

Maternal Health Services Delivery of Public Lying-In Clinics in Zambales

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Date Submitted:

March 07, 2026

Date Accepted:

July 23, 2026

Date Published:

September 22, 2026

DOI:

10.5281/zenodo.22900982

ABSTRACT

Maternal health service delivery at the primary-care level is essential to safe pregnancy, childbirth, and the postpartum period. This study assessed the perceived extent of maternal health service delivery in selected public lying-in clinics in Zambales and identified the operational issues encountered by healthcare workers as a basis for an intervention program. A descriptive quantitative survey design was used. Twenty-eight (28) healthcare workers from public lying-in clinics in Cabangan, San Felipe, and San Antonio, Zambales participated through total enumeration. Data were collected using a researcher-developed questionnaire that underwent expert content validation and pilot reliability testing. Three experts provided an overall validation mean of 4.80/5.00. The final data were analyzed using frequency,

percentage, weighted mean, composite mean, and grand mean. Maternal health service delivery obtained an overall grand mean of 4.17, interpreted as High Extent. Prenatal Care had the highest composite mean (4.29, Very High Extent), followed by Postnatal Care (4.27, Very High Extent), Monitoring and Record-Keeping (4.20, High Extent), Intrapartum Care (4.06, High Extent), and Compliance with Department of Health (DOH) Standards and Protocols (4.01, High Extent). Overall issues encountered obtained a grand mean of 3.33 (Sometimes Encountered). Workforce Constraints was the most prominent issue category (3.74, Often Encountered), particularly shortage of healthcare workers (3.89), heavy workload (3.86), and limited training opportunities (3.82). A Maternal Health Intervention Program was developed focusing on workforce development, resource enhancement, health information systems, standards compliance, referral coordination, employee wellness, and continuous quality improvement. The findings indicate generally favorable service delivery while highlighting workforce and operational concerns that require sustained local action.

Keywords: *maternal health, lying-in clinics, prenatal care, intrapartum care, postnatal care, Zambales, healthcare workers*

INTRODUCTION

Maternal health remains a critical component of public health, reflecting the overall effectiveness of healthcare systems in ensuring safe pregnancy, childbirth, and postpartum care. Globally, preventable maternal deaths persist due to gaps in access to timely and quality healthcare services. According to the World Health Organization (2023), approximately 295,000 women died from pregnancy-related causes in 2017, with most cases occurring in low- and middle-income countries. To provide a meaningful basis for comparison, maternal mortality is appropriately expressed through the maternal mortality ratio, which relates maternal deaths to the number of live births. These global figures demonstrate that maternal mortality remains an important public health concern

and underscore the need to strengthen maternal health service delivery systems, particularly at the primary healthcare level.

In the Philippines, maternal health services are delivered through an integrated healthcare system consisting of hospitals, rural health units, barangay health stations, and public lying-in clinics under the supervision of the Department of Health and local government units. Despite the implementation of various health programs and policies, including the Responsible Parenthood and Reproductive Health Act, disparities in maternal health outcomes remain evident, particularly in rural and geographically isolated communities. These disparities are often associated with variations in service delivery capacity, availability of skilled health workers, accessibility of healthcare facilities, and adequacy of healthcare resources (Philippine Statistics Authority, 2022; Department of Health, 2021).

Lying-in clinics play a vital role in maternal health service delivery, especially in communities with limited access to hospitals and higher-level healthcare facilities. These facilities provide essential maternal healthcare services, including antenatal care, normal delivery, postnatal care, newborn care, and health education. They also serve as important primary-level facilities for monitoring pregnant women, identifying possible complications, maintaining maternal health records, providing counseling, and facilitating appropriate referral when cases require higher-level management. Public lying-in clinics are commonly managed by local government units and staffed by trained healthcare professionals such as midwives and nurses. As frontline healthcare providers, they are directly responsible for implementing maternal health programs, monitoring pregnant women, conducting safe deliveries, and ensuring continuity of care. Their competencies, workload, and working conditions are important considerations in the delivery of quality maternal healthcare services (Department of Health, 2019; UNFPA, 2021).

In support of improving maternal and newborn healthcare services, the Department of Health requires healthcare facilities providing maternal and newborn services to comply with applicable standards and training requirements, including Basic Emergency Obstetric and Newborn Care (BEmONC). BEmONC equips healthcare providers, particularly midwives, nurses, and physicians, with the necessary competencies and clinical skills in managing obstetric and newborn emergencies, implementing safe delivery practices, preventing infections, performing newborn resuscitation, and facilitating appropriate referral procedures.

Compliance with BEmONC standards is essential in ensuring quality maternal and newborn healthcare services and in reducing maternal and neonatal morbidity and mortality. In public lying-in clinics, the implementation of BEmONC protocols and the capability of healthcare providers to respond appropriately to maternal and newborn emergencies are important components of maternal health service delivery. These should be considered together with the availability of personnel, essential equipment and supplies, medicines, referral mechanisms, and other facility-level resources.

The delivery of maternal health services in lying-in clinics involves multiple components, including human resources, availability of essential equipment and supplies, financial and logistical support, adherence to clinical protocols, and effective administrative systems. Healthcare providers in these facilities often perform multiple responsibilities ranging from clinical care to documentation and community outreach activities. Furthermore, the adequacy of facilities, availability of medicines, and accessibility of referral systems are important considerations in providing timely and quality maternal healthcare (World Health Organization, 2022; UNFPA, 2021). Since the present study uses a descriptive quantitative design and obtains data through a survey questionnaire answered by healthcare workers, the assessment focuses on their self-reported perceptions of the extent of maternal health service delivery rather than objectively establishing clinical effectiveness or causal relationships.

In 2023, Central Luzon recorded 204 registered maternal deaths, accounting for 10.9% of the 1,868 registered maternal deaths recorded nationally. Among the provinces and highly urbanized cities in Central Luzon, Zambales recorded 23 registered maternal deaths, representing 11.3% of the 204 registered maternal deaths in the region and placing the province fourth based on the number of registered maternal deaths. These figures are based on the place of usual residence of the deceased and refer specifically to registered maternal deaths, rather than

maternal mortality rate or maternal mortality ratio. A maternal mortality ratio is expressed in relation to the number of live births, generally as maternal deaths per 100,000 live births. Thus, the 23 registered maternal deaths in Zambales and their 11.3% share of the regional total provide a specific local and regional context for examining maternal health service delivery in the province.

More recent maternal health monitoring data provide additional context on the maternal health situation in Zambales. Based on the January to May 2025 data presented by the Department of Health, Zambales recorded 2,708 live births and six maternal deaths, corresponding to a maternal mortality ratio of 221.56 deaths per 100,000 live births. The reported maternal deaths during this monitoring period were recorded in Iba and San Marcelino. These data indicate that maternal deaths continued to be reported in the province during the period and provide a basis for continued attention to maternal health service delivery at the local level.

The 2025 maternal mortality data presented by the Department of Health further showed that Zambales recorded 6,213 live births and five maternal deaths, equivalent to a maternal mortality ratio of 80.48 deaths per 100,000 live births. At the municipal level, maternal deaths were reported in Botolan, Iba, and San Marcelino in the presented dataset, while no maternal deaths were reported in the other municipalities included in the table. These figures provide a more recent provincial context for understanding the continuing importance of maternal healthcare services in Zambales.

The maternal mortality trend presented for Zambales from 2022 to 2025 also shows variation across the four-year period, with reported maternal mortality ratios of approximately 80 deaths per 100,000 live births in 2022, 46 in 2023, 120 in 2024, and 80.48 in 2025. The variation across the reporting years indicates that maternal mortality remains a continuing public health concern that warrants sustained monitoring and strengthening of maternal healthcare services. However, these mortality figures alone do not establish a causal relationship between maternal deaths and the performance or service delivery of individual public lying-in clinics.

The local maternal health situation should also be considered together with other indicators, including live births, maternal morbidity, facility-based deliveries, referrals, availability of healthcare workers, operational status of public lying-in clinics, and accessibility of maternal healthcare facilities. These indicators provide a more comprehensive picture of maternal health service delivery because maternal death statistics alone cannot describe the day-to-day capacity and operational conditions of healthcare facilities. In this regard, available data from the Zambales Provincial Health Office, Department of Health, and Municipal Health Offices may provide additional evidence regarding the maternal health situation and service delivery conditions in the province, particularly in the selected municipalities of Cabangan, San Felipe, and San Antonio whether timely and quality maternal healthcare can be provided (World Health Organization, 2022; UNFPA, 2021)."

The importance of strengthening maternal healthcare services in the Province of Zambales is further emphasized by the continuous implementation of the Maternal and Neonatal Death Surveillance and Response (MNDSR) program by the Department of Health and the Provincial Health Office. Maternal Death Review activities are regularly conducted to identify medical and non-medical factors associated with maternal deaths and to formulate evidence-based interventions to prevent similar cases. These activities highlight the need to strengthen maternal health service delivery systems, improve emergency obstetric and newborn care, and ensure compliance with maternal healthcare standards in public lying-in clinics. The continued implementation of maternal death surveillance indicates that maternal health remains a significant public health concern requiring continuous assessment and improvement of healthcare services at the local level.

In the Province of Zambales, public lying-in clinics serve as primary birthing facilities for many communities, particularly in coastal and geographically isolated barangays. Due to limited access to hospitals and higher-level healthcare facilities, these clinics often become the first point of contact for pregnant women seeking maternal healthcare services. According to the Philippine Statistics Authority (2022), the province records thousands of live births annually, indicating a continuing demand for maternal healthcare services. The geographic location of communities, distance from higher-level facilities, transportation conditions, and availability of referral mechanisms are also relevant considerations in ensuring timely access to maternal healthcare.

The present study specifically focuses on selected public lying-in clinics located in the municipalities of Cabangan, San Felipe, and San Antonio. These municipalities were selected because their public lying-in clinics remain operational and continue to provide maternal healthcare services to their respective communities. The selection of the research locales was also based on accessibility, availability of respondents, and the continuing implementation of maternal healthcare programs in these facilities. The selected clinics provide an appropriate setting for examining prenatal care, intrapartum care, postnatal care, monitoring and record-keeping, and compliance with DOH standards based on the experiences and self-reported perceptions of healthcare workers.

Other municipalities within the province were not included in the study due to several considerations. Some public lying-in clinics were temporarily closed or non-operational during the conduct of the study, while others were located near public hospitals or district hospitals where maternal healthcare services are commonly referred. Additionally, certain facilities did not fully comply with the licensing and operational requirements prescribed by the Department of Health, making them unsuitable for inclusion in the present investigation. The selected municipalities were therefore considered appropriate research locales because their public lying-in clinics actively provide maternal healthcare services and reflect the operational conditions, challenges, and service delivery practices experienced by frontline healthcare workers in public lying-in facilities in the province.

The available regional and provincial evidence provides a clearer basis for examining maternal health service delivery in Zambales. Although the province may not consistently rank among the areas with the highest maternal mortality measures nationally, the occurrence of registered maternal deaths within the province, together with the continuing demand for maternal healthcare services and the presence of geographically dispersed communities, warrants a closer examination of service delivery at the primary healthcare level. The concern is therefore not based solely on the number of maternal deaths but also on the need to understand how maternal health services are delivered in the facilities where women first seek care.

Furthermore, maternal morbidity, including complications resulting from hemorrhage, infection, and hypertensive disorders, continues to be a concern at the local level, especially in areas where access to emergency obstetric care is limited. These complications are generally preventable and manageable through early detection and timely intervention. Facility-based deliveries, timely referrals, availability of skilled health workers, and access to emergency obstetric care are therefore important considerations in strengthening maternal health service delivery. This situation emphasizes the importance of strengthening maternal health service delivery at the primary healthcare level, particularly in lying-in clinics where early interventions can be initiated and appropriate referrals can be facilitated.

Despite the essential role of public lying-in clinics, there remains limited localized research focusing on how maternal health services are delivered in Zambales, particularly from the perspective of healthcare providers. Existing studies commonly focus on maternal outcomes and service utilization rather than examining the actual processes, operational conditions, and challenges associated with service delivery at the facility level. There is also limited localized evidence examining the perceived extent of service delivery across specific service areas such as prenatal care, intrapartum care, postnatal care, monitoring and record-keeping, and compliance with DOH standards among healthcare workers in selected public lying-in clinics in Zambales. This research gap highlights the need for a focused investigation on maternal health service delivery in public lying-in clinics.

This study, therefore, aims to assess the perceived extent of maternal health service delivery of selected public lying-in clinics in Zambales based on the self-reports of healthcare workers. It also identifies the challenges encountered by healthcare workers in the aforementioned service areas and provides a basis for developing interventions to enhance and sustain the operations of public lying-in clinics in the province. The findings of the study are expected to provide evidence-based information that may assist the Department of Health, local government units, healthcare administrators, healthcare workers, and policymakers in strengthening maternal health service delivery, improving policy implementation, and addressing operational challenges in selected public lying-in clinics in the province.

Conceptual Framework

Maternal health service delivery in lying-in clinics is influenced by available health system resources, service delivery processes, and compliance with applicable standards and protocols. In the Philippine context, maternal healthcare services are guided by policies and standards established by the Department of Health (DOH), which provide the regulatory and operational basis for the delivery of maternal and newborn health services. These include requirements related to staffing, facilities, equipment, service capability, clinical practices, documentation, and referral mechanisms. Such standards provide an important basis for examining the extent of maternal health service delivery in public lying-in clinics.

Maternal health service delivery in lying-in clinics is supported by relevant policies issued by the Department of Health. These include Administrative Order No. 2012-0012, which provides rules and regulations governing the establishment and operation of birthing homes or lying-in clinics and specifies requirements related to staffing, facilities, equipment, and service capability. These requirements are relevant to the assessment of the operational capacity of the selected public lying-in clinics.

Likewise, Administrative Order No. 2014-0020, which provides the Philippine Clinical Practice Guidelines on Maternal Care, establishes clinical guidance relevant to the provision of prenatal, intrapartum, and postnatal care. These guidelines provide a basis for examining the delivery of maternal health services across the different stages of pregnancy, childbirth, and the postpartum period.

Moreover, Administrative Order No. 2016-0035, or the guidelines on the implementation of the Maternal, Newborn, Child Health and Nutrition Strategy, supports the delivery of integrated maternal and newborn health services across the continuum of care. The Universal Health Care Act (Republic Act No. 11223) likewise provides a broader policy framework for improving access to healthcare services and strengthening health systems. These policies provide relevant standards and policy foundations for understanding and examining maternal health service delivery in public lying-in clinics.

In addition to national policies, international standards and recommendations of the World Health Organization (WHO) emphasize the importance of competent health workers, essential medicines and supplies, functional health information systems, appropriate facilities, and organized service delivery mechanisms in maternal healthcare. These principles are relevant to the present study because they provide a broader health-system context for examining the resources and service delivery practices of the selected public lying-in clinics.

Anchored on these national policies and international standards, the present study adopts the Input–Process–Output (IPO) Model as an organizing conceptual framework. The framework is used to organize the resources and conditions relevant to maternal health service delivery, the specific service delivery areas examined in the study, and the findings that will serve as the basis for developing interventions. The IPO model does not imply a causal relationship among the variables because the study employs a descriptive quantitative research design.

The Input component includes the health workers or personnel, medical supplies and equipment, facility resources, administrative and logistical support, and applicable DOH policies, standards, and protocols. These inputs represent the resources and conditions relevant to the operation and delivery of maternal health services in the selected public lying-in clinics.

The Process component consists of the five dimensions of maternal health service delivery examined in the study: (1) prenatal care, (2) intrapartum care, (3) postnatal care, (4) monitoring and record-keeping, and (5) compliance with DOH standards and protocols. These dimensions represent the specific areas through which the extent of maternal health service delivery is assessed based on the self-reports of health workers in the selected public lying-in clinics in Cabangan, San Felipe, and San Antonio, Zambales.

The Output component consists of the assessed extent of maternal health service delivery, the challenges reported by health workers, and the proposed interventions to enhance and sustain the operations of the selected public lying-in clinics. These outputs are limited to the variables and information actually measured in the study. Maternal mortality, maternal morbidity, patient satisfaction, neonatal outcomes, and other clinical outcomes are not included as outputs because these were not directly measured by the research instrument. Through this

framework, the study provides an organized assessment of the extent of maternal health service delivery and the challenges encountered by health workers in the selected public lying-in clinics. The findings serve as the basis for developing appropriate interventions intended to enhance and sustain maternal health service delivery and clinic operations in the Province of Zambales.

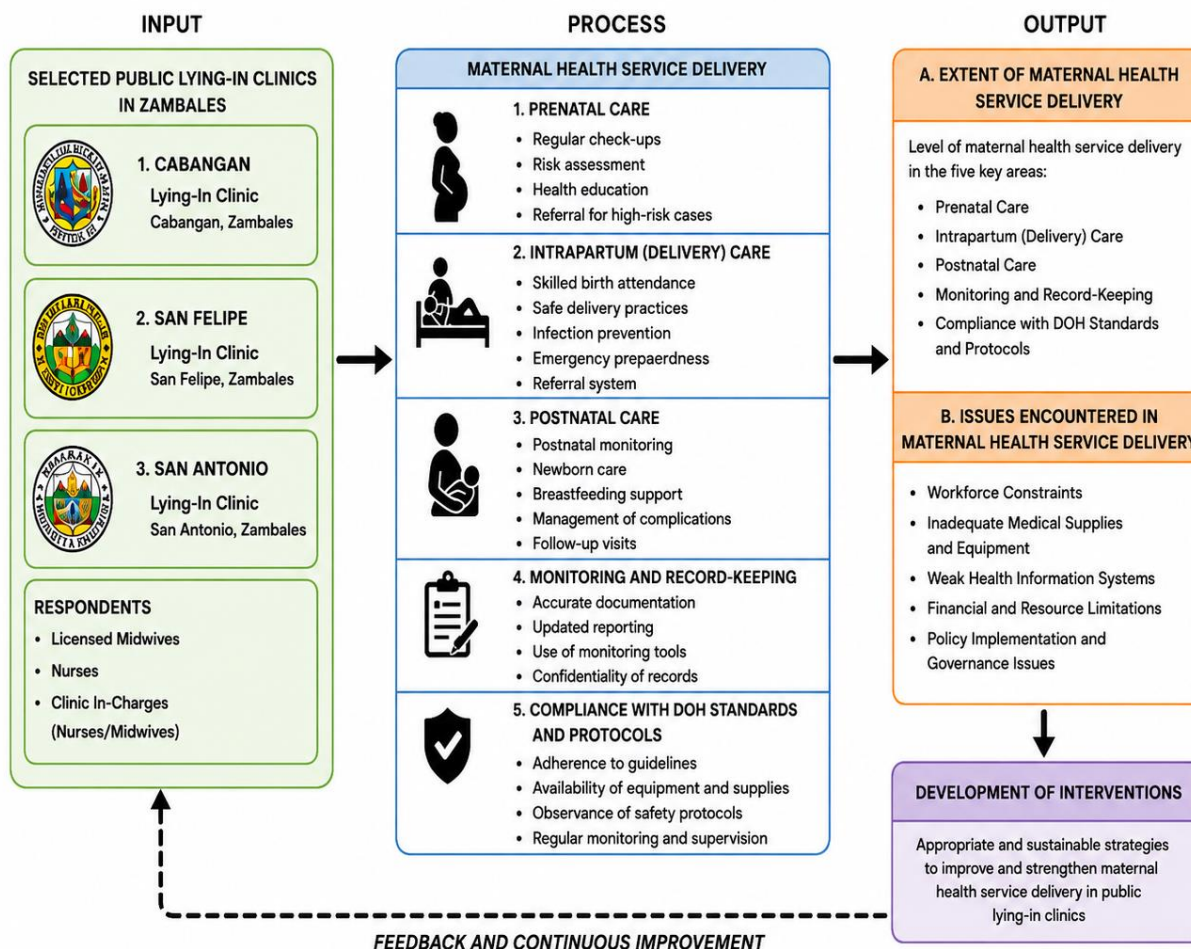


Figure 1. *Input-Process-Output (IPO) model*

Figure 1 is the depiction of the Input-Process-Output (IPO) model that is used for studying the process of maternal health services delivery in selected lying-in clinics in Zambales, particularly Cabangan, San Felipe, and San Antonio. The input is the selected lying-in clinics and the healthcare providers who act as respondents in the study. The process involves the provision of maternal health services that include prenatal, intrapartum, and postnatal care, as well as monitoring, documentation, and following DOH standards. The output is the amount of maternal health services provided by these lying-in clinics and the problems faced during their delivery.

Statement of the Problem

The purpose of this study is to assess the extent of maternal health service delivery in selected public lying-in clinics in Zambales based on the self-reports of health workers. The findings of the study will serve as a basis for developing interventions to enhance and sustain the operations of public lying-in clinics in the Province of Zambales.

Specifically, this study sought to answer the following questions:

1. What is the extent of maternal health service delivery in selected public lying-in clinics in Zambales based on the self-reports of health workers in terms of:

- a. Prenatal care;
- b. Intrapartum (delivery) care;
- c. Postnatal care;
- d. Monitoring and record-keeping; and
- e. Compliance with Department of Health standards and protocols?

2. What challenges are encountered in the delivery of maternal health services in selected public lying-in clinics as reported by health workers along the aforementioned areas of service delivery?

3. What maternal health service delivery interventions can be developed to enhance and sustain the operations of public lying-in clinics in the Province of Zambales?

Scope and Delimitation

In this study, an assessment of maternal health service delivery at selected lying-in clinics is performed in Zambales Province. Three public lying-in clinics in the municipalities of Cabangan, San Felipe, and San Antonio are used as the focus of the study. The subjects include health workers of these clinics who perform maternal health service delivery activities.

There is an analysis of the extent of service delivery for maternal health along the following aspects: antenatal, intra-partum (delivery), postnatal, record-keeping, and compliance with standards from the DOH. Identification of the problems that health practitioners encounter when delivering maternal health services in these areas is also found out

The scope of the research focus only on public lying-in clinics located in various municipalities within Zambales province and will not include any private lying-in clinics, hospitals, rural health units, or any other health institution not found in the aforementioned areas. The scope excludes pregnant mothers, patients, and other community members because the focus of the research study is the perceptions of health workers in maternal care.

Moreover, the study is limited to the assessment of maternal health service delivery based on the responses gathered through the survey questionnaire. Other aspects, such as financial auditing, clinical outcome measurements, patient satisfaction surveys, and long-term maternal or neonatal health outcomes, are not included within the scope of the study. As such, the findings from this research may not be generalizable to other settings, populations, or types of healthcare facilities beyond the selected public lying-in clinics in Zambales.

Significance of the Study

This study on the Maternal Health Service Delivery of Public Lying-in Clinics in Zambales is expected to provide valuable insights and benefits to the following stakeholders:

Department of Health (DOH). The findings of this study will provide evidence-based information on the actual implementation and service delivery conditions of maternal health programs in public lying-in clinics. This may serve as a reference for the DOH in strengthening policies, improving maternal health service standards, and addressing gaps in facility-based maternal care at the local level.

Local Government Units (LGU). The results of this study will guide LGUs in assessing the operational performance and service delivery capacity of lying-in clinics under their jurisdiction. It may help them in

improving resource allocation, strengthening health system support, and enhancing the implementation of maternal health programs in their respective communities.

Health Personnel. This study will help health workers understand the current conditions, challenges, and factors affecting maternal health service delivery, enabling them to improve efficiency, coordination, and quality of care provided to mothers.

Public Lying-in Clinics in Zambales. The findings may serve as a basis for improving facility operations, addressing service delivery gaps, and strengthening maternal health care services provided to pregnant women and mothers.

Future Researchers. This study may serve as a useful reference for future research related to maternal health service delivery, particularly in public health facilities in provincial and rural settings.

Definition of Terms

For better understanding of the study, the following terms are defined operationally.

Extent of Maternal Health Service Delivery of Public Lying-in Clinics. This refers to the level of implementation of maternal health services provided by selected public lying-in clinics in Zambales as perceived by the healthcare providers. In this study, it was measured in terms of prenatal care, intrapartum (delivery) care, postnatal care, monitoring and record-keeping, and compliance with Department of Health standards and protocols.

Prenatal Care. This refers to the healthcare services provided to pregnant women before childbirth, including regular prenatal check-ups, maternal and fetal monitoring, health education and counseling, pregnancy risk assessment, and referral of high-risk pregnancies. In this study, prenatal care was one of the indicators used to determine the extent of maternal health service delivery.

Intrapartum (Delivery) Care. This refers to the healthcare services provided during labor and childbirth, including skilled birth attendance, safe delivery practices, infection prevention, emergency obstetric preparedness, and implementation of referral procedures. In this study, intrapartum care served as one of the indicators of maternal health service delivery.

Postnatal Care. This refers to the healthcare services provided to mothers and newborns immediately after childbirth, including postnatal assessment, newborn care, breastfeeding support, management of post-delivery complications, and follow-up visits. In this study, postnatal care was used as one of the indicators in assessing maternal health service delivery.

Monitoring and Record-Keeping. This refers to the systematic documentation, maintenance, reporting, and management of maternal health records to ensure accurate patient information, continuity of care, and timely submission of reports. In this study, it served as one of the indicators for measuring the extent of maternal health service delivery.

Compliance with Department of Health Standards and Protocols. This refers to the adherence of public lying-in clinics to the policies, clinical guidelines, safety standards, and operational protocols prescribed by the Department of Health for maternal and newborn healthcare services. In this study, it was used as one of the indicators in determining the extent of maternal health service delivery.

Issues Encountered in the Delivery of Maternal Health Services. This refers to the challenges experienced by healthcare providers that may affect the quality, efficiency, and continuity of maternal health service delivery. In this study, these issues include workforce constraints, inadequate medical supplies and equipment, weak health information systems, financial and resource limitations, and policy implementation and governance issues.

Maternal Health Service Delivery Interventions. This refers to the proposed evidence-based strategies and improvement measures developed from the findings of the study to strengthen maternal health service delivery in selected public lying-in clinics in Zambales. The proposed interventions focus on workforce development,

capacity building, resource enhancement, strengthening health information systems, improving compliance with Department of Health standards and protocols, and promoting continuous quality improvement.

Literature Review

This chapter presents a comprehensive review of conceptual and empirical literature relevant to the present study on maternal health service delivery in public lying-in clinics. The review focuses on the major service areas of maternal healthcare, including prenatal care, intrapartum care, postnatal care, monitoring and record-keeping, and compliance with standards and protocols. It also examines the issues encountered in maternal health service delivery, such as workforce constraints, inadequate medical supplies and equipment, weak health information systems, financial limitations, and policy implementation concerns.

Conceptual Literature

The review considers both domestic and foreign literatures to provide a complete analysis of maternal health service provision in birth clinics. Conceptual literature includes the policies, frameworks, standards, and guidelines provided by the World Health Organization and the Department of Health, while the research literature involves empirical studies, scholarly articles, reports by the government, and systematic reviews concerning maternal healthcare services and the problems involved in health care institutions.

The literature is organized according to the identified themes and subthemes of the study. For each theme, conceptual discussions are presented first, followed by empirical findings from related studies. This organization allows for a clearer understanding of the relationship between existing concepts, actual service delivery conditions, and the issues encountered in maternal healthcare settings. The reviewed literature also highlights existing gaps, particularly the limited localized studies focusing on maternal health service delivery in public lying-in clinics and the experiences of health workers in the Province of Zambales. These gaps provide the basis and justification for conducting the present study.

Maternal Health Services: Delivery of Birthing Facilities

Maternal health service delivery refers to the provision of essential health services to women throughout pregnancy, childbirth, and the postpartum period. It is not limited to the occurrence of a safe delivery but encompasses a continuum of care that includes preventive, promotive, clinical, monitoring, referral, and postnatal services. The World Health Organization (WHO) emphasizes that maternal healthcare should be accessible, safe, effective, timely, equitable, and responsive to the needs of women. In primary and community-based facilities, service delivery therefore requires appropriately trained health workers, adequate resources, functional referral mechanisms, reliable information systems, and adherence to evidence-based standards. (World Health Organization [WHO], 2022).

In the Philippine setting, maternal health services are implemented through a network of hospitals, rural health units, barangay health stations, birthing facilities, and other health facilities under the national and local health systems. Department of Health policies emphasize facility-based delivery, skilled birth attendance, antenatal care, emergency obstetric and newborn care, postpartum care, referral, and monitoring. The DOH's earlier national policy on maternal and neonatal health specifically identifies antenatal care, care during delivery, and postpartum/postnatal care as components of a continuum of maternal and newborn services. (Department of Health [DOH], 2012).

Public lying-in clinics are important because they provide maternal health services closer to communities, particularly for women who may experience difficulty accessing hospitals. Their role is particularly relevant in rural and geographically dispersed communities where transportation, distance, and financial considerations may influence access to higher-level facilities. Consequently, assessing the extent of services actually delivered by these facilities provides useful information about the operational capacity of primary-level maternal health services. The present study therefore focuses on the service delivery practices reported by health workers rather than attempting to measure maternal mortality, morbidity, patient satisfaction, or other clinical outcomes. This

distinction is important because the present study uses a descriptive survey and relies on the self-reports of healthcare providers. (DOH, 2008; WHO, 2025).

The present study adopts this continuum-of-care perspective but specifically measures maternal health service delivery through five dimensions: prenatal care, intrapartum care, postnatal care, monitoring and record-keeping, and compliance with DOH standards and protocols. These dimensions correspond to major components of maternal health service delivery and provide an operational basis for assessing the perceived extent of services provided in the selected public lying-in clinics. (DOH, 2008; DOH, 2012; WHO, 2025).

Synthesis

The conceptual literature consistently establishes maternal healthcare as a continuum of services, rather than a single intervention. WHO and Philippine health policies agree that pregnancy, childbirth, and the postpartum period require coordinated services supported by competent personnel, appropriate resources, monitoring, and referral mechanisms. However, these standards describe the expected level of care and do not by themselves establish the extent to which specific public lying-in clinics in Zambales implement those services. This distinction creates the basis for the present study, which operationalizes maternal health service delivery through five measurable dimensions based on health workers' self-reports.

Prenatal Care

Prenatal care is a major component of maternal health service delivery because it provides opportunities for healthcare providers to monitor pregnancy, identify risks, provide health education, and prepare women for childbirth. Prenatal services include maternal assessment, monitoring of vital signs and fetal condition, nutritional counseling, screening and laboratory procedures, identification of pregnancy-related risks, counseling, birth preparedness, and referral of women requiring higher-level care. WHO's recommendations on antenatal care emphasize person-centered and evidence-based care throughout pregnancy rather than merely focusing on the number of consultations. (WHO, 2025).

In the Philippine context, prenatal care is integrated into primary healthcare services and is provided through rural health units, barangay health stations, hospitals, and birthing facilities. The national maternal and newborn health framework emphasizes early identification of high-risk pregnancies, appropriate birth preparedness, skilled attendance, and referral. These requirements make prenatal care particularly relevant to public lying-in clinics because assessment during pregnancy provides an opportunity to identify women who may require referral before complications become emergencies. (DOH, 2025).

Recent international guidance further emphasizes that antenatal care should not be limited to the number of visits received. The content and quality of each contact are important because healthcare workers need opportunities to assess maternal and fetal well-being, provide health information, identify potential complications, and support women throughout pregnancy. (WHO, 2025).

The literature therefore generally agrees that prenatal care is an important entry point to the maternal healthcare continuum. However, the availability of a prenatal program does not automatically establish that every recommended service is consistently implemented. Differences in health-worker availability, workload, equipment, supplies, referral mechanisms, and facility capacity may influence how services are delivered. The present study addresses this concern by examining the perceived extent of prenatal service delivery based on the self-report of healthcare workers in selected public lying-in clinics in Zambales.

Synthesis of Prenatal Care Literature

The conceptual literature establishes prenatal care as a fundamental component of maternal health service delivery and emphasizes comprehensive assessment, risk identification, health education, birth preparedness, and referral. The literature is consistent in recognizing the importance of these services, but it also indicates that the implementation of recommended prenatal care may vary according to available personnel, resources, and facility capacity. What remains less clear is the extent to which these recommended services are being delivered in selected public lying-in clinics in Zambales from the perspective of healthcare providers. Therefore, the present study

examines prenatal care as one of the five dimensions of maternal health service delivery, focusing specifically on the perceived extent of service delivery rather than effectiveness or actual maternal health outcomes.

Intrapartum care

Intrapartum care refers to the healthcare services provided to women during labor, childbirth, and the immediate period following delivery. It includes clinical assessment, monitoring of maternal and fetal conditions, skilled attendance during childbirth, infection prevention and control, management of complications, immediate newborn care, and referral when higher-level intervention is required. The World Health Organization (WHO) emphasizes that intrapartum care should be safe, respectful, evidence-based, and responsive to the individual needs of women and their newborns. These components make intrapartum care an essential dimension of maternal health service delivery in birthing facilities. (World Health Organization [WHO], 2018).

The WHO further emphasizes the importance of continuous assessment of maternal and fetal well-being during labor, timely recognition of complications, skilled birth attendance, effective infection prevention, and appropriate referral mechanisms. Healthcare providers are expected to have the competencies necessary to manage normal labor and identify conditions requiring emergency obstetric and newborn care. Thus, intrapartum care involves not only the conduct of delivery but also the continuous monitoring and appropriate clinical response throughout the labor and childbirth process. (WHO, 2018).

Skilled birth attendance is an important component of intrapartum care. Midwives, nurses, and physicians with appropriate training and competencies are responsible for monitoring labor, recognizing danger signs, providing appropriate interventions, and initiating referrals when complications occur. The availability of competent health workers is therefore an important consideration in examining the delivery of maternal health services, particularly in primary-level and community-based birthing facilities. (Campbell & Graham, 2016).

Labor monitoring is another essential component of intrapartum care. Healthcare providers monitor maternal vital signs, fetal condition, uterine contractions, and progress of labor to identify deviations from normal childbirth. Standardized monitoring tools and appropriate documentation support the timely recognition of complications and decision-making during labor. Consequently, the availability of appropriate monitoring procedures and the ability of healthcare workers to implement them are relevant indicators of intrapartum service delivery. (WHO, 2018).

Infection prevention and control are also fundamental to safe intrapartum care. Appropriate hand hygiene, sterilization of equipment, use of personal protective equipment, environmental sanitation, and proper waste management help reduce the risk of infection during childbirth. These practices are particularly important in lying-in clinics because mothers and newborns may be vulnerable to infection during and immediately after delivery. Compliance with infection prevention measures is therefore an important aspect of the services provided by healthcare workers. (WHO, 2016).

In the Philippine context, the Department of Health has established standards and protocols for maternal and newborn care that guide healthcare facilities and health workers in providing safe childbirth services. Basic Emergency Obstetric and Newborn Care (BEmONC) is particularly relevant because it provides healthcare workers with competencies for recognizing and managing common obstetric and newborn emergencies, providing essential interventions, and facilitating timely referral when services beyond the facility's capability are required. These standards provide an important policy basis for examining intrapartum care in public lying-in clinics. (Department of Health [DOH], 2019).

BEmONC is particularly relevant to public lying-in clinics because these facilities may serve as the first point of care for women experiencing labor in communities where access to hospitals may be limited. Healthcare workers are expected to recognize maternal and newborn danger signs, provide appropriate initial management, and coordinate referral to higher-level facilities when necessary. Thus, BEmONC-related competencies and referral practices form part of the expected service-delivery processes in facilities providing maternal and newborn care. (DOH, 2019).

Respectful maternity care is another consideration in intrapartum service delivery. Women should receive care that respects their dignity, privacy, autonomy, and preferences during childbirth. Bohren et al. (2017)

emphasized that experiences of disrespect and mistreatment during childbirth may influence women's perceptions of healthcare facilities and their willingness to seek facility-based care. This suggests that intrapartum care encompasses both appropriate clinical practices and respectful interactions between healthcare providers and women.

Midwifery-led care has also been recognized as an important approach to supporting safe and appropriate childbirth. Renfrew et al. (2014) found that midwife-led models of care can provide benefits across pregnancy, labor, and the postpartum period when implemented within an appropriate healthcare system. These findings support the importance of competent midwives and other skilled healthcare providers in delivering intrapartum services, particularly in primary-level birthing facilities.

However, the literature also indicates that the delivery of recommended intrapartum services may be affected by operational conditions within healthcare facilities. Workforce shortages, inadequate equipment and supplies, limited infrastructure, transportation difficulties, and weaknesses in referral mechanisms may create challenges for healthcare workers. UNFPA (2021) emphasized the continuing need to strengthen health systems and ensure adequate human and material resources for maternal healthcare, particularly in underserved communities.

In the Philippine setting, public lying-in clinics are important providers of maternal health services, particularly in communities where hospitals and higher-level facilities may not be readily accessible. Healthcare workers in these facilities may perform multiple responsibilities, including labor monitoring, delivery assistance, immediate newborn care, documentation, health education, and referral coordination. These responsibilities highlight the importance of examining not only whether maternal health programs exist but also the extent to which healthcare workers actually deliver the expected intrapartum services.

Referral mechanisms are particularly important when complications exceed the capacity of a lying-in clinic. Timely communication, transportation, coordination with receiving facilities, and appropriate documentation are necessary to facilitate continuity of care. The three-delays framework of Thaddeus and Maine (1994) highlights the importance of timely access to appropriate care in preventing avoidable maternal deaths. Although the present study does not measure maternal mortality or referral outcomes, referral practices remain relevant to the assessment of intrapartum service delivery because they form part of the expected processes for managing cases requiring higher-level care.

Continuing professional development is likewise important in maintaining the competencies of healthcare workers involved in labor and delivery. Regular training, skills enhancement, and updates on maternal and newborn care standards help healthcare workers maintain familiarity with current clinical protocols and emergency procedures. In the context of public lying-in clinics, continuing education may support healthcare workers in carrying out their assigned intrapartum care responsibilities in accordance with established standards. (WHO, 2016; DOH, 2019).

Synthesis

The conceptual literature consistently establishes intrapartum care as a major component of maternal health service delivery. The literature agrees that safe intrapartum care requires skilled healthcare workers, continuous maternal and fetal monitoring, infection prevention and control, emergency preparedness, respectful maternity care, appropriate documentation, and functional referral mechanisms. International guidance provides the clinical and person-centered basis for these services, while Philippine DOH policies and BEmONC standards provide the national regulatory and operational context for their implementation in birthing facilities. (WHO, 2018; DOH, 2019).

However, the literature also indicates that the presence of standards and policies does not necessarily ensure uniform implementation at the facility level. Differences in staffing, resources, equipment, training, infrastructure, and referral capacity may influence how intrapartum services are delivered. While previous literature has extensively discussed maternal and neonatal outcomes associated with intrapartum care, less

attention is given to the extent to which specific intrapartum services are delivered as reported by healthcare workers in selected public lying-in clinics in Zambales.

Therefore, the present study treats intrapartum (delivery) care as one of the five dimensions of maternal health service delivery. The study specifically assesses the perceived extent of intrapartum service delivery based on the self-report of healthcare workers. It does not directly measure maternal mortality, maternal morbidity, neonatal outcomes, patient satisfaction, or clinical effectiveness. Rather, the literature provides the standards and expected practices against which the reported extent of service delivery can be understood.

This framing is important for maintaining alignment among your title, Statement of the Problem, conceptual framework, methodology, findings, conclusions, and recommendations. Your Chapter IV should therefore discuss the findings under Intrapartum (Delivery) Care as an extent-of-service-delivery measure and should not conclude that the clinics are "effective" or that they produced better maternal or neonatal outcomes solely because respondents gave high ratings.

Postnatal Care

Postnatal care refers to the healthcare services provided to mothers and newborns immediately after childbirth and throughout the postpartum period. The World Health Organization defines the postnatal period as the first six weeks following delivery, a critical stage during which both mothers and newborns are highly vulnerable to complications and health risks. According to the World Health Organization (2022), appropriate postnatal care significantly contributes to reducing maternal and neonatal morbidity and mortality through early detection of complications and timely healthcare interventions.

The postpartum period is considered one of the most neglected stages in maternal healthcare despite its importance. Studies indicate that a considerable proportion of maternal and newborn deaths occur during the first 48 hours after childbirth. Consequently, continuous monitoring and appropriate healthcare interventions during this period are essential to ensure maternal recovery and newborn survival. WHO recommends that mothers and newborns receive several postnatal contacts within the first six weeks after delivery to monitor health conditions and identify complications.

Postnatal care encompasses a variety of healthcare services aimed at promoting the health and well-being of both the mother and the infant. These services include physical assessment of the mother, monitoring of vital signs, assessment of postpartum bleeding, evaluation of uterine involution, wound care, breastfeeding support, newborn examination, immunization counseling, nutritional guidance, family planning counseling, and health education. The provision of these services contributes to the early detection and management of postpartum complications.

Maternal complications during the postpartum period include postpartum hemorrhage, infections, hypertensive disorders, anemia, and mental health problems such as postpartum depression. According to Say et al. (2014), postpartum hemorrhage remains one of the leading causes of maternal mortality worldwide. Early identification and prompt management of these complications are essential to prevent severe maternal morbidity and mortality.

Postnatal monitoring allows healthcare providers to assess maternal recovery and identify danger signs that may require medical intervention. Midwives and nurses perform regular assessments of blood pressure, temperature, uterine contractions, bleeding patterns, and overall physical condition. These assessments enable healthcare providers to detect complications before they become life-threatening.

Newborn care is another important component of postnatal services. According to UNICEF (2021), the neonatal period represents the highest risk period for infant mortality. Immediate newborn care includes maintaining body temperature, promoting skin-to-skin contact, supporting breastfeeding, preventing infections, and monitoring the infant's condition. Early identification of neonatal complications contributes significantly to improving newborn survival.

Breastfeeding support forms an essential aspect of postnatal care. The World Health Organization recommends exclusive breastfeeding during the first six months of life because it provides optimal nutrition, strengthens immunity, and promotes healthy growth and development. Healthcare providers play an important

role in educating mothers about breastfeeding techniques, positioning, and management of breastfeeding problems.

Several studies have demonstrated the benefits of postnatal care in improving maternal and neonatal outcomes. According to Titaley et al. (2018), women who receive adequate postnatal services experience lower risks of postpartum complications and demonstrate improved maternal health outcomes. Their findings emphasized the importance of regular follow-up visits during the postpartum period.

Similarly, Lawn et al. (2016) reported that postnatal care interventions significantly reduce neonatal mortality and improve child survival. Their study highlighted the importance of early postnatal visits and community-based healthcare services in promoting maternal and newborn health.

In many developing countries, access to postnatal services remains limited. Women residing in rural and geographically isolated communities often experience barriers such as transportation difficulties, financial constraints, lack of healthcare facilities, and limited availability of healthcare providers. These barriers may reduce the utilization of postnatal services and increase the risk of maternal and neonatal complications.

The Department of Health in the Philippines promotes postnatal care through various maternal health programs. Healthcare providers are encouraged to conduct postpartum assessments, provide health education, support breastfeeding, and facilitate family planning services. Public healthcare facilities are expected to monitor mothers and newborns during the postpartum period to ensure continuity of care.

Family planning counseling is another important component of postnatal care. Healthcare providers educate mothers regarding birth spacing, contraceptive options, and reproductive health practices. Appropriate family planning contributes to improved maternal health and reduced risks associated with closely spaced pregnancies.

Mental health concerns during the postpartum period have also received increasing attention. Postpartum depression affects many women and may influence maternal functioning, infant care, and family relationships. Healthcare providers should assess emotional well-being and provide appropriate counseling or referrals when necessary.

Several Philippine studies have identified challenges affecting postnatal care services. These include limited healthcare personnel, inadequate follow-up mechanisms, insufficient transportation support, and lack of awareness among mothers regarding the importance of postnatal visits. These barriers may affect the continuity and effectiveness of maternal healthcare services.

Healthcare providers in public lying-in clinics serve important roles in providing postnatal services. Midwives and nurses monitor mothers and newborns, provide health education, identify complications, and facilitate referrals to higher-level healthcare facilities when necessary. Their competence and commitment significantly influence the quality of postpartum care.

Continuity of care is an essential principle in postnatal services. Effective communication between healthcare providers and patients promotes adherence to health recommendations and encourages mothers to seek appropriate healthcare services. Follow-up visits allow healthcare providers to evaluate recovery and reinforce health education messages.

The quality of postnatal care may also be influenced by organizational factors such as staffing, availability of resources, administrative support, and compliance with healthcare standards. Facilities with adequate resources and trained personnel are generally able to provide more comprehensive postpartum services.

Community participation also contributes to successful postnatal care programs. Barangay health workers and community volunteers may assist healthcare providers in conducting home visits, monitoring mothers and newborns, and encouraging compliance with postnatal recommendations. Community-based interventions have been shown to improve maternal and neonatal outcomes.

The World Health Organization emphasizes that strengthening postnatal care services is essential to achieving maternal and child health goals. Healthcare systems must ensure that mothers and newborns receive timely, accessible, and quality postpartum services to reduce preventable complications and deaths.

Postnatal care remains an indispensable component of maternal health service delivery because it promotes maternal recovery, supports newborn health, and prevents postpartum complications. The provision of comprehensive postpartum services contributes significantly to improved maternal and neonatal outcomes.

The present study includes postnatal care as one of the major dimensions of maternal health service delivery in public lying-in clinics in Zambales. Assessing the extent of postnatal care services provided by healthcare providers may help identify strengths and weaknesses in service delivery and provide valuable information for improving maternal healthcare programs and policies in the province.

Synthesis

The conceptual literature establishes postnatal care as an important dimension of maternal health service delivery because it encompasses maternal monitoring, newborn care, breastfeeding support, health education, family planning counseling, identification of danger signs, follow-up, and referral. International recommendations provide the general standards for postpartum and newborn care, while Philippine maternal and newborn health policies provide the national context for implementing these services in healthcare facilities (WHO, 2022; DOH, 2016).

The literature generally agrees that effective postnatal service delivery requires competent healthcare workers, adequate resources, appropriate monitoring, continuity of care, and functional referral mechanisms. However, the literature also indicates that the presence of recommended standards does not automatically establish that all services are consistently delivered at the facility level. Operational limitations such as staffing constraints, inadequate resources, transportation difficulties, and weak follow-up mechanisms may affect the extent of services provided.

Importantly, much of the existing literature focuses on maternal and newborn outcomes, utilization of postnatal services, and barriers to accessing care. The present study differs in that it focuses specifically on the extent of postnatal maternal health service delivery as perceived and self-reported by healthcare workers in selected public lying-in clinics in Zambales. The study therefore does not directly measure maternal mortality, maternal morbidity, neonatal outcomes, patient satisfaction, or clinical effectiveness.

Accordingly, postnatal care is treated in the present study as the third dimension of maternal health service delivery, together with prenatal care, intrapartum care, monitoring and record-keeping, and compliance with DOH standards and protocols. Assessing the perceived extent of postnatal service delivery may identify areas where services are adequately implemented and areas where improvements or interventions may be needed. The findings will serve as a basis for developing interventions intended to enhance and sustain the operations of public lying-in clinics in Zambales.

Monitoring and Record-Keeping

Monitoring and record-keeping are essential components of healthcare service delivery because they provide accurate and reliable information necessary for patient management, continuity of care, program evaluation, and decision-making. In maternal healthcare services, documentation and monitoring systems serve as fundamental tools that enable healthcare providers to track maternal conditions, monitor treatment outcomes, identify complications, and evaluate the effectiveness of healthcare interventions. The World Health Organization (WHO, 2022) recognizes health information systems as one of the six building blocks of a strong healthcare system because they provide evidence necessary for planning, policy development, and healthcare improvement.

Healthcare documentation refers to the systematic recording of patient information, healthcare services provided, diagnostic findings, treatment interventions, and patient outcomes. In maternal healthcare, documentation begins during prenatal care and continues through delivery, postpartum care, and follow-up visits. Maternal health records contain important information regarding the health status of pregnant women, risk factors, laboratory results, obstetric history, delivery outcomes, and newborn conditions. Accurate and complete documentation facilitates continuity of care and allows healthcare providers to make appropriate clinical decisions.

According to the World Health Organization, effective monitoring and health information systems contribute significantly to improving maternal and neonatal health outcomes. Reliable information allows healthcare providers to identify trends, monitor health indicators, evaluate program performance, and allocate resources effectively. The availability of quality health information supports evidence-based decision-making and strengthens healthcare management.

The Department of Health in the Philippines requires all healthcare facilities to maintain accurate and complete maternal health records. Various forms and reporting systems are utilized to document maternal healthcare services, including prenatal records, delivery records, postnatal records, maternal death reviews, and monthly accomplishment reports. These documents provide essential information for monitoring maternal health programs and evaluating healthcare performance.

Monitoring systems in maternal healthcare involve the continuous collection, analysis, and interpretation of data related to maternal and newborn services. Monitoring allows healthcare administrators and policymakers to assess service coverage, identify gaps in healthcare delivery, and implement appropriate interventions. The Department of Health regularly utilizes monitoring systems to evaluate maternal healthcare programs and determine compliance with national standards.

Patient record management plays an important role in ensuring continuity of maternal healthcare services. Maternal records provide healthcare providers with comprehensive information regarding previous consultations, medical history, laboratory findings, and treatment plans. Access to accurate records enables healthcare providers to make informed decisions and provide appropriate care. Incomplete or inaccurate records may result in delays in treatment, misdiagnosis, and poor patient outcomes.

According to Lippeveld et al. (2017), health information systems are essential for improving healthcare quality because they facilitate communication among healthcare providers and support clinical decision-making. Their study found that healthcare facilities with effective information systems demonstrate improved patient outcomes and better healthcare management practices.

Similarly, AbouZahr and Boerma (2018) emphasized the importance of health information systems in maternal healthcare. Their research revealed that accurate maternal health data contribute to better healthcare planning, resource allocation, and policy development. Reliable information allows governments and healthcare organizations to identify high-risk populations and prioritize interventions.

Documentation also serves legal and administrative purposes in healthcare facilities. Medical records provide evidence of healthcare services rendered and support accountability among healthcare providers. Proper documentation protects both patients and healthcare workers by providing an accurate account of clinical care and interventions performed.

In maternal healthcare facilities, healthcare providers are responsible for completing various forms and reports. Midwives and nurses often document prenatal consultations, labor monitoring, delivery outcomes, postpartum assessments, and newborn care services. The accuracy and completeness of these records influence the quality of patient care and the reliability of healthcare statistics.

The implementation of maternal and neonatal death surveillance systems further highlights the importance of monitoring and documentation. Maternal and Neonatal Death Surveillance and Response (MNDSR) systems rely heavily on accurate data collection and reporting. These systems enable healthcare authorities to identify causes of maternal deaths, analyze contributing factors, and develop preventive interventions.

The World Health Organization emphasizes the importance of data quality in healthcare systems. Data quality dimensions include accuracy, completeness, timeliness, consistency, and reliability. Poor-quality data may lead to inaccurate health statistics and ineffective healthcare policies. Therefore, healthcare providers must ensure that information recorded in patient records is complete and accurate.

Several studies have identified challenges associated with monitoring and record-keeping in healthcare facilities. According to Aqil et al. (2019), healthcare workers frequently encounter difficulties related to excessive documentation requirements, limited time, inadequate training, and insufficient monitoring tools. These challenges may affect the quality and completeness of health records.

In many developing countries, healthcare facilities continue to rely on manual documentation systems. Paper-based records are susceptible to loss, damage, duplication, and incomplete documentation. Manual systems also require significant time and effort from healthcare workers. Consequently, healthcare providers may experience increased workloads associated with documentation responsibilities.

Electronic health information systems have emerged as important tools for improving healthcare documentation. Electronic records facilitate data storage, retrieval, analysis, and reporting. According to WHO (2021), digital health technologies improve data quality, reduce documentation errors, and enhance communication among healthcare providers. However, implementation of electronic systems remains limited in many rural healthcare facilities due to financial and technological constraints.

The Department of Health continues to promote health information system strengthening through training programs and reporting guidelines. Healthcare workers receive orientation on documentation procedures, data management, and reporting requirements to improve information quality. Proper training contributes to improved record accuracy and reporting efficiency.

Timeliness of reporting is another important aspect of monitoring systems. Healthcare facilities are required to submit regular reports to local health offices and national agencies. Delays in reporting may affect program monitoring and healthcare planning. Timely submission of reports allows healthcare authorities to identify emerging issues and respond appropriately.

Confidentiality and privacy are essential principles in healthcare documentation. Patient records contain sensitive information that must be protected from unauthorized access. Healthcare providers are expected to maintain confidentiality and comply with ethical and legal requirements regarding patient information. The Data Privacy Act of the Philippines further emphasizes the protection of personal health information.

Monitoring tools are also important for evaluating healthcare performance. Performance indicators such as maternal mortality rates, prenatal coverage, skilled birth attendance, and postnatal care utilization provide valuable information regarding the effectiveness of maternal health programs. These indicators guide healthcare administrators in identifying strengths and areas requiring improvement.

Several Philippine studies have reported challenges related to health information systems in primary healthcare facilities. Common issues include incomplete records, delayed reports, inadequate training, and limited resources for documentation activities. These challenges may affect program implementation and decision-making processes.

Healthcare providers working in public lying-in clinics often perform multiple responsibilities, including patient care, health education, administrative tasks, and documentation. Excessive documentation requirements may contribute to increased workload and reduced time available for direct patient care. Therefore, effective documentation systems should balance information requirements with the practical realities of healthcare delivery.

Administrative support also influences the effectiveness of monitoring and record-keeping systems. Healthcare managers play important roles in supervising documentation activities, ensuring compliance with reporting requirements, and providing necessary resources. Supportive leadership contributes to improved data quality and organizational performance.

The integration of monitoring and evaluation activities into maternal healthcare programs contributes to continuous quality improvement. Healthcare facilities that regularly review their performance data are better able to identify problems and implement corrective actions. Quality improvement initiatives often rely on accurate and reliable information obtained from monitoring systems.

In public lying-in clinics, monitoring and record-keeping support continuity of maternal healthcare services from pregnancy through the postpartum period. Proper documentation enables healthcare providers to track patient progress, identify complications, and facilitate referrals when necessary. Accurate records also support healthcare planning and policy development at local and national levels.

The present study includes monitoring and record-keeping as one of the major dimensions of maternal health service delivery because effective documentation systems contribute significantly to quality healthcare services. Assessing monitoring and record-keeping practices in public lying-in clinics may provide valuable

information regarding the strengths and weaknesses of healthcare information systems and may guide future interventions aimed at improving maternal healthcare services in the Province of Zambales.

Synthesis

The conceptual literature consistently establishes monitoring and record-keeping as an important component of maternal health service delivery. The literature agrees that accurate, complete, timely, and properly managed information supports continuity of care, communication among healthcare providers, program monitoring, referral coordination, and administrative decision-making (WHO, 2022; Lippeveld et al., 2017). The literature also indicates that the quality of monitoring and documentation may be influenced by several operational factors, including healthcare workers' workload, availability of documentation tools, training, supervision, administrative support, and access to appropriate information technology. While digital systems may improve information management, their implementation may be challenging in facilities with limited infrastructure and resources (WHO, 2021).

However, much of the existing literature discusses health information systems in relation to data quality, health planning, program monitoring, and health outcomes. There is comparatively less emphasis on the extent to which routine monitoring and record-keeping activities are carried out by healthcare workers at the facility level, particularly in public lying-in clinics. This distinction is relevant to the present study because it does not directly evaluate the effectiveness of a health information system or measure maternal and neonatal outcomes.

Therefore, the present study treats monitoring and record-keeping as the fourth dimension of maternal health service delivery. It examines the extent of monitoring and record-keeping practices as perceived and self-reported by healthcare workers in selected public lying-in clinics in Zambales. The findings may identify areas of strength and areas requiring improvement and may provide a basis for developing interventions to enhance and sustain maternal health service delivery.

Compliance with Standards and Protocols

Compliance with standards and protocols is an essential component of healthcare service delivery because it ensures that healthcare services are provided safely, effectively, ethically, and consistently. In maternal healthcare, adherence to established standards and clinical guidelines contributes significantly to reducing maternal and neonatal morbidity and mortality. Healthcare standards serve as frameworks that guide healthcare providers in delivering quality services, minimizing medical errors, and promoting patient safety. The World Health Organization (WHO, 2022) emphasizes that compliance with evidence-based standards is necessary to improve healthcare outcomes and strengthen health systems.

Healthcare standards are systematically developed statements designed to guide healthcare professionals and organizations in making appropriate decisions regarding patient care. Clinical protocols, on the other hand, provide detailed instructions regarding the management of specific conditions and healthcare procedures. In maternal healthcare, these standards cover prenatal care, labor and delivery management, postnatal care, newborn care, infection prevention, emergency obstetric care, referral systems, and documentation practices.

The World Health Organization has developed numerous guidelines aimed at improving maternal and newborn health services. These guidelines emphasize respectful maternity care, patient safety, infection prevention, labor management, and emergency preparedness. Compliance with these international standards contributes to improved healthcare quality and better maternal and neonatal outcomes.

According to Donabedian's quality-of-care framework, healthcare quality is influenced by structure, process, and outcomes. Compliance with standards represents an important process indicator because it measures whether healthcare providers follow established procedures and protocols. Adherence to standards ensures consistency in service delivery and reduces variations in clinical practice.

In the Philippines, the Department of Health serves as the primary government agency responsible for establishing maternal healthcare standards and protocols. Various administrative orders, clinical guidelines, and operational manuals have been developed to guide healthcare facilities in delivering maternal and newborn

services. Healthcare facilities are expected to comply with these standards to ensure patient safety and quality healthcare.

One of the most important initiatives implemented by the Department of Health is the Basic Emergency Obstetric and Newborn Care (BEmONC) program. BEmONC establishes standards for managing obstetric and newborn emergencies and aims to reduce maternal and neonatal deaths. Healthcare providers working in maternity facilities are required to undergo BEmONC training to develop competencies in emergency management, newborn resuscitation, infection prevention, and referral procedures.

The Department of Health Administrative Order No. 2008-0029 outlines policies and standards for implementing maternal, newborn, child health, and nutrition programs. These standards emphasize the importance of skilled birth attendance, safe delivery practices, postpartum care, and emergency referral systems. Healthcare facilities that provide maternal healthcare services are expected to comply with these standards.

Compliance with infection prevention and control protocols is another important aspect of maternal healthcare. Healthcare-associated infections continue to pose significant risks to mothers and newborns. Standard precautions such as hand hygiene, sterilization of equipment, use of personal protective equipment, and proper waste management reduce the risk of infections during childbirth. The Centers for Disease Control and Prevention emphasize that adherence to infection control protocols significantly improves patient safety.

Several studies have demonstrated the relationship between compliance with standards and healthcare outcomes. According to Rowe et al. (2018), healthcare facilities with higher compliance rates generally exhibit better maternal and neonatal outcomes. Their study found that adherence to clinical guidelines improved the quality of care and reduced complications during childbirth.

Similarly, Kruk et al. (2018) emphasized that quality healthcare depends not only on access to services but also on the consistent implementation of evidence-based standards. Their research revealed that poor adherence to clinical protocols contributes to preventable maternal and neonatal deaths.

Regular supervision and monitoring contribute significantly to compliance with standards. Healthcare administrators and supervisors conduct facility assessments, clinical audits, and monitoring visits to evaluate adherence to guidelines. Supportive supervision allows healthcare providers to identify gaps in practice and implement corrective measures.

The Department of Health conducts monitoring and accreditation activities to assess compliance among healthcare facilities. Lying-in clinics are evaluated based on infrastructure, equipment, staffing, service delivery, and adherence to clinical standards. Facilities that fail to meet minimum requirements may face corrective actions or suspension of operations.

Training and continuing professional development also influence compliance. Healthcare providers who participate in seminars, workshops, and clinical updates are more likely to adhere to current guidelines and best practices. According to WHO (2021), continuing education improves healthcare providers' knowledge, skills, and confidence in implementing clinical protocols.

However, several factors may affect compliance with standards and protocols. Limited resources, inadequate staffing, insufficient equipment, and lack of training may hinder healthcare providers from fully implementing guidelines. In many developing countries, healthcare facilities encounter challenges in maintaining consistent compliance due to operational constraints.

Research conducted by Leslie et al. (2017) found that resource limitations significantly affect compliance with maternal healthcare standards. Healthcare providers working in low-resource settings often experience difficulties in implementing protocols due to shortages of supplies and equipment.

Administrative support is another important factor affecting compliance. Healthcare leaders influence organizational culture, resource allocation, and staff motivation. Supportive leadership encourages healthcare providers to comply with standards and participate in quality improvement activities.

Quality assurance programs promote compliance by establishing mechanisms for performance evaluation and continuous improvement. Clinical audits, peer reviews, and performance monitoring enable healthcare facilities to assess adherence to standards and identify areas requiring improvement.

Patient safety is a primary objective of healthcare standards. Compliance reduces the occurrence of medical errors, adverse events, and preventable complications. Standardized procedures ensure that healthcare providers deliver consistent and evidence-based care regardless of individual differences in practice.

The implementation of respectful maternity care has become an important aspect of compliance in maternal healthcare. The World Health Organization advocates for respectful treatment of women during childbirth, protection of patient rights, informed decision-making, and emotional support. Healthcare providers are expected to respect the dignity, privacy, and preferences of mothers throughout the childbirth process.

In public lying-in clinics, compliance with standards and protocols ensures that maternal healthcare services meet established quality requirements. Midwives and nurses are responsible for implementing clinical guidelines, maintaining patient safety, and adhering to infection control measures. Their compliance influences healthcare outcomes and patient satisfaction.

Several Philippine studies have reported challenges affecting compliance among healthcare facilities. These include limited financial resources, inadequate infrastructure, insufficient personnel, and inconsistent supervision. Such challenges may affect the ability of healthcare providers to fully implement standards.

Healthcare accreditation programs also encourage compliance. Accreditation serves as a mechanism for evaluating healthcare quality and promoting continuous improvement. Accredited facilities demonstrate commitment to quality standards and patient safety.

The Maternal and Neonatal Death Surveillance and Response system further emphasizes the importance of compliance. Investigations of maternal deaths frequently identify failures in adherence to protocols as contributing factors. Findings from maternal death reviews often lead to recommendations aimed at improving compliance and preventing future incidents.

Technological advancements have also influenced compliance monitoring. Electronic health records, digital reporting systems, and online training programs support healthcare providers in implementing standards and improving documentation. However, the availability of such technologies remains limited in some primary healthcare facilities.

Continuous quality improvement initiatives encourage healthcare providers to evaluate their practices and adopt evidence-based interventions. Compliance with standards should not be viewed merely as a regulatory requirement but as a commitment to delivering safe and quality healthcare services.

In maternal healthcare, adherence to standards and protocols contributes to improved patient outcomes, reduced complications, enhanced patient satisfaction, and stronger healthcare systems. Healthcare providers who consistently comply with established guidelines are better equipped to provide safe and effective maternal care.

The present study includes compliance with standards and protocols as one of the major dimensions of maternal health service delivery in public lying-in clinics in Zambales. Assessing the perceived extent of compliance among healthcare workers may provide information regarding the implementation of established standards and the operational issues encountered in their delivery of maternal health services. The findings may serve as a basis for developing interventions to strengthen service delivery and sustain the operations of the selected public lying-in clinics in the province

Synthesis

The conceptual literature establishes that compliance with standards and protocols is a fundamental element of quality maternal health service delivery. The literature emphasizes that standards provide healthcare workers with a structured basis for delivering safe, consistent, and evidence-based care, while protocols guide them in responding to specific maternal and newborn health conditions.

The literature further indicates that compliance extends beyond clinical procedures. It encompasses infection prevention and control, emergency preparedness, BEmONC competencies, referral mechanisms, documentation and reporting, supervision, and continuing professional development. These components work together to promote patient safety and improve the continuity and quality of maternal healthcare services.

At the same time, compliance is influenced by the conditions within healthcare facilities. Workforce constraints, inadequate supplies and equipment, financial limitations, weak information systems, insufficient

training, and limited administrative support may hinder healthcare workers from fully implementing established standards and protocols. This suggests that compliance is not solely dependent on the knowledge or willingness of individual healthcare workers but is also affected by the organizational capacity of the facility.

For the present study, compliance with standards and protocols is considered one of the major dimensions of maternal health service delivery in selected public lying-in clinics in Zambales. Assessing the perceived extent of compliance among healthcare workers will provide an understanding of how established standards are implemented in actual facility-level practice. It may also reveal operational issues that influence compliance and service delivery. The findings can serve as a basis for developing appropriate interventions to strengthen adherence to maternal healthcare standards, improve service delivery, and sustain the operations of public lying-in clinics in Zambales.

Maternal Health Services Delivery Issues

Maternal health service delivery involves the provision of comprehensive healthcare services to women during pregnancy, childbirth, and the postpartum period. Although substantial progress has been achieved in reducing maternal mortality worldwide, numerous challenges continue to affect the accessibility, quality, and effectiveness of maternal healthcare services. The World Health Organization (WHO, 2022) recognizes that maternal health outcomes are influenced not only by clinical interventions but also by health system factors, organizational capacity, resource availability, workforce competency, governance, and healthcare infrastructure.

Healthcare delivery systems are composed of several interconnected components that work together to ensure the provision of quality maternal healthcare. These components include healthcare personnel, medical equipment, financial resources, information systems, organizational management, and policy implementation. Weaknesses in any of these components may compromise the effectiveness of maternal healthcare services and increase the risks of maternal and neonatal complications.

According to the World Health Organization (2022), approximately 287,000 maternal deaths occurred globally in 2020. Many of these deaths could have been prevented through timely access to quality maternal healthcare services. However, barriers such as inadequate healthcare resources, shortages of skilled healthcare workers, weak referral systems, and limited access to emergency obstetric care continue to affect healthcare delivery, particularly in low- and middle-income countries.

The United Nations Sustainable Development Goal 3 aims to reduce the global maternal mortality ratio to less than 70 maternal deaths per 100,000 live births by 2030. Achieving this target requires strengthening maternal healthcare systems and addressing the challenges that affect service delivery. WHO emphasizes that improving healthcare systems is essential to reducing maternal mortality and ensuring universal access to maternal healthcare services.

In many developing countries, maternal healthcare facilities encounter operational challenges that affect the quality of services provided. These challenges include shortages of healthcare personnel, inadequate medical supplies, insufficient financial resources, poor infrastructure, weak health information systems, and ineffective governance. Such problems may result in delays in diagnosis, treatment, referral, and emergency response.

The World Health Organization identifies health workforce, healthcare financing, leadership and governance, medical products and technologies, service delivery, and information systems as the six building blocks of healthcare systems. Deficiencies in these areas contribute to poor maternal health outcomes and reduced quality of care. Therefore, strengthening these healthcare system components is essential to improving maternal health services.

Healthcare workers play critical roles in maternal healthcare delivery. Midwives, nurses, physicians, and other healthcare professionals provide essential services including prenatal care, childbirth assistance, postnatal care, health education, and emergency management. However, shortages of skilled healthcare providers remain major concerns worldwide. According to the United Nations Population Fund (UNFPA, 2021), many countries experience insufficient numbers of midwives and healthcare workers, particularly in rural and underserved communities.

Resource limitations also affect maternal healthcare delivery. The availability of medicines, equipment, laboratory supplies, and emergency resources directly influences healthcare providers' ability to deliver quality care. WHO reports that shortages of essential supplies contribute to preventable maternal and neonatal complications.

Health information systems are another important component of healthcare delivery. Accurate documentation, timely reporting, and effective monitoring enable healthcare providers and administrators to evaluate service performance and identify areas requiring improvement. Weak health information systems may compromise continuity of care and healthcare planning.

Financial constraints frequently affect healthcare operations. Limited budgets may restrict procurement of equipment, staff development, facility maintenance, and service expansion. Healthcare facilities operating with insufficient resources often experience difficulties in maintaining quality standards.

Governance and policy implementation also influence maternal healthcare delivery. Effective leadership, supportive supervision, and compliance with healthcare standards promote accountability and quality improvement. Conversely, weak governance and inconsistent policy implementation may hinder healthcare performance.

Several studies have reported that maternal healthcare services are affected by multiple organizational and systemic challenges. Kruk et al. (2018) emphasized that improving healthcare quality requires strengthening healthcare systems rather than simply increasing service utilization. Their findings suggest that healthcare quality depends on adequate resources, competent healthcare workers, effective management, and supportive policies.

Similarly, Campbell and Graham (2016) highlighted that healthcare systems must address workforce shortages, inadequate infrastructure, and resource constraints to improve maternal health outcomes. Their research demonstrated that investments in healthcare systems contribute to reductions in maternal mortality.

In the Philippine context, the Department of Health continues to implement programs aimed at improving maternal healthcare services. However, healthcare facilities, particularly in rural areas, continue to experience operational challenges that affect service delivery. Public lying-in clinics often encounter limitations related to staffing, equipment availability, transportation, referral systems, and financial resources.

Geographically isolated communities frequently experience difficulties accessing healthcare services. Transportation barriers, distance to healthcare facilities, and limited emergency referral systems may delay access to appropriate care. Such delays contribute to maternal morbidity and mortality.

The "Three Delays Model" developed by Thaddeus and Maine explains that maternal deaths often result from delays in deciding to seek care, delays in reaching healthcare facilities, and delays in receiving appropriate treatment. These delays are influenced by healthcare system issues and resource limitations.

Several local studies have identified healthcare system challenges affecting maternal health services in the Philippines. Common concerns include inadequate staffing, insufficient medical supplies, limited training opportunities, delayed reporting systems, and inconsistent implementation of healthcare programs. These challenges may affect the quality and accessibility of maternal healthcare services.

The Maternal and Neonatal Death Surveillance and Response program implemented by the Department of Health further demonstrates the importance of identifying healthcare delivery issues. Maternal death reviews frequently identify systemic problems that contribute to adverse maternal outcomes. Findings from these reviews often lead to recommendations aimed at strengthening healthcare systems.

Healthcare administrators and policymakers recognize that addressing maternal health service delivery issues requires coordinated efforts involving healthcare providers, local government units, national agencies, and community organizations. Investments in workforce development, infrastructure, information systems, and policy implementation are necessary to improve maternal healthcare services.

Public lying-in clinics serve as important healthcare facilities for many communities, particularly in rural areas. These facilities provide essential maternal healthcare services and often represent the first point of contact for pregnant women. However, operational challenges may affect their ability to provide comprehensive maternal healthcare services.

Understanding the issues affecting maternal health service delivery is essential for developing appropriate interventions and improving healthcare quality. Identifying workforce constraints, resource limitations, information system weaknesses, financial problems, and governance issues may assist healthcare administrators in implementing evidence-based solutions.

The present study focuses on maternal health service delivery issues because these factors significantly influence the quality and effectiveness of maternal healthcare services provided by public lying-in clinics in Zambales. Assessing these challenges may provide valuable information for improving healthcare delivery, strengthening maternal health programs, and enhancing maternal and newborn outcomes within the province.

Workforce Constraints

Workforce constraints refer to limitations related to the availability, distribution, competency, workload, training, retention, and organizational support of healthcare personnel involved in maternal health service delivery. Healthcare workers, particularly midwives, nurses, and physicians, are essential to the provision of safe and continuous maternal care because they are responsible for prenatal assessment, labor and delivery care, postnatal monitoring, health education, documentation, referral, and emergency management. The World Health Organization identifies the health workforce as a fundamental component of a functioning health system, emphasizing the need for an adequate, competent, equitably distributed, and supported workforce to achieve quality healthcare services.

In maternal healthcare, the availability of skilled healthcare personnel is particularly important because pregnancy and childbirth may involve rapidly developing complications requiring immediate assessment and intervention. Competent healthcare workers must be capable of identifying danger signs, providing appropriate initial management, following established clinical protocols, and facilitating timely referral when services beyond the capacity of the facility are required. Thus, workforce adequacy involves not only the number of personnel available but also their competencies and capacity to perform the responsibilities required in maternal health service delivery.

Workload is another important dimension of workforce constraints. Healthcare providers in primary healthcare facilities and public lying-in clinics may perform several functions simultaneously, including clinical care, health education, documentation, reporting, administrative tasks, and community activities. When staffing is insufficient relative to service demands, healthcare workers may experience excessive workload, fatigue, and reduced time for direct patient care. Such conditions may affect the consistency and quality of maternal healthcare services.

Competency and continuing professional development are likewise important considerations. Maternal health guidelines, emergency procedures, infection prevention practices, and newborn care standards require healthcare workers to maintain current knowledge and clinical skills. Training opportunities, including Basic Emergency Obstetric and Newborn Care (BEmONC), are particularly relevant to facilities providing maternal services because healthcare workers need appropriate competencies to recognize and manage obstetric and newborn emergencies and to initiate timely referrals. However, participation in training may be affected by staffing shortages, financial limitations, workload, and the availability of training opportunities.

Workforce retention and distribution also influence the accessibility and continuity of maternal healthcare services. Rural and geographically isolated communities may experience greater difficulty in attracting and retaining qualified healthcare professionals. Factors such as workload, working conditions, opportunities for professional development, organizational support, and career advancement may influence the willingness of healthcare workers to remain in underserved facilities. Unequal distribution of healthcare workers may consequently contribute to differences in the availability and continuity of maternal health services between communities.

Organizational support and supervision are also important components of workforce effectiveness. Healthcare workers require appropriate administrative guidance, coordination, feedback, and access to resources to perform their responsibilities effectively. Supportive supervision can help identify performance gaps, provide

opportunities for professional development, and encourage adherence to maternal healthcare standards and protocols. Similarly, teamwork and communication among midwives, nurses, physicians, administrators, and other healthcare personnel can facilitate continuity of care and appropriate referral of patients.

In the Philippine context, workforce challenges are particularly relevant to public healthcare facilities because maternal health services are delivered through a decentralized health system in which local health facilities and local government units play important roles. Public lying-in clinics may depend heavily on midwives and other frontline healthcare workers to provide maternal services within their communities. Consequently, limitations in staffing, training, workload management, supervision, and retention may influence the extent to which recommended maternal healthcare services can be consistently delivered.

For public lying-in clinics, workforce adequacy is closely interconnected with other aspects of healthcare service delivery. Even when facilities have established maternal health programs, adequate equipment, and clinical protocols, the actual delivery of services may be affected when there are insufficient or inadequately trained personnel. Conversely, competent and adequately supported healthcare workers may be better positioned to maximize available resources, maintain accurate records, comply with standards, provide health education, and facilitate referrals. Workforce constraints should therefore be considered not as an isolated problem but as a factor that interacts with resources, information systems, financing, and governance.

Synthesis

The conceptual literature establishes that the healthcare workforce is a fundamental component of maternal health service delivery. Adequate staffing, competent healthcare providers, manageable workloads, continuing professional development, supportive supervision, organizational support, and effective teamwork are important conditions that enable healthcare workers to perform their responsibilities effectively. In maternal healthcare, these workforce conditions support the continuous provision of prenatal, intrapartum, and postnatal services, including patient assessment, monitoring, health education, documentation, counseling, emergency response, and referral coordination.

Conceptually, workforce constraints may be understood as conditions that limit the capacity of healthcare personnel to perform these responsibilities effectively. These constraints include insufficient staffing, excessive workload, limited opportunities for training and professional development, inadequate supervision, difficulties in personnel retention, and unfavorable working conditions. The literature suggests that these factors do not operate independently. For example, inadequate staffing may increase workload, while excessive workload may reduce opportunities for training and contribute to fatigue or burnout. Similarly, limited organizational support and supervision may affect motivation, professional development, and the capacity of healthcare workers to comply with established maternal healthcare standards.

The conceptual literature also emphasizes the importance of strengthening workforce capacity through continuing professional development, including Basic Emergency Obstetric and Newborn Care (BEmONC) training, supportive supervision, teamwork, and organizational support. These mechanisms may enhance healthcare workers' competencies and their ability to respond to maternal and newborn care needs. However, the effectiveness of these mechanisms may depend on the availability of resources, facility conditions, management support, and the specific context in which healthcare workers perform their duties.

In the context of public lying-in clinics, workforce conditions are particularly relevant because healthcare workers may perform multiple clinical, administrative, documentation, educational, and referral-related responsibilities. Thus, the adequacy and capacity of the workforce form an important part of the overall environment in which maternal health services are delivered. The conceptual literature therefore supports viewing workforce constraints not simply as a shortage of personnel, but as a broader set of conditions involving staffing, workload, competency, training, supervision, organizational support, and working conditions that may influence the capacity of healthcare facilities to sustain maternal health services.

Guided by these concepts, the present study considers workforce constraints as one of the major dimensions of issues encountered in maternal health service delivery in selected public lying-in clinics in

Zambales. The study focuses on the healthcare workers' perceptions of staffing adequacy, workload, training and professional development, supervision, organizational support, and related workforce conditions. The findings will provide a contextual understanding of workforce-related concerns and serve as a basis for developing appropriate interventions to enhance and sustain maternal health service delivery in the selected public lying-in clinics.

Inadequate Medical Supplies and Equipment

The availability of adequate medical supplies and functional healthcare equipment is a fundamental requirement for the effective delivery of maternal healthcare services. Healthcare facilities depend on essential medicines, medical instruments, laboratory equipment, emergency supplies, and delivery apparatus to provide safe and quality care to mothers and newborns. In maternal healthcare, the absence or inadequacy of these resources may compromise service delivery, delay treatment, increase the risk of complications, and negatively affect maternal and neonatal outcomes. The World Health Organization (WHO, 2022) identifies medical products, vaccines, and technologies as one of the six essential building blocks of a strong healthcare system.

Maternal healthcare services require a wide range of medical supplies and equipment to support prenatal care, labor and delivery, postnatal care, and emergency management. These include blood pressure apparatus, fetal dopplers, weighing scales, delivery sets, sterilization equipment, oxygen tanks, suction machines, emergency medications, laboratory supplies, and newborn resuscitation equipment. The availability and functionality of these resources are important operational considerations in the delivery of maternal healthcare services by healthcare workers.

According to the World Health Organization, access to essential medicines and equipment is necessary to reduce preventable maternal and neonatal deaths. Healthcare facilities that lack necessary resources may be unable to provide timely interventions during emergencies. Obstetric complications such as postpartum hemorrhage, eclampsia, sepsis, and obstructed labor require immediate treatment and appropriate medical equipment. Delays in intervention caused by inadequate supplies may contribute to poor health outcomes.

The WHO Essential Medicines List includes several medications necessary for maternal healthcare, such as oxytocin, magnesium sulfate, antibiotics, iron supplements, and antihypertensive drugs. These medications are considered essential because they address common maternal complications and support safe pregnancy and childbirth. The unavailability of these medicines may increase maternal morbidity and mortality.

The United Nations Population Fund (UNFPA, 2021) reported that many healthcare facilities in developing countries experience shortages of essential medical supplies and equipment. Resource limitations frequently affect healthcare facilities in rural and underserved communities where procurement systems, transportation, and funding remain inadequate. Such shortages may compromise healthcare providers' ability to deliver quality maternal healthcare services.

The Department of Health in the Philippines has established standards regarding the equipment and supplies required for healthcare facilities that provide maternal and newborn services. Public lying-in clinics are expected to maintain adequate equipment for prenatal assessment, labor monitoring, emergency obstetric care, infection prevention, and newborn management. Compliance with these requirements contributes to patient safety and quality care.

Basic Emergency Obstetric and Newborn Care (BEmONC) standards emphasize the importance of maintaining essential equipment and emergency supplies in healthcare facilities. Healthcare providers require access to delivery instruments, newborn resuscitation devices, sterilization equipment, and emergency medications to manage obstetric and neonatal emergencies effectively. The absence of these resources may delay treatment and increase the need for referrals.

Several studies have demonstrated the relationship between resource availability and healthcare quality. Kruk et al. (2018) reported that inadequate healthcare infrastructure and insufficient supplies significantly affect the quality of maternal healthcare services. Their findings indicated that healthcare facilities with adequate resources demonstrate better patient outcomes and higher service quality.

Similarly, Leslie et al. (2017) found that shortages of equipment and supplies contribute to healthcare worker frustration and reduced service efficiency. Healthcare providers often experience difficulties in performing clinical procedures, when necessary, resources are unavailable. These limitations may increase workloads and negatively affect job satisfaction.

Medical equipment maintenance is another important consideration in healthcare service delivery. Equipment may become unusable because of wear and tear, lack of maintenance, or inadequate technical support. According to WHO (2021), healthcare facilities should implement preventive maintenance programs to ensure that medical equipment remains functional and safe for patient use.

Healthcare workers require appropriate training in the use and maintenance of medical equipment. Lack of training may result in improper use, equipment damage, or inaccurate assessments. Continuous education programs improve healthcare providers' competencies and promote safe utilization of medical devices.

Infection prevention and control also depend on the availability of adequate supplies and equipment. Sterilization equipment, personal protective equipment, gloves, disinfectants, and waste disposal materials are necessary to prevent healthcare-associated infections. The Centers for Disease Control and Prevention emphasize that adherence to infection prevention practices reduces maternal and neonatal infections.

Several studies have reported that healthcare facilities experiencing shortages of infection control supplies encounter increased risks of healthcare-associated infections. Proper sterilization and infection prevention measures are essential during childbirth because mothers and newborns are particularly vulnerable to infections. Laboratory services also contribute to maternal healthcare delivery. Prenatal screening, blood testing, urinalysis, and other laboratory procedures assist healthcare providers in identifying risk factors and complications. However, many primary healthcare facilities experience limitations in laboratory resources and diagnostic equipment.

Transportation and referral equipment constitute additional resource requirements in maternal healthcare. Emergency referrals often depend on the availability of ambulances, communication systems, and transportation support. Delays in referral resulting from transportation limitations may contribute to adverse maternal outcomes. Financial constraints frequently contribute to inadequate medical supplies and equipment. Healthcare facilities operating with limited budgets may encounter difficulties procuring essential items, replacing damaged equipment, or upgrading facilities. Resource allocation decisions significantly influence healthcare operations and service quality.

The Philippine healthcare system continues to address resource limitations through various government programs and healthcare reforms. The Department of Health provides equipment assistance, medical supplies, and infrastructure support to healthcare facilities. However, some rural healthcare facilities continue to experience shortages because of budget limitations and logistical challenges.

Public lying-in clinics often operate with limited resources. Midwives and healthcare providers may need to maximize available supplies while maintaining quality care. Resource shortages may require referrals to higher-level facilities when services cannot be adequately provided.

Several local studies have identified equipment shortages as barriers to maternal healthcare delivery. Common concerns include inadequate delivery equipment, limited emergency supplies, insufficient laboratory materials, and shortages of medications. These limitations may present operational challenges for healthcare workers in delivering maternal health services.

Supply chain management also influences resource availability. Effective procurement, storage, distribution, and inventory systems ensure continuous availability of essential supplies. Weak supply management systems may contribute to stockouts and resource shortages.

Healthcare administrators play important roles in resource management. Planning, budgeting, procurement, and monitoring activities contribute to the efficient use of healthcare resources. Administrative support facilitates timely replacement and maintenance of equipment.

The World Health Organization emphasizes that investments in healthcare infrastructure and medical technologies are necessary to strengthen healthcare systems. Adequate supplies and equipment support healthcare workers and improve patient outcomes.

The Maternal and Neonatal Death Surveillance and Response program has identified resource limitations as contributing factors in some maternal deaths. Findings from maternal death reviews frequently recommend improving the availability of equipment, medicines, and emergency supplies.

Quality healthcare depends on both human resources and material resources. Even highly skilled healthcare providers may encounter difficulties in delivering quality services, if necessary, supplies and equipment are unavailable. Therefore, resource availability remains an essential component of maternal healthcare delivery. The present study includes inadequate medical supplies and equipment as one of the major issues affecting maternal health service delivery in public lying-in clinics in Zambales. Assessing the availability and adequacy of medical resources may provide valuable information regarding operational challenges encountered by healthcare providers. The findings may serve as a basis for resource allocation, facility improvement, and policy development aimed at strengthening maternal healthcare services in the province

Synthesis

The concept of adequate medical supplies and functional healthcare equipment is an important operational component of maternal health service delivery. Maternal healthcare requires sufficient medicines, delivery instruments, diagnostic materials, emergency supplies, infection prevention materials, and functional equipment to support services across the prenatal, intrapartum, postnatal, and emergency care continuum. The adequacy of these resources provides healthcare workers with the necessary means to perform their clinical responsibilities safely and efficiently.

Conceptually, resource adequacy encompasses not only the availability of supplies and equipment but also their sufficiency, functionality, accessibility, maintenance, and appropriate utilization. A facility may possess medical equipment, but if such equipment is non-functional, inaccessible, inadequately maintained, or unavailable when needed, its practical contribution to service delivery is limited. Similarly, sufficient supplies require proper procurement, storage, inventory monitoring, and timely replenishment to prevent stockouts and interruptions in service delivery.

The literature further indicates that resource availability is interconnected with other components of the healthcare system. Financial resources, procurement systems, supply-chain management, equipment maintenance, administrative support, and healthcare worker competency influence the capacity of a facility to maintain adequate medical resources. Consequently, resource limitations should be viewed as part of a broader operational environment rather than as an isolated facility problem. In public lying-in clinics, these conditions may influence the ability of healthcare workers to provide continuous and appropriate maternal healthcare services.

The concept is particularly relevant to prenatal, intrapartum, and postnatal care. During prenatal care, appropriate diagnostic and monitoring equipment supports assessment of maternal and fetal conditions. During labor and delivery, functional delivery instruments, emergency medicines, newborn resuscitation equipment, and infection prevention supplies support safe childbirth and emergency preparedness. During postnatal care, appropriate monitoring materials, medicines, and newborn-care equipment support the assessment and continued care of mothers and newborns. Thus, adequate resources provide an operational foundation for the delivery of maternal health services.

At the same time, resource adequacy does not operate independently of workforce capacity, health information systems, financial resources, and compliance with standards and protocols. Healthcare workers require appropriate resources to implement established clinical procedures, while effective monitoring and record-keeping systems help identify resource requirements and service gaps. Adequate financing supports procurement and maintenance, whereas compliance with maternal healthcare standards provides guidance on the resources and equipment required for safe service delivery. These relationships demonstrate that medical supplies and equipment form part of an interconnected maternal healthcare delivery system.

Within the context of the present study, inadequate medical supplies and equipment is therefore conceptualized as an operational issue involving perceived limitations in the availability, adequacy, functionality, accessibility, maintenance, and utilization of resources needed to provide maternal health services. The concept is examined from the perspective of healthcare workers in selected public lying-in clinics in Zambales. Rather than

assuming that resource limitations directly cause maternal or neonatal outcomes, the study considers them as reported operational constraints that may affect the delivery and sustainability of maternal health services.

The conceptual understanding of this issue provides a basis for assessing the specific resource-related concerns experienced by healthcare workers and for identifying appropriate interventions involving resource allocation, procurement, inventory management, equipment maintenance, facility support, and administrative planning. In this way, the assessment of medical supplies and equipment contributes to a broader understanding of the operational conditions that support or constrain maternal health service delivery in public lying-in clinics in Zambales.

Weak Health Information Systems

Weak health information systems refer to deficiencies in the collection, recording, processing, analysis, reporting, and utilization of health-related data within healthcare organizations. In maternal healthcare, information systems play a crucial role in monitoring maternal conditions, documenting healthcare interventions, tracking pregnancy outcomes, evaluating program effectiveness, and supporting evidence-based decision-making. The World Health Organization (WHO, 2022) identifies health information systems as one of the six building blocks of healthcare systems because accurate information is essential for planning, implementation, monitoring, and evaluation of healthcare services.

Health information systems encompass all processes involved in collecting, storing, managing, and utilizing health data. In maternal healthcare, these systems include prenatal records, labor and delivery records, postnatal records, maternal death reviews, referral forms, health reports, and monitoring databases. Accurate and reliable information allows healthcare providers to monitor patient conditions, identify complications, coordinate care, and evaluate maternal health outcomes.

According to the World Health Organization, effective health information systems provide timely, reliable, and accurate information necessary for healthcare planning and policy formulation. Reliable data support evidence-based decisions, facilitate resource allocation, and improve healthcare quality. Conversely, weak information systems may contribute to poor decision-making, inadequate planning, and ineffective healthcare interventions.

The Department of Health (DOH) requires healthcare facilities to maintain comprehensive maternal health records and submit regular reports to local and national health authorities. These reports serve as the basis for monitoring maternal health indicators, evaluating healthcare programs, and developing policies aimed at improving maternal and newborn care.

In maternal healthcare, documentation begins during prenatal care and continues through labor, delivery, postpartum care, and follow-up visits. Patient records contain information regarding medical history, pregnancy progress, laboratory findings, risk factors, treatments, and health outcomes. Healthcare providers depend on these records to make informed clinical decisions and provide appropriate interventions.

Incomplete or inaccurate documentation may compromise patient safety and continuity of care. According to Lippeveld, Sauerborn, and Bodart (2017), poor-quality health information negatively affects healthcare delivery because inaccurate data may lead to incorrect clinical decisions and ineffective health planning. Their study emphasized that data quality is essential for improving healthcare outcomes and strengthening healthcare systems. Similarly, AbouZahr and Boerma (2018) reported that weak health information systems contribute to underreporting of maternal deaths, inaccurate health statistics, and inadequate monitoring of maternal health programs. Their findings suggest that many low- and middle-income countries experience difficulties in collecting reliable maternal health data because of limited resources and inadequate information systems.

One of the major problems associated with weak health information systems is incomplete documentation. Healthcare workers may fail to record important patient information because of time constraints, excessive workloads, or inadequate training. Missing information may affect patient monitoring and delay necessary interventions. In maternal healthcare, incomplete records may result in failure to identify high-risk pregnancies or postpartum complications.

Delayed reporting is another challenge affecting health information systems. Healthcare facilities are required to submit regular reports on maternal health indicators, service utilization, and health outcomes. Delays in reporting may affect healthcare planning and decision-making. According to the World Health Organization, timely reporting is necessary for monitoring health programs and identifying emerging healthcare concerns. Data accuracy is also a major concern. Errors in recording, coding, and reporting may compromise the reliability of healthcare statistics. Inaccurate data may lead to inappropriate resource allocation and ineffective policy decisions. Therefore, healthcare providers must ensure that patient information is recorded correctly and completely.

The Maternal and Neonatal Death Surveillance and Response (MNDSR) program implemented by the Department of Health relies heavily on accurate health information systems. Maternal death reviews require complete and reliable information regarding patient history, clinical management, and contributing factors. Weak documentation systems may hinder investigations and limit opportunities for healthcare improvement.

Healthcare providers play critical roles in maintaining health information systems. Midwives, nurses, and physicians are responsible for documenting patient assessments, treatments, referrals, and outcomes. However, healthcare workers often experience challenges associated with documentation requirements. Excessive paperwork, staff shortages, and competing responsibilities may affect the quality of documentation.

Several studies have reported that healthcare workers spend considerable time completing forms and reports. According to Aqil et al. (2019), documentation responsibilities may increase workloads and reduce time available for direct patient care. Healthcare providers often experience difficulties balancing clinical responsibilities with administrative requirements.

Manual documentation systems remain common in many healthcare facilities, particularly in rural areas. Paper-based records are vulnerable to loss, damage, duplication, and incomplete entries. Retrieval of information may also be difficult when records are poorly organized. These limitations may affect continuity of care and healthcare monitoring.

Electronic Health Information Systems (EHIS) have been introduced in many countries to improve data management and reporting. Electronic systems facilitate data storage, retrieval, analysis, and communication among healthcare providers. According to WHO (2021), digital health technologies improve data quality, reduce errors, and enhance healthcare efficiency.

Electronic health records offer several advantages, including accessibility, accuracy, security, and timely reporting. Healthcare providers can easily access patient information, monitor health indicators, and generate reports. However, implementation of electronic systems requires financial resources, technological infrastructure, and staff training.

In many developing countries, healthcare facilities continue to experience challenges in adopting digital health systems because of limited internet access, inadequate computer resources, and insufficient technical support. Rural healthcare facilities may lack the infrastructure necessary to implement electronic health records effectively.

The Department of Health has initiated programs aimed at strengthening health information systems through training, standardization of reporting forms, and digital health initiatives. Healthcare workers receive orientation on data management, reporting procedures, and documentation requirements to improve information quality.

Data confidentiality and patient privacy are also important considerations in health information systems. Patient records contain sensitive information that must be protected from unauthorized access. The Philippine Data Privacy Act of 2012 emphasizes the protection of personal information, including healthcare records. Healthcare providers must maintain confidentiality and ensure proper handling of patient data.

Monitoring and evaluation activities depend on reliable health information systems. Maternal health indicators such as prenatal coverage, facility-based deliveries, postnatal care utilization, maternal mortality, and neonatal outcomes provide important information regarding healthcare performance. Accurate data support quality improvement initiatives and policy development.

Several Philippine studies have identified challenges affecting health information systems in primary healthcare facilities. Common problems include incomplete documentation, delayed reports, inadequate training, insufficient monitoring tools, and lack of information technology resources. These challenges may affect healthcare planning and service delivery.

Supportive supervision contributes to improving health information systems. Healthcare administrators conduct record reviews, monitor reporting compliance, and provide feedback to healthcare workers. Supervision helps identify errors and promotes adherence to documentation standards.

Continuous training in health information management improves healthcare workers' competencies in documentation and reporting. Healthcare providers who receive training demonstrate better understanding of data quality requirements and reporting procedures.

Weak health information systems may also affect maternal healthcare policies and resource allocation. Policymakers rely on healthcare data to identify priorities, allocate budgets, and evaluate healthcare programs. Inaccurate or incomplete data may lead to ineffective interventions and inefficient use of resources.

The World Health Organization emphasizes that strengthening health information systems is necessary to improve maternal and newborn healthcare services. Reliable data enable healthcare providers and administrators to identify problems, monitor outcomes, and implement evidence-based interventions.

In public lying-in clinics, effective health information systems support continuity of maternal care from pregnancy to the postpartum period. Accurate records facilitate patient monitoring, referral coordination, and healthcare evaluation. Weak information systems may compromise patient safety and reduce service quality.

The present study includes weak health information systems as one of the major issues affecting maternal health service delivery in public lying-in clinics in Zambales. Assessing information system challenges may provide valuable information regarding documentation practices, reporting systems, and data management processes. The findings may serve as a basis for strengthening health information systems and improving maternal healthcare services within the province.

Synthesis

The reviewed conceptual literature consistently establishes that health information systems are an essential component of maternal health service delivery because they support accurate documentation, patient monitoring, reporting, referral coordination, program monitoring, and evidence-based decision-making. The literature agrees that complete, accurate, timely, and accessible health information is necessary for maintaining continuity of care and for enabling healthcare providers and administrators to monitor maternal health services. In particular, proper documentation of prenatal, intrapartum, postnatal, referral, and follow-up information provides healthcare workers with information necessary for monitoring clients and coordinating appropriate care. However, the literature also identifies persistent weaknesses in health information systems, particularly in primary healthcare and rural settings. Commonly reported concerns include incomplete or inaccurate records, delayed reporting, excessive documentation requirements, limited training, manual record-keeping, inadequate information technology resources, and difficulties in retrieving and managing records. These challenges are often associated with organizational and resource conditions, including workload, staffing limitations, technological infrastructure, and administrative support. Nevertheless, because the present study employs a descriptive survey design, these conditions are treated as reported operational issues and are not interpreted as causal determinants of maternal or neonatal outcomes.

The literature further suggests that strengthening health information systems requires both human and organizational support. Training, supportive supervision, standardized documentation procedures, regular record review, appropriate reporting mechanisms, and adequate technological resources may help improve the quality and reliability of health information. Although electronic systems may improve accessibility, retrieval, and reporting efficiency, their implementation also requires adequate infrastructure, technical support, financial resources, data security measures, and trained personnel. Thus, strengthening information systems should consider

the specific operational context and capacity of individual healthcare facilities rather than focusing solely on technological adoption.

Despite the importance of health information systems in maternal healthcare, there remains limited localized evidence concerning the specific information-management challenges encountered by healthcare workers in public lying-in clinics in Zambales. Existing literature provides substantial evidence regarding the general importance of health information systems, but less is known about how documentation, record-keeping, reporting, data management, and information resources are experienced by healthcare workers in selected public lying-in clinics within the province. This local gap is particularly relevant because the selected facilities serve communities with different geographic and operational conditions.

The present study addresses this gap by examining weak health information systems as one of the major issues encountered in the delivery of maternal health services in selected public lying-in clinics in Zambales. The assessment is based on the self-reports of healthcare workers and considers concerns related to documentation, record-keeping, reporting, data management, and availability or use of information resources. The study does not directly measure the effect of information-system weaknesses on maternal mortality, morbidity, patient satisfaction, or other clinical outcomes. Rather, it provides descriptive evidence on information-system issues experienced by healthcare workers, which may serve as a basis for developing appropriate interventions to strengthen monitoring and record-keeping and to enhance maternal health service delivery in the selected public lying-in clinics.

Financial and Resource Limitations

Financial and resource limitations are among the most significant challenges affecting the delivery of maternal healthcare services, particularly in primary healthcare facilities and public lying-in clinics. Adequate financial resources are necessary to support healthcare operations, procure medical supplies and equipment, maintain facilities, provide training programs, and ensure the availability of healthcare personnel. However, many healthcare institutions, especially those operating in rural and geographically isolated areas, experience financial constraints that affect the quality, accessibility, and sustainability of maternal health services. The World Health Organization (WHO, 2022) recognizes healthcare financing as one of the six building blocks of an effective healthcare system because sufficient financial resources are essential to achieving quality healthcare outcomes.

Healthcare financing refers to the mobilization, allocation, and utilization of financial resources for healthcare services. In maternal healthcare, adequate funding supports prenatal services, labor and delivery care, postnatal care, emergency obstetric services, health education programs, facility maintenance, and healthcare workforce development. Financial limitations may hinder the ability of healthcare facilities to provide comprehensive maternal health services and respond effectively to healthcare needs.

According to the World Health Organization (2021), insufficient healthcare financing contributes significantly to poor maternal health outcomes, particularly in low- and middle-income countries. Many healthcare facilities operate with limited budgets that restrict their capacity to purchase equipment, maintain infrastructure, hire additional staff, and implement quality improvement programs. Consequently, financial constraints often result in reduced service quality and limited access to essential healthcare services.

The United Nations Population Fund (UNFPA, 2021) reported that inadequate healthcare funding remains one of the major barriers to improving maternal health services globally. Limited financial resources affect healthcare infrastructure, medical supplies, transportation systems, and healthcare workforce development. These deficiencies may contribute to delays in care, reduced service availability, and increased maternal health risks.

The Department of Health in the Philippines continuously allocates resources for maternal and child health programs through national and local government budgets. However, disparities in resource allocation may occur because local government units possess varying financial capacities. Healthcare facilities located in economically disadvantaged areas may receive limited financial support, affecting healthcare operations and service delivery. Public lying-in clinics primarily depend on government funding, local government support, and healthcare programs for their operations. Budget allocations are used for personnel services, facility maintenance,

procurement of supplies, equipment acquisition, and implementation of maternal healthcare programs. Insufficient financial support may limit the capacity of these facilities to provide quality healthcare services.

Several studies have demonstrated the relationship between healthcare financing and maternal health outcomes. Kruk et al. (2018) reported that healthcare facilities with adequate financial resources demonstrate better service quality, improved infrastructure, and enhanced patient outcomes. Their study emphasized that healthcare quality depends significantly on investments in healthcare systems.

Similarly, McIntyre and Meheus (2014) found that financial barriers contribute to inequalities in healthcare access and service utilization. Limited financial resources affect both healthcare facilities and patients, resulting in reduced healthcare utilization and poorer health outcomes.

Infrastructure maintenance represents a major financial concern for healthcare facilities. Buildings, delivery rooms, waiting areas, water systems, electrical facilities, and sanitation facilities require regular maintenance and improvements. Poor infrastructure may compromise patient safety and affect healthcare quality. Resource limitations may also affect procurement of essential medicines and supplies. Healthcare facilities operating with inadequate budgets may experience stock shortages, delayed procurement, and insufficient medical inventories. These problems may compromise maternal healthcare services and increase referrals to higher-level facilities.

The availability of transportation and referral systems also depends on financial resources. Ambulances, communication equipment, fuel, and transportation support require funding for operation and maintenance. Delays in emergency referrals may occur when transportation resources are limited.

Training and professional development activities often require financial investments. Healthcare workers need continuing education programs, seminars, workshops, and certifications to maintain competencies. However, budget limitations may restrict opportunities for staff development and continuing education.

According to WHO (2020), investments in healthcare workforce development contribute to improved healthcare quality and patient outcomes. Facilities with sufficient resources are more capable of providing training opportunities and supporting professional growth.

Healthcare facilities may also experience challenges in acquiring new technologies and modern equipment because of financial limitations. Digital health systems, electronic medical records, laboratory equipment, and diagnostic technologies often require substantial investments. Limited resources may delay modernization efforts and affect service efficiency.

The implementation of Universal Health Care in the Philippines aims to improve healthcare financing and access to healthcare services. Through PhilHealth and government healthcare programs, efforts are being made to reduce financial barriers and strengthen healthcare facilities. However, challenges remain in ensuring equitable distribution of resources among healthcare institutions.

Local government units play important roles in financing healthcare services. Their financial capacity influences the allocation of resources for health programs, facility improvements, and healthcare personnel. Variations in local revenues may result in differences in healthcare funding among municipalities.

Several Philippine studies have reported financial limitations in rural healthcare facilities. Common concerns include inadequate operational budgets, delayed fund releases, insufficient maintenance funds, and limited resources for healthcare programs. These issues may affect healthcare delivery and organizational performance.

Resource allocation decisions influence healthcare priorities. Healthcare administrators must determine how limited resources will be distributed among personnel, equipment, supplies, training, and facility improvements. Effective financial management contributes to efficient utilization of available resources.

Financial accountability and transparency are important aspects of healthcare administration. Proper budgeting, monitoring, and auditing ensure that healthcare resources are used effectively and responsibly. Good financial governance supports sustainable healthcare operations.

International organizations such as WHO, UNFPA, and UNICEF continue to support maternal healthcare programs through technical assistance, funding support, and capacity-building initiatives. These partnerships contribute to improving healthcare resources and strengthening maternal health services.

In geographically isolated and disadvantaged areas, financial limitations may be more pronounced because of transportation costs, logistical difficulties, and limited economic resources. Public lying-in clinics serving remote communities may encounter additional challenges in maintaining adequate resources and sustaining operations.

The COVID-19 pandemic further exposed financial vulnerabilities within healthcare systems. Healthcare facilities experienced increased operational costs, supply shortages, and resource reallocation. Many healthcare institutions faced financial pressures that affected routine maternal healthcare services.

Healthcare sustainability depends on adequate financial support and efficient resource management. Sustainable financing enables healthcare facilities to maintain services, improve infrastructure, support healthcare workers, and implement quality improvement initiatives.

The World Health Organization emphasizes that strengthening healthcare financing is necessary to achieve universal health coverage and improve maternal health outcomes. Adequate financial resources enable healthcare systems to provide accessible, equitable, and quality maternal healthcare services.

The present study includes financial and resource limitations as one of the major issues affecting maternal health service delivery in public lying-in clinics in Zambales. Assessing these financial challenges may provide valuable information regarding budgetary constraints, resource adequacy, and operational difficulties experienced by healthcare providers. The findings may serve as a basis for resource allocation, policy formulation, and interventions aimed at strengthening maternal healthcare services within the province.

Synthesis

The reviewed conceptual literature consistently establishes that adequate financial and material resources are important to the effective and sustainable delivery of maternal health services. The literature generally agrees that healthcare facilities require sufficient funding to support essential operations, including the procurement of medicines and medical supplies, acquisition and maintenance of equipment, facility improvement, workforce development, transportation and referral services, and implementation of maternal healthcare programs. Adequate financial resources also provide healthcare facilities with greater capacity to maintain essential services and respond to operational and emergency needs.

The literature further indicates that financial and resource limitations may be manifested through insufficient operational budgets, inadequate supplies and equipment, delayed procurement, limited facility maintenance, restricted training opportunities, transportation difficulties, and inadequate technological resources. These concerns may be particularly relevant in rural and geographically isolated communities where healthcare facilities may encounter additional logistical and operational challenges. However, the literature also suggests that the availability of financial resources alone does not determine the quality of maternal healthcare delivery. Resource utilization, procurement systems, administrative management, local government support, workforce capacity, and organizational priorities may influence how available resources are translated into actual services. There is also general agreement that addressing financial and resource limitations requires more than increasing funding. Effective budgeting, resource allocation, procurement, inventory management, equipment maintenance, financial accountability, and administrative support are necessary to ensure that available resources are used efficiently. The literature also recognizes the importance of government financing and local government support in sustaining public healthcare facilities. Nevertheless, the extent and nature of financial and resource constraints may differ among healthcare facilities depending on their local conditions, available funding, population served, and operational capacity.

Despite the broader literature on healthcare financing and resource adequacy, there remains limited localized evidence concerning the specific financial and resource limitations experienced by healthcare workers in public lying-in clinics in Zambales. Existing literature provides important information regarding healthcare

financing at the global and national levels, but less is known about the operational concerns experienced at the facility level, particularly in selected public lying-in clinics in the province. This local gap is important because differences in municipal resources, geographic conditions, procurement processes, and facility capacity may result in different experiences among healthcare workers.

The present study addresses this gap by examining financial and resource limitations as one of the major issues encountered in the delivery of maternal health services in selected public lying-in clinics in Zambales. The study focuses on the healthcare workers' reported concerns regarding budget adequacy, availability and allocation of resources, procurement of supplies and equipment, facility maintenance, training resources, transportation and referral support, and other operational requirements. Consistent with the descriptive nature of the study, these limitations are treated as reported operational issues and are not interpreted as proven causes of maternal or neonatal outcomes. The findings may provide a basis for developing appropriate interventions related to resource allocation, financial management, procurement, facility support, and the strengthening and sustainability of maternal health service delivery in the selected public lying-in clinics in Zambales.

Policy Implementation and Governance Issues

Policy implementation and governance play critical roles in the effective delivery of maternal healthcare services. Healthcare policies provide the framework, standards, and directions that guide healthcare organizations and healthcare providers in delivering quality maternal care. Governance, on the other hand, refers to the processes, leadership structures, accountability mechanisms, and decision-making systems that ensure the effective implementation of healthcare policies and programs. Weak governance structures and poor policy implementation may significantly affect healthcare quality, service accessibility, resource allocation, and health outcomes. The World Health Organization (WHO, 2022) identifies leadership and governance as one of the six fundamental building blocks of a strong healthcare system because effective governance ensures accountability, transparency, and efficient healthcare management.

Healthcare governance encompasses leadership, organizational management, policy formulation, supervision, accountability, and stakeholder participation. Effective governance ensures that healthcare policies are translated into actual healthcare practices and services. In maternal healthcare, governance mechanisms guide the implementation of maternal health programs, compliance with clinical standards, resource management, and quality improvement initiatives.

The World Health Organization defines good governance as the process through which governments and healthcare organizations establish policies, exercise authority, allocate resources, and ensure accountability to improve health outcomes. Effective governance promotes coordination among healthcare providers, local governments, policymakers, and communities, thereby strengthening healthcare systems and improving service delivery.

In maternal healthcare, policies are designed to reduce maternal mortality, improve access to healthcare services, strengthen emergency obstetric care, and promote quality maternal and newborn services. These policies provide healthcare providers with guidelines and standards for delivering safe and effective care. However, the existence of policies alone does not guarantee successful implementation. The effectiveness of healthcare programs largely depends on how policies are implemented and monitored at the local level.

The Philippines has enacted several maternal health policies aimed at improving maternal and newborn outcomes. One of the most significant policies is the Responsible Parenthood and Reproductive Health Act of 2012, which promotes universal access to reproductive health services, maternal healthcare, family planning, and health education. The Department of Health also implements various administrative orders and programs focused on maternal and child health.

The Department of Health's Maternal, Newborn, Child Health and Nutrition Strategy serves as a comprehensive framework for improving maternal healthcare services nationwide. The strategy emphasizes skilled birth attendance, facility-based deliveries, emergency obstetric care, and strengthened referral systems.

Local government units and healthcare facilities are expected to implement these policies according to national standards.

Basic Emergency Obstetric and Newborn Care (BEmONC) is another important government initiative. BEmONC establishes standards for emergency obstetric and newborn care services and requires healthcare providers to undergo specialized training. Healthcare facilities must comply with these standards to improve maternal and neonatal outcomes.

Despite the existence of comprehensive policies, implementation challenges continue to affect healthcare delivery. According to the World Health Organization (2021), policy implementation gaps often occur because of insufficient resources, inadequate supervision, limited technical capacity, and weak organizational support. These challenges may reduce the effectiveness of healthcare programs and limit their impact on maternal health outcomes.

Kruk et al. (2018) emphasized that healthcare quality depends not only on the development of policies but also on effective implementation mechanisms. Their study found that weak implementation often results in inconsistencies in service delivery and reduced healthcare quality. Healthcare facilities may experience difficulties translating policy requirements into actual practice because of operational limitations.

Leadership plays an essential role in healthcare governance. Healthcare administrators, managers, and supervisors are responsible for planning, organizing, monitoring, and evaluating healthcare services. Effective leaders promote accountability, motivate healthcare workers, and facilitate continuous quality improvement.

According to Bradley et al. (2015), strong leadership contributes to improved healthcare performance, employee satisfaction, and patient outcomes. Healthcare leaders influence organizational culture, communication, resource allocation, and staff development. Effective leadership is particularly important in maternal healthcare facilities where healthcare providers face multiple challenges and responsibilities.

Accountability mechanisms also support good governance. Healthcare facilities implement monitoring systems, performance evaluations, clinical audits, and supervision activities to ensure compliance with policies and standards. Accountability promotes transparency and encourages healthcare workers to maintain quality healthcare services.

The decentralization of the Philippine healthcare system under the Local Government Code transferred many healthcare responsibilities to local government units. While decentralization provides local governments with greater authority over healthcare services, it also creates variations in healthcare implementation because local governments differ in financial capacity, leadership, and administrative priorities.

According to Bossert and Beauvais (2017), decentralization may improve responsiveness to local health needs but may also result in inequalities in healthcare services when local governments possess varying resources and management capacities. Consequently, some municipalities may provide stronger maternal healthcare programs than others.

Coordination among healthcare agencies and local government units is essential for effective policy implementation. Maternal health programs require collaboration among the Department of Health, local health offices, hospitals, rural health units, and public lying-in clinics. Poor coordination may result in duplication of services, inefficient resource utilization, and gaps in healthcare delivery.

Supportive supervision is another important governance function. Supervisors provide guidance, technical assistance, and feedback to healthcare workers. Regular monitoring visits help identify problems, improve performance, and ensure compliance with healthcare standards.

Several studies have reported that inadequate supervision contributes to poor policy implementation. Healthcare providers may experience difficulties interpreting guidelines or implementing new programs without sufficient support from supervisors and administrators.

Resource limitations frequently affect policy implementation. Healthcare facilities may struggle to comply with standards because of inadequate staffing, insufficient equipment, limited budgets, and inadequate infrastructure. Policies requiring specific services or equipment may be difficult to implement in resource-constrained settings.

Political factors may also influence healthcare governance. Changes in local leadership, administrative priorities, and budget allocations may affect healthcare programs and service continuity. Healthcare administrators must adapt to changing political environments while maintaining service quality.

The Maternal and Neonatal Death Surveillance and Response (MNDSR) program illustrates the importance of governance in maternal healthcare. Maternal death reviews identify gaps in healthcare services and provide recommendations for policy improvements. Effective governance ensures that recommendations are implemented and monitored.

Several Philippine studies have identified governance challenges affecting healthcare facilities. Common concerns include inadequate supervision, inconsistent policy implementation, limited stakeholder participation, delayed decision-making, and insufficient monitoring systems. These issues may affect the quality and effectiveness of maternal healthcare services.

Community participation also contributes to effective governance. Community members, local organizations, and healthcare users may participate in health planning, program evaluation, and decision-making processes. Community involvement promotes accountability and ensures that healthcare services respond to local needs.

Healthcare policies require regular evaluation and revision to address emerging health issues and changing healthcare needs. Monitoring and evaluation activities provide information regarding program effectiveness and identify areas requiring improvement. Evidence-based policymaking contributes to stronger healthcare systems and improved health outcomes.

The World Health Organization emphasizes that good governance promotes transparency, accountability, participation, and responsiveness. Strong governance systems support healthcare providers, improve resource utilization, and strengthen healthcare service delivery.

In public lying-in clinics, governance influences staffing decisions, resource allocation, policy compliance, quality assurance, and service management. Healthcare administrators and local government officials play important roles in supporting maternal healthcare programs and ensuring effective service delivery.

The present study includes policy implementation and governance issues as one of the major challenges affecting maternal health service delivery in public lying-in clinics in Zambales. Assessing governance and policy-related issues may provide valuable information regarding administrative support, supervision, policy compliance, and organizational effectiveness. The findings may serve as a basis for strengthening healthcare governance, improving policy implementation, and enhancing maternal healthcare services within the province.

Synthesis

The reviewed conceptual literature consistently establishes that effective policy implementation and good governance are important to the delivery of quality maternal health services. The literature generally agrees that policies provide the standards and direction for maternal healthcare, while governance mechanisms translate these policies into actual programs, practices, and services. Leadership, supervision, accountability, coordination, resource allocation, monitoring, and stakeholder participation are repeatedly identified as important elements that support the implementation of maternal health policies and standards.

The literature further indicates that the existence of policies and guidelines does not necessarily ensure their consistent implementation. Policy implementation may be affected by inadequate resources, insufficient staffing, limited technical capacity, weak supervision, organizational constraints, and differences in administrative support. In public healthcare facilities, these challenges may influence the ability of healthcare workers to comply with standards and implement maternal health programs consistently. However, the literature also suggests that implementation conditions vary across settings, particularly because local government units differ in financial capacity, leadership, administrative priorities, and organizational resources.

The reviewed literature also emphasizes that governance is broader than policy compliance. Effective governance involves leadership, accountability, supervision, communication, coordination, transparency, stakeholder participation, and monitoring and evaluation. Supportive supervision and effective leadership may

help healthcare workers understand and implement policies, while regular monitoring can identify gaps and provide opportunities for corrective action. Conversely, inadequate coordination and supervision may make it difficult for healthcare workers to translate policy requirements into routine practice.

In the Philippine context, governance is particularly relevant because healthcare responsibilities have been decentralized to local government units. While decentralization allows local authorities to respond to community needs, differences in local resources and management capacities may result in variations in healthcare program implementation. This makes it important to examine policy implementation and governance at the facility and local level, rather than assuming that national policies are implemented uniformly across all healthcare facilities. Nevertheless, there remains limited localized evidence concerning the specific policy implementation and governance issues encountered by healthcare workers in public lying-in clinics in Zambales. Existing literature provides substantial discussion of national maternal health policies and general healthcare governance, but less information is available regarding how healthcare workers in selected public lying-in clinics experience administrative support, supervision, coordination, policy compliance, monitoring, and decision-making in their actual work settings. This local gap is important because the implementation of national policies may be influenced by the specific organizational and resource conditions of individual municipalities and facilities.

The present study addresses this gap by examining policy implementation and governance issues as one of the major challenges encountered in the delivery of maternal health services in selected public lying-in clinics in Zambales. The study focuses on healthcare workers' reported experiences regarding administrative support, supervision, policy implementation, compliance with standards, coordination, monitoring, and organizational management. Consistent with the descriptive nature of the study, these concerns are treated as reported operational and governance issues rather than proven causes of maternal or neonatal outcomes. The findings may serve as a basis for developing appropriate interventions to strengthen administrative support, improve policy implementation and supervision, enhance coordination and accountability, and ultimately strengthen maternal health service delivery in the selected public lying-in clinics in Zambales.

Maternal Health Services: Delivery of Birthing Facilities

Maternal health remains one of the major public health priorities worldwide because it directly affects the health and well-being of mothers, newborns, families, and communities. The World Health Organization emphasizes that maternal healthcare services should be accessible, safe, effective, and responsive to the needs of women throughout pregnancy, childbirth, and the postpartum period. Maternal health services include a continuum of care that begins during pregnancy, continues throughout labor and delivery, and extends into the postnatal period.

According to the World Health Organization (2023), approximately 287,000 women died from preventable causes related to pregnancy and childbirth in 2020. Most of these deaths occurred in developing countries where healthcare systems experience shortages of healthcare workers, inadequate facilities, limited resources, and barriers to healthcare access. Improving maternal healthcare delivery therefore remains a global priority.

The United Nations Sustainable Development Goal 3 aims to reduce the global maternal mortality ratio to less than 70 maternal deaths per 100,000 live births by the year 2030. Achieving this target requires strengthening healthcare systems and improving the delivery of maternal health services at all levels of care.

In the Philippines, maternal healthcare services are delivered through hospitals, rural health units, barangay health stations, and public lying-in clinics. The Department of Health has implemented several programs and policies to improve maternal health outcomes, including the Maternal, Newborn, Child Health and Nutrition Strategy, Basic Emergency Obstetric and Newborn Care (BEmONC), and the Responsible Parenthood and Reproductive Health Act.

Public lying-in clinics play an important role in providing maternal healthcare services, particularly in rural and geographically isolated communities. These facilities provide prenatal care, normal deliveries, postnatal

care, newborn care, health education, and referral services. Midwives and nurses working in these facilities serve as frontline healthcare providers responsible for ensuring safe motherhood and reducing maternal risks.

The effectiveness of maternal health service delivery depends on several dimensions, including prenatal care, intrapartum care, postnatal care, monitoring and record-keeping, and compliance with standards and protocols. Likewise, service delivery may be affected by various operational and organizational issues such as workforce constraints, inadequate supplies and equipment, weak health information systems, financial limitations, and governance concerns.

Synthesis of Research Literature: Maternal Health Services Delivery in Birthing Facilities

The reviewed research literature consistently establishes that maternal health service delivery in birthing facilities is a continuum of care that requires accessible, safe, competent, and coordinated services from pregnancy through childbirth and the postnatal period. Across international and Philippine literature, there is general agreement that facility-based delivery and skilled birth attendance are important components of maternal healthcare. In the Philippines, recent national data show continued progress in facility-based childbirth, with 88% of live births in the two years preceding the 2022 National Demographic and Health Survey occurring in health facilities; Central Luzon recorded one of the highest regional proportions at 97%. More recent Philippine Statistics Authority data further reported that 94.1% of registered live births in 2023 occurred in health facilities, including hospitals, birthing clinics, and lying-in centers. These findings demonstrate the increasing importance of facility-based maternal healthcare and the role of birthing facilities in the Philippine health system.

The literature also agrees that the presence of a birthing facility alone does not necessarily guarantee comprehensive or quality maternal healthcare. Effective service delivery depends on the functionality of the facility, adequacy and competency of health personnel, availability of essential supplies and equipment, appropriate monitoring and documentation, emergency preparedness, referral mechanisms, and adherence to national standards. Philippine policy documents specifically emphasize the need for accessible emergency obstetric and newborn care, adequate staffing, communication and transportation systems, and functional referral arrangements. Department of Health standards for BEmONC facilities, for example, identify staffing, 24-hour service availability, communication, transportation, and referral capacity as important components of facility functionality.

Philippine research likewise suggests that the expansion of facility-based delivery does not automatically translate into uniformly effective maternal health outcomes. A Philippine historical review of BEmONC found that although the development of BEmONC contributed to increases in facility-based deliveries and skilled birth attendance, BEmONC functionality remained inadequate in many settings and did not by itself substantially achieve the intended reduction in maternal mortality. The study consequently emphasized the need for further capacity-building, particularly in rural and resource-constrained areas, and for greater alignment between national and local health policies. This finding is important because it demonstrates that service availability and service functionality are distinct concerns.

The literature further indicates that the quality of maternal health service delivery is multidimensional. Prenatal care provides opportunities for risk assessment, health education, birth preparedness, and early referral; intrapartum care requires skilled attendance, labor monitoring, emergency preparedness, infection prevention, and timely referral; while postnatal care supports maternal and newborn monitoring and continuity of care. These clinical dimensions are supported by administrative and health-system functions such as record-keeping, reporting, resource management, supervision, and compliance with standards. Thus, maternal health service delivery should be examined not only in terms of whether services are available but also in terms of the extent to which essential services are actually implemented within the facility.

However, the reviewed studies also reveal differences in the conditions under which maternal services are delivered. Facilities in urban and better-resourced areas may have greater access to personnel, equipment, transportation, and referral facilities, whereas rural and geographically isolated facilities may face greater operational constraints. Philippine evidence on BEmONC functionality similarly points to continuing challenges in rural and resource-poor areas. This suggests that national improvements in facility-based delivery should not

be interpreted as evidence that all birthing facilities have comparable capacity to provide maternal healthcare services.

The Philippine policy environment provides an important framework for understanding these differences. The Department of Health's National Safe Motherhood Program continues to emphasize quality maternal and newborn health services, BEmONC training, maternal death surveillance and response, and technical support for local government partners. Current DOH planning documents also recognize continuing concerns related to maternal healthcare access and identify strengthening the National Safe Motherhood Program and training healthcare workers in BEmONC as strategies for improving maternal care. Therefore, the implementation of maternal health services in local birthing facilities remains an important area for assessment even where national policies and programs are already established.

Despite substantial literature on maternal health and facility-based childbirth in the Philippines, a specific gap remains regarding the facility-level implementation of maternal health services in selected public lying-in clinics in Zambales. National statistics describe broad patterns of facility-based delivery, while national policies establish standards and programs for maternal care. However, these sources do not sufficiently describe how healthcare workers in selected public lying-in clinics experience the actual delivery of prenatal, intrapartum, postnatal, monitoring and record-keeping, and standards-compliance activities in their local facilities. Moreover, the available literature identified in this review provides limited evidence specifically focused on Zambales and on the operational experiences of healthcare workers in public lying-in clinics.

This gap is particularly relevant because Central Luzon demonstrates a high level of facility-based childbirth, yet regional and national statistics do not necessarily show whether individual facilities consistently provide all recommended components of maternal health services. The functionality of birthing facilities must therefore be examined at the local level rather than inferred solely from facility-delivery rates. The DOH's current emphasis on BEmONC functionality, monitoring, supportive supervision, logistics, and referral systems further supports the importance of facility-level assessment.

Thus, the present study addresses the identified gap by assessing the extent of maternal health service delivery in selected public lying-in clinics in Zambales, specifically in terms of prenatal care, intrapartum care, postnatal care, monitoring and record-keeping, and compliance with standards and protocols. It also examines the operational issues encountered by healthcare workers, including workforce constraints, inadequate medical supplies and equipment, weak health information systems, financial and resource limitations, and policy implementation and governance issues. Rather than assuming that these factors cause maternal or neonatal outcomes, the study descriptively examines the experiences and perceptions of healthcare workers regarding service delivery and operational challenges. The findings are intended to provide localized evidence that can serve as a basis for developing appropriate interventions to strengthen and sustain maternal health service delivery in selected public lying-in clinics in Zambales.

Prenatal Care

Prenatal care is one of the most important components of maternal healthcare services because it provides healthcare interventions during pregnancy to ensure the health and safety of both the mother and the unborn child. According to the World Health Organization (WHO, 2016), prenatal care includes early registration of pregnant women, regular medical examinations, nutritional counseling, laboratory testing, risk assessment, health education, and identification of pregnancy-related complications. Quality prenatal care contributes significantly to reducing maternal and neonatal morbidity and mortality.

The concept of prenatal care has evolved over the years. Earlier healthcare systems primarily focused on detecting complications during pregnancy. However, modern maternal healthcare emphasizes comprehensive prenatal services that include preventive, promotive, curative, and educational interventions. WHO recommends a minimum of eight antenatal contacts to improve pregnancy outcomes and increase maternal satisfaction with healthcare services.

Globally, prenatal care has been recognized as an effective strategy in reducing maternal mortality. According to WHO (2023), women who receive adequate prenatal care are more likely to experience safer pregnancies and healthier births. Regular prenatal visits allow healthcare providers to monitor maternal conditions, detect abnormalities, and provide timely interventions.

Several international studies have demonstrated the benefits of prenatal care. Carroli et al. (2018) found that women who attended regular prenatal consultations experienced lower rates of pregnancy complications compared to those with inadequate prenatal visits. Their study emphasized the importance of continuous monitoring and early detection of health risks.

Similarly, Villar et al. (2019) reported that adequate prenatal care improved maternal nutrition, increased institutional deliveries, and reduced adverse pregnancy outcomes. The researchers concluded that early and regular prenatal services contribute significantly to maternal and newborn health.

Prenatal care also provides opportunities for health education. Pregnant women receive counseling regarding nutrition, exercise, breastfeeding, birth preparedness, family planning, and danger signs during pregnancy. Health education empowers women to make informed decisions and seek timely healthcare services.

The United Nations Population Fund (UNFPA, 2021) emphasized that prenatal services should be accessible, affordable, and culturally appropriate. Many developing countries continue to face barriers to prenatal care, including poverty, transportation difficulties, healthcare worker shortages, and limited healthcare facilities. In the Philippines, prenatal care services are delivered through hospitals, rural health units, barangay health stations, and public lying-in clinics. The Department of Health recommends early pregnancy registration and regular prenatal consultations. Pregnant women are encouraged to attend scheduled visits to monitor maternal and fetal health.

The Responsible Parenthood and Reproductive Health Act of 2012 support access to maternal healthcare services, including prenatal care. The law promotes equitable access to reproductive health services and aims to reduce maternal mortality.

The Department of Health's Maternal, Newborn, Child Health and Nutrition Strategy emphasize the importance of prenatal services in improving maternal outcomes. Healthcare providers conduct physical examinations, laboratory tests, nutritional assessments, immunizations, and health counseling during prenatal visits.

According to the Philippine Statistics Authority (2022), many maternal deaths in the country remain associated with delayed healthcare seeking and inadequate prenatal care. Women who fail to attend prenatal consultations may experience undetected complications that increase pregnancy risks.

Several local studies have examined prenatal healthcare utilization in the Philippines. Dela Cruz et al. (2020) found that access to prenatal services significantly influenced maternal outcomes. Women who attended regular prenatal consultations demonstrated better pregnancy outcomes and higher healthcare satisfaction.

Likewise, Reyes and Santos (2021) reported that healthcare accessibility, educational attainment, and socioeconomic conditions affected prenatal care utilization among pregnant women. Their findings emphasized the importance of strengthening maternal healthcare services in rural communities.

Public lying-in clinics play important roles in providing prenatal services, especially in geographically isolated areas. Midwives conduct prenatal examinations, monitor maternal conditions, provide counseling, and facilitate referrals to higher-level facilities when necessary.

Healthcare workers in public lying-in clinics often serve as frontline providers responsible for ensuring that pregnant women receive essential maternal healthcare services. Their competencies, availability, and commitment influence the quality of prenatal care.

The quality of prenatal care also depends on the availability of equipment, medical supplies, and healthcare personnel. Facilities with adequate resources are better able to provide comprehensive prenatal services.

Healthcare guidelines recommend risk assessments during prenatal visits. Healthcare providers identify high-risk pregnancies and monitor conditions such as hypertension, diabetes, anemia, and infections. Early identification allows timely interventions and reduces maternal complications.

The World Health Organization further emphasizes respectful maternity care during prenatal consultations. Healthcare providers should promote dignity, confidentiality, and patient participation in decision-making.

Technology has also contributed to improvements in prenatal care. Electronic health records, telemedicine, and digital health applications support patient monitoring and healthcare communication. However, many rural facilities continue to experience technological limitations.

Despite improvements in maternal healthcare, barriers to prenatal care remain. Transportation difficulties, financial limitations, cultural beliefs, and healthcare worker shortages may affect healthcare utilization. Addressing these barriers requires coordinated efforts among healthcare providers, government agencies, and communities.

The present study includes prenatal care as one of the major dimensions of maternal health service delivery because it significantly influences maternal outcomes and reflects the quality of healthcare services provided by public lying-in clinics. Understanding how prenatal services are delivered may provide valuable information for improving maternal healthcare programs and strengthening healthcare delivery systems.

Synthesis of Research Literature on Prenatal Care

The reviewed research literature generally agrees that prenatal care is an essential component of maternal health service delivery. Philippine policy and health-system evidence consistently emphasize maternal assessment, risk identification, health education, birth preparedness, and referral as important elements of antenatal care. Recent Philippine data also demonstrate that antenatal care remains a major indicator for monitoring maternal health-service performance.

However, the literature also indicates that availability and utilization of prenatal services do not necessarily guarantee uniform quality or completeness of service delivery. Differences in staffing, equipment, supplies, accessibility, workload, information systems, and facility capacity may influence how prenatal services are implemented. Thus, while the literature agrees on the importance of prenatal care, the actual extent of implementation may differ among healthcare facilities and communities.

There is also a limitation in the existing literature relevant to the present study. Much of the available Philippine evidence focuses on maternal healthcare utilization, coverage indicators, or population-level outcomes, while comparatively less attention is given to the facility-level experiences of healthcare workers delivering prenatal services in public lying-in clinics. This is particularly relevant in provinces such as Zambales, where public facilities serve communities with varying geographic and operational conditions.

Accordingly, the present study addresses this gap by examining prenatal care as one of the major dimensions of maternal health service delivery in selected public lying-in clinics in Zambales. Specifically, it assesses the perceived extent of prenatal services provided by healthcare workers in terms of maternal assessment and monitoring, health education and counseling, risk identification, birth preparedness, and referral-related activities. The study will provide localized descriptive evidence on how prenatal services are being delivered and may identify areas that require strengthening. The findings may subsequently serve as a basis for developing interventions to improve and sustain maternal health service delivery in the selected public lying-in clinics.

Intrapartum care

Intrapartum care refers to the care provided to women and their newborns during labor and childbirth. It is a critical component of maternal health service delivery because complications may develop rapidly during this period and require timely recognition and appropriate management. The World Health Organization (WHO) emphasizes that quality intrapartum care should combine evidence-based clinical practices with respectful and woman-centered care to promote safe childbirth and a positive childbirth experience. Essential components include skilled attendance, monitoring of maternal and fetal conditions, infection prevention, timely management of complications, immediate newborn care, and appropriate referral when the condition of the mother or newborn exceeds the capacity of the facility.

International literature consistently emphasizes the importance of skilled healthcare providers in achieving safe intrapartum care. Campbell and Graham (2016) highlighted the contribution of skilled birth

attendants to reducing preventable maternal deaths, while more recent literature emphasizes that skilled attendance must be supported by appropriate competencies, resources, and functioning referral systems. The literature therefore generally agrees that the presence of trained midwives, nurses, and other competent healthcare professionals is necessary for safe delivery. However, skilled attendance alone does not guarantee quality care. The effectiveness of intrapartum services also depends on whether healthcare workers have access to essential medicines, equipment, adequate facilities, emergency training, and supportive supervision.

Another recurring finding is the importance of continuous monitoring during labor. Monitoring maternal vital signs, fetal condition, labor progress, and other clinical indicators enables healthcare workers to recognize complications and initiate appropriate interventions. WHO guidance on intrapartum care emphasizes the need for systematic assessment while avoiding unnecessary interventions. This suggests that quality intrapartum care involves not simply performing procedures but ensuring that clinical assessments are appropriate, timely, and responsive to the individual needs of the mother and newborn.

Respectful maternity care is likewise emphasized in the literature. Bohren et al. (2019) reported that women's experiences during childbirth are influenced not only by clinical safety but also by the way healthcare providers communicate with and treat them. Respect for dignity, privacy, informed decision-making, and emotional support forms part of quality maternal healthcare. Thus, the literature presents intrapartum care as both a clinical and interpersonal service. This is particularly relevant in public lying-in clinics where healthcare workers interact closely with women and their families throughout labor and delivery.

The literature also identifies emergency preparedness and referral capacity as important determinants of safe intrapartum care. Obstetric emergencies such as postpartum hemorrhage, hypertensive disorders, obstructed labor, and fetal distress may require immediate intervention or transfer to a higher-level facility. Consequently, a lying-in clinic must not only be capable of managing normal deliveries but must also recognize its limitations and maintain an effective referral mechanism. The Three Delays Model of Thaddeus and Maine further explains the importance of reducing delays in seeking care, reaching an appropriate facility, and receiving adequate treatment.

In the Philippine context, intrapartum care is an important component of the national maternal and newborn health program. The Department of Health promotes facility-based delivery and skilled birth attendance and has established standards and programs intended to strengthen maternal and newborn services. The Basic Emergency Obstetric and Newborn Care (BEmONC) framework is particularly relevant because it emphasizes the competencies and essential interventions required for responding to common obstetric and newborn emergencies. These policies demonstrate that safe intrapartum care in Philippine facilities involves not only the conduct of normal deliveries but also emergency preparedness, infection prevention, newborn care, and referral. Philippine research generally supports the importance of skilled personnel and adequate facility resources in intrapartum care. Studies cited in the present review indicate that facilities with trained healthcare workers, appropriate equipment, and emergency preparedness are better positioned to provide safe delivery services. At the same time, Philippine evidence indicates continuing disparities in access and service capacity between urban and rural communities. Women in geographically isolated and disadvantaged areas may encounter transportation difficulties, limited facility capacity, staffing shortages, and other barriers that can affect access to timely intrapartum services.

Public lying-in clinics are particularly important within this context because they provide community-level maternal services, especially for women with low-risk pregnancies. Midwives and nurses may be responsible for monitoring labor, conducting normal deliveries, providing immediate newborn care, documenting services, educating mothers, and coordinating referrals. Consequently, the quality of intrapartum care in these facilities may depend on the interaction of healthcare workers' competencies, available supplies and equipment, facility capacity, referral mechanisms, and compliance with established standards.

Synthesis of Research Literature on Intrapartum Care

The reviewed studies generally agree that safe intrapartum care requires more than the physical presence of a birthing facility. Skilled healthcare workers, appropriate labor monitoring, emergency preparedness, infection

prevention, respectful maternity care, immediate newborn care, and functional referral mechanisms are consistently identified as important components of quality delivery services. Philippine policies and programs, particularly those concerning skilled birth attendance and BEmONC, reinforce these requirements.

However, the literature also indicates that the availability of skilled personnel does not necessarily ensure consistent or comprehensive service delivery. Differences in staffing, training, equipment, supplies, facility capacity, supervision, and referral arrangements may influence how intrapartum services are implemented. Similarly, international evidence provides substantial information on the clinical and organizational requirements of safe childbirth, but these findings cannot automatically be assumed to reflect the operational realities of every Philippine public lying-in clinic.

A further limitation of the existing literature is the limited localized evidence concerning the actual delivery of intrapartum services in public lying-in clinics in Zambales. Although Philippine studies provide evidence regarding skilled birth attendance, facility-based delivery, and maternal healthcare access, less information is available regarding how healthcare workers in selected public lying-in clinics in the province perceive the extent to which recommended intrapartum services are actually delivered. In particular, there is a need to examine the practical implementation of labor monitoring, emergency preparedness, infection prevention, immediate newborn care, respectful maternity care, and referral practices within the local setting.

The present study addresses this gap by including intrapartum care as one of the major dimensions of maternal health service delivery in selected public lying-in clinics in Zambales. Rather than assuming that the presence of standards or trained personnel automatically indicates effective implementation, the study assesses the perceived extent of intrapartum service delivery based on the self-reports of healthcare workers. The findings will provide localized descriptive evidence that may identify strengths and areas needing improvement and may serve as a basis for developing appropriate interventions to strengthen and sustain maternal health service delivery in the selected public lying-in clinics.

Postnatal care

Postnatal care refers to the healthcare services provided to mothers and newborns immediately after childbirth and throughout the postpartum period. The postnatal period is a critical component of the maternal health continuum because mothers and newborns remain vulnerable to complications after delivery. Current WHO guidance emphasizes that postnatal care should address not only the detection and management of physical complications but also breastfeeding, newborn care, maternal mental health, family planning, health education, and respectful, person-centered support. Thus, quality postnatal care extends beyond a single postpartum examination and involves continuing assessment and support for both mother and newborn.

International research consistently identifies the early postnatal period as an important opportunity to prevent maternal and neonatal morbidity and mortality. Postpartum hemorrhage, infection, hypertensive disorders, breastfeeding difficulties, and newborn complications may require timely recognition and intervention. The literature therefore generally agrees that early and appropriate postnatal assessment is essential, particularly during the first days following childbirth when complications may develop rapidly.

The literature also emphasizes that postnatal care should address the needs of both the mother and newborn. Maternal assessment includes monitoring vital signs, bleeding, uterine recovery, wound condition, signs of infection, blood pressure, and other postpartum concerns. Newborn assessment includes monitoring feeding, temperature, breathing, weight, and signs of infection or other complications. This mother-and-newborn approach supports the concept of postnatal care as an integrated component of maternal and newborn health service delivery. Breastfeeding support is another consistently identified component of quality postnatal care. Victora et al. (2016) demonstrated the substantial health benefits of breastfeeding for infants and mothers. Healthcare providers play an important role in helping mothers initiate and sustain breastfeeding by providing appropriate information, addressing breastfeeding difficulties, and promoting evidence-based infant-feeding practices. This indicates that postnatal care involves not only clinical monitoring but also health education and supportive interventions that influence maternal and newborn well-being.

The literature further recognizes maternal mental health as an important but sometimes overlooked component of postnatal services. Postpartum depression, anxiety, and emotional difficulties can affect maternal functioning and family well-being. Consequently, comprehensive postnatal care requires healthcare workers to be attentive to mothers' emotional and psychosocial needs in addition to physical recovery. This broader understanding of postnatal care is consistent with the current movement toward respectful and person-centered maternal healthcare.

Newborn care is similarly important during the postnatal period. Essential newborn interventions include appropriate thermal care, breastfeeding support, cord care, newborn assessment, and identification of danger signs. Research has consistently shown that early recognition of newborn complications and timely referral are important in reducing preventable neonatal morbidity and mortality. Therefore, the capacity of lying-in clinics to provide appropriate newborn monitoring and referral is an important consideration in assessing postnatal service delivery. In the Philippine setting, postnatal care forms part of the national maternal and newborn health service framework. The Department of Health promotes postpartum monitoring, newborn care, breastfeeding support, family planning counseling, health education, and appropriate referral through primary healthcare facilities and other birthing facilities. Public lying-in clinics therefore have an important role in ensuring continuity of care after delivery, particularly for mothers who may experience difficulty accessing hospitals or other higher-level facilities.

Philippine research also suggests that utilization of postnatal services may be influenced by socioeconomic conditions, accessibility of healthcare facilities, educational attainment, and geographic location. These factors are particularly relevant in rural and geographically isolated communities where transportation and access to healthcare providers may present challenges. Consequently, the availability of postnatal services at the community level may help reduce barriers to continued maternal and newborn care.

Public lying-in clinics are strategically positioned to provide immediate postpartum assessment, newborn monitoring, breastfeeding counseling, family planning information, health education, and referral services. Midwives and nurses may also conduct follow-up consultations or coordinate home visits with community health workers. These activities support continuity of care from pregnancy through delivery and into the postpartum period.

However, the literature suggests that the availability of postnatal services does not necessarily mean that all recommended services are consistently delivered. Differences in staffing, healthcare workers' competencies, workload, supplies and equipment, documentation systems, referral mechanisms, and facility capacity may influence the extent to which postnatal care is implemented. This is particularly important in public lying-in clinics where healthcare workers may have multiple clinical, administrative, and community-based responsibilities.

The reviewed literature further suggests that continuity of care is an important principle in maternal health service delivery. Prenatal care, intrapartum care, and postnatal care should not be viewed as separate services but as interconnected components of a maternal healthcare continuum. Information obtained during pregnancy and delivery can guide postpartum management, while postnatal findings can inform subsequent maternal and reproductive healthcare. Effective documentation and referral mechanisms are therefore important in maintaining continuity between different stages of care.

Synthesis of Research Literature on Postnatal Care

The reviewed literature generally agrees that postnatal care is an essential component of maternal health service delivery and that effective services should address both maternal and newborn needs. Early postpartum assessment, monitoring for complications, breastfeeding support, newborn care, health education, family planning counseling, and timely referral are consistently identified as important elements of quality postnatal care. Philippine maternal health policies similarly recognize the importance of postpartum and newborn services within the maternal healthcare continuum.

The literature also demonstrates that accessibility and continuity of care remain important concerns, particularly in rural and geographically isolated communities. Philippine evidence indicates that socioeconomic conditions, distance, transportation, and healthcare accessibility can influence postnatal care utilization. However,

the reviewed literature does not establish that these factors affect service delivery in the same manner across all facilities. Differences in staffing, facility capacity, community conditions, healthcare-worker competencies, and organizational support may influence how postnatal services are actually implemented.

An important limitation of the existing literature is that much of the available evidence focuses on postnatal care utilization or maternal and newborn outcomes, rather than the perceived extent of actual postnatal service delivery within specific public lying-in clinics. There is also limited localized evidence describing how healthcare workers in public lying-in clinics in Zambales experience the delivery of postpartum monitoring, newborn care, breastfeeding support, health education, family planning counseling, follow-up, and referral services.

The present study addresses this gap by examining postnatal care as one of the major dimensions of maternal health service delivery in selected public lying-in clinics in Zambales. Specifically, the study assesses the perceived extent of postnatal services based on the self-reports of healthcare workers. It focuses on the services actually provided within the selected facilities rather than assuming that the existence of national standards or programs guarantees their consistent implementation.

The study does not attempt to establish a causal relationship between postnatal care and maternal or neonatal mortality, morbidity, or other health outcomes. Instead, it provides descriptive evidence regarding the extent of postnatal service delivery and may identify areas of strength and aspects requiring improvement. The findings may consequently serve as a basis for developing appropriate interventions to strengthen postnatal care, improve continuity of maternal and newborn services, and sustain the operations of selected public lying-in clinics in Zambales.

Monitoring and Record-Keeping

Monitoring and record-keeping are essential components of maternal healthcare services because they ensure continuity of care, facilitate decision-making, support health planning, and improve patient outcomes. In maternal healthcare, healthcare providers rely on accurate and complete documentation to monitor the condition of pregnant women, assess risks, evaluate treatment interventions, and coordinate services among healthcare providers. The World Health Organization (WHO, 2022) emphasizes that effective health information systems and proper documentation are necessary for improving maternal and newborn healthcare services. Monitoring refers to the continuous observation and assessment of maternal and newborn conditions throughout pregnancy, labor, delivery, and the postpartum period. Record-keeping, on the other hand, involves the systematic documentation of patient information, medical histories, laboratory findings, interventions, and healthcare outcomes. Together, these processes provide valuable information for clinical management, healthcare evaluation, and policy formulation.

According to the World Health Organization, health information systems are one of the six fundamental building blocks of an effective healthcare system. Reliable health information enables healthcare providers to monitor health conditions, identify trends, evaluate programs, and make evidence-based decisions. In maternal healthcare, accurate records contribute significantly to patient safety and quality care.

Maternal records contain important information regarding prenatal consultations, laboratory results, immunizations, risk assessments, labor progress, delivery outcomes, postpartum conditions, and newborn status. These records allow healthcare providers to track patient progress and detect potential complications. Incomplete or inaccurate records may compromise patient safety and affect healthcare quality.

Documentation begins during prenatal care. Healthcare providers collect demographic information, medical history, obstetric history, and current pregnancy details. Prenatal records include physical examination findings, laboratory results, nutritional assessments, and health education activities. These records serve as references throughout pregnancy and childbirth.

During labor and delivery, healthcare providers document maternal vital signs, fetal heart rate, labor progression, interventions, medications, and delivery outcomes. The use of labor monitoring tools such as the partograph assists healthcare workers in identifying abnormalities and making appropriate clinical decisions.

Postpartum documentation includes assessments of maternal recovery, newborn condition, breastfeeding status, and health education provided to mothers. Follow-up records support continuity of care and facilitate healthcare monitoring.

According to Lippeveld, Sauerborn, and Bodart (2017), quality healthcare depends heavily on reliable health information. Their study emphasized that accurate documentation improves patient care, strengthens health programs, and supports effective healthcare management. Poor record-keeping, however, may contribute to medical errors and ineffective healthcare interventions.

Similarly, AbouZahr and Boerma (2018) reported that weak health information systems contribute to underreporting of maternal deaths, inaccurate health statistics, and ineffective maternal health programs. Their findings highlighted the importance of strengthening health information systems in healthcare facilities.

Healthcare providers rely on documentation to support clinical decision-making. Information regarding previous pregnancies, medical conditions, allergies, laboratory results, and risk factors assists healthcare workers in determining appropriate interventions. Missing information may lead to delayed diagnosis or inappropriate treatment.

The Department of Health requires healthcare facilities to maintain accurate and complete records. Standardized forms and reporting systems are used to collect maternal health data at the local and national levels. These reports contribute to healthcare planning, policy development, and program evaluation.

The Maternal and Neonatal Death Surveillance and Response (MNDSR) program depends heavily on accurate documentation. Maternal death reviews require detailed information regarding patient history, healthcare interventions, and contributing factors. Weak documentation systems may hinder investigations and limit opportunities for healthcare improvement.

Monitoring maternal health indicators is also an important aspect of healthcare management. Indicators such as prenatal coverage, facility-based deliveries, maternal mortality, postnatal care utilization, and newborn outcomes provide valuable information regarding healthcare performance.

According to the World Health Organization (2021), health indicators support evidence-based decision-making and enable healthcare administrators to identify strengths and weaknesses within healthcare systems. Accurate data facilitate resource allocation and program development.

Several studies have identified documentation challenges among healthcare workers. Aqil et al. (2019) reported that healthcare providers often experience difficulties balancing clinical responsibilities and documentation requirements. Excessive paperwork may increase workloads and reduce time available for patient care.

Healthcare workers may encounter problems such as incomplete records, delayed reporting, inaccurate entries, and lost documents. These challenges may affect continuity of care and compromise healthcare quality. Training and supervision contribute significantly to improving documentation practices.

Manual record systems remain common in many primary healthcare facilities. Paper-based records are susceptible to damage, loss, duplication, and storage problems. Retrieving information may become difficult when records are poorly organized.

Electronic health information systems have been introduced to improve healthcare documentation. Digital records facilitate information storage, retrieval, analysis, and reporting. According to WHO (2021), electronic systems improve data quality and reduce documentation errors.

Electronic medical records provide several advantages, including accessibility, accuracy, efficiency, and timely reporting. Healthcare providers can easily access patient information and generate reports for monitoring and evaluation purposes.

However, the implementation of electronic systems presents challenges, particularly in developing countries. Financial limitations, inadequate infrastructure, limited internet access, and insufficient technical support may affect adoption.

The Department of Health has implemented various initiatives to strengthen health information systems in the Philippines. Healthcare workers receive training on documentation standards, reporting procedures, and data management to improve information quality.

Confidentiality and data privacy are important aspects of record-keeping. Patient information must be protected from unauthorized access and misuse. The Philippine Data Privacy Act of 2012 requires healthcare institutions to maintain the confidentiality and security of health information.

Supportive supervision contributes significantly to improving documentation practices. Supervisors review records, monitor compliance, and provide feedback to healthcare workers. Regular audits help identify errors and promote adherence to documentation standards.

Several Philippine studies have reported challenges affecting health information systems in healthcare facilities. Common issues include incomplete documentation, delayed reporting, insufficient training, inadequate supplies, and limited technological resources.

Public lying-in clinics rely heavily on accurate records to monitor maternal health services. Midwives document prenatal visits, delivery outcomes, postpartum assessments, referrals, and health education activities. These records support continuity of care and facilitate healthcare evaluation.

Healthcare planning and policymaking also depend on accurate information. Government agencies utilize health statistics to identify healthcare priorities, allocate resources, and develop maternal health programs. Poor-quality data may lead to ineffective interventions and inefficient resource allocation.

Monitoring and evaluation activities provide opportunities for continuous quality improvement. Healthcare facilities analyze maternal health indicators to identify areas requiring improvement and implement corrective actions.

The World Health Organization emphasizes that strong health information systems contribute to better health outcomes, improved healthcare management, and enhanced service quality. Reliable information supports accountability and promotes evidence-based healthcare.

The present study includes monitoring and record-keeping as one of the major dimensions of maternal health service delivery because documentation and health information systems significantly influence healthcare quality and patient outcomes. Assessing monitoring and record-keeping practices in public lying-in clinics may provide valuable information regarding documentation quality, reporting systems, and healthcare management in the Province of Zambales.

Synthesis of Research Literature on Monitoring and Record-Keeping

The reviewed literature consistently agrees that monitoring and record-keeping are essential components of maternal health service delivery. Accurate, complete, timely, and accessible information supports clinical decision-making, continuity of care, referral coordination, program monitoring, health planning, and evaluation. Maternal records covering prenatal consultations, labor and delivery, postnatal assessments, newborn care, and referrals provide healthcare workers with information necessary to monitor clients and identify potential risks. The literature therefore supports the view that documentation is not merely an administrative responsibility but an integral part of safe and quality maternal healthcare.

The literature also agrees that the quality of monitoring and record-keeping depends on both the availability of appropriate systems and the capacity of healthcare workers to use them effectively. Training, standardized documentation procedures, supportive supervision, regular record review, and adequate reporting mechanisms are identified as important factors in maintaining reliable health information. The use of electronic health information systems may further improve data accessibility, retrieval, and reporting. However, the literature indicates that digitalization alone does not guarantee effective information management because technological systems require adequate infrastructure, financial resources, technical support, data security, and trained personnel.

Despite this general agreement, the literature identifies persistent limitations in monitoring and record-keeping, particularly in primary healthcare and resource-constrained settings. Common concerns include

incomplete or inaccurate records, delayed reporting, excessive documentation requirements, manual record systems, difficulty retrieving information, inadequate training, limited technological resources, and insufficient administrative support. These findings suggest that weaknesses in record-keeping may arise from interconnected workforce, technological, organizational, and resource conditions rather than from documentation practices alone.

In the Philippine context, monitoring and record-keeping are particularly important because maternal health facilities are expected to document and report maternal and newborn health services for clinical management, program monitoring, and health planning. Public lying-in clinics rely on records of prenatal care, delivery, postnatal care, newborn services, referrals, and health education to support continuity of care and reporting. However, Philippine healthcare facilities, particularly those at the primary and community levels, may continue to experience challenges related to incomplete documentation, reporting requirements, staffing, training, and technological limitations. These concerns indicate the need to examine information-management practices within the actual operational context of individual facilities.

However, a localized gap remains regarding public lying-in clinics in Zambales. Although existing literature establishes the importance of health information systems and identifies common documentation challenges, there is limited evidence describing the specific monitoring and record-keeping concerns experienced by healthcare workers in selected public lying-in clinics in the province. In particular, limited information is available regarding how healthcare workers experience the documentation of maternal services, record management, reporting procedures, monitoring activities, and the availability and use of information resources within these facilities.

The present study addresses this gap by including monitoring and record-keeping as one of the major dimensions of maternal health service delivery in selected public lying-in clinics in Zambales. The study assesses the perceived extent of monitoring and record-keeping based on the experiences and self-reports of healthcare workers. It considers the actual practices and operational concerns related to documentation, monitoring, record management, reporting, and health information resources.

Importantly, the present study does not seek to establish a causal relationship between monitoring and record-keeping and maternal or neonatal outcomes. Consistent with its descriptive survey research design, the study focuses on describing the perceived extent of service delivery and identifying issues encountered by healthcare workers. The findings may provide localized evidence that can serve as a basis for developing appropriate interventions to improve documentation, monitoring, reporting, information management, and continuity of maternal health services in the selected public lying-in clinics in Zambales.

Compliance with Standards and Protocols

Compliance with standards and protocols is a fundamental component of quality maternal healthcare services. Healthcare standards and clinical protocols serve as guidelines that ensure safe, effective, consistent, and evidence-based care for mothers and newborns. In maternal healthcare, adherence to established standards helps reduce complications, improve patient outcomes, and maintain the quality of healthcare services. The World Health Organization (WHO, 2022) emphasizes that compliance with healthcare standards contributes significantly to patient safety, quality assurance, and healthcare effectiveness.

Healthcare standards consist of established policies, guidelines, procedures, and best practices developed by healthcare organizations and regulatory agencies. These standards provide healthcare professionals with clear directions regarding the management of pregnancy, labor, delivery, postpartum care, and newborn care. Protocols ensure that healthcare services are delivered consistently regardless of healthcare settings or providers.

The World Health Organization defines clinical guidelines as systematically developed recommendations that assist healthcare providers in making appropriate decisions regarding patient care. Evidence-based protocols improve healthcare quality by reducing variations in clinical practice and promoting the use of effective interventions.

In maternal healthcare, standards and protocols cover various aspects of care, including prenatal assessments, labor monitoring, infection prevention, emergency obstetric care, postpartum management, newborn

care, referral systems, and documentation practices. Compliance with these guidelines ensures that mothers receive safe and appropriate healthcare services.

The Department of Health (DOH) in the Philippines has developed numerous policies and administrative orders to improve maternal and newborn health services. These include the Maternal, Newborn, Child Health and Nutrition Strategy, the Essential Intrapartum and Newborn Care (EINC) protocol, and the Basic Emergency Obstetric and Newborn Care (BEmONC) guidelines.

The Essential Intrapartum and Newborn Care (EINC) protocol promotes evidence-based interventions during labor, delivery, and newborn care. The protocol emphasizes immediate skin-to-skin contact, delayed cord clamping, early breastfeeding initiation, and infection prevention measures. Compliance with these practices has been associated with improved maternal and neonatal outcomes.

Basic Emergency Obstetric and Newborn Care (BEmONC) standards establish the competencies required for healthcare providers to manage obstetric emergencies. Midwives, nurses, and physicians receive training on emergency interventions, newborn resuscitation, referral systems, and infection prevention.

According to the World Health Organization (2021), adherence to evidence-based clinical guidelines significantly reduces maternal and neonatal mortality. Healthcare facilities that consistently implement recommended practices demonstrate improved patient outcomes and higher quality of care.

Several international studies have examined compliance with maternal healthcare standards. Rowe et al. (2018) reported that healthcare facilities with strong compliance systems demonstrated better clinical performance and improved maternal outcomes. Their study emphasized that adherence to standards contributes to patient safety and healthcare quality.

Similarly, Kruk et al. (2018) found that poor compliance with clinical guidelines contributes to preventable maternal complications and reduced healthcare quality. The authors recommended strengthening supervision, training, and quality assurance programs.

Infection prevention protocols constitute an important aspect of maternal healthcare standards. Healthcare providers are expected to follow hand hygiene practices, sterilization procedures, waste disposal guidelines, and standard precautions. Failure to comply with infection prevention measures may increase the risk of maternal and neonatal infections.

The World Health Organization emphasizes the importance of patient safety initiatives in maternal healthcare. Safety protocols reduce medical errors, improve communication among healthcare providers, and enhance clinical outcomes.

Quality assurance programs are commonly used to monitor compliance with healthcare standards. Healthcare administrators conduct audits, supervision visits, and performance evaluations to assess adherence to protocols and identify areas requiring improvement.

Healthcare workers require continuous education and training to maintain compliance with evolving standards and guidelines. According to WHO (2020), continuing professional development enhances clinical competencies and promotes evidence-based practice.

Several studies have demonstrated that training programs improve compliance among healthcare workers. Healthcare providers who participate in continuing education programs exhibit greater knowledge of protocols and higher levels of adherence.

Leadership and organizational support also influence compliance. Healthcare administrators establish policies, provide resources, and monitor implementation of standards. Effective leadership promotes accountability and encourages adherence to healthcare protocols.

The Department of Health regularly conducts monitoring and evaluation activities to assess compliance among healthcare facilities. Accreditation processes, licensing requirements, and quality assurance programs encourage healthcare organizations to maintain standards.

Public lying-in clinics are required to comply with licensing standards established by the Department of Health. These standards cover staffing requirements, equipment availability, infrastructure, infection control, emergency preparedness, and service delivery.

Failure to comply with standards may result in deficiencies in healthcare services. Inadequate adherence to protocols may increase the risk of complications, compromise patient safety, and reduce service quality. Several Philippine studies have identified factors affecting compliance among healthcare workers. Common barriers include inadequate training, resource limitations, excessive workloads, and insufficient supervision. These factors may influence the ability of healthcare providers to implement standards consistently. The COVID-19 pandemic introduced additional protocols related to infection prevention, patient screening, and healthcare worker safety. Healthcare facilities were required to adapt to changing guidelines while maintaining essential maternal healthcare services.

Monitoring and evaluation play important roles in ensuring compliance. Clinical audits, record reviews, and supervisory visits provide opportunities to identify deficiencies and implement corrective measures. Healthcare accreditation programs encourage continuous quality improvement. Accredited healthcare facilities generally demonstrate stronger compliance with standards and better organizational performance. Patient satisfaction is also associated with compliance. Healthcare facilities that follow established protocols often provide safer, more effective, and more consistent services, resulting in improved patient experiences. The World Health Organization advocates quality maternal and newborn care that is safe, effective, timely, efficient, equitable, and people-centered. Compliance with standards serves as the foundation for achieving these healthcare goals.

Healthcare governance and policy implementation further support compliance. Clear policies, administrative support, and accountability mechanisms promote adherence to healthcare standards and improve service quality.

Public lying-in clinics serve as important healthcare facilities in rural communities. Ensuring compliance with maternal healthcare standards contributes to safer deliveries, improved newborn care, and better maternal outcomes.

The present study includes compliance with standards and protocols as one of the major dimensions of maternal health service delivery because adherence to clinical guidelines significantly influences healthcare quality and patient safety. Assessing compliance practices in public lying-in clinics in Zambales may provide valuable information regarding the implementation of maternal healthcare standards and identify opportunities for quality improvement.

Synthesis

The reviewed research literature consistently establishes that compliance with standards and protocols is an important dimension of maternal health service delivery because it promotes safe, consistent, evidence-based, and patient-centered care. The literature generally agrees that adherence to clinical guidelines is particularly important during prenatal care, labor and delivery, postnatal care, newborn care, infection prevention, emergency obstetric management, referral, and documentation. Studies also emphasize that compliance is strengthened through competent healthcare workers, continuing professional development, supportive supervision, adequate resources, and effective quality-assurance mechanisms. These findings indicate that compliance should be viewed not merely as a regulatory requirement but as an operational component of quality maternal healthcare.

The literature, however, also suggests that the existence of standards and policies does not necessarily guarantee their consistent implementation. Differences in staffing, availability of supplies and equipment, training, supervision, organizational support, and facility capacity may influence how healthcare providers implement established protocols. In resource-limited and rural settings, healthcare workers may experience difficulties complying with requirements despite having knowledge of the appropriate standards. Thus, the literature suggests that compliance is influenced by the interaction between provider competency, organizational support, facility resources, monitoring mechanisms, and policy implementation, rather than by the availability of guidelines alone. In the Philippine context, compliance is particularly relevant because maternal health services are guided by national policies and standards established by the Department of Health. Programs and protocols such as the Maternal, Newborn, Child Health and Nutrition (MNCHN) Strategy, Essential Intrapartum and Newborn Care (EINC), Basic Emergency Obstetric and Newborn Care (BEmONC), facility licensing requirements, and infection

prevention and control standards provide an institutional framework for maternal health service delivery. These policies establish expectations regarding skilled birth attendance, emergency preparedness, infection prevention, newborn care, referral, and quality assurance. However, Philippine healthcare facilities may differ in their capacity to translate these requirements into routine practice, particularly in rural and geographically isolated communities. The literature therefore provides strong evidence regarding the importance of compliance, but there remains limited localized research examining how healthcare workers in public lying-in clinics in Zambales perceive the actual implementation of maternal health standards and protocols. Existing literature provides broader national and international evidence, but insufficient attention has been given to the specific operational conditions of public lying-in clinics in the province, including the extent to which healthcare workers are able to implement required standards within their available workforce, resources, supervision, and facility conditions. This represents an important local research gap.

The present study addresses this gap by examining compliance with standards and protocols as one of the major dimensions of maternal health service delivery in selected public lying-in clinics in Zambales. The study focuses on the perceptions of healthcare workers regarding the implementation of established standards in maternal health service delivery, including clinical practices, infection prevention, emergency preparedness, referral procedures, documentation, and other applicable protocols. Rather than assuming that non-compliance directly causes maternal or neonatal outcomes, the study provides descriptive evidence of the perceived extent of compliance and the operational issues encountered by healthcare workers. The findings may serve as a basis for developing appropriate interventions to strengthen compliance, improve maternal health service delivery, and sustain the operations of selected public lying-in clinics in Zambales.

Maternal Health Services Delivery Issues

Workforce constraints have become one of the most significant challenges affecting healthcare systems worldwide. In maternal healthcare services, the availability, competency, distribution, and retention of healthcare workers directly influence the quality, accessibility, and effectiveness of healthcare delivery. The World Health Organization (WHO, 2022) recognizes healthcare workforce as one of the six fundamental building blocks of a strong healthcare system because skilled healthcare professionals serve as the primary providers of essential health services. Shortages of healthcare workers, excessive workloads, inadequate training, and poor working conditions may compromise maternal healthcare outcomes and increase the risk of maternal and neonatal complications.

Healthcare workforce refers to all individuals engaged in the delivery of healthcare services, including physicians, nurses, midwives, healthcare assistants, and other allied health professionals. In maternal healthcare, midwives, nurses, and physicians play essential roles in providing prenatal care, labor and delivery services, postnatal care, health education, emergency interventions, and referral coordination. The availability and competency of these healthcare providers significantly affect the quality of maternal healthcare services. According to the World Health Organization (2020), there is a global shortage of healthcare workers, particularly in low- and middle-income countries. The organization estimates a shortage of millions of healthcare professionals worldwide, with the greatest deficits occurring in maternal and child health services. This shortage contributes to unequal access to healthcare and poorer maternal outcomes.

Midwives are considered among the most important healthcare providers in maternal and newborn care. The United Nations Population Fund (UNFPA, 2021) reported that strengthening the midwifery workforce could significantly reduce maternal and newborn deaths worldwide. Midwives provide comprehensive maternal healthcare services, including antenatal care, labor management, postnatal care, family planning counseling, and health education.

However, many healthcare facilities experience shortages of qualified midwives and nurses. According to WHO (2021), inadequate staffing levels increase workloads, reduce healthcare efficiency, and affect service quality. Healthcare workers may experience fatigue, stress, and burnout because of excessive responsibilities. Workload is one of the most common workforce challenges in healthcare facilities. Healthcare providers in public lying-in clinics often perform multiple duties, including patient care, documentation, reporting, community

outreach, and administrative tasks. Excessive workloads may reduce the time available for direct patient care and increase the likelihood of errors.

Aiken et al. (2018) found that higher patient-to-nurse ratios were associated with increased patient mortality and lower quality of care. Their study demonstrated that adequate staffing contributes significantly to improved patient outcomes and healthcare quality.

Similarly, Carayon and Gurses (2018) reported that excessive workloads contribute to healthcare worker fatigue, decreased job satisfaction, and reduced clinical performance. Healthcare workers experiencing heavy workloads may have difficulty maintaining quality standards and managing patient needs effectively.

Burnout is another important workforce issue. Burnout refers to emotional exhaustion, depersonalization, and reduced professional accomplishment resulting from prolonged occupational stress. Healthcare providers working in demanding environments may experience burnout, which negatively affects both employees and patient care. According to Maslach and Leiter (2016), healthcare workers experiencing burnout demonstrate lower productivity, increased absenteeism, and decreased job satisfaction. Burnout may also contribute to staff turnover and workforce shortages.

Staff retention has become a major concern in healthcare organizations. Healthcare professionals may leave their positions because of inadequate compensation, poor working conditions, limited career opportunities, or excessive workloads. High turnover rates affect service continuity and organizational stability. The World Health Organization emphasizes that healthcare worker retention strategies should include adequate compensation, supportive work environments, career development opportunities, and continuing education programs.

Continuing professional development is essential in maternal healthcare. Healthcare providers require updated knowledge and skills to manage evolving clinical practices and healthcare standards. Training programs improve competencies in emergency obstetric care, infection prevention, newborn care, and patient safety. According to WHO (2020), healthcare workers who receive regular training demonstrate improved clinical performance and greater adherence to evidence-based practices. Continuing education contributes to better healthcare outcomes and increased professional confidence.

Several studies have shown the importance of training in maternal healthcare. Homer et al. (2019) found that skilled healthcare providers who received ongoing education demonstrated improved competencies in managing obstetric emergencies and providing quality maternal care.

In the Philippines, healthcare workforce challenges remain evident, particularly in rural and geographically isolated areas. The Department of Health has implemented programs to strengthen the healthcare workforce through deployment programs, training initiatives, and workforce development strategies.

However, disparities in workforce distribution persist. Urban areas generally have more healthcare professionals than rural communities. Public lying-in clinics located in remote municipalities may experience shortages of midwives, nurses, and physicians.

According to the Philippine Statistics Authority (2022), healthcare workforce distribution remains uneven across regions and provinces. Geographically isolated areas often experience difficulties recruiting and retaining healthcare professionals.

Several Philippine studies have identified workforce challenges affecting maternal healthcare services. Reyes and Santos (2020) found that staffing shortages and heavy workloads affected the quality of maternal healthcare services in rural communities. Healthcare workers reported difficulties managing multiple responsibilities because of limited personnel.

Similarly, Cruz et al. (2021) reported that inadequate staffing contributed to increased workloads and reduced patient interaction among healthcare providers. Their study emphasized the importance of increasing workforce capacity to improve healthcare delivery.

Supportive supervision also influences workforce performance. Healthcare administrators provide guidance, monitoring, and feedback to healthcare workers. Effective supervision improves employee performance, job satisfaction, and service quality.

Leadership and organizational support contribute significantly to workforce motivation. Healthcare workers who receive recognition, support, and opportunities for growth demonstrate greater commitment and job satisfaction.

The COVID-19 pandemic further exposed workforce challenges within healthcare systems. Healthcare workers experienced increased workloads, infection risks, emotional stress, and staffing shortages. Many healthcare facilities struggled to maintain essential maternal healthcare services during the pandemic. Occupational stress has become a growing concern among healthcare workers. Stress may result from heavy workloads, limited resources, emotional demands, and workplace pressures. Chronic stress may affect mental health, job satisfaction, and professional performance.

Work-life balance also influences workforce retention and productivity. Healthcare workers require adequate rest, family time, and emotional support to maintain well-being and prevent burnout. Financial incentives and compensation play important roles in workforce motivation. Competitive salaries, benefits, and incentives contribute to employee retention and job satisfaction. Inadequate compensation may encourage healthcare workers to seek employment opportunities elsewhere.

Healthcare infrastructure and working conditions also affect workforce performance. Safe working environments, adequate equipment, and sufficient supplies enable healthcare workers to perform their duties effectively.

The World Health Organization advocates strengthening the healthcare workforce through education, recruitment, retention, and supportive policies. Investments in healthcare personnel contribute to stronger healthcare systems and improved maternal health outcomes.

Public lying-in clinics depend heavily on the availability and competency of healthcare workers. Midwives and nurses serve as frontline providers responsible for delivering maternal healthcare services, monitoring patients, managing emergencies, and providing health education.

The present study includes workforce constraints as one of the major issues affecting maternal health service delivery in public lying-in clinics in Zambales. Assessing workforce challenges may provide valuable information regarding staffing adequacy, workload, training needs, and occupational issues experienced by healthcare providers. The findings may serve as a basis for workforce development programs, policy improvements, and interventions aimed at strengthening maternal healthcare services within the province.

Synthesis – Workforce Constraints

The reviewed literature generally agrees that the availability, adequacy, competency, and distribution of healthcare workers are important considerations in the delivery of maternal health services. Across international and Philippine literature, midwives and nurses are consistently identified as frontline providers responsible for prenatal care, intrapartum care, postnatal care, health education, monitoring, documentation, emergency response, and referral coordination. The literature further indicates that adequate staffing, appropriate workload distribution, continuing professional development, supportive supervision, and favorable working conditions are important in enabling healthcare workers to perform these responsibilities effectively.

The literature also consistently identifies staffing shortages and excessive workload as common workforce concerns, particularly in rural and geographically isolated settings. Healthcare workers may be required to perform multiple clinical, administrative, documentation, and community-related responsibilities, which may limit the time available for direct patient care. Philippine literature similarly points to uneven workforce distribution and difficulties in recruiting and retaining qualified healthcare personnel in rural communities. These findings are particularly relevant to public lying-in clinics, where a relatively small number of midwives and other healthcare workers may be responsible for a broad range of maternal health services.

However, the literature suggests that workforce constraints do not operate uniformly across healthcare facilities. Although inadequate staffing and heavy workloads are frequently associated with difficulties in service delivery, the extent to which these concerns are experienced may vary depending on training opportunities, organizational support, supervision, working conditions, and availability of other resources. Thus, the presence of

a staffing shortage does not necessarily imply that maternal health services are inadequately delivered in every facility. This indicates the need to examine workforce constraints within their specific organizational and local context rather than assuming a direct causal relationship between workforce conditions and maternal or neonatal outcomes.

Continuing professional development and Basic Emergency Obstetric and Newborn Care (BEmONC) training is also emphasized in the literature as important components of workforce capacity. Training may strengthen healthcare workers' knowledge and skills in emergency obstetric care, newborn care, infection prevention, and referral procedures. Nevertheless, access to training may be affected by staffing availability, funding, scheduling, and geographical considerations. Similarly, supportive supervision and organizational support may help healthcare workers maintain competencies and comply with standards, but the effectiveness of these mechanisms may differ among facilities.

In the Philippine context, existing literature provides evidence of workforce challenges in rural and underserved communities; however, there is limited localized evidence describing the specific workforce concerns encountered by healthcare workers in public lying-in clinics in Zambales. In particular, there remains insufficient evidence regarding how staffing adequacy, workload, professional development, supervision, organizational support, and related workforce conditions are experienced by healthcare workers in selected public lying-in clinics in the province. This local gap is important because workforce conditions may differ according to the operational capacity and geographical circumstances of individual facilities.

The present study addresses this gap by examining workforce constraints as one of the major issues encountered in the delivery of maternal health services in selected public lying-in clinics in Zambales. It focuses on the experiences and perceptions of healthcare workers regarding staffing adequacy, workload, training and professional development, supervision, organizational support, and related workforce conditions. Consistent with the descriptive design of the study, workforce constraints will be treated as reported operational issues rather than tested causal determinants of maternal or neonatal outcomes. The findings are intended to provide localized evidence that may serve as a basis for appropriate workforce-development strategies and interventions to strengthen and sustain maternal health service delivery in the selected public lying-in clinics.

Inadequate Medical Supplies and Equipment

Inadequate medical supplies and equipment remain important operational concerns in maternal healthcare service delivery, particularly in primary healthcare facilities and public lying-in clinics. The availability of essential medicines, medical instruments, diagnostic tools, and functional emergency equipment affects the capacity of healthcare providers to deliver safe and appropriate maternal care. The World Health Organization identifies access to essential medicines, health technologies, and other necessary resources as important components of a functioning health system. In maternal healthcare, these resources support assessment, monitoring, treatment, emergency management, infection prevention, and referral.

Medical supplies include consumable materials such as medicines, gloves, syringes, gauze, disinfectants, intravenous fluids, and laboratory materials, while medical equipment includes durable instruments and devices used for assessment, monitoring, treatment, and emergency care. In maternal healthcare facilities, these may include blood pressure apparatus, weighing scales, fetal monitoring devices, delivery beds, oxygen equipment, suction machines, newborn resuscitation equipment, and essential emergency obstetric supplies. Their availability and functionality are particularly important during labor and delivery, when timely intervention may be necessary. International literature generally agrees that inadequate supplies, equipment, and infrastructure can limit the capacity of healthcare facilities to provide quality maternal services. Kruk et al. (2018), for example, associated deficiencies in healthcare resources with weaknesses in the quality and readiness of health facilities. Similarly, Campbell and Graham (2016) emphasized that limitations in healthcare infrastructure and resources may contribute to delays in diagnosis, treatment, and referral. These findings support the view that resource readiness is an important condition for effective maternal healthcare delivery.

The literature further indicates that resource adequacy involves more than simply having equipment available. Functionality, maintenance, replenishment, procurement, and timely access to supplies are also important. Equipment that is unavailable, defective, poorly maintained, or inappropriate for the required service may be practically equivalent to having no equipment at all. Likewise, stock-outs of medicines and consumable supplies can affect emergency preparedness and service continuity. Thus, the availability of resources should be considered together with the capacity of facilities to maintain and manage them.

In maternal healthcare, the importance of supplies and equipment varies across the continuum of care. Prenatal services require basic diagnostic and monitoring equipment, while intrapartum services require functional delivery equipment, infection-prevention materials, emergency medicines, and newborn resuscitation equipment. Postnatal services likewise require appropriate supplies for maternal and newborn assessment and care. The availability of these resources therefore supports the delivery of the major maternal health service dimensions examined in the present study.

In the Philippine setting, the availability of essential supplies and functional equipment is linked to the implementation of national maternal and newborn health standards. Department of Health policies and facility requirements provide guidance concerning the readiness of birthing facilities, including staffing, infrastructure, equipment, supplies, infection prevention, and emergency preparedness. BEmONC requirements are particularly relevant because facilities providing emergency obstetric and newborn care need appropriate equipment, medicines, trained personnel, and referral mechanisms to respond to complications.

However, the Philippine literature also suggests that the existence of national standards does not necessarily mean that all facilities have the same level of operational readiness. Differences in local government resources, procurement processes, facility conditions, staffing, geographic location, and maintenance capacity may affect the actual availability of supplies and equipment. These variations are especially relevant in rural and geographically isolated communities where access to replacement supplies, technical support, and emergency referral resources may be more difficult.

Another important concern is the relationship between resource limitations and healthcare workers' ability to perform their responsibilities. When essential supplies or equipment are unavailable, healthcare workers may have to adjust procedures, delay certain interventions, refer patients, or work within limited alternatives. While healthcare workers may develop coping strategies, such adaptations do not necessarily substitute for adequate facility readiness. This highlights the need to examine resource constraints from the perspective of the healthcare workers who directly experience these operational conditions.

The literature also suggests that financial limitations and inadequate medical resources are interconnected. Insufficient or delayed funding may affect procurement, equipment maintenance, facility improvement, transportation, and replenishment of essential supplies. Consequently, inadequate supplies and equipment should not be viewed as an isolated facility problem but as an operational issue that may involve financing, procurement, management, and local health-system capacity.

Synthesis

The reviewed literature generally agrees that adequate medical supplies and functional equipment are necessary for the safe and effective delivery of maternal healthcare services. Across the literature, resource availability is associated with facility readiness, emergency preparedness, timely intervention, infection prevention, and the capacity of healthcare workers to perform essential maternal and newborn care. The literature also indicates that shortages can result in delays, increased referrals, limitations in service provision, and difficulties in responding to obstetric and newborn emergencies.

At the same time, the literature shows that resource adequacy is multidimensional. The issue is not limited to whether an item is physically present in a facility. Availability, functionality, maintenance, replenishment, procurement, and timely access are equally relevant. This suggests that assessing medical supplies and equipment should consider the operational experiences of healthcare workers rather than focusing solely on the existence of inventories or facility infrastructure.

The literature further indicates that resource limitations are influenced by broader organizational conditions, including financial capacity, procurement systems, local government support, maintenance mechanisms, and geographic accessibility. Thus, shortages of supplies and equipment may reflect interconnected health-system and facility-level constraints. However, the reviewed literature provides limited evidence regarding how these specific constraints are experienced by health care workers in public lying-in clinics at the local level. In the Philippine context, national policies and Department of Health standards establish expectations for the availability of appropriate equipment, medicines, supplies, and emergency resources in birthing facilities. Nevertheless, differences in local resources and facility capacity may result in variations in implementation. While Philippine studies have documented resource-related challenges in rural healthcare settings, there remains limited localized evidence specifically describing the experiences of healthcare workers in selected public lying-in clinics in Zambales, particularly in relation to the availability, functionality, procurement, maintenance, and adequacy of supplies and equipment needed for maternal health service delivery.

The present study addresses this gap by examining inadequate medical supplies and equipment as one of the major issues encountered by healthcare workers in selected public lying-in clinics in Zambales. The study focuses on the reported operational experiences of health care workers and considers resource adequacy as part of the broader conditions affecting maternal health service delivery. It does not attempt to establish that inadequate supplies and equipment directly cause maternal or neonatal outcomes. Rather, it seeks to provide descriptive local evidence regarding resource-related challenges that may be considered in developing appropriate interventions for improving facility readiness, resource allocation, equipment maintenance, and the sustainability of maternal health services.

Weak Health Information Systems

Weak health information systems have become one of the major challenges affecting healthcare service delivery, particularly in maternal healthcare programs. Health information systems serve as the foundation of healthcare planning, monitoring, evaluation, and decision-making. In maternal healthcare, accurate, timely, and reliable information is essential for monitoring maternal conditions, tracking pregnancy outcomes, evaluating healthcare programs, and improving service delivery. According to the World Health Organization (WHO, 2022), health information systems are among the six essential building blocks of an effective healthcare system because they provide data necessary for evidence-based decision-making and healthcare management.

A health information system refers to the collection, processing, storage, analysis, and dissemination of health-related information used to support healthcare services and management. These systems include patient records, health reports, disease surveillance systems, registries, databases, and reporting mechanisms. In maternal healthcare, health information systems provide data regarding prenatal consultations, delivery outcomes, maternal complications, postnatal services, and newborn health.

The World Health Organization defines health information systems as mechanisms that generate, analyze, and utilize information to improve healthcare services and promote population health. Reliable health information allows healthcare providers and policymakers to monitor health conditions, allocate resources, and evaluate healthcare programs.

Weak health information systems may result in inaccurate data, incomplete records, delayed reporting, poor communication, and ineffective healthcare planning. These deficiencies can negatively affect maternal healthcare services and contribute to poor health outcomes.

Globally, many developing countries continue to experience challenges in health information management. According to WHO (2021), weak information systems limit the ability of healthcare organizations to monitor health indicators and implement effective interventions. Inaccurate data may compromise healthcare planning and reduce the effectiveness of maternal health programs.

Several studies have emphasized the importance of strong health information systems. AbouZahr and Boerma (2018) reported that reliable health data are essential for monitoring maternal mortality, evaluating

healthcare programs, and improving maternal health outcomes. Their study highlighted the importance of strengthening health information systems to support healthcare decision-making.

Similarly, Lippeveld et al. (2017) emphasized that quality healthcare depends on accurate and timely information. Health information systems support patient management, program monitoring, and health care administration.

In maternal healthcare, healthcare providers collect large amounts of information throughout pregnancy, labor, delivery, and the postpartum period. Prenatal records include maternal history, laboratory results, risk assessments, and clinical findings. Labor records document delivery outcomes, interventions, and complications. Postpartum records monitor maternal recovery and newborn health.

Accurate documentation contributes to continuity of care. Healthcare providers use patient records to monitor health conditions, identify risk factors, and make appropriate clinical decisions. Missing or incomplete information may result in delayed interventions or inappropriate treatment.

Maternal mortality surveillance depends heavily on reliable health information systems. The Maternal and Neonatal Death Surveillance and Response (MND SR) program requires accurate documentation and reporting to identify the causes of maternal deaths and develop preventive interventions.

According to WHO (2022), weak health information systems contribute to underreporting of maternal deaths and inaccurate health statistics. Incomplete data may prevent healthcare organizations from identifying healthcare problems and implementing appropriate solutions.

Healthcare reporting systems also support public health programs. Maternal health indicators such as prenatal care coverage, facility-based deliveries, maternal mortality rates, and postnatal care utilization provide important information for healthcare planning.

The Department of Health in the Philippines has established health information systems to monitor maternal and child health programs. Healthcare facilities are required to submit reports regarding maternal services, pregnancy outcomes, and health indicators.

However, several challenges continue to affect information systems in healthcare facilities. Delayed reporting, incomplete records, inaccurate data, and insufficient training may compromise data quality. Healthcare workers often experience difficulties balancing documentation requirements and clinical responsibilities. According to Aqil et al. (2019), healthcare workers frequently encounter documentation burdens that increase workloads and reduce the time available for patient care. Excessive reporting requirements may contribute to incomplete documentation and delayed submissions.

Manual record systems remain common in many healthcare facilities, particularly in rural areas. Paper-based records may be lost, damaged, or difficult to retrieve. Storage limitations and filing problems may also affect record management.

Electronic health information systems have been introduced to improve healthcare documentation and reporting. Electronic medical records facilitate data storage, retrieval, analysis, and reporting. These systems improve data quality and reduce documentation errors.

According to WHO (2021), digital health technologies contribute to stronger healthcare systems by improving information accessibility and supporting evidence-based decision-making. Electronic systems allow healthcare providers to access patient information quickly and generate reports efficiently. Despite these advantages, implementing electronic systems presents several challenges. Financial limitations, inadequate infrastructure, poor internet connectivity, and limited technical skills may affect technology adoption, particularly in rural healthcare facilities.

Several studies have demonstrated the benefits of electronic health records. Fraser et al. (2017) found that digital systems improved documentation accuracy, reduced errors, and enhanced healthcare efficiency. Healthcare providers using electronic systems demonstrated better information management.

Data quality remains an important concern in health information systems. Data must be accurate, complete, timely, and reliable. Poor-quality data may lead to incorrect decisions and ineffective healthcare programs.

Supportive supervision contributes significantly to improving health information systems. Supervisors review reports, monitor documentation practices, and provide technical assistance to healthcare workers. Regular audits help identify errors and improve data quality.

Training and capacity building are also essential. Healthcare workers require competencies in documentation, reporting procedures, data management, and information analysis. Continuing education programs strengthen these skills and improve information quality.

The Department of Health regularly conducts monitoring activities to assess the performance of health information systems. Healthcare facilities receive guidance regarding reporting standards and documentation requirements.

Confidentiality and data privacy are important considerations in health information management. Healthcare institutions must protect patient information from unauthorized access and ensure compliance with privacy regulations. The Data Privacy Act of 2012 provides guidelines for protecting health information in the Philippines.

Several Philippine studies have identified weaknesses in healthcare information systems. Dela Cruz et al. (2020) reported problems related to incomplete records, delayed reports, and insufficient training among healthcare workers. These issues affected healthcare monitoring and program evaluation. Similarly, Santos and Reyes (2021) found that healthcare facilities in rural communities experienced difficulties maintaining accurate records because of staffing shortages and heavy workloads. Their study recommended strengthening documentation systems and providing additional training.

Communication systems also form part of health information systems. Effective communication among healthcare providers facilitates referrals, consultations, and patient management. Weak communication systems may contribute to delays in treatment and poor coordination.

Healthcare planning depends on reliable information. Government agencies use maternal health data to allocate resources, develop programs, and establish healthcare priorities. Inaccurate information may result in ineffective interventions and inefficient use of resources.

The COVID-19 pandemic further highlighted the importance of strong health information systems. Healthcare organizations relied heavily on timely information to monitor cases, allocate resources, and maintain essential healthcare services.

The World Health Organization advocates strengthening health information systems to support universal health coverage and improve healthcare outcomes. Reliable information promotes accountability, quality improvement, and evidence-based healthcare.

Public lying-in clinics depend on effective health information systems to monitor maternal services, document patient information, and report healthcare outcomes. Midwives and healthcare workers rely on accurate records to provide safe and continuous maternal care.

The present study includes weak health information systems as one of the major issues affecting maternal health service delivery in public lying-in clinics in Zambales. Assessing information system challenges may provide valuable information regarding documentation practices, reporting systems, data quality, and healthcare management. The findings may serve as a basis for developing appropriate interventions to strengthen monitoring and record-keeping practices and enhance maternal health service delivery in the selected public lying-in clinics in Zambales.

Synthesis – Weak Health Information Systems

The reviewed research literature generally agrees that strong health information systems are essential to effective maternal health service delivery because they support accurate documentation, continuity of care, monitoring, reporting, clinical decision-making, and health program evaluation. Studies by AbouZahr and Boerma (2018) and Lippeveld et al. (2017) emphasize that accurate, complete, and timely health information enables healthcare providers and administrators to identify maternal health risks, monitor service utilization, and make evidence-based decisions. Similarly, the literature on digital health systems indicates that electronic records can

improve the accessibility, accuracy, and efficiency of health information management. Thus, there is broad agreement that the quality of maternal health services is closely linked to the quality of information generated and maintained by healthcare facilities.

However, the literature also indicates that the existence of a health information system does not necessarily guarantee reliable information. Studies have identified persistent problems involving incomplete documentation, delayed reporting, excessive paperwork, inadequate training, weak supervision, and limited technological resources. Aqil et al. (2019), for example, highlighted the documentation burden experienced by healthcare workers, suggesting that reporting requirements may compete with time needed for direct patient care. Likewise, the literature on electronic systems recognizes that digitalization may improve information management but may also introduce challenges related to infrastructure, internet connectivity, financial resources, technical capacity, and user readiness. These findings suggest that weaknesses in health information systems are not limited to the absence of technology; they may also arise from human-resource, organizational, infrastructure, and procedural constraints.

The Philippine literature and policy context further demonstrate the importance of reliable health information for maternal healthcare. Health facilities are required to document and report maternal and newborn health information for monitoring, program implementation, and health planning. However, the literature cited in this study indicates that rural and resource-constrained facilities may continue to experience incomplete records, delayed reports, staffing limitations, and insufficient training. These challenges are particularly relevant to public lying-in clinics because healthcare workers may simultaneously perform clinical, administrative, documentation, and reporting responsibilities. Consequently, weaknesses in record-keeping and reporting may affect not only data quality but also the continuity and monitoring of maternal health services.

Despite the available literature, a local evidence gap remains. Existing studies provide important information regarding health information systems at the global and Philippine levels, but there is limited empirical evidence specifically describing the health information system challenges experienced by healthcare workers in public lying-in clinics in Zambales. In particular, there is a need to examine how healthcare workers experience issues involving documentation, completeness and timeliness of records, reporting requirements, data management, technological resources, and communication within selected public lying-in clinics. This localized perspective is important because the availability of resources, staffing patterns, administrative arrangements, and technological capacity may differ across healthcare facilities and local government settings.

The present study addresses this gap by examining weak health information systems as one of the major issues encountered in maternal health service delivery in selected public lying-in clinics in Zambales. The study focuses on the experiences and perceptions of healthcare workers regarding monitoring, record-keeping, reporting, data management, and related information-system concerns. Consistent with the descriptive nature of the study, the research does not attempt to establish that weak information systems cause poor maternal or neonatal outcomes. Instead, it seeks to provide descriptive local evidence on the operational issues encountered by healthcare workers. The findings may serve as a basis for developing appropriate interventions to strengthen monitoring and record-keeping practices, improve information management, and support the delivery and sustainability of maternal health services in the selected public lying-in clinics in Zambales.

Financial and Resource Limitations

Financial and resource limitations are among the most significant barriers affecting the delivery of maternal healthcare services, particularly in public healthcare facilities and lying-in clinics. Adequate financial resources are essential for maintaining healthcare operations, procuring medical supplies, improving infrastructure, hiring healthcare personnel, and sustaining quality healthcare services. According to the World Health Organization (WHO, 2022), health financing is one of the six fundamental building blocks of an effective healthcare system because it determines the availability, accessibility, and quality of health services.

Healthcare financing refers to the mobilization, allocation, and utilization of financial resources to support healthcare programs and services. In maternal healthcare, financial resources are necessary to provide prenatal

consultations, labor and delivery services, postnatal care, emergency obstetric interventions, medicines, equipment, and health promotion activities. Without adequate funding, healthcare facilities may struggle to provide essential maternal services.

Globally, insufficient healthcare financing remains a major challenge, particularly in low- and middle-income countries. According to the World Health Organization (2021), many countries allocate inadequate budgets to maternal and child health programs, resulting in shortages of healthcare workers, limited medical supplies, poor infrastructure, and reduced access to healthcare services.

The United Nations Population Fund (UNFPA, 2021) reported that inadequate financial investments in maternal healthcare contribute to preventable maternal and neonatal deaths. Healthcare systems with limited resources often experience difficulties in maintaining quality services and responding to maternal emergencies. Financial limitations affect multiple aspects of maternal healthcare delivery. Healthcare facilities require funding for personnel salaries, facility maintenance, medical equipment, medicines, training programs, transportation services, and information systems. Resource shortages may compromise service quality and reduce healthcare accessibility.

According to McIntyre and Meheus (2014), health financing significantly influences healthcare utilization and patient outcomes. Their study emphasized that sufficient funding improves healthcare accessibility, strengthens service delivery, and reduces inequalities in healthcare.

Several studies have demonstrated the relationship between financial resources and maternal health outcomes. Kruk et al. (2018) found that healthcare facilities with adequate funding demonstrated better infrastructure, higher staffing levels, and improved maternal health outcomes. Their findings indicated that resource investments contribute significantly to healthcare quality.

The World Health Organization advocates universal health coverage to ensure that all individuals receive healthcare services without experiencing financial hardship. Universal health coverage includes maternal health services as essential healthcare interventions.

In the Philippines, the government has implemented several healthcare financing reforms to improve access to maternal healthcare services. The Universal Health Care Act seeks to strengthen healthcare financing and expand healthcare coverage for all Filipinos.

PhilHealth plays an important role in financing maternal healthcare services. Maternity care packages provide financial assistance for prenatal care, childbirth, and postpartum services. These benefits reduce out-of-pocket expenses and encourage healthcare utilization.

Despite these programs, financial challenges remain evident, particularly in local government units and rural healthcare facilities. Public lying-in clinics often depend on local government budgets for operational expenses, equipment procurement, and facility maintenance.

The Department of Health provides financial support through various health programs, including maternal and child health initiatives. However, budget constraints may affect the availability of resources and the implementation of healthcare programs.

According to the Philippine Institute for Development Studies (PIDS, 2020), disparities in local government resources contribute to differences in healthcare service delivery. Municipalities with limited financial capacity may experience difficulties supporting healthcare facilities.

Several Philippine studies have identified financial limitations affecting healthcare facilities. Dela Cruz et al. (2020) reported that insufficient operational budgets affected maternal healthcare services in rural communities. Healthcare workers reported shortages of supplies, equipment, and transportation resources.

Similarly, Santos and Reyes (2021) found that financial constraints limited healthcare facility improvements and affected service quality. Their study recommended increased investments in maternal healthcare programs.

Resource limitations may also affect human resource development. Training programs, continuing education, and professional development activities require financial support. Healthcare workers may experience limited opportunities for skill enhancement because of budget restrictions.

Infrastructure development depends heavily on financial resources. Healthcare facilities require adequate buildings, delivery rooms, waiting areas, water supply systems, electricity, and sanitation facilities. Poor infrastructure may compromise patient safety and healthcare quality.

Emergency referral systems also require financial support. Ambulances, fuel, communication systems, and transportation assistance facilitate timely referrals during obstetric emergencies. Resource shortages may delay referrals and increase maternal risks.

The COVID-19 pandemic further strained healthcare resources worldwide. Governments redirected funds toward pandemic response activities, affecting routine maternal healthcare programs. Healthcare facilities experienced shortages of supplies, personal protective equipment, and operational resources.

Healthcare managers frequently face challenges regarding budget allocation and resource prioritization. Limited budgets require careful decision-making to ensure that essential services remain available.

Resource mobilization strategies have been developed to address financial limitations. Partnerships with government agencies, non-government organizations, and international institutions contribute additional resources to healthcare programs.

The World Health Organization recommends increasing investments in primary healthcare and maternal health programs to improve healthcare outcomes. Sustainable financing mechanisms support healthcare system strengthening and service delivery.

Accountability and financial management are also important aspects of healthcare financing. Proper budgeting, monitoring, and resource utilization ensure that limited resources are used effectively and efficiently. Public lying-in clinics serve vulnerable populations, particularly women living in rural and geographically isolated communities. Adequate financial support enables these facilities to provide safe and quality maternal healthcare services.

The present study includes financial and resource limitations as one of the major issues affecting maternal health service delivery in public lying-in clinics in Zambales. Assessing financial challenges may provide valuable information regarding resource availability, operational constraints, and funding needs. The findings are intended to provide descriptive local evidence that may serve as a basis for developing appropriate interventions related to resource allocation, operational support, and the sustainability of maternal health service delivery in the selected public lying-in clinics in the province

Synthesis – Financial and Resource Limitations

The reviewed research literature generally agrees that adequate financial and material resources are important to the capacity of healthcare facilities to deliver accessible, safe, and continuous maternal health services. Adequate financing supports the procurement of medicines and medical supplies, maintenance of equipment and facilities, staffing, professional development, transportation, information systems, and other operational requirements. The literature therefore indicates that financial resources are not merely administrative inputs but are closely connected to the operational capacity of healthcare facilities to sustain essential maternal health services.

The literature also suggests that financial limitations are multidimensional. They may involve not only insufficient funding but also limitations in budget allocation, procurement, resource prioritization, equipment maintenance, transportation, training, and the availability of operational support. Thus, even when some financial resources are available, weaknesses in their allocation or utilization may still create difficulties in service delivery. This perspective is particularly relevant to public lying-in clinics, where the availability of resources may affect the capacity of healthcare workers to perform routine maternal care, respond to emergencies, maintain equipment, and facilitate referrals.

At the international level, the literature consistently emphasizes that inadequate financing and resource availability are more pronounced in rural and underserved settings. Limited financial capacity may contribute to

shortages of healthcare personnel, medical supplies, functional equipment, infrastructure, and transportation. However, the literature should not be interpreted as establishing a direct causal relationship between the amount of funding available and maternal health outcomes in every facility. Differences in management, resource allocation, workforce capacity, local governance, and healthcare utilization may also influence how financial resources are translated into actual services. Thus, financial availability should be considered together with the broader operational context of healthcare delivery.

In the Philippine setting, health financing reforms and government programs have sought to improve access to essential healthcare services, including maternal healthcare. The Universal Health Care Act, PhilHealth financing mechanisms, and Department of Health programs provide institutional mechanisms for supporting healthcare delivery. Nevertheless, the availability and effective utilization of resources may vary among local government units and healthcare facilities. This variation is important in rural settings where public healthcare facilities may depend substantially on local government support for operational expenses, supplies, equipment, maintenance, training, and referral-related activities.

The reviewed literature further indicates that financial limitations may interact with other operational problems identified in this study. For example, insufficient funding may contribute to inadequate medical supplies and equipment, workforce constraints, limited training opportunities, weak information systems, and difficulties in maintaining referral mechanisms. Consequently, financial and resource limitations should not be viewed as an isolated issue but as a factor that may influence several dimensions of maternal health service delivery. However, because the present study is descriptive, these relationships are considered as interrelated operational concerns rather than tested causal relationships.

Despite the available international and Philippine literature on healthcare financing, there remains a localized evidence gap concerning public lying-in clinics in Zambales. Existing literature provides broader information regarding health financing, resource disparities, and healthcare system constraints, but limited evidence specifically describes the financial and resource issues experienced by healthcare workers in selected public lying-in clinics in the province. In particular, there is a need to document healthcare workers' perceptions regarding operational funding, availability of supplies and equipment, facility maintenance, training resources, transportation and referral support, and other resource requirements.

The present study addresses this gap by examining financial and resource limitations as one of the major issues encountered in maternal health service delivery in selected public lying-in clinics in Zambales. The study focuses on the self-reported experiences of healthcare workers regarding the availability, adequacy, allocation, and operational use of financial and material resources needed to provide maternal health services. It does not seek to determine whether financial limitations cause poor maternal or neonatal outcomes. Rather, it aims to provide descriptive local evidence regarding the operational challenges encountered by healthcare workers, which may serve as a basis for developing appropriate interventions related to resource allocation, operational support, facility readiness, and the sustainability of maternal health service delivery in the selected public lying-in clinics in Zambales.

Policy Implementation and Governance Issues

Policy implementation and governance are essential components of healthcare systems because they influence the planning, organization, management, and delivery of healthcare services. In maternal healthcare, effective governance ensures that policies, programs, and standards are properly implemented to achieve desired health outcomes. According to the World Health Organization (WHO, 2022), leadership and governance constitute one of the six building blocks of healthcare systems because they provide strategic direction, accountability, and coordination.

Healthcare governance refers to the processes, structures, and mechanisms used to guide healthcare organizations and ensure accountability, transparency, and quality service delivery. Governance involves leadership, policy development, supervision, regulation, and resource management.

Policy implementation refers to the process of translating healthcare policies into actual programs, activities, and services. Effective implementation requires coordination among government agencies, healthcare institutions, local government units, and healthcare providers.

The World Health Organization emphasizes that strong governance contributes to improved healthcare quality, increased accountability, and better health outcomes. Weak governance may result in poor coordination, ineffective programs, and inadequate service delivery.

Maternal health policies guide healthcare providers in delivering safe and quality healthcare services. Policies establish standards, procedures, and responsibilities that support maternal health programs.

In the Philippines, several laws and policies support maternal healthcare services. The Responsible Parenthood and Reproductive Health Act of 2012 promote access to reproductive and maternal health services. The Universal Health Care Act seeks to strengthen healthcare delivery and improve healthcare accessibility.

The Department of Health has issued various administrative orders, guidelines, and standards related to maternal and newborn health. These policies include the Maternal, Newborn, Child Health and Nutrition Strategy, Essential Intrapartum and Newborn Care (EINC) protocols, and Basic Emergency Obstetric and Newborn Care (BEmONC) guidelines.

Despite the existence of policies, implementation challenges remain. According to WHO (2021), healthcare systems frequently encounter difficulties in translating policies into practice because of limited resources, inadequate supervision, and organizational constraints.

Several international studies have examined healthcare governance and policy implementation. Travis et al. (2016) reported that effective leadership and governance contribute to stronger healthcare systems and improved health outcomes.

Similarly, Sheikh et al. (2017) found that weak governance structures negatively affect healthcare quality, accountability, and service delivery. Their study emphasized the importance of leadership and organizational support.

Local government units play significant roles in healthcare implementation in the Philippines. Following the devolution of health services, local governments became responsible for managing healthcare facilities and implementing health programs.

However, differences in local government capacities may affect healthcare delivery. Municipalities with limited resources may experience challenges implementing healthcare programs and maintaining healthcare facilities.

The Department of Health provides technical assistance, supervision, and monitoring to support policy implementation. Nevertheless, healthcare facilities may still experience difficulties complying with standards because of operational limitations.

Supervision and monitoring are essential components of governance. Regular monitoring activities evaluate program implementation, identify problems, and promote accountability. Healthcare administrators provide guidance and support to healthcare workers.

According to Bossert and Mitchell (2018), supportive supervision improves employee performance and enhances healthcare quality. Effective supervision ensures compliance with policies and promotes continuous improvement.

Communication and coordination among stakeholders also influence policy implementation. Healthcare providers, administrators, and government agencies must collaborate to achieve healthcare goals.

Several Philippine studies have identified governance challenges affecting healthcare services. Dela Cruz et al. (2020) reported that inconsistent implementation of policies affected healthcare operations and service delivery. Similarly, Reyes and Santos (2021) found that administrative limitations and inadequate supervision contributed to implementation difficulties in rural healthcare facilities.

Political factors may also influence healthcare programs. Changes in leadership, priorities, and budget allocations may affect program continuity and resource availability.

Healthcare workers require adequate orientation regarding policies and guidelines. Training programs improve understanding of standards and strengthen implementation.

Accountability mechanisms support good governance. Performance evaluations, audits, and monitoring systems encourage compliance and improve organizational effectiveness.

The COVID-19 pandemic highlighted the importance of effective governance. Healthcare leaders coordinated emergency responses, resource allocation, and service continuity during the public health crisis. Transparency and stakeholder participation contribute to successful policy implementation. Community involvement strengthens healthcare programs and promotes accountability.

The World Health Organization advocates good governance characterized by transparency, participation, accountability, responsiveness, and effectiveness. Strong governance supports healthcare system strengthening and improves healthcare outcomes.

Public lying-in clinics depend on effective leadership, administrative support, and policy implementation to provide quality maternal healthcare services. Governance influences staffing, resource allocation, supervision, and service delivery.

The present study includes policy implementation and governance issues as one of the major factors affecting maternal health service delivery in public lying-in clinics in Zambales. Assessing governance challenges may provide valuable information regarding leadership, supervision, policy compliance, and administrative support. The findings may serve as a basis for strengthening healthcare governance and improving maternal healthcare services within the province.

The reviewed conceptual and research literature highlight that maternal health service delivery in birthing facilities is a multidimensional process influenced by various interrelated factors. Both global standards from the World Health Organization and national policies from the Department of Health emphasize the importance of providing accessible, quality, and continuous maternal healthcare services across prenatal, intrapartum, and postnatal stages (WHO, 2016; DOH, 2016).

The literature consistently identifies key service areas—prenatal care, intrapartum care, postnatal care, monitoring systems, and compliance with standards—as essential components of effective maternal health service delivery. However, empirical studies reveal that the actual implementation of these services is often affected by workforce constraints, inadequate resources, weak health information systems, and gaps in policy enforcement (WHO, 2022; UNFPA, 2021).

Moreover, while existing studies provide insights into maternal health outcomes and healthcare systems, there is limited research focusing on the actual delivery of services at the facility level, particularly in public lying-in clinics. There is also a lack of localized studies examining the operational conditions and experiences of health workers, who play a critical role in service delivery.

These gaps call for the undertaking of the current research that will seek to assess the provision of maternal health services in public lying-in clinics in Zambales, as well as to explore problems experienced by health professionals, and provide solutions to address these gaps in maternal health services.

Synthesis-Policy Implementation and Governance Issues

The reviewed conceptual and research literature consistently recognizes policy implementation and governance as important components of maternal health service delivery. The literature agrees that effective leadership, supervision, coordination, accountability, monitoring, and administrative support are necessary to translate national health policies and standards into actual healthcare services. In maternal healthcare, the existence of policies alone is insufficient; their effective implementation at the facility level depends on the capacity of healthcare organizations and frontline providers to understand, apply, monitor, and comply with established guidelines and procedures.

The literature further indicates that governance challenges may arise from differences in administrative capacity, available resources, staffing, supervision, communication, and local priorities. Although national policies and standards provide a common framework for maternal healthcare, their implementation may vary across

healthcare facilities and local government settings. This is particularly relevant in public lying-in clinics, where healthcare workers operate within local health systems and depend on administrative support, resource allocation, supervision, and coordination with other health authorities.

In the Philippine context, the implementation of maternal health policies involves the Department of Health, local government units, healthcare administrators, and frontline healthcare workers. The devolution of health services has increased the role of local governments in managing healthcare facilities and implementing health programs. Consequently, differences in local government capacity and administrative support may influence how policies and standards are implemented at the facility level. However, the literature provided does not sufficiently describe how these governance mechanisms are experienced by healthcare workers specifically in public lying-in clinics in Zambales.

A local research gap therefore remains regarding the operational governance issues encountered by healthcare workers in selected public lying-in clinics in the province. In particular, there is limited localized evidence describing concerns related to policy dissemination, supervision, administrative support, coordination, monitoring, and implementation of maternal healthcare policies and protocols from the perspective of the healthcare workers directly involved in service delivery.

The present study addresses this gap by examining policy implementation and governance issues as one of the major operational concerns affecting maternal health service delivery in selected public lying-in clinics in Zambales. The study focuses on the self-reported experiences of healthcare workers regarding policy implementation, supervision, administrative support, coordination, monitoring, and compliance. Since the study employs a descriptive quantitative design, it does not establish a causal relationship between governance issues and maternal or neonatal outcomes. Rather, it seeks to provide descriptive local evidence that may serve as a basis for developing appropriate interventions to strengthen policy implementation, governance, and the delivery of maternal health services in the selected public lying-in clinics.

Overall Synthesis of the Conceptual and Related Literature

The reviewed conceptual and related literature consistently establishes that maternal health service delivery is a multidimensional process that requires the availability of competent healthcare workers, adequate resources, reliable information systems, effective monitoring, compliance with established standards, and supportive governance. International organizations, particularly the World Health Organization, emphasize that quality maternal healthcare should be accessible, safe, effective, timely, efficient, equitable, and people-centered. Similarly, Philippine health policies and standards provide guidelines intended to ensure the delivery of appropriate maternal and newborn healthcare services at different levels of the health system.

The literature generally agrees that maternal health service delivery encompasses essential components across the continuum of care, particularly prenatal care, intrapartum care, postnatal care, monitoring and record-keeping, and compliance with standards and protocols. These components are interconnected, as effective monitoring and documentation support continuity of care, compliance with clinical standards promotes patient safety, and appropriate prenatal, delivery, and postnatal services contribute to the provision of comprehensive maternal healthcare. The literature further indicates that the quality of these services is influenced not only by clinical practices but also by the organizational and operational conditions in which healthcare workers perform their responsibilities.

The reviewed literature also demonstrates substantial agreement regarding the operational issues that may affect maternal health service delivery. Workforce constraints, including inadequate staffing, heavy workloads, limited training opportunities, and retention difficulties, may affect the capacity of healthcare providers to deliver services consistently. Similarly, inadequate medical supplies and equipment may limit the ability of healthcare workers to conduct assessments, manage routine deliveries, respond to emergencies, and provide appropriate maternal and newborn care. Weak health information systems and inadequate monitoring and record-keeping may affect the availability, accuracy, and timeliness of information needed for clinical decision-making, reporting, planning, and program evaluation.

Financial and resource limitations are likewise identified as important operational concerns. Adequate financing is necessary for staffing, procurement of medicines and supplies, equipment maintenance, infrastructure improvement, training, transportation, and information systems. The literature suggests that limitations in financial resources may interact with other operational concerns, such as workforce shortages, equipment deficiencies, and weak information systems. Thus, maternal health service delivery should be viewed as a system in which different components influence and support one another rather than as separate activities.

The literature further emphasizes that compliance with standards and effective policy implementation depend on organizational support and governance. The existence of national laws, Department of Health policies, administrative orders, clinical protocols, and licensing requirements provides an important framework for maternal healthcare delivery. However, the literature indicates that the presence of policies does not automatically guarantee consistent implementation at the facility level. Supervision, leadership, communication, policy dissemination, monitoring, accountability, resource availability, and the capacity of healthcare workers to understand and apply established standards are also important considerations.

In the Philippine setting, national policies and health programs provide a framework for maternal and newborn healthcare delivery. However, healthcare facilities operate within different local contexts and may vary in terms of staffing, financial resources, equipment, information systems, administrative support, and implementation capacity. Public lying-in clinics, particularly those serving rural communities, may therefore experience operational conditions that are different from those described in broader national or international literature. The reviewed literature provides substantial information about maternal healthcare systems and health outcomes, but there is comparatively limited evidence describing the facility-level operational issues experienced by healthcare workers in public lying-in clinics, particularly in the Province of Zambales.

A specific local research gap is therefore evident. While existing literature discusses the importance of maternal health services and identifies common healthcare system challenges, limited localized evidence is available regarding how healthcare workers in selected public lying-in clinics in Zambales perceive the actual delivery of maternal health services and the operational issues they encounter. In particular, there is a need to examine the interconnected concerns involving workforce, medical supplies and equipment, health information systems, financial and resource limitations, and policy implementation and governance, while also assessing the major areas of maternal health service delivery.

The present study addresses this gap by assessing the delivery of maternal health services in selected public lying-in clinics in Zambales, particularly in terms of prenatal care, intrapartum care, postnatal care, monitoring and record-keeping, and compliance with standards and protocols. It also examines the major issues encountered by healthcare workers, including workforce constraints, inadequate medical supplies and equipment, weak health information systems, financial and resource limitations, and policy implementation and governance issues.

Importantly, the present study is descriptive in nature and is based on the self-reported perceptions of healthcare workers. It does not attempt to establish causal relationships between the identified issues and maternal or neonatal outcomes. Rather, it seeks to describe the extent of maternal health service delivery and the operational issues encountered by healthcare workers in the selected public lying-in clinics. The findings are intended to provide descriptive local evidence that may serve as a basis for developing appropriate interventions to address identified gaps, strengthen service delivery, and support the improvement and sustainability of maternal healthcare services in selected public lying-in clinics in Zambales.

Research Design

The study employed a descriptive survey research design, which is a quantitative approach used to describe the existing conditions, characteristics, and perceptions of a defined population without manipulating variables. In this study, a researcher-developed survey questionnaire was administered to healthcare providers to assess their perceptions of the extent of maternal health service delivery and the issues encountered in selected public lying-in clinics in Zambales.

The study utilized a researcher-developed survey questionnaire to gather quantitative data from healthcare providers directly involved in maternal health service delivery. The survey focused on the major dimensions of maternal health service delivery, including prenatal care, intrapartum care, postnatal care, monitoring and record-keeping, and compliance with standards and protocols. It also assessed the issues encountered by healthcare providers in relation to workforce constraints, inadequate medical supplies and equipment, weak health information systems, financial and resource limitations, and policy implementation and governance issues.

The descriptive survey research design was appropriate because the study did not involve the manipulation of variables or the administration of an intervention. Instead, it described the existing conditions and reported experiences of healthcare providers based on the data gathered through the survey questionnaire.

Research Locale

The research is done at lying-in clinics operating under the public health system and found within the Province of Zambales particularly in the municipalities of Cabangan, San Felipe, and San Antonio. The reason for choosing these municipalities is that there are lying-in clinics being operated by them which serve as maternal health facilities in their areas.

The Zambales Province was selected as the study area because of the importance of the role played by the public lying-in clinics in providing maternal health services in the province. It is important particularly in the rural and coastal communities where access to tertiary hospitals and specialist obstetric services might not be possible. The lying-in clinics will provide services such as prenatal care, normal delivery services, post-natal care, neonatal care, maternal counseling services, and referral services.

The maternal health situation in the province and the Central Luzon region further justifies the selection of Zambales. According to data from the Philippine Statistics Authority, Central Luzon recorded approximately 204 maternal deaths in 2023. Among the region's provinces, Zambales accounted for about 11.3% of maternal deaths and ranked fourth (4th) in maternal mortality, behind Bulacan, Nueva Ecija, and Pampanga. Although Zambales is not among the provinces with the highest maternal mortality nationwide, its share of the regional maternal mortality burden indicates that maternal health concerns remain significant in the province.

Moreover, the province continues to record substantial numbers of live births annually, reflecting a continuing demand for maternal healthcare services. Cases of maternal morbidity associated with complications such as postpartum hemorrhage, hypertension during pregnancy, infections, and delayed referrals continue to affect maternal healthcare outcomes, particularly in geographically isolated communities.

The geographically dispersed municipalities of Zambales, including coastal and remote barangays, create challenges in healthcare accessibility, transportation, emergency referral systems, and the availability of healthcare resources. Because many pregnant women rely primarily on nearby public lying-in clinics for maternal healthcare services, the operational conditions and service delivery capabilities of these facilities become highly important in ensuring safe pregnancy and childbirth outcomes.

Furthermore, the selected municipalities of Cabangan, San Felipe, and San Antonio represent different healthcare service environments within the province, allowing the study to capture diverse operational realities and maternal health service delivery conditions. These conditions justify assessing maternal health service delivery in public lying-in clinics and identifying issues encountered by health workers to develop appropriate interventions that may improve and sustain maternal healthcare services in the Province of Zambales.

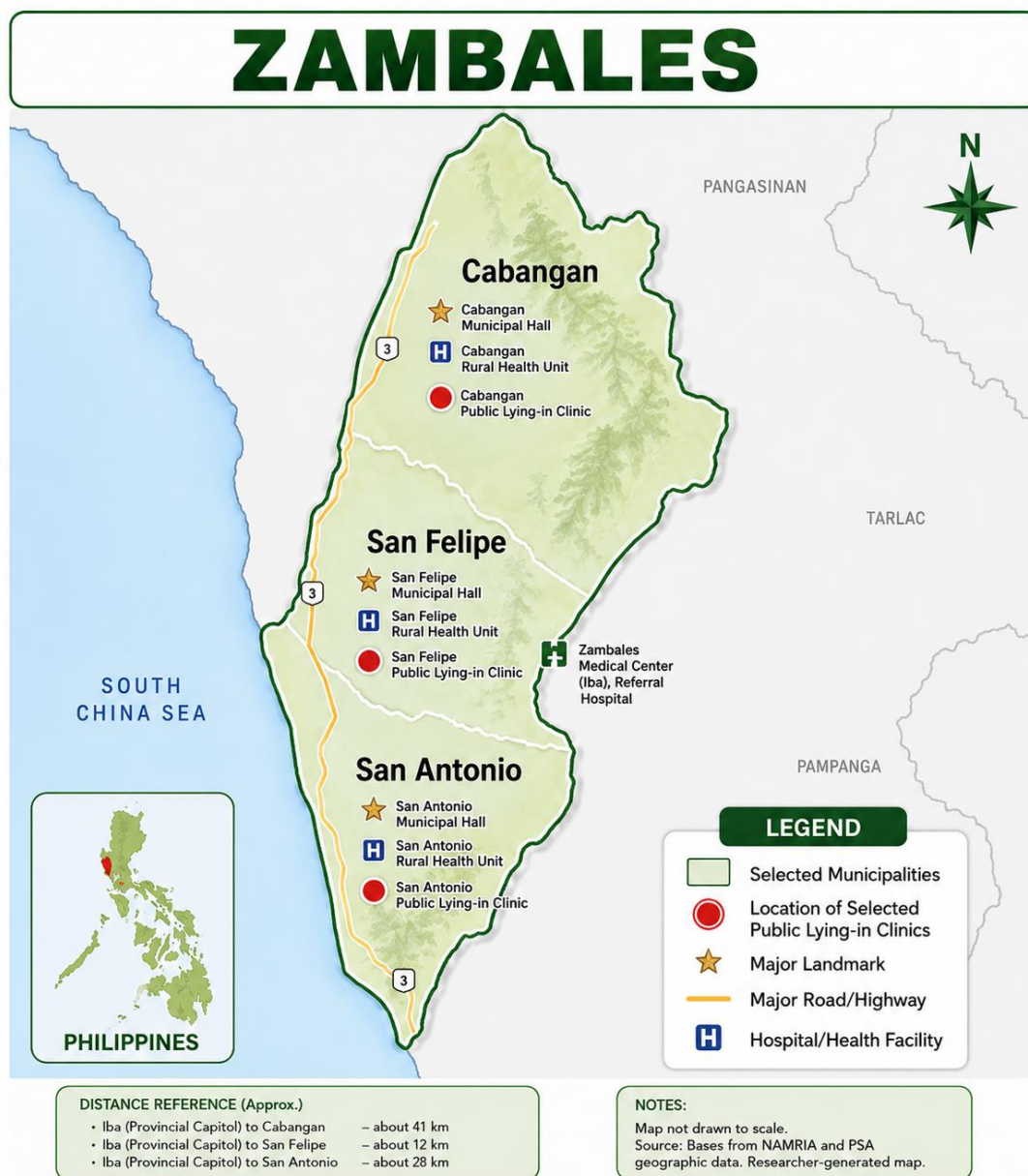


Figure 2: Locale of the Study

Respondents of the Study

The respondents of the study consisted of twenty-eight (28) healthcare providers from the selected public lying-in clinics in the municipalities of Cabangan, San Felipe, and San Antonio, Zambales. The respondents included nurses, midwives, and clinic in-charges who were directly involved in the delivery of maternal health services.

The study employed total enumeration sampling, wherein all healthcare providers who met the established inclusion criteria in the selected public lying-in clinics were included in the study. The use of total enumeration was appropriate because the target population was relatively small and manageable, allowing the researcher to include all qualified healthcare providers rather than selecting only a sample from the population.

Table 1. Distribution of Respondents by Municipality and Professional Category

Municipality/Clinic	Nurse	Midwife/Clinic In-Charge	Total
Cabangan	2	6	8
San Felipe	3	6	9
San Antonio	4	7	11
Total	9	19	28

Inclusion and Exclusion Criteria

The study included all qualified healthcare workers assigned to the selected public lying-in clinics in Cabangan, San Felipe, and San Antonio, Zambales, who were directly involved in maternal health service delivery. These included qualified nurses, midwives, and clinic in-charges who had sufficient knowledge and experience regarding the delivery and operations of maternal health services and who voluntarily consented to participate in the study.

The study excluded personnel who were not directly involved in maternal health service delivery, personnel who were not assigned to the selected public lying-in clinics, healthcare workers who were on leave or unavailable during the data collection period, and those who did not meet the established qualifications. Personnel who declined to participate or did not provide informed consent were also excluded.

Research Instrument

The researcher-developed survey questionnaire was utilized as the primary data-gathering instrument to collect the necessary information from healthcare workers assigned to the selected public lying-in clinics in Zambales. The questionnaire was developed based on the objectives of the study, the Statement of the Problem, related literature and studies, and relevant maternal health standards and policies issued by the Department of Health (DOH) and the World Health Organization (WHO). The instrument was designed to ensure alignment with the variables of the study and to obtain relevant data regarding maternal health service delivery and the issues encountered in public lying-in clinics.

The questionnaire consisted of three (3) parts. Part I – Respondents' Demographic Profile gathered information on the respondents' age, sex, professional role or position, educational attainment, and length of service in maternal health services. Part II – Extent of Maternal Health Service Delivery assessed the extent of maternal health service delivery in public lying-in clinics as perceived by healthcare workers. It covered five major service areas: Prenatal Care, Intrapartum (Delivery) Care, Postnatal Care, Monitoring and Record-Keeping, and Compliance with Department of Health Standards and Protocols. Part III – Issues Encountered in Maternal Health Service Delivery identified the issues and challenges encountered by healthcare workers in delivering maternal health services. The indicators covered Workforce Constraints, Inadequate Medical Supplies and Equipment, Weak Health Information Systems, Financial and Resource Limitations, and Policy Implementation and Governance Issues.

Following the development of the questionnaire, prior to the pilot testing, the researcher-developed questionnaire was subjected to content validation to establish the relevance, clarity, and appropriateness of the items in relation to the objectives and variables of the study. The instrument was reviewed by three (3) experts with relevant knowledge and experience in maternal health, public health research, and research methodology. The experts evaluated the questionnaire based on the relevance and appropriateness of each item to the objectives and dimensions of maternal health service delivery and the issues encountered by healthcare workers. The researchers' validation ratings were summarized to determine the content validity of the instrument. The item-level and scale-level content validity measures were distinguished from the overall validation rating mean. The

validation rating mean reflected the experts' overall assessment of the instrument, while the Content Validity Index (CVI) focused on the proportion of items judged relevant based on the established criterion.

For the CVI computation, the ratings assigned by the three (3) experts to each questionnaire item were examined, and the number of experts who rated an item as relevant was divided by the total number of experts. The resulting item-level content validity index (I-CVI) values were then reviewed to determine whether the individual items met the prescribed criterion. A scale-level content validity index (S-CVI) was likewise obtained to provide an overall assessment of the content validity of the instrument. Items identified by the experts as requiring clarification, revision, or improvement were revised accordingly before the administration of the pilot test. This process helped ensure that the questionnaire items were understandable, relevant, and aligned with the objectives of the study.

Pilot Testing and Reliability of the Instrument

Following content validation and revision of the questionnaire, a pilot test was conducted to assess the preliminary reliability and clarity of the instrument before its administration to the actual respondents. The pilot test was conducted among eight (8) health practitioners from a pilot birthing facility in Subic. The pilot respondents were selected from a facility outside the selected public lying-in clinics included in the actual study to minimize the possibility of familiarity with the pilot questionnaire influencing the responses of the actual study participants.

The pilot respondents completed the questionnaire intended for the actual study. Their responses were encoded and subjected to reliability analysis using JASP. Cronbach's alpha was computed separately for the five (5) service-delivery dimensions under Part II and the five (5) issue categories under Part III. The resulting coefficients were: Prenatal Care ($\alpha = 0.9583$), Intrapartum (Delivery) Care ($\alpha = 0.1282$), Postnatal Care ($\alpha = 0.8774$), Monitoring and Record-Keeping ($\alpha = 0.8003$), Compliance with DOH Standards and Protocols ($\alpha = 0.8061$), Workforce Constraints ($\alpha = 0.9268$), Inadequate Medical Supplies and Equipment ($\alpha = 0.7508$), Weak Health Information Systems ($\alpha = 0.9663$), Financial and Resource Limitations ($\alpha = 0.9395$), and Policy Implementation and Governance Issues ($\alpha = 0.9352$).

The pilot test served as a preliminary assessment of the consistency of responses to the questionnaire items and provided an opportunity to identify items that might require further clarification or revision. The pilot respondents were not included in the actual sample of the study.

The results of the pilot reliability analysis were interpreted with caution because the pilot test involved only eight (8) health practitioners. The small pilot group limits the stability and generalizability of the reliability coefficients and means that the Cronbach's alpha values should be regarded as preliminary evidence of internal consistency rather than as definitive proof of the reliability of the instrument in the broader target population. Nevertheless, the pilot testing regarding the functioning and internal consistency of the questionnaire rather than definitive evidence that the instrument is uniformly reliable in the broader target population.

It should also be emphasized that Cronbach's alpha measures the internal consistency of the items within a scale and does not by itself establish the validity of the instrument. Content validity was addressed separately through expert review and CVI assessment. Thus, the validation and reliability procedures were treated as complementary steps in establishing the appropriateness of the researcher-developed questionnaire.

Table 1. *Summary of Cronbach's Alpha Reliability Results of the Research Instrument*

Scale/Dimension	Items	No. of Items	Cronbach's Alpha	Interpretation
Prenatal Care	Q1–Q5	5	0.9583	Excellent

Intrapartum (Delivery) Care	Q6–Q10	5	0.1282	Very Low / Unacceptable
Postnatal Care	Q11–Q15	5	0.8774	Good
Monitoring and Record-Keeping	Q16–Q20	5	0.8003	Good
Compliance with DOH Standards and Protocols	Q21–Q25	5	0.8061	Good
Workforce Constraints	Q26–Q30	5	0.9268	Excellent
Inadequate Medical Supplies and Equipment	Q31–Q35	5	0.7508	Acceptable
Weak Health Information Systems	Q36–Q40	5	0.9663	Excellent
Financial and Resource Limitations	Q41–Q45	5	0.9395	Excellent
Policy Implementation and Governance Issues	Q46–Q50	5	0.9352	Excellent
Entire Instrument	Q1–Q50	50	0.9580	Excellent overall internal consistency

The pilot reliability analysis showed varying levels of internal consistency across the ten subscales of the researcher-developed questionnaire. The Cronbach's alpha coefficients ranged from 0.1282 to 0.9663. Most of the subscales demonstrated acceptable to excellent internal consistency, including Prenatal Care ($\alpha = 0.9583$), Postnatal Care ($\alpha = 0.8774$), Monitoring and Record-Keeping ($\alpha = 0.8003$), Compliance with DOH Standards and Protocols ($\alpha = 0.8061$), Workforce Constraints ($\alpha = 0.9268$), Inadequate Medical Supplies and Equipment ($\alpha = 0.7508$), Weak Health Information Systems ($\alpha = 0.9663$), Financial and Resource Limitations ($\alpha = 0.9395$), and Policy Implementation and Governance Issues ($\alpha = 0.9352$). However, the Intrapartum (Delivery) Care subscale obtained a Cronbach's alpha of 0.1282, indicating very low internal consistency among Q6–Q10. This result indicates the need for careful review of the items in this subscale for clarity, consistency, and alignment with the intended construct.

The overall Cronbach's alpha of the 50-item instrument was 0.9580, indicating high overall internal consistency. However, this overall coefficient was not interpreted as evidence that every individual subscale was reliable, particularly because the Intrapartum (Delivery) Care subscale yielded a substantially lower coefficient. The reliability findings were further interpreted with caution because the pilot test involved only eight (8) health practitioners. The small pilot sample may result in unstable reliability estimates; therefore, the coefficients were considered preliminary evidence of internal consistency rather than definitive evidence of reliability for the broader target population.

Data Gathering Procedure

The researcher first obtained ethical and administrative approval from the University of Luzon Graduate School (ULGS), the Municipal Health Office, and the administrators of the selected public lying-in clinics before conducting the study. After securing the necessary permissions, the researcher coordinated with the midwives to facilitate the proper distribution of the questionnaires to the identified respondents. Informed consent was obtained from all participants prior to the administration of the research instrument, ensuring that they were fully informed of the study's purpose, significance, procedures, and the voluntary nature of their participation.

DATA GATHERING PROCEDURE

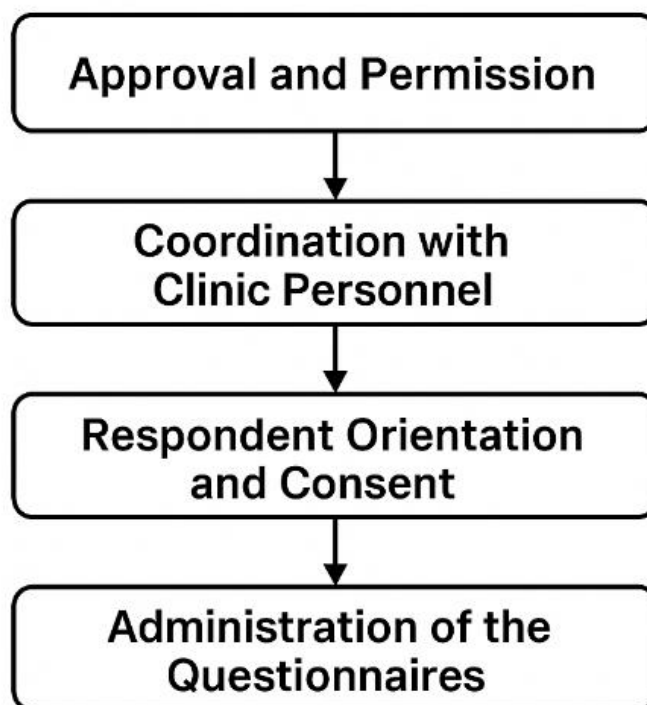


Figure 3: *Data Gathering Procedure*

The researcher personally administered the questionnaires to ensure proper guidance and clarity among respondents, and subsequently retrieved the completed instruments to guarantee completeness and accuracy of responses. All collected data were systematically encoded, organized, and prepared for statistical treatment. Thereafter, the data were forwarded to a qualified statistician for appropriate analysis. This rigorous procedure was implemented to ensure the reliability, validity, and integrity of the data in addressing the study's research objectives and questions.

Statistical Treatment

After the completed questionnaires were retrieved, the responses were carefully checked, validated, and organized to ensure the completeness and accuracy of the gathered data. The validated responses were then encoded into a data matrix for proper tabulation, analysis, and interpretation. Appropriate descriptive statistical tools were used to answer the specific problems of the study.

For the demographic profile of the respondents, including age, sex, professional role or position, educational attainment, and length of service in maternal health services, frequency counts and percentage distributions were used. Frequency referred to the number of respondents in each category, while percentage indicated the proportion of respondents belonging to a particular category relative to the total number of respondents. These statistical tools were used to describe the characteristics of the healthcare providers assigned to the selected public lying-in clinics.

To answer Subproblem No. 1, which determined the extent of maternal health service delivery in public lying-in clinics as perceived by healthcare providers, the weighted mean and composite mean were used. The weighted mean was computed for each individual indicator in the questionnaire, while the composite mean was used to summarize the weighted mean scores of the indicators under each major service area. These statistical

measures were used to determine the extent of maternal health service delivery in the following areas: Prenatal Care, Intrapartum (Delivery) Care, Postnatal Care, Monitoring and Record-Keeping, and Compliance with Department of Health Standards and Protocols.

The weighted mean was computed by multiplying the frequency of each response category by its corresponding numerical scale value, summing the products, and dividing the sum by the total number of respondents. It was expressed as:

$$wm = n \sum f_i x_i$$

where WM represents the weighted mean, f_i represents the frequency of responses for each category, x_i represents the numerical value assigned to each response category, and N represents the total number of respondents.

The composite mean was computed by obtaining the average of the weighted mean scores of all indicators belonging to a particular service area. It was expressed as:

$$CM = k \sum CM_i$$

where CM represents the composite mean, WM_i represents the weighted mean of each indicator, and k represents the number of indicators under the particular service area.

To answer Subproblem No. 2, which determined the issues encountered in maternal health service delivery, the weighted mean and composite mean were likewise used. The weighted mean was computed for each individual issue indicator, while the composite mean summarized the weighted mean scores of the indicators under each major issue category. These statistical measures were used to describe the extent to which healthcare providers encountered issues related to Workforce Constraints, Inadequate Medical Supplies and Equipment, Weak Health Information Systems, Financial and Resource Limitations, and Policy Implementation and Governance Issues.

The grand mean was used to summarize the overall assessment across the major service areas for Subproblem No. 1 and across the major issue categories for Subproblem No. 2. It was computed by obtaining the average of the composite means of the respective areas or categories. It was expressed as:

$$GM = k \sum CM_i$$

where GM represents the grand mean, CM_i represents the composite mean of each major area or category, and k represents the total number of major areas or categories.

The corresponding verbal interpretations of the weighted means, composite means, and grand means were based on the established Likert scale ranges presented in the study. For maternal health service delivery, the scale ranged from Very Low Extent (1.00–1.80) to Very High Extent (4.21–5.00). For issues encountered, the scale ranged from Never Encountered (1.00–1.80) to Always Encountered (4.21–5.00).

Only descriptive statistics were employed because the study was limited to describing the respondents' demographic characteristics, perceptions of the extent of maternal health service delivery, and issues encountered in the selected public lying-in clinics. The study did not test relationships, differences, predictors, or causal effects among variables. Therefore, inferential statistical procedures were not employed. The descriptive results served as the basis for the interpretation of findings and the formulation of the proposed Maternal Health Intervention Program.

Table 1. *Scale and Verbal Interpretation for the Extent of Maternal Health Service Delivery*
 The following Likert scales and verbal interpretations were used in interpreting the responses:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Very High Extent
4	3.41–4.20	High Extent
3	2.61–3.40	Moderate Extent
2	1.81–2.60	Low Extent
1	1.00–1.80	Very Low Extent

Table 2. *Scale and Verbal Interpretation for Issues Encountered*

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Always Encountered
4	3.41–4.20	Often Encountered
3	2.61–3.40	Sometimes Encountered
2	1.81–2.60	Rarely Encountered
1	1.00–1.80	Never Encountered

For Subproblem No. 3, the findings obtained from the assessment of maternal health service delivery and the issues encountered were used as the basis for the development of proposed interventions intended to improve and sustain the operations of public lying-in clinics in the Province of Zambales.

Only descriptive statistical procedures were employed because the study focused on describing respondents' perceptions of service delivery and reported issues. The study did not test relationships, significant differences, predictors, or causal effects among variables; therefore, inferential statistical tests were not employed. The use of descriptive statistics was consistent with the descriptive quantitative research design and the use of total enumeration.

The statistical treatment and analysis of data were conducted with the assistance of a statistician to support the accuracy of computations and appropriate interpretation of the findings. The processed data served as the basis for the presentation, analysis, and interpretation of results in Chapter IV.

Ethical Considerations

The researcher will strictly observe ethical principles and standards throughout the conduct of the study to ensure the protection of the rights, welfare, dignity, and privacy of the respondents. Before the conduct of the study, the researcher will seek approval from the University of Luzon Graduate School, the Municipal Health Offices, and the administrators of the selected public lying-in clinics in the Province of Zambales.

Informed Consent. Before the administration of the questionnaire, the researcher will fully inform the respondents regarding the purpose, nature, objectives, and significance of the study. An informed consent form will be provided and secured from all participants before they participate in the study. The respondents will be informed that their participation is entirely voluntary and that they may withdraw from the study at any time without any penalty or negative consequence.

Voluntary Participation. The respondents of this study will consist of health workers assigned to selected public lying-in clinics, including licensed midwives, nurses, and clinic in-charges directly involved in maternal healthcare services. Since the study involves healthcare professionals, the researcher will ensure that participation is non-obligatory and will not interfere with their duties, responsibilities, and delivery of healthcare services within the clinics.

Confidentiality. The questionnaire will not require the respondents to disclose personal identifying information to ensure anonymity and confidentiality. All information and responses gathered from the participants will be treated with utmost confidentiality and will be used solely for academic and research purposes. The data collected will be presented in aggregate form only to protect the identity and privacy of the respondents.

The researcher will ensure that the questionnaire items are clear, appropriate, non-discriminatory, and free from any form of psychological harm, coercion, or offensive language. The respondents will also be given adequate time to answer the questionnaire honestly and objectively based on their actual experiences in maternal health service delivery.

Data Privacy. All completed questionnaires and gathered data will be securely stored and will only be accessible to the researcher and the statistician involved in the study. After the completion of the research, all records and data will be properly archived or disposed of in accordance with institutional research policies and ethical standards.

The study will adhere to the ethical guidelines and research standards set by the University of Luzon Graduate School and other applicable research ethics protocols to ensure the integrity, credibility, and ethical conduct of the research process.

Presentation, Analysis, and Interpretation of Data

This chapter presents, analyzes, and interprets the data gathered from the twenty-eight (28) healthcare providers assigned to the selected public lying-in clinics in the municipalities of Cabangan, San Felipe, and San Antonio, Zambales. The presentation of the findings follows the sequence of the Statement of the Problem. Specifically, it presents the extent of maternal health service delivery in terms of prenatal care, intrapartum care, postnatal care, monitoring and record-keeping, and compliance with Department of Health (DOH) standards and protocols. It likewise presents the issues encountered in maternal health service delivery in terms of workforce constraints, inadequate medical supplies and equipment, weak health information systems, financial and resource limitations, and policy implementation and governance issues. Finally, the chapter concludes with the proposed Maternal Health Intervention Program, which was developed based on the findings of the study.

Table 1. Extent of Maternal Health Service Delivery in Terms of Prenatal Care

Indicators	Weighted Mean	Interpretation	Rank
Q1. Regular prenatal check-ups are provided to pregnant women.	4.36	Very High Extent	1
Q2. Maternal vital signs and fetal conditions are properly monitored.	4.32	Very High Extent	3
Q3. Pregnant women receive adequate health education and counseling.	4.36	Very High Extent	1
Q4. Risk assessment for pregnancy-related complications is regularly conducted.	4.18	High Extent	5
Q5. Referral procedures for high-risk pregnancies are effectively implemented.	4.25	Very High Extent	4
Composite Mean	4.29	Very High Extent	

Legend:

Range of Weighted Mean

4.21 – 5.00

3.41 – 4.20

2.61 – 3.40

1.81 – 2.60

1.00 – 1.80

Scale

Verbal Interpretation

5 Very High Extent

4 High Extent

3 Moderate Extent

2 Low Extent

1 Very Low Extent

Table 1 presents the respondents' assessment of the extent of maternal health service delivery in terms of prenatal care in the selected public lying-in clinics in Zambales. The five indicators obtained weighted means ranging from 4.18 to 4.36, with an overall composite mean of 4.29, interpreted as Very High Extent.

The highest-rated indicators are regular prenatal check-ups which are provided to pregnant women (Q1) and pregnant women receive adequate health education and counseling (Q3), both with a weighted mean of 4.36, interpreted as Very High Extent. Based on the respondents' perceptions, regular prenatal consultations and health education were among the most consistently implemented aspects of prenatal care. Maternal vital signs and fetal conditions are properly monitored (Q2) obtained a weighted mean of 4.32, also indicating a Very High Extent. Meanwhile, referral procedures for high-risk pregnancies (Q5) obtained 4.25, while risk assessment for pregnancy-related complications (Q4) received the lowest weighted mean of 4.18, interpreted as High Extent.

The composite mean of 4.29 indicates that prenatal care was perceived to be delivered to a Very High Extent. The result suggests that the selected clinics generally provide the major prenatal care activities included in the instrument. However, the comparatively lower rating for risk assessment indicates an area that may warrant continued attention and strengthening

The finding is consistent with the emphasis of the WHO on antenatal care as an important component of maternal health service delivery. It is also generally aligned with Department of Health standards that emphasize maternal assessment, monitoring, health education, risk identification, and referral as important components of prenatal care. These standards provide a basis for understanding the relatively high assessment obtained in the present study. From a public health perspective, the findings suggest that prenatal care represents one of the stronger areas of maternal health service delivery in the selected clinics. Nevertheless, the findings can be understood as respondents' assessments of service delivery, rather than direct measurements of clinical performance or maternal health outcomes. Strengthening risk assessment and referral practices may further support the delivery of comprehensive prenatal care.

Table 2 presents the respondents' assessment of maternal health service delivery in terms of intrapartum or delivery care. The weighted means ranged from 3.89 to 4.25, while the composite mean was 4.06, interpreted as High Extent

Table 2. *Extent of Maternal Health Service Delivery in Terms of Intrapartum (Delivery) Care*

Indicators	Weighted Mean	Interpretation	Rank
Q6. Skilled birth attendance is consistently provided during delivery.	4.25	Very High Extent	1
Q7. Infection prevention and control measures are properly observed.	3.93	High Extent	4
Q8. Delivery equipment and supplies are available and functional.	3.89	High Extent	5
Q9. Emergency referral procedures are effectively implemented.	4.18	High Extent	2
Q10. Delivery care complies with DOH maternal healthcare standards.	4.04	High Extent	3
Composite Mean	4.06	High Extent	

Legend:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Very High Extent
4	3.41–4.20	High Extent
3	2.61–3.40	Moderate Extent
2	1.81–2.60	Low Extent
1	1.00–1.80	Very Low Extent

The highest-rated indicator is skilled birth attendance is consistently provided during delivery (Q6), with a weighted mean of 4.25, interpreted as Very High Extent. This suggests that respondents generally perceived skilled attendance during delivery to be consistently provided. Emergency referral procedures (Q9) obtained 4.18, followed by compliance with DOH maternal healthcare standards (Q10) with 4.04. Infection prevention and control measures (Q7) obtained 3.93, while the lowest-rated indicator was delivery equipment and supplies are available and functional (Q8) with 3.89.

The composite mean of 4.06, interpreted as High Extent, indicates that intrapartum care is generally perceived to be implemented to a high extent. However, the relatively lower ratings for equipment and supplies and infection prevention suggest areas where continued monitoring and resource support may be appropriate. The finding is consistent with WHO and Department of Health guidance emphasizing skilled birth attendance, infection prevention, emergency preparedness, referral, and availability of essential resources during childbirth. The literature provides support for the importance of these components in safe maternal healthcare delivery.

The findings should not be interpreted as proof that all deliveries were clinically safe or that maternal and neonatal outcomes were improved, since these outcomes were not directly measured in the study. Rather, the results indicate that healthcare providers generally perceived the specified intrapartum practices to be implemented to a High Extent.

Table 3. *Extent of Maternal Health Service Delivery in Terms of Postnatal Care*

Indicators	Weighted Mean	Interpretation	Rank
Q11. Mothers receive adequate postnatal monitoring after delivery.	4.25	Very High Extent	2
Q12. Newborn care services are properly provided.	4.39	Very High Extent	1
Q13. Breastfeeding education and support are provided to mothers.	4.39	Very High Extent	1
Q14. Postpartum complications are properly managed.	4.21	Very High Extent	3
Q15. Follow-up postnatal visits are regularly conducted.	4.11	High Extent	4
Composite Mean	4.27	Very High Extent	

Legend:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Very High Extent
4	3.41–4.20	High Extent
3	2.61–3.40	Moderate Extent
2	1.81–2.60	Low Extent
1	1.00–1.80	Very Low Extent

Table 3 presents the respondents' assessment of postnatal care. The weighted means ranged from 4.11 to 4.39, with a composite mean of 4.27, interpreted as Very High Extent.

The highest-rated indicators are newborn care services are properly provided (Q12) and breastfeeding education and support are provided to mothers (Q13), both with weighted means of 4.39. These were followed by mothers receive adequate postnatal monitoring after delivery (Q11) with 4.25 and postpartum complications are properly managed (Q14) with 4.21. The lowest-rated indicator was follow-up postnatal visits are regularly conducted (Q15), with a weighted mean of 4.11, interpreted as High Extent.

The composite mean of 4.27 indicates that postnatal care was perceived to be delivered to a Very High Extent. The results suggest that newborn care, breastfeeding support, and maternal monitoring were among the more strongly perceived components of postnatal services. The comparatively lower rating for follow-up postnatal visits may indicate an area that could be further strengthened.

The finding is generally consistent with WHO recommendations regarding comprehensive postnatal care, including maternal and newborn assessment, breastfeeding support, counseling, and follow-up. Department of Health maternal and newborn care guidelines similarly emphasize appropriate postpartum and newborn care. The findings indicate a favorable perception of postnatal service delivery among the respondents. However, because the study relied on a survey of healthcare providers, the results do not directly establish the completeness or clinical effectiveness of postnatal services received by every client.

Table 4. *Extent of Maternal Health Service Delivery in Terms of Monitoring and Record-Keeping*

Indicators	Weighted Mean	Interpretation	Rank
Q16. Maternal health records are properly maintained.	4.21	Very High Extent	3
Q17. Patient information is accurately documented.	4.25	Very High Extent	2

Q18. Maternal health reports are submitted on time.	4.18	High Extent	4
Q19. Monitoring and reporting tools are effectively utilized.	4.04	High Extent	5
Q20. Confidentiality of patient records is strictly observed.	4.32	Very High Extent	1
Composite Mean	4.20	High Extent	

Legend:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Very High Extent
4	3.41–4.20	High Extent
3	2.61–3.40	Moderate Extent
2	1.81–2.60	Low Extent
1	1.00–1.80	Very Low Extent

Table 4 presents the respondents' assessment of monitoring and record-keeping practices. The weighted means ranged from 4.04 to 4.32, with a composite mean of 4.20, interpreted as High Extent.

The highest-rated indicator was confidentiality of patient records is strictly observed (Q20), which obtained a weighted mean of 4.32, interpreted as Very High Extent. This was followed by patient information is accurately documented (Q17) with 4.25 and maternal health records are properly maintained (Q16) with 4.21. Maternal health reports are submitted on time (Q18) obtained 4.18, while monitoring and reporting tools are effectively utilized (Q19) obtained the lowest weighted mean of 4.04.

The composite mean of 4.20 indicates that monitoring and record-keeping were perceived to be implemented to a High Extent. The results suggest that confidentiality, documentation, and maintenance of maternal health records were relatively strong areas. At the same time, the comparatively lower rating for monitoring and reporting tools may indicate the need for continued improvement in the use of available information and reporting mechanisms.

The finding is consistent with the WHO emphasis on health information systems and accurate documentation as important components of healthcare delivery. Proper documentation and reporting may support continuity of care, monitoring, and administrative decision-making.

However, the present study did not independently verify the accuracy or completeness of the records. Thus, the results should be interpreted as the perceptions of the respondents regarding monitoring and record-keeping practices

Table 5. Extent of Maternal Health Service Delivery in Terms of Compliance with DOH Standards and Protocols

Indicators	Weighted Mean	Interpretation	Rank
Q21. The clinic complies with DOH maternal healthcare guidelines.	4.14	High Extent	1
Q22. Standard operating procedures are consistently followed.	3.93	High Extent	3
Q23. Required maternal healthcare equipment and supplies are available.	3.93	High Extent	3
Q24. Safety protocols are regularly implemented.	4.04	High Extent	2
Q25. The clinic undergoes regular monitoring and supervision.	4.04	High Extent	2
Composite Mean	4.01	High Extent	

Legend:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Very High Extent
4	3.41–4.20	High Extent
3	2.61–3.40	Moderate Extent
2	1.81–2.60	Low Extent
1	1.00–1.80	Very Low Extent

Table 5 presents the respondents' assessment of compliance with Department of Health standards and protocols. The weighted means ranged from 3.93 to 4.14, while the composite mean was 4.01, interpreted as High Extent.

The highest-rated indicator is the clinic complies with DOH maternal healthcare guidelines (Q21), with a weighted mean of 4.14. This was followed by safety protocols are regularly implemented (Q24) and the clinic undergoes regular monitoring and supervision (Q25), both with weighted means of 4.04. The indicators concerning standard operating procedures (Q22) and required maternal healthcare equipment and supplies (Q23) both obtained 3.93, interpreted as High Extent.

The composite mean of 4.01 indicates that compliance with DOH standards and protocols is perceived to be implemented to a High Extent. The findings suggest that respondents generally perceived the selected clinics as following established maternal healthcare guidelines and procedures. However, the relatively lower ratings for standard operating procedures and equipment and supplies indicate areas that may benefit from continued monitoring and support. The findings are generally consistent with the Department of Health's emphasis on compliance with maternal healthcare standards and protocols, including appropriate clinical procedures, safety practices, equipment readiness, and supervision.

Importantly, the results represent self-reported perceptions of healthcare providers and were not based on an independent facility audit. Therefore, the findings should not be interpreted as definitive evidence that all DOH requirements were fully complied with in actual practice.

Table 6. *Summary of the Extent of Maternal Health Service Delivery of Public Lying-in Clinics in Zambales*

Service Area	Composite Mean	Interpretation	Rank
Prenatal Care	4.29	Very High Extent	1
Intrapartum Care	4.06	High Extent	4
Postnatal Care	4.27	Very High Extent	2
Monitoring and Record-Keeping	4.20	High Extent	3
Compliance with DOH Standards and Protocols	4.01	High Extent	5
Grand Mean	4.17	High Extent	

Legend:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Very High Extent
4	3.41–4.20	High Extent
3	2.61–3.40	Moderate Extent
2	1.81–2.60	Low Extent
1	1.00–1.80	Very Low Extent

Table 6 summarizes the respondents' assessment of maternal health service delivery across the five service areas. The overall grand mean was 4.17, interpreted as High Extent.

Among the five service areas, Prenatal Care obtained the highest composite mean of 4.29, interpreted as Very High Extent, followed by Postnatal Care with 4.27, also interpreted as Very High Extent. Monitoring and Record-Keeping obtained 4.20, while Intrapartum Care received 4.06. Compliance with DOH Standards and Protocols obtained the lowest composite mean of 4.01, although it remained within the High Extent category. The overall grand mean of 4.17 suggests that maternal health service delivery was perceived by the respondents to be implemented to a High Extent. This indicates that prenatal and postnatal services were relatively stronger areas, while intrapartum care and compliance with DOH standards had comparatively lower ratings.

The results are generally consistent with the concept of a continuum of maternal healthcare, in which prenatal, delivery, and postnatal services are supported by monitoring systems and adherence to established standards.

The findings should nevertheless be interpreted within the scope of the study. The grand mean reflects healthcare providers' assessments and does not independently measure actual facility performance, client satisfaction, or maternal and newborn health outcomes.

Problem 2: What issues are encountered in maternal health service delivery in public lying-in clinics in Zambales

Table 7. *Workforce Constraints*

Indicators	Weighted Mean	Interpretation	Rank
Q26. Shortage of healthcare workers affects service delivery.	3.89	Often Encountered	1
Q27. Heavy workload affects the efficiency of maternal healthcare services.	3.86	Often Encountered	2
Q28. Limited training opportunities affect service quality.	3.82	Often Encountered	3
Q29. Staff scheduling affects continuity of maternal care.	3.50	Often Encountered	5
Q30. Burnout among healthcare workers affects job performance.	3.61	Often Encountered	4
Composite Mean	3.74	Often Encountered	

Legend:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Always Encountered
4	3.41–4.20	Often Encountered
3	2.61–3.40	Sometimes Encountered
2	1.81–2.60	Rarely Encountered
1	1.00–1.80	Never Encountered

Table 7 presents the issues encountered in maternal health service delivery in terms of workforce constraints. The weighted means ranged from 3.50 to 3.89, with a composite mean of 3.74, interpreted as Often Encountered.

The most frequently encountered issue is shortage of healthcare workers affecting service delivery (Q26), with a weighted mean of 3.89. This was followed by heavy workload affecting efficiency (Q27) with 3.86 and limited training opportunities affecting service quality (Q28) with 3.82. Burnout (Q30) obtained 3.61, while staff scheduling (Q29) obtained the lowest weighted mean of 3.50. All five indicators were interpreted as Often Encountered.

The composite mean of 3.74 indicates that workforce constraints were Often Encountered by the respondents. This makes workforce-related concerns the most prominent issue category in the study. The finding is consistent with literature emphasizing the importance of adequate staffing, appropriate workload distribution, competency development, and supportive work environments in healthcare service delivery. However, the result should not be interpreted to mean that workforce constraints necessarily caused reduced service quality in the selected clinics. The present study did not test causal relationships. Instead, the findings indicate that respondents frequently experienced workforce-related challenges while simultaneously rating overall maternal health service delivery highly.

One possible explanation is that healthcare providers may have developed coping strategies, adjusted workloads, relied on teamwork, or drawn on their professional experience to maintain service delivery despite staffing constraints. However, these possible coping mechanisms were not directly measured in the present study and should therefore be considered possible explanations rather than established findings.

Table 8. *Inadequate Medical Supplies and Equipment*

Indicators	Weighted Mean	Interpretation	Rank
Q31. Essential medicines are insufficient.	3.46	Sometimes Encountered	1
Q32. Delivery equipment is inadequate.	3.25	Sometimes Encountered	4
Q33. Medical supplies are not regularly replenished.	3.25	Sometimes Encountered	4
Q34. Facility resources are insufficient for quality maternal care.	3.43	Sometimes Encountered	2
Q35. Lack of equipment affects emergency response and patient management.	3.39	Sometimes Encountered	3
Composite Mean	3.36	Sometimes Encountered	

Legend:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Always Encountered
4	3.41–4.20	Often Encountered
3	2.61–3.40	Sometimes Encountered
2	1.81–2.60	Rarely Encountered
1	1.00–1.80	Never Encountered

Table 8 presents the issues encountered in terms of inadequate medical supplies and equipment. The weighted means ranged from 3.25 to 3.46, with a composite mean of 3.36, interpreted as Sometimes Encountered. The highest-rated issue was insufficient essential medicines (Q31), with a weighted mean of 3.46, followed by facility resources being insufficient for quality maternal care (Q34) with 3.43. Lack of equipment affecting emergency response and patient management (Q35) obtained 3.39. Delivery equipment inadequacy and irregular replenishment of medical supplies both obtained 3.25.

The composite mean of 3.36 indicates that inadequacies in medical supplies and equipment were Sometimes Encountered. Thus, resource-related concerns were present but were reported less frequently than workforce constraints.

The findings are consistent with literature emphasizing the importance of adequate medicines, functional equipment, and essential supplies in maternal healthcare facilities. The results may indicate that continued attention to procurement, inventory management, and equipment maintenance is warranted.

Nevertheless, the study did not conduct a physical inventory or facility assessment. Therefore, the findings reflect the reported experiences of the healthcare providers rather than an independent measurement of actual resource availability.

Table 9. *Weak Health Information Systems*

Indicators	Weighted Mean	Interpretation	Rank
Q36. Documentation processes are time-consuming.	3.21	Sometimes Encountered	3
Q37. Patient records are sometimes incomplete.	3.32	Sometimes Encountered	2
Q38. Reporting systems experience delays.	3.36	Sometimes Encountered	1
Q39. Monitoring tools are insufficient.	3.18	Sometimes Encountered	4
Q40. Data management issues affect continuity of maternal care.	3.32	Sometimes Encountered	2
Composite Mean	3.28	Sometimes Encountered	

Legend:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Always Encountered
4	3.41–4.20	Often Encountered

3	2.61–3.40	Sometimes Encountered
2	1.81–2.60	Rarely Encountered
1	1.00–1.80	Never Encountered

Table 9 presents the issues encountered in terms of health information systems. The weighted means ranged from 3.18 to 3.36, with a composite mean of 3.28, interpreted as Sometimes Encountered. The highest-rated issue is the delay in reporting systems (Q38), with a weighted mean of 3.36. This was followed by incomplete patient records (Q37) and data management issues affecting continuity of maternal care (Q40), both with 3.32. Documentation processes being time-consuming obtained 3.21, while insufficient monitoring tools obtained the lowest weighted mean of 3.18.

The composite mean of 3.28 indicates that health information system-related issues are Sometimes Encountered. The results suggest that documentation, reporting, and information management concerns occurred occasionally among the respondents.

The findings are generally consistent with the literature emphasizing the importance of timely, complete, and accurate health information for healthcare monitoring and decision-making.

However, the study did not independently assess the quality of the clinics' information systems or verify the completeness of records. Therefore, the findings should be understood as respondents' reported experiences rather than an objective evaluation of the health information system.

Table 10. *Financial and Resource Limitations*

Indicators	Weighted Mean	Interpretation	Rank
Q41. Budget limitations affect clinic operations.	3.36	Sometimes Encountered	1
Q42. Financial resources are insufficient for facility improvement.	3.32	Sometimes Encountered	2
Q43. Limited funds affect the procurement of medical supplies.	3.29	Sometimes Encountered	3
Q44. Resource limitations affect service accessibility.	3.21	Sometimes Encountered	4
Q45. Transportation and referral support are inadequate.	3.11	Sometimes Encountered	5
Composite Mean	3.26	Sometimes Encountered	

Legend:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Always Encountered
4	3.41–4.20	Often Encountered
3	2.61–3.40	Sometimes Encountered
2	1.81–2.60	Rarely Encountered
1	1.00–1.80	Never Encountered

Table 10 presents the issues encountered in terms of financial and resource limitations. The weighted means ranged from 3.11 to 3.36, while the composite mean was 3.26, interpreted as Sometimes Encountered. The highest-rated issue is budget limitations affecting clinic operations (Q41), with a weighted mean of 3.36. This was followed by insufficient financial resources for facility improvement (Q42) with 3.32 and limited funds affecting procurement of medical supplies (Q43) with 3.29. Resource limitations affecting service accessibility obtained 3.21, while transportation and referral support obtained the lowest weighted mean of 3.11.

The composite mean of 3.26 indicates that financial and resource limitations were Sometimes Encountered. This suggests that respondents experienced budgetary and resource-related concerns occasionally, although these concerns were less frequently reported than workforce constraints.

The findings are consistent with the literature emphasizing the role of adequate financing and resource allocation in maintaining healthcare operations and supporting maternal health programs.

The results, however, do not establish that financial limitations caused deficiencies in maternal health service delivery. Rather, they indicate that respondents experienced these limitations from time to time. The findings may therefore support consideration of resource allocation, procurement planning, and referral support as areas for continued administrative attention.

Table 11. *Policy Implementation and Governance Issues*

Indicators	Weighted Mean	Interpretation	Rank
Q46. Maternal health policies are inconsistently implemented.	3.11	Sometimes Encountered	1
Q47. Monitoring and supervision are inadequate.	3.04	Sometimes Encountered	2
Q48. Communication of updated guidelines is delayed.	3.00	Sometimes Encountered	3
Q49. Administrative support is insufficient.	2.96	Sometimes Encountered	4
Q50. Compliance with DOH standards is difficult due to operational constraints.	3.04	Sometimes Encountered	2
Composite Mean	3.03	Sometimes Encountered	

Legend:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Always Encountered
4	3.41–4.20	Often Encountered
3	2.61–3.40	Sometimes Encountered
2	1.81–2.60	Rarely Encountered
1	1.00–1.80	Never Encountered

Table 11 presents the issues encountered in terms of policy implementation and governance. The weighted means ranged from 2.96 to 3.11, with a composite mean of 3.03, interpreted as Sometimes Encountered. The highest-rated issue is inconsistent implementation of maternal health policies (Q46), with a weighted mean of 3.11. This was followed by inadequate monitoring and supervision (Q47) and difficulty complying with DOH standards due to operational constraints (Q50), both with 3.04. Delayed communication of updated guidelines obtained 3.00, while insufficient administrative support obtained the lowest weighted mean of 2.96. The composite mean of 3.03 indicates that policy implementation and governance issues are Sometimes Encountered. Compared with the other issue categories, this was the lowest-rated category, suggesting that governance-related concerns were reported less frequently than workforce constraints.

The findings are consistent with literature emphasizing the importance of leadership, supervision, communication, policy dissemination, and administrative support in healthcare systems. However, the findings do not establish that governance issues significantly disrupted service delivery. Instead, they indicate that respondents occasionally encountered governance-related concerns. Continued policy orientation, supportive supervision, timely dissemination of guidelines, and clear administrative communication may help sustain effective implementation.

Table 12. *Summary of Issues Encountered in Maternal Health Service Delivery*

Issue Category	Composite Mean	Interpretation	Rank
Workforce Constraints	3.74	Often Encountered	1
Inadequate Medical Supplies and Equipment	3.36	Sometimes Encountered	2
Weak Health Information Systems	3.28	Sometimes Encountered	3
Financial and Resource Limitations	3.26	Sometimes Encountered	4
Policy Implementation and Governance Issues	3.03	Sometimes Encountered	5
Grand Mean	3.33	Sometimes Encountered	

Legend:

Scale	Range of Weighted Mean	Verbal Interpretation
5	4.21–5.00	Always Encountered
4	3.41–4.20	Often Encountered
3	2.61–3.40	Sometimes Encountered
2	1.81–2.60	Rarely Encountered
1	1.00–1.80	Never Encountered

Table 12 presents the overall summary of issues encountered in maternal health service delivery. The grand mean was 3.33, interpreted as Sometimes Encountered.

Among the five issue categories, Workforce Constraints obtained the highest composite mean of 3.74, interpreted as Often Encountered. This was followed by Inadequate Medical Supplies and Equipment (3.36), Weak Health Information Systems (3.28), Financial and Resource Limitations (3.26), and Policy Implementation and Governance Issues (3.03). The latter four categories were all interpreted as Sometimes Encountered.

The grand mean of 3.33 indicates that the identified issues were Sometimes Encountered overall. The results show that workforce constraints were the most prominent concern among the respondents, while policy implementation and governance issues received the lowest rating.

Important interpretation of Tables 6 and 12

A notable finding of the study is the coexistence of a High Extent overall assessment of maternal health service delivery (grand mean = 4.17) and the presence of workforce constraints that were Often Encountered (composite mean = 3.74).

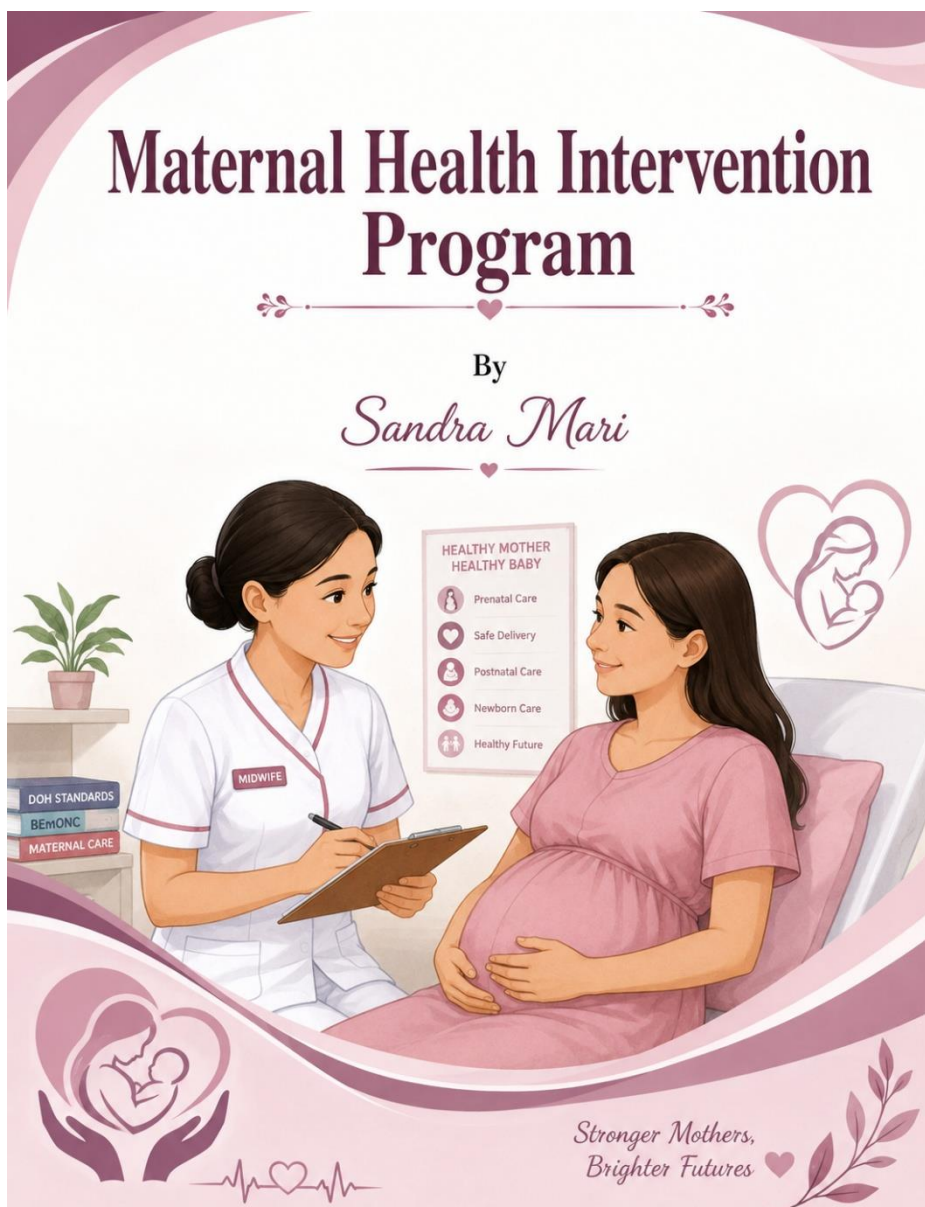
This result should not automatically be viewed as contradictory. One possible explanation is that healthcare providers may be able to maintain the delivery of essential maternal health services despite workforce constraints through professional experience, teamwork, task adjustment, workload management, or other coping strategies. The commitment of healthcare workers and established clinic procedures may also potentially help sustain service delivery despite operational challenges.

However, these explanations were not directly measured in the present study. Therefore, they should be treated as possible interpretations rather than conclusions established by the data.

More importantly, the findings demonstrate that the presence of operational challenges does not necessarily mean that respondents will rate every aspect of service delivery as low. The two sets of findings measure different dimensions: Tables 1–6 measure the respondents' perceptions of the extent of service delivery, while Tables 7–12 measure the frequency with which they encounter particular issues. Thus, a clinic may be perceived as delivering services to a High or Very High Extent while healthcare workers may simultaneously experience certain operational difficulties.

From a public health perspective, the results suggest that workforce concerns should receive particular attention, even though overall maternal health service delivery was favorably assessed. Recruitment or augmentation of personnel, equitable workload distribution, continuing professional development, supportive supervision, and staff wellness initiatives may be considered as possible interventions. Likewise, continued attention to supplies, information systems, financing, and governance may help sustain the favorable assessment of maternal health service delivery.

Overall, the findings provide a basis for developing the proposed Maternal Health Intervention Program. The proposed interventions should be directly linked to the issues identified in the study, particularly the workforce constraints that obtained the highest rating among the identified issue categories.



Rationale

The findings of the study revealed that maternal health service delivery in the selected public lying-in clinics in Zambales was assessed by the respondents at an overall High Extent, with a grand mean of 4.17. Prenatal Care obtained the highest composite mean of 4.29, interpreted as Very High Extent, followed by Postnatal Care with a composite mean of 4.27, also interpreted as Very High Extent. Monitoring and Record-Keeping obtained a composite mean of 4.20, while Intrapartum Care and Compliance with Department of Health (DOH) Standards and Protocols obtained composite means of 4.06 and 4.01, respectively, both interpreted as High Extent.

Although the overall assessment indicated a favorable level of maternal health service delivery, the findings also identified several issues encountered by healthcare providers. Workforce Constraints obtained the highest composite mean of 3.74, interpreted as Often Encountered. Among the workforce-related concerns, shortage of healthcare workers obtained the highest weighted mean of 3.89, followed by heavy workload at 3.86, limited training opportunities at 3.82, burnout at 3.61, and staff scheduling concerns at 3.50.

Other issue categories were interpreted as Sometimes Encountered, including Inadequate Medical Supplies and Equipment with a composite mean of 3.36, Weak Health Information Systems with 3.28, Financial and Resource Limitations with 3.26, and Policy Implementation and Governance Issues with 3.03.

The findings therefore indicate that while maternal health services were assessed favorably by the respondents, operational concerns remain in workforce capacity, training opportunities, availability of resources, health information management, financial and logistical support, referral coordination, and policy implementation. The proposed intervention program was developed to directly address these findings while sustaining the service areas that received High or Very High Extent ratings.

The program focuses on feasible activities that may strengthen workforce capacity, improve resource monitoring, enhance documentation and reporting, reinforce compliance with DOH standards and protocols, strengthen referral coordination, and promote employee wellness. The interventions are designed to provide practical mechanisms for continuous improvement in maternal health service delivery in the selected public lying-in clinics.

The proposed program is aligned with the maternal and newborn health priorities of the Department of Health, particularly the implementation of maternal and newborn care standards, BEmONC and EINC-related capacity building, as applicable to the participating facilities. It also supports the principles of the Universal Health Care Act (Republic Act No. 11223) and Sustainable Development Goal 3 on health and well-being.

General Objective

To strengthen maternal health service delivery in selected public lying-in clinics in Zambales through workforce development, improved healthcare resources, strengthened health information systems, enhanced policy implementation, and continuous quality improvement.

Specific Objectives

Within one year of implementation, the program aims to:

Strengthen workforce capacity and improve workload monitoring and distribution.

Enhance the participation of healthcare providers in relevant maternal and newborn healthcare training and capability-building activities.

Improve the monitoring and availability of essential medicines, medical supplies, and emergency obstetric equipment.

Strengthen maternal health documentation, reporting, and health information management practices.

Strengthen the dissemination and monitoring of DOH standards, policies, and maternal healthcare protocols.

Strengthen referral coordination and documentation between public lying-in clinics and appropriate referral facilities.

Promote employee wellness and supportive workplace practices in response to workload and burnout concerns.

Establish mechanisms for continuous monitoring and quality improvement of maternal health service delivery..

Intervention Matrix

Objectives	Research Findings/Basis	Intervention Activities	Persons Responsible	Time Frame	Resources Needed	Measurable Success Indicators
1. Strengthen workforce capacity and improve workload monitoring and distribution.	Table 7: Workforce Constraints obtained a composite mean of 3.74 (Often Encountered). Shortage of	Conduct staffing and workload assessment; review duty schedules; identify workload concerns;	Municipal Health Office (MHO), Clinic Heads, LGU	Within 6–12 months; reviewed quarterly	Staffing records, duty schedules, workload-monitoring forms	Staffing and workload assessment completed in 100% of participating clinics; updated duty schedules

	healthcare workers ranked first at 3.89, while heavy workload obtained 3.86. Staff scheduling also obtained 3.50.	coordinate with the MHO and LGU regarding staffing requirements; establish a simple workload-monitoring mechanism.				reviewed quarterly.
2. Enhance the participation of healthcare providers in maternal and newborn healthcare training.	Table 7: Limited training opportunities obtained a weighted mean of 3.82 (Often Encountered).	Conduct or coordinate BEmONC, EINC, emergency obstetric care, infection prevention and control, and other relevant maternal health capability-building activities, subject to facility requirements and available training programs.	DOH, Provincial Health Office (PHO), MHO, Clinic Heads	Quarterly/within one year	Training materials, facilitators, venue, training funds	At least 90% of eligible healthcare providers participate in at least one relevant training or capability-building activity within one year.
3. Improve monitoring of essential medicines, medical supplies, and equipment.	Table 8: Inadequate Medical Supplies and Equipment obtained a composite mean of 3.36 (Sometimes Encountered). Essential medicines being insufficient ranked first at 3.46.	Conduct quarterly inventory; establish and monitor minimum stock levels; submit procurement requests based on inventory results; conduct regular equipment inspection and maintenance.	MHO, Clinic Heads, LGU Procurement Office	Quarterly	Inventory forms, procurement funds, equipment maintenance resources	100% of participating clinics conduct quarterly inventory and equipment inspection, with documented action for identified shortages or deficiencies.
4. Strengthen maternal health documentation	Table 9: Weak Health Information Systems	Conduct training or orientation on standardized	Clinic Heads, MHO, Health Information/Re	Monthly/Quarterly	Standard forms, computers where	At least 95% of required maternal health reports

, reporting, and information management.	obtained a composite mean of 3.28 (Sometimes Encountered). Reporting delays obtained 3.36, while incomplete patient records and data-management concerns obtained 3.32.	maternal health documentation ; implement monthly records review; improve organization of paper-based or electronic records; monitor report submission schedules.	cords Personnel		available, records-management materials	are submitted within the prescribed reporting period; monthly records review is documented.
5. Strengthen dissemination and monitoring of DOH standards and protocols.	Table 5: Compliance with DOH Standards and Protocols obtained a composite mean of 4.01 (High Extent), the lowest among the five service areas. Table 11: Policy Implementation and Governance Issues obtained 3.03 (Sometimes Encountered).	Conduct semi-annual orientation on updated DOH issuances, Administrative Orders, maternal health protocols, BEmONC/EIN C-related standards, and facility procedures; use a compliance checklist during monitoring activities.	DOH, PHO, MHO, Clinic Heads	Semi-annually	DOH issuances, compliance checklists, IEC materials	100% of participating clinics receive or participate in at least two policy/protocol orientation or monitoring activities within one year; completed compliance checklists are maintained.
6. Strengthen referral coordination and documentation .	Table 1: Risk assessment obtained the lowest prenatal-care rating at 4.18. Table 3: The comparatively lower postnatal indicator obtained 4.11. Table 10: Transportation and referral support obtained 3.11	Develop or update a referral flowchart; maintain an updated contact directory of referral facilities; establish communication procedures; maintain and review a referral logbook;	MHO, Clinic Heads, Referral Facilities	Within 3–6 months; monitored monthly	Referral forms, communication facilities, contact directory, referral logbook	Updated referral flowchart and referral contact directory available in 100% of participating clinics; referral logbook reviewed monthly.

	(Sometimes Encountered).	conduct coordination with appropriate referral facilities.				
7. Promote employee wellness and supportive workplace practices.	Table 7: Burnout obtained 3.61 (Often Encountered), while heavy workload obtained 3.86 (Often Encountered).	Conduct stress-management sessions, employee wellness activities, team-support activities, and periodic discussion of workload concerns.	MHO, Clinic Heads, LGU	Semi-annually	Wellness materials, facilitators, activity funds	At least two employee wellness activities are conducted within one year, with attendance and activity reports maintained.
8. Establish continuous quality-improvement mechanisms.	Table 6: Maternal health service delivery obtained an overall grand mean of 4.17 (High Extent), while all five service areas were rated either High Extent or Very High Extent. The findings indicate areas that should be sustained and continuously monitored.	Conduct periodic review of service delivery indicators and identified issues; document improvement actions; conduct clinic-level quality-improvement meetings; monitor implementation of the intervention program.	MHO, Clinic Heads, Healthcare Providers	Quarterly	Monitoring forms, meeting materials, documentation tools	At least four quality-improvement monitoring/evaluation activities are documented within one year; action plans are prepared for identified priority concerns.

Implementation Strategy

The proposed intervention program shall be implemented through coordination among the Municipal Health Offices, Local Government Units, Provincial Health Office, clinic heads, healthcare providers, and other appropriate partner agencies. Implementation shall prioritize the issues that obtained the highest ratings in the study, particularly workforce constraints, while maintaining the service areas that were assessed at a High or Very High Extent.

The program shall be implemented in phases. During the initial phase, the participating clinics shall conduct staffing, workload, supply, equipment, documentation, and referral assessments. The results of these assessments shall serve as the basis for identifying specific facility-level priorities.

The second phase shall focus on capacity building, resource monitoring, documentation improvement, policy orientation, referral coordination, and employee wellness activities. The responsible offices shall coordinate schedules and available resources to avoid disruption of routine maternal health services.

The final phase shall focus on monitoring, documentation, and evaluation of program activities. Accomplishments shall be reviewed against the measurable indicators identified in the intervention matrix. Necessary adjustments shall be made based on implementation experience, available resources, and facility needs. Budget Requirement (Illustrative)

The following budget is illustrative and shall be subject to the availability of funds and the applicable budgeting, procurement, and accounting rules of the concerned Local Government Units and health offices.

Item	Estimated Cost (PHP)
BEmONC and EINC Training	120,000
Training Materials	30,000
Medical Supplies and Equipment	250,000
Computers and Documentation Materials	80,000
Monitoring and Evaluation	25,000
Employee Wellness Program	40,000
Printing of IEC Materials	15,000
Transportation and Coordination	20,000
Total Estimated Budget	₱580,000

Note: The proposed amounts are illustrative only. The actual budget shall be determined by the concerned Local Government Units, Municipal Health Offices, Provincial Health Office, and other implementing agencies based on approved plans, available appropriations, applicable funding sources, and existing government budgeting and procurement policies.

Monitoring and Evaluation Plan

Program Area	Performance Indicator	Means of Verification	Frequency
Workforce capacity	Number of participating clinics with completed staffing and workload assessment	Staffing and workload assessment forms	Quarterly
Staff competency	Percentage of eligible healthcare providers participating in relevant maternal health training	Training certificates, attendance sheets	Quarterly
Supplies and equipment	Percentage of participating clinics completing quarterly inventory and equipment inspection	Inventory reports, inspection forms	Quarterly
Documentation	Percentage of required maternal health reports submitted within the prescribed period	Maternal health reports, submission records	Monthly

Policy compliance	Number of policy orientation/monitoring activities conducted	Attendance sheets, compliance checklists, monitoring reports	Semi-annually
Referral coordination	Availability of updated referral flowchart/contact directory and completed referral logbook review	Referral documents and logbook	Monthly
Employee wellness	Number of wellness activities conducted	Attendance sheets and activity reports	Semi-annually
Quality improvement	Number of documented quality-improvement review meetings and action plans	Meeting minutes, action plans, monitoring reports	Quarterly

Expected Outcomes

At the end of the one-year implementation period, the proposed program is expected to result in:
 Improved monitoring of staffing patterns and workload distribution in participating public lying-in clinics.
 Increased participation of healthcare providers in relevant maternal and newborn healthcare training and capability-building activities.

Improved monitoring of the availability and functionality of essential medicines, medical supplies, and equipment.

More timely and complete maternal health documentation and reporting.

Strengthened dissemination and monitoring of DOH standards, policies, and maternal healthcare protocols.

Improved documentation and coordination of referrals between public lying-in clinics and appropriate referral facilities.

Increased implementation of employee wellness and supportive workplace activities.

Strengthened mechanisms for continuous monitoring and quality improvement of maternal health service delivery. These expected results refer to program implementation and process improvements. They do not assume or guarantee changes in maternal mortality, neonatal mortality, patient satisfaction, or other health outcomes that were not directly measured in the present study.

Sustainability Plan

To sustain the proposed intervention program, the Municipal Health Offices, Local Government Units, Provincial Health Office, and administrators of the participating public lying-in clinics shall integrate appropriate activities into their annual operational plans and available budgets, subject to existing government policies and available resources.

Regular staffing and workload reviews, inventory monitoring, documentation audits, policy orientations, referral coordination, employee wellness activities, and quality-improvement reviews shall be incorporated into routine clinic operations whenever feasible.

The responsible offices shall maintain appropriate documentation of program activities and accomplishments to facilitate monitoring and future planning. Relevant training and capability-building activities shall be coordinated with available DOH, Provincial Health Office, Municipal Health Office, and other authorized training programs.

The intervention program shall also be reviewed periodically to determine which activities are feasible, which require modification, and which should be continued based on the needs and resources of the participating clinics. Through institutionalization of feasible activities into regular health service operations, the program may support the continued improvement and sustainability of maternal health service delivery in the selected public lying-in clinics in Zambales.

Summary

This study assessed the Maternal Health Services Delivery of Selected Public Lying-in Clinics in Zambales. Specifically, it sought to determine (1) the extent of maternal health service delivery in terms of prenatal care, intrapartum care, postnatal care, monitoring and record-keeping, and compliance with Department of Health (DOH) standards and protocols; (2) the issues encountered in maternal health service delivery in terms of workforce constraints, inadequate medical supplies and equipment, weak health information systems, financial and resource limitations, and policy implementation and governance issues; and (3) the maternal health intervention program that may be proposed based on the findings of the study.

The study employed a descriptive quantitative research design to describe the perceived extent of maternal health service delivery and the issues encountered in the selected public lying-in clinics. A total of twenty-eight (28) healthcare workers from Cabangan, San Felipe, and San Antonio, Zambales, participated through total enumeration. Data were gathered using a researcher-developed questionnaire that underwent expert content validation and pilot reliability testing. Three experts provided an overall validation mean of 4.80 out of 5.00. The pilot test involved eight (8) healthcare practitioners from a pilot birthing facility in Subic who were excluded from the actual sample. Cronbach's alpha was computed separately for the ten questionnaire subscales; most subscales showed acceptable to excellent preliminary internal consistency, while the Intrapartum (Delivery) Care subscale obtained a low coefficient ($\alpha = 0.1282$). Because the pilot group was very small, the coefficients were interpreted cautiously as preliminary reliability evidence. The final data were analyzed using frequency, percentage, weighted mean, composite mean, and grand mean.

Extent of Maternal Health Service Delivery

The study found that the extent of maternal health service delivery in the selected public lying-in clinics was implemented to a High Extent, obtaining an overall grand mean of 4.17. Among the five service delivery areas, Prenatal Care obtained the highest composite mean of 4.29, interpreted as Very High Extent, indicating that regular prenatal consultations, maternal and fetal monitoring, health education, pregnancy risk assessment, and referral services are consistently implemented. This was followed by Postnatal Care, with a composite mean of 4.27 (Very High Extent), demonstrating that mothers and newborns receive adequate postnatal monitoring, breastfeeding support, health education, and follow-up care. Monitoring and Record-Keeping obtained a composite mean of 4.20 (High Extent), indicating that maternal health records are properly maintained, documentation is accurate, reports are submitted on time, and confidentiality is observed. Intrapartum Care recorded a composite mean of 4.06 (High Extent), reflecting effective implementation of skilled birth attendance, infection prevention, referral procedures, and standard delivery protocols. Lastly, Compliance with DOH Standards and Protocols obtained a composite mean of 4.01 (High Extent), indicating that maternal healthcare services generally comply with established national standards and clinical guidelines.

Issues Encountered in Maternal Health Service Delivery

Regarding issues in maternal health service delivery, the study found an overall grand mean of 3.33, interpreted as Sometimes Encountered. Among the identified issues, Workforce Constraints had the highest composite mean of 3.74, interpreted as Often Encountered, indicating that shortages of healthcare personnel, heavy workloads, limited training opportunities, staff scheduling concerns, and employee burnout remain the most common challenges faced by healthcare providers. Inadequate Medical Supplies and Equipment had a composite mean of 3.36, while Weak Health Information Systems recorded 3.28, both interpreted as Sometimes Encountered. Likewise, Financial and Resource Limitations had a composite mean of 3.26, while Policy Implementation and Governance Issues recorded 3.03, indicating that these operational concerns occur occasionally but do not significantly hinder the overall delivery of maternal healthcare services. Proposed Maternal Health Intervention Program

Based on the findings of the study, a Maternal Health Intervention Program entitled "Strengthening Maternal Health Service Delivery Through Workforce Development, Resource Enhancement, and Quality Improvement in

Selected Public Lying-in Clinics in Zambales" was developed. The intervention program focuses on strengthening workforce capacity, expanding competency-based training, improving the availability of essential medicines and equipment, enhancing health information systems, increasing financial and logistical support, reinforcing compliance with DOH standards, and strengthening referral mechanisms. The proposed intervention program aims to sustain the high level of maternal health service delivery while addressing the operational challenges identified in the study.

CONCLUSIONS

Based on the findings of the study, the following conclusions were drawn:

Maternal health service delivery in the selected public lying-in clinics in Zambales was generally assessed by the respondents to be implemented to a High Extent, as reflected by the overall grand mean of 4.17. Among the five service areas, prenatal care (4.29) and postnatal care (4.27) obtained the highest assessments and were interpreted as Very High Extent. Monitoring and record-keeping (4.20), intrapartum care (4.06), and compliance with DOH standards and protocols (4.01) were assessed as High Extent.

Prenatal care was assessed to be implemented to a Very High Extent, with a composite mean of 4.29. Regular prenatal check-ups and health education and counseling obtained the highest ratings, while pregnancy risk assessment obtained the comparatively lowest rating within the category. This suggests that prenatal care practices were generally perceived favorably by the healthcare providers, while risk assessment may warrant further attention.

Intrapartum care was assessed to be implemented to a High Extent, with a composite mean of 4.06. Skilled birth attendance received the highest assessment, while the availability and functionality of delivery equipment and supplies received the lowest assessment. The findings suggest that respondents generally perceived delivery care practices to be implemented at a favorable level, although facility resources may require continued attention.

Postnatal care was assessed to be implemented to a Very High Extent, with a composite mean of 4.27. Newborn care services and breastfeeding education and support obtained the highest assessments, while follow-up postnatal visits received the lowest assessment within the category. The findings suggest that postnatal care was generally perceived favorably by the respondents.

Monitoring and record-keeping were assessed to be implemented to a High Extent, with a composite mean of 4.20. Confidentiality of patient records received the highest assessment, while the utilization of monitoring and reporting tools obtained the lowest. The findings indicate that respondents generally perceived documentation and record-keeping practices to be adequately implemented, while monitoring tools may warrant further strengthening.

Compliance with DOH standards and protocols was assessed to be implemented to a High Extent, with a composite mean of 4.01. Compliance with DOH maternal healthcare guidelines received the highest assessment, while standard operating procedures and the availability of required maternal healthcare equipment and supplies received comparatively lower assessments. This suggests that respondents generally perceived compliance with established maternal healthcare standards to be favorable, although continued monitoring and support may be appropriate.

Workforce constraints were the most frequently encountered category of issues, obtaining a composite mean of 3.74, interpreted as Often Encountered. Shortage of healthcare workers, heavy workload, and limited training opportunities received the highest assessments within this category. This indicates that workforce-related concerns were the most prominent issues reported by the respondents.

Inadequate medical supplies and equipment, weak health information systems, financial and resource limitations, and policy implementation and governance issues were all Sometimes Encountered. Their composite means were 3.36, 3.28, 3.26, and 3.03, respectively. These findings indicate that the respondents experienced these operational and administrative concerns occasionally.

Overall, the identified issues in maternal health service delivery were assessed as Sometimes Encountered, as reflected by the grand mean of 3.33. Workforce constraints were the only issue category assessed as Often Encountered, while the remaining categories were assessed as Sometimes Encountered.

The findings indicate that favorable perceptions of maternal health service delivery coexisted with reported operational challenges, particularly workforce constraints. This suggests that the presence of frequently encountered workforce issues did not correspond to a low overall assessment of service delivery. Possible explanations, such as professional experience, teamwork, workload adjustment, or other coping mechanisms, may be considered; however, these factors were not directly measured in the present study and therefore cannot be established as conclusions.

The findings provide an empirical basis for the development of the proposed Maternal Health Intervention Program. The proposed interventions may prioritize workforce-related concerns while also addressing medical supplies and equipment, health information systems, financial and resource limitations, and policy implementation and governance issues identified by the respondents.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are proposed:

For the Municipal Health Offices and administrators of the selected public lying-in clinics: Since Workforce Constraints obtained the highest composite mean of 3.74 (Often Encountered), they should assess staffing requirements and workload distribution and, when feasible, request or advocate for additional qualified healthcare personnel. Work schedules may also be reviewed to promote adequate coverage and continuity of maternal health services. Measures that support staff well-being may likewise be considered to address reported concerns related to workload and burnout.

For the Municipal Health Offices, clinic administrators, and healthcare providers: Since limited training opportunities obtained a relatively high rating under Workforce Constraints (3.82), regular competency-based training, continuing professional development, and refresher orientations related to maternal and newborn healthcare should be strengthened. Priority may be given to areas relevant to the identified service concerns, including risk assessment, emergency referral, infection prevention and control, and DOH maternal healthcare standards.

For the Municipal Health Offices and clinic administrators: Since the availability of medical supplies and equipment was assessed as Sometimes Encountered (composite mean = 3.36), particularly the insufficiency of essential medicines (3.46) and facility resources (3.43), inventory and monitoring systems should be strengthened. Regular assessment of stocks, timely replenishment of essential medicines and supplies, and scheduled inspection and maintenance of delivery equipment may be undertaken to support facility readiness.

For the clinic administrators and healthcare providers: Since weaknesses in health information systems were assessed as Sometimes Encountered (composite mean = 3.28), particularly delays in reporting (3.36) and incomplete patient records/data management concerns (3.32), standardized documentation and reporting procedures should be reinforced. Regular checking of records, timely submission of reports, and continuing orientation on records management and data handling may be implemented.

For the Municipal Health Offices and local government units: Since Financial and Resource Limitations obtained a composite mean of 3.26 (Sometimes Encountered), mechanisms for identifying and prioritizing essential clinic needs should be strengthened. Budgetary planning may give appropriate attention to essential medicines, equipment maintenance, facility requirements, and transportation or referral support, particularly those needed for maternal healthcare services.

For the Municipal Health Offices, clinic administrators, and concerned health authorities: Since Policy Implementation and Governance Issues obtained the lowest but still Sometimes Encountered composite mean of 3.03, regular dissemination and orientation on updated maternal health policies and DOH guidelines should be maintained. Supportive supervision, clear communication of policy changes, and periodic monitoring of compliance may be strengthened to minimize administrative and implementation gaps.

For clinic administrators and healthcare providers: Since Intrapartum Care obtained a composite mean of 4.06 (High Extent) and the indicators on infection prevention and control (3.93) and availability and functionality of delivery equipment and supplies (3.89) received comparatively lower ratings, continuous monitoring of infection prevention practices and facility readiness can be undertaken. Regular checking of essential delivery equipment and supplies may help identify resource gaps that require attention.

For clinic administrators and healthcare providers: Since Monitoring and Record-Keeping obtained a composite mean of 4.20 (High Extent), with monitoring and reporting tool utilization receiving a comparatively lower rating (4.04), existing documentation and monitoring practices should be continuously reviewed. Where feasible, appropriate digital or standardized monitoring tools may be introduced or strengthened to improve the efficiency and consistency of documentation and reporting.

For the Municipal Health Offices and clinic administrators: Since Compliance with DOH Standards and Protocols obtained the lowest composite mean among the five service areas at 4.01 (High Extent), regular policy orientation, supportive supervision, and periodic internal assessment of compliance should be sustained. Particular attention may be given to standard operating procedures, availability of required equipment and supplies, safety protocols, and monitoring requirements.

For the healthcare providers and clinic administrators: Since Prenatal Care (4.29) and Postnatal Care (4.27) were assessed at a Very High Extent, these practices should be sustained while attention is given to their comparatively lower indicators. In particular, pregnancy risk assessment (4.18) and follow-up postnatal visits (4.11) may be strengthened through consistent assessment, counseling, referral coordination, and follow-up mechanisms.

For the Municipal Health Offices, local government units, and clinic administrators: The findings can be used as a basis for developing and implementing the proposed Maternal Health Intervention Program. The program may prioritize the most frequently encountered concern—workforce constraints—while incorporating appropriate activities addressing medical supplies and equipment, health information systems, financial and resource limitations, and policy implementation and governance.

For future researchers: Similar studies may be conducted in other public and private birthing facilities or in other municipalities and provinces to provide additional evidence on maternal health service delivery. Future studies may also consider variables not measured in the present research, such as objective service quality indicators, client experiences, staffing ratios, facility readiness, or maternal and newborn health outcomes, provided that these are appropriate to the research design and ethical requirements.

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