widnyani, 2017). Effective interventions must consider regional contexts to tailor strategies and ensure their effectiveness in diverse settings.

3. Data

This study utilizes data from the National Socio-Economic Survey (Susenas), spanning 2015 to 2023, which provides nationally representative information on household socio-economic conditions in Indonesia. Susenas is a critical data source for understanding the living standards of the Indonesian population, and it captures detailed information relevant to birth registration status. Key variables include:

Individual and Household-Level Factors: These include demographic characteristics, socioeconomic status, parental education, employment status, internet and mobile phone use. Mother's age at first birth, and access to health services are also examined.

Regional-Level Factors: This study examines regional disparities in birth registration, focusing on differences between rural and urban areas, as well as variations across islands and provinces.

Dependent Variable: The primary outcome variable is whether children aged 0-4 have a birth certificate.

4. Research Methods

The analytical approach involves a multilevel binary logistic regression model, which allows for the examination of factors influencing birth registration at both the household and regional levels. This method is particularly suitable for addressing the hierarchical structure of the data, where individuals (children) are nested within households, and households are nested within regions.

Multilevel models are ideal for this analysis as they account for the potential clustering effects within households and regions, providing more accurate estimates of how various factors influence birth registration. This approach helps disentangle the contributions of individual, household, and regional characteristics, allowing for a comprehensive assessment of disparities in birth registration across Indonesia.

5. Expected Findings

Preliminary insights suggest that while birth registration rates have generally improved over the study period, significant disparities remain. Registration rates are lower among children from poorer households, rural areas, and regions with limited access to civil registration services. The findings are expected to highlight the complex interplay of socioeconomic, demographic, and regional factors that influence birth registration, revealing critical barriers that need to be addressed.

The study's findings will inform policymakers by identifying high-risk groups and regions with the lowest registration rates, enabling targeted interventions. By providing evidence-based recommendations, the research aims to enhance the efficiency of Indonesia's civil registration and vital statistics (CRVS) systems, supporting policies that promote equitable access to legal identity and social services.

6. Conclusion

This study will contribute to closing the registration gaps in Indonesia by providing a detailed examination of the factors hindering birth registration on children under five. The research emphasizes the importance of strengthening the CRVS system to ensure comprehensive, timely, and accurate vital statistics that support the formulation of inclusive policies. Furthermore, the findings expected to underscore the vital role of reliable statistics in advancing human rights, enhancing social protection, and guiding policy development towards more equitable and inclusive outcomes for all children in Indonesia.

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