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Abstract:

Purpose of Study: This study examined the influence of inter-professional collaboration on the provision of quality perinatal care in public hospitals of Kwale County. It specifically assessed how communication, shared decision-making, multidisciplinary teamwork, conflict resolution, case review, and quality improvement practices contribute to the delivery of safe, timely, coordinated, and responsive perinatal services.

Methodology: The study adopted an analytical cross-sectional design using a mixed-methods approach. It targeted 171 healthcare workers across 20 level 3 and 4 public health facilities and eight key informants. Data were collected through structured questionnaires and interviews. Quantitative data were analyzed using SPSS, while qualitative data were thematically analyzed using MAXQDA.

Findings: The study achieved an overall response rate of 88.8 percent. Findings showed that inter-professional collaboration had a positive and statistically significant relationship with quality perinatal care ($r = .658$, $p < .001$). Regression analysis established that collaboration explained 43.3 percent of the variation in quality perinatal care ($R^2 = .433$, $F = 113.798$, $p < .001$), with a significant positive effect ($\beta = .658$, $t = 10.737$, $p < .001$). Although communication and standardized handover practices were relatively well established, multidisciplinary near-miss reviews, psychosocial support, active quality improvement teams, and follow-up of audit recommendations remained weak. Overall, quality perinatal care was rated moderately positively.

Conclusion: The study concludes that inter-professional collaboration significantly improves the provision of quality perinatal care in public hospitals of Kwale County. Strengthening multidisciplinary teamwork, routine case reviews, psychosocial support, quality improvement teams, and follow-up of audit recommendations is therefore essential. Hospital and county health managers should institutionalize and support collaborative care practices.

***Keywords*:** *inter-professional collaboration, quality perinatal care, multidisciplinary teamwork, public hospitals*

1.0 INTRODUCTION

1.1 Background of the Study

Quality perinatal care, encompassing the period immediately before, during, and after childbirth, remains a central determinant of maternal and newborn survival worldwide. Among the range of health system and process factors that shape this quality, inter-professional collaboration has emerged as a particularly important process-level driver. Inter-professional collaboration refers to the coordinated communication, shared decision-making, and joint clinical action among doctors, nurses, midwives, and other healthcare providers working together to manage maternal and newborn care. Where collaboration is weak, fragmented decision-making and delayed recognition of complications frequently follow, with direct consequences for perinatal outcomes.

In the United Kingdom, Moran, Coates, Ayers, Olander, and Bateson (2023) examined inter-professional working within a newly implemented parent-infant mental health service supporting families experiencing bonding and attachment difficulties. The study found that clearly defined roles, shared referral pathways, and regular joint case discussions enabled different professional groups to work cohesively, although initial ambiguity about professional boundaries was identified as an early barrier to effective teamwork. In the United States, Meadows, Byfield, Bingham, and Diop (2023) examined the role of perinatal quality collaboratives in promoting maternal health equity and found that structured, multi-institutional collaboration among obstetric providers significantly strengthened the standardization of emergency obstetric response and reduced variation in the quality of care delivered across participating hospitals. Both studies demonstrate that even in well-resourced health systems, the quality of perinatal care depends substantially on how effectively different professional groups coordinate their work.

Within the West African region, Dzomeku et al. (2025) explored healthcare providers' perspectives on team-based maternal care delivery in Ghana and found that interprofessional teams comprising midwives, nurses, nutritionists, pharmacists, and physicians played a central role in ensuring respectful and dignified maternal services, although role ambiguity, inadequate staffing, and limited institutional support constrained the consistency of collaborative practice. In Southern Africa, Madisa, Filmalter, and Heyns (2023) explored the perceptions of healthcare professionals and postnatal women regarding inter-professional collaboration in a Botswana maternity facility, and found that poor communication, disrespectful interactions, unclear role boundaries, and weak collaborative leadership were the dominant barriers preventing effective teamwork, despite general recognition among providers of its importance for quality maternal care. These regional findings suggest that while the value of inter-professional collaboration is widely acknowledged across African health systems, its consistent operationalization remains an ongoing challenge.

In Kenya, maternal and newborn health outcomes continue to fall short of national targets, with coordination failures among healthcare teams repeatedly identified as a contributing factor.

Jepkosgei, English, Adam, and Nzinga (2022) examined intra- and inter-professional teamwork processes in newborn units across three Kenyan hospitals and found that fragmented communication, unclear professional hierarchies, and limited shared decision-making constrained effective team-based newborn care, even where individual providers demonstrated strong clinical competence. Public hospitals in Kwale County, a largely rural and underserved coastal county, face similar structural and staffing constraints that may further limit the extent to which inter-professional collaboration is embedded in routine perinatal care delivery. Within this context, the present study sought to establish how inter-professional collaboration influences the provision of quality perinatal care in public hospitals of Kwale County.

1.2 Statement of the Problem

Public hospitals in Kwale County continue to record gaps in the quality of perinatal care, including delays in the recognition and management of obstetric emergencies, inconsistent adherence to clinical protocols, and variable maternal and newborn outcomes. While inter-professional collaboration is widely recognized as central to safe, coordinated perinatal care, healthcare workers in many Kenyan public hospitals continue to operate within siloed professional structures characterized by limited joint case review, unclear role boundaries, and weak multidisciplinary decision-making (Jepkosgei et al., 2022).

Existing evidence from the United Kingdom, the United States, Ghana, and Botswana confirms that structured inter-professional teamwork improves the consistency and safety of maternal and newborn care, but also shows that the effectiveness of collaboration depends heavily on context-specific factors such as staffing levels, institutional support, and leadership commitment (Moran et al., 2023; Meadows et al., 2023; Dzomeku et al., 2025; Madisa et al., 2023). However, there remains limited empirical evidence on the extent and functioning of inter-professional collaboration within public hospitals in Kwale County specifically, and on how this collaboration translates into measurable improvements in the quality of perinatal care received by mothers and newborns. Without such evidence, health managers in the county lack a clear, locally grounded basis for strengthening multidisciplinary teamwork as a strategy for improving perinatal outcomes. This study sought to address this gap.

1.3 Purpose of the Study

The purpose of this study was to examine the influence of inter-professional collaboration on the provision of quality perinatal care in public hospitals of Kwale County.

1.4 Research Hypothesis

$H0_1$: Inter-professional collaboration does not significantly influence the provision of quality perinatal care in public hospitals of Kwale County.

2.0 LITERATURE REVIEW

2.1 Theoretical Review: Donabedian's Structure-Process-Outcome Model

This study was guided by Donabedian's Structure-Process-Outcome (SPO) model, a framework developed by physician and health-services researcher Avedis Donabedian for systematically evaluating the quality of healthcare. The model conceptualizes healthcare quality through three interconnected dimensions: structure, process, and outcome. Although the framework originated in the 1960s, recent scholarship continues to affirm its relevance for evaluating contemporary healthcare organizations, primary care services, professional teamwork, and quality improvement interventions (McCullough et al., 2023; De Rosis, 2024).

The structure dimension represents the resources and organizational conditions required for healthcare delivery, including staffing, infrastructure, equipment, and institutional support (McCullough et al., 2023). The process dimension concerns the actual activities and professional interactions involved in delivering care, including communication, coordination, and clinical decision-making (Moayed, Khalili, Ebadi, & Parandeh, 2022). The outcome dimension reflects the results of care, including patient experiences, satisfaction, and clinical outcomes (De Rosis, 2024).

Inter-professional collaboration is positioned within the process dimension of the model, since it involves healthcare professionals actively working together, communicating, and coordinating responsibilities in the delivery of maternal and newborn care. This classification is consistent with recent applications of the Donabedian framework, which locate professional interaction, workflow, and coordinated clinical activity within the process component (Moayed et al., 2022; McCullough et al., 2023). Quality perinatal care, the dependent variable, is positioned within the outcome dimension, reflecting the effects of collaborative processes on patient experience, safety, and clinical results.

The Donabedian model is relevant to this study because it provides a systematic basis for explaining how inter-professional processes translate available health system resources into measurable perinatal care outcomes. A key strength of the model is its simplicity and broad applicability across diverse healthcare settings (McCullough et al., 2023). However, the model has also been critiqued for implying an overly linear relationship between structure, process, and outcome, when in practice healthcare quality emerges from complex, interacting organizational and contextual factors (Geary, 2024). This study therefore applies the model while recognizing that the relationship between inter-professional collaboration and quality perinatal care may be shaped by additional contextual factors beyond process alone.

2.2 Empirical Review: Inter-Professional Collaboration and Quality Perinatal Care

Globally, structured inter-professional teamwork has been consistently associated with improved maternal and newborn care outcomes. Moran et al. (2023), examining a newly implemented parent-infant mental health service in the United Kingdom, found that clearly defined professional roles and regular joint case discussions enabled effective collaboration between midwives, psychologists, and health visitors, although initial role ambiguity limited the pace at which teams became fully functional. Similarly, Meadows et al. (2023), reviewing the role of perinatal quality collaboratives in the United States, established that structured multi-institutional collaboration among obstetric providers significantly reduced variation in

emergency obstetric response and strengthened standardized management of maternal complications across participating hospitals.

Within the African region, Dzomeku et al. (2025) explored healthcare providers' experiences of team-based maternal care in Ghana and found that interprofessional teams composed of midwives, nurses, nutritionists, pharmacists, and physicians were central to delivering respectful, coordinated maternal services, although inadequate staffing and limited institutional support constrained consistent collaborative practice. In Botswana, Madisa, Filmalter, and Heyns (2023) found that poor communication, unclear role boundaries, and weak collaborative leadership were the principal barriers to effective inter-professional collaboration in a maternity care facility, despite general recognition among both providers and patients of its importance for safe, coordinated care. These findings suggest that while African health systems increasingly recognize the value of inter-professional collaboration, translating this recognition into consistent multidisciplinary practice remains constrained by staffing, leadership, and communication challenges.

In Kenya, Jepkosgei, English, Adam, and Nzinga (2022) examined intra- and inter-professional teamwork processes in newborn units across three hospitals and found that fragmented communication and unclear professional hierarchies limited effective team-based care, even where individual providers were clinically competent. The study further noted that initiatives to strengthen teamwork in Kenyan hospitals have largely drawn on models developed in high-income settings, with comparatively limited context-specific evidence generated locally. This gap is particularly pronounced for perinatal care in devolved, resource-constrained counties such as Kwale, where the present study is situated. Collectively, the reviewed literature indicates that inter-professional collaboration is a consistent and significant correlate of perinatal care quality across diverse health system contexts, providing a strong empirical basis for the present study's hypothesis.

2.3 Conceptual Framework

The conceptual framework guiding this study proposes a direct relationship between inter-professional collaboration, the independent variable, and the provision of quality perinatal care, the dependent variable, in public hospitals of Kwale County. Inter-professional collaboration was conceptualized and measured through indicators including open communication among team members, availability of psychosocial support for staff, functional conflict-resolution systems, established multidisciplinary maternal death review teams, routine review of maternal near-miss cases, use of audit recommendations to inform quality improvement, structured staff induction on emergency protocols, standardized shift handover procedures, and the presence of active multidisciplinary quality improvement teams. Quality perinatal care, the dependent variable, was conceptualized through indicators including adherence to clinical guidelines and protocols, timeliness of care during labor, delivery, and the immediate postnatal period, efficiency of referral for complicated cases, maternal satisfaction, minimization of adverse perinatal outcomes, consistency of postnatal follow-up care, and the extent to which care meets the physical and emotional needs of mothers and newborns. The framework posits that stronger

inter-professional collaboration is expected to produce a corresponding improvement in the overall quality of perinatal care provided within Kwale County's public hospitals.

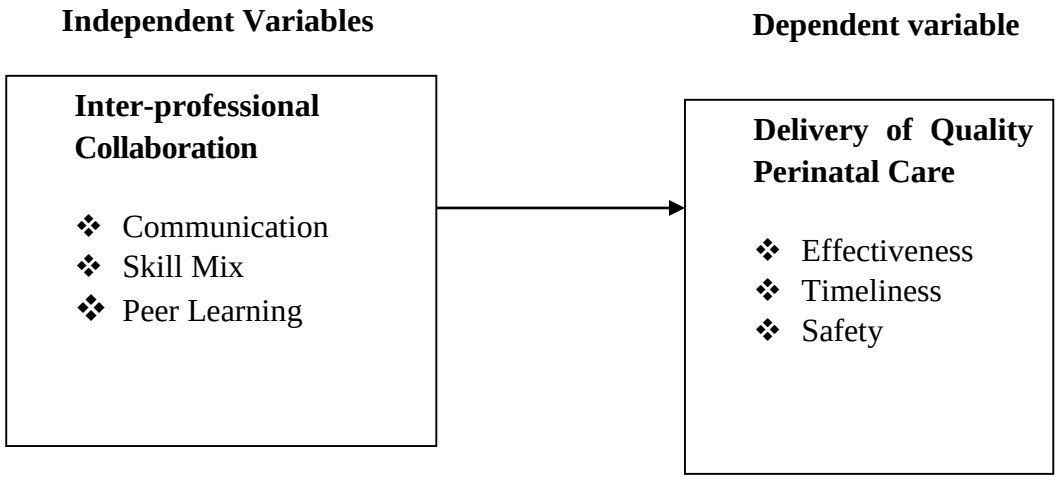

Figure 1: Conceptual Framework

3.0 RESEARCH METHODOLOGY

The study adopted an analytical cross-sectional research design using a mixed-methods approach to examine the influence of inter-professional collaboration on the provision of quality perinatal care in public hospitals of Kwale County. The study targeted 171 healthcare workers, comprising doctors, nurses, midwives, and anesthetists working in maternity units, postnatal wards, and maternity theatres across 20 level 3 and 4 public health facilities. A census sampling approach was employed, whereby all 171 eligible healthcare workers were included in the quantitative component. Qualitative data were obtained from selected health managers and reproductive health leaders responsible for coordinating maternal and perinatal services at facility, sub-county, and county levels.

Data were collected using structured self-administered questionnaires and key informant interviews. The questionnaire assessed inter-professional collaboration through indicators including frequency of team meetings, communication among healthcare professionals, collaborative decision-making, role clarity, and multidisciplinary teamwork. Quality perinatal care was assessed using indicators such as adherence to clinical guidelines, timeliness of care, maternal satisfaction, and perinatal outcomes. Quantitative data were analyzed using SPSS, employing descriptive statistics, correlation analysis, and simple linear regression. Qualitative data were analyzed thematically using MAXQDA to provide complementary explanations of how inter-professional collaboration influences the quality of perinatal care.

4.0 RESEARCH FINDINGS AND DISCUSSION

4.1 Response Rate

The study determined response rates among healthcare workers deployed across maternity units, postnatal wards, and maternity theatres. Table 1 presents the response rate findings.

Table 1: Response Rate

Category	Target Population (N)	Responded (n)	Response Rate (%)
Healthcare Workers	171	151	88.3%
Key Informants	8	8	100%
Total	**179**	**159**	**88.8%**

Source: Author (2026).

The high response rate is attributed to the researcher's persistent follow-up and assurance of confidentiality to respondents. This finding is consistent with established methodological recommendations regarding acceptable research response rates, with a response rate above 70 percent generally considered adequate for minimizing nonresponse bias and supporting the validity of survey findings (Creswell & Creswell, 2023). The response rate attained in this study was therefore considered sufficient to support the reliability and generalizability of the results.

4.2 Descriptive Results of Inter-Professional Collaboration

The study sought to establish the influence of inter-professional collaboration on the provision of quality perinatal care in public hospitals of Kwale County. The findings are presented in Table 2.

Table 2: Descriptive Results of Inter-Professional Collaboration (Communication, Skill Mix, Peer Learning)

Statement (n = 151)	Disagree n (%)	Neutral n (%)	Agree n (%)
Team members freely voice opinions on perinatal care without fear of reprisal	13 (8.6%)	15 (9.9%)	123 (81.5%)
Emotional support is available for staff after traumatic events such as maternal deaths	114 (75.5%)	21 (13.9%)	16 (10.6%)
There is a designated system for resolving conflicts at the workplace	32 (21.2%)	24 (15.9%)	95 (62.9%)
There is an established multidisciplinary team to conduct maternal mortality audits (MPDSR)	39 (25.8%)	20 (13.2%)	92 (60.9%)
The multidisciplinary team reviews maternal near-miss cases	115 (76.2%)	18 (11.9%)	18 (11.9%)

Recommendations from audits inform quality improvement interventions in perinatal health care	101 (66.9%)	22 (14.6%)	28 (18.5%)
There is an induction schedule to orient new staff on updated obstetric emergency management protocols	36 (23.8%)	23 (15.2%)	92 (60.9%)
There is a standard handover protocol across shifts to ensure continuity of care	15 (9.9%)	17 (11.3%)	119 (78.8%)
The facility has an active Quality Improvement team with multi-cadre membership	110 (72.8%)	19 (12.6%)	22 (14.6%)

Source: Author (2026).

Table 2 presents respondents' views of inter-professional collaboration, communication, skill mix, and peer learning within perinatal care services. The findings demonstrate that while basic communication structures and teamwork practices exist within health facilities, more complex components of multidisciplinary collaboration and continuous quality improvement remain inadequately established. A majority of respondents reported that healthcare workers were able to freely express their opinions regarding perinatal care without fear of reprisal (81.5%), and that standard handover protocols were available to support continuity of care across shifts (78.8%). In addition, 62.9% reported the presence of systems for resolving workplace conflicts, while 60.9% indicated that multidisciplinary teams were established to conduct maternal death reviews through the Maternal and Perinatal Death Surveillance and Response (MPDSR) mechanism. These findings suggest that foundational elements necessary for collaborative care, including communication and team coordination, are present in many facilities.

However, the findings reveal important gaps in translating these structures into effective multidisciplinary clinical practice and quality improvement. Most respondents disagreed that emotional support was available for healthcare workers following traumatic events such as maternal deaths (75.5%), that maternal near-miss cases were reviewed by multidisciplinary teams (76.2%), and that audit recommendations informed quality improvement interventions (66.9%). Similarly, only 14.6% agreed that their facilities had active multidisciplinary Quality Improvement teams. These findings suggest that although platforms for review and collaboration exist, they are not consistently utilized to promote collective learning, staff support, and implementation of corrective actions.

The qualitative findings reinforced these observations by highlighting inconsistencies in the functioning of multidisciplinary teams. Although key informants acknowledged the presence of multidisciplinary team structures within facilities, they described challenges in ensuring routine joint decision-making, particularly for critically ill obstetric patients. A maternity in-charge explained:

> *There is a lack of multidisciplinary review of critically ill obstetric cases. Obstetricians and gynaecologists and other specialists, such as physicians, often assess patients independently and recommend different management approaches, leading to uncertainty among nursing staff regarding which treatment plan to implement. (Maternity In-Charge)*

This narrative provides context to the quantitative finding that while multidisciplinary teams for MPDSR exist in 60.9% of facilities, collaborative review processes such as maternal near-miss discussions remain limited. The findings suggest that the presence of a team structure does not necessarily guarantee effective interdisciplinary engagement, shared decision-making, or coordinated clinical management, consistent with recent evidence that inter-professional teamwork requires structured communication and shared accountability beyond routine interactions (Moran et al., 2023).

The qualitative data further highlighted challenges in institutionalizing quality improvement approaches within maternity services. A Sub-County Quality Improvement Coordinator noted:

> *We have trained healthcare workers on the Kenya Quality Model of Health (KQMH) within the maternity department; however, the gap remains in activation of quality improvement teams due to inadequate prioritization of this initiative by the hospital management team. (Sub-County Quality Improvement Coordinator)*

This finding corresponds with the quantitative results showing that 72.8% of respondents disagreed that their facilities had active multidisciplinary quality improvement teams, suggesting that although healthcare workers may have received relevant training, implementation is constrained by limited leadership support and competing institutional priorities. This is consistent with regional evidence from Ghana and Botswana, where inadequate institutional support and weak collaborative leadership similarly limited the consistency of inter-professional practice (Dzomeku et al., 2025; Madisa et al., 2023).

Similarly, the qualitative findings identified weaknesses in the use of MPDSR processes to drive preventive action. Although informants acknowledged that maternal deaths were reviewed within recommended timelines, they reported limited follow-up of agreed actions and inadequate review of maternal near-miss cases. A Sub-County Health Management Team member stated:

> *All maternal deaths are audited within the recommended timelines, and the gaps are documented and uploaded to the Kenya Health Information System. However, there is no follow-up of the agreed action points and the review of maternal near-miss cases. As a result, opportunities to address modifiable factors that could prevent future maternal deaths are missed. (Sub-County Health Management Team Member)*

This qualitative evidence explains the quantitative finding that only 18.5% of respondents agreed that audit recommendations informed quality improvement interventions. From the perspective of the Donabedian framework, these findings indicate that while some structural components of collaborative care, such as communication channels, handover systems, and multidisciplinary team arrangements, are established, significant process gaps remain, including limited joint case reviews, inadequate psychosocial support for healthcare providers, and weak follow-up of audit recommendations.

4.3 Descriptive Results for Quality Perinatal Care

The study assessed the provision of quality perinatal care as the dependent variable. The findings are displayed in Table 3.

Table 3: Descriptive Results for Quality Perinatal Care

Statement	Disagree n (%)	Neutral n (%)	Agree n (%)
Health workers consistently adhere to standard clinical guidelines and protocols during perinatal care.	24 (15.9%)	25 (16.6%)	102 (67.5%)
Mothers and newborns receive timely care during labor, delivery, and the immediate postnatal period.	29 (19.2%)	31 (20.5%)	91 (60.3%)
Referral of complicated obstetric and newborn cases is done promptly and efficiently.	43 (28.5%)	35 (23.2%)	73 (48.3%)
Mothers report high levels of satisfaction with the perinatal care received at this facility.	25 (16.6%)	27 (17.9%)	99 (65.6%)
Adverse perinatal outcomes, such as birth asphyxia and postpartum hemorrhage, are effectively minimized.	48 (31.8%)	36 (23.8%)	67 (44.4%)
Postnatal follow-up care is consistently provided to mothers and newborns before discharge.	21 (13.9%)	23 (15.2%)	107 (70.9%)
The care provided adequately meets the physical and emotional needs of mothers and newborns.	33 (21.9%)	31 (20.5%)	87 (57.6%)
Overall, the quality of perinatal care provided at this facility is high.	31 (20.5%)	30 (19.9%)	90 (59.6%)

Source: Author (2026).

Table 3 indicates that respondents generally perceived the provision of quality perinatal care positively. The highest level of agreement was recorded for consistent provision of postnatal follow-up care before discharge, with 107 (70.9%) respondents agreeing. This was followed by adherence to standard clinical guidelines and protocols, reported by 102 (67.5%) respondents, and maternal satisfaction with perinatal care, reported by 99 (65.6%) respondents. These findings suggest that routine clinical practices and postnatal follow-up services were relatively well established across the sampled public hospitals. However, lower levels of agreement were observed regarding minimization of adverse perinatal outcomes, where only 67 (44.4%) respondents agreed, while 48 (31.8%) disagreed. Similarly, only 73 (48.3%) respondents agreed that referrals of complicated obstetric and newborn cases were conducted promptly and efficiently, while 43 (28.5%) disagreed. These findings suggest that referral efficiency and prevention of adverse perinatal outcomes remain important areas requiring improvement. Overall, 90 (59.6%) respondents agreed that the quality of perinatal care provided at the facilities was high, indicating a generally positive but not optimal assessment of quality care.

4.4 Correlation Analysis

Bivariate Pearson correlation analysis was conducted to examine the strength and direction of the relationship between inter-professional collaboration and the provision of quality perinatal care. Table 4 presents the correlation results.

Table 4: Pearson Correlation Between Inter-Professional Collaboration and Quality Perinatal Care

	IPC	QPC
Inter-Professional Collaboration (IPC) — Pearson r	1	.658**
Sig. (2-tailed)		.000
N	**151**	**151**
Quality Perinatal Care (QPC) — Pearson r	.658**	1
Sig. (2-tailed)	.000	
N	**151**	**151**

*** Correlation is significant at the 0.01 level (2-tailed).*

As shown in Table 4, inter-professional collaboration had a positive and statistically significant correlation with the provision of quality perinatal care ($r = .658$, $p < .001$). This moderately strong relationship indicates that facilities with stronger communication, teamwork, and multidisciplinary review practices tend to report correspondingly higher quality perinatal care. This finding is consistent with evidence from Ghana and Botswana, where stronger team-based collaboration among maternal healthcare providers was similarly associated with more coordinated and respectful maternal care (Dzomeku et al., 2025; Madisa et al., 2023), and with findings from the United States, where structured inter-institutional collaboration reduced variation in the quality of obstetric emergency response (Meadows et al., 2023).

4.5 Regression Analysis

Simple linear regression analysis was conducted to determine the extent to which inter-professional collaboration predicts the provision of quality perinatal care. Table 5 presents the model summary.

Table 5: Model Summary for Inter-Professional Collaboration

Model	Predictor Variable	R	R-Square	Adjusted R-Square	Std. Error
1	Inter-Professional Collaboration	.658	.433	.429	.412

As shown in Table 5, the correlation coefficient ($R = .658$) confirms a moderately strong positive relationship between inter-professional collaboration and quality perinatal care. The

coefficient of determination (R^2 = .433) indicates that inter-professional collaboration alone explains approximately 43.3 percent of the variation in quality perinatal care, with the adjusted R^2 of .429 confirming that the model provides a reasonable fit to the data. The standard error of the estimate (.412) suggests that deviations of the observed values from the predicted values are relatively small.

Table 6: ANOVA Results for Inter-Professional Collaboration

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	19.310	1	19.310	113.798	.000
Residual	25.290	149	0.170		
Total	44.600	150			

Dependent Variable: Quality Perinatal Care. Predictors: (Constant), Inter-Professional Collaboration.

The ANOVA results in Table 6 indicate that the regression model is statistically significant (F = 113.798, p < .001), confirming that inter-professional collaboration has a statistically significant effect on the provision of quality perinatal care in public hospitals of Kwale County. This provides grounds for rejecting the null hypothesis that inter-professional collaboration does not significantly influence the provision of quality perinatal care.

Table 7: Regression Coefficients for Inter-Professional Collaboration

Model	B	Std. Error	Beta	t	Sig.
(Constant)	1.450	.198		7.323	.000
Inter-Professional Collaboration	.612	.057	.658	10.737	.000

Dependent Variable: Quality Perinatal Care.

Table 7 presents the regression coefficients for the relationship between inter-professional collaboration and quality perinatal care. The unstandardized coefficient (B = .612, p < .001) indicates that a one-unit increase in inter-professional collaboration is associated with a .612-unit increase in quality perinatal care, holding other factors constant. The corresponding t-value (t = 10.737) confirms that this effect is statistically significant at the .001 level. These results confirm that inter-professional collaboration is a significant positive predictor of the provision of quality perinatal care in public hospitals of Kwale County, consistent with findings from Kenya's newborn units (Jepkosgei et al., 2022) and from maternal care settings in the United Kingdom and Ghana (Moran et al., 2023; Dzomeku et al., 2025).

5.0 SUMMARY OF THE STUDY

This study examined the influence of inter-professional collaboration on the provision of quality perinatal care in public hospitals of Kwale County, guided by Donabedian's Structure-Process-Outcome model. Using an analytical cross-sectional design with a mixed-methods approach,

data were collected from 151 healthcare workers and 8 key informants across 20 level 3 and 4 public health facilities, yielding a response rate of 88.8 percent.

The descriptive analysis revealed that foundational elements of inter-professional collaboration, including open communication, conflict-resolution systems, and standardized shift handover, were reasonably well established, with 81.5 percent of respondents reporting free expression of opinions and 78.8 percent reporting standard handover protocols. However, more advanced collaborative practices, including psychosocial support after traumatic events (10.6% agreement), multidisciplinary review of maternal near-miss cases (11.9% agreement), and active multidisciplinary quality improvement teams (14.6% agreement), remained substantially underdeveloped. Quality perinatal care was rated moderately overall (M = 3.52), with postnatal follow-up and adherence to clinical guidelines rated most favorably, while minimization of adverse perinatal outcomes and referral efficiency were rated lowest.

The inferential analysis established a positive and statistically significant correlation between inter-professional collaboration and quality perinatal care ($r = .658$, $p < .001$). Regression analysis further confirmed that inter-professional collaboration significantly predicted quality perinatal care ($R^2 = .433$, $F = 113.798$, $p < .001$; $\beta = .658$, $t = 10.737$, $p < .001$), leading to the rejection of the null hypothesis. Qualitative findings from key informants reinforced these results, revealing that although multidisciplinary team structures exist within facilities, gaps in joint case review, psychosocial support, and follow-up of audit recommendations continue to limit the translation of collaborative structures into consistently high-quality perinatal care.

6.0 CONCLUSION

The study concludes that inter-professional collaboration is a significant and positive determinant of the provision of quality perinatal care in public hospitals of Kwale County. Facilities that have established structured communication systems, standardized handover protocols, and functional conflict-resolution mechanisms demonstrate stronger perinatal care outcomes, particularly in relation to clinical guideline adherence and continuity of postnatal follow-up care.

However, the persistence of gaps in multidisciplinary case review, psychosocial support for healthcare workers, and follow-up of maternal death and near-miss audit recommendations indicates that many facilities have established only the foundational structures of collaborative care, without fully embedding the more proactive, process-oriented dimensions of teamwork that meaningfully reduce adverse perinatal outcomes. This is consistent with the Donabedian framework's emphasis that structural presence alone does not guarantee effective process or favorable outcomes.

7.0 RECOMMENDATIONS

Based on the findings of this study, several recommendations are proposed. First, hospital management should institutionalize routine multidisciplinary review of maternal near-miss

cases, not only maternal deaths, to ensure that lessons from complications are systematically captured and used to inform practice improvements.

Second, health facilities should establish structured psychosocial support mechanisms for healthcare workers following traumatic events such as maternal deaths, given that only 10.6 percent of respondents reported the availability of such support. This is essential for sustaining staff wellbeing and, by extension, the quality of care they are able to provide.

Third, hospital and sub-county leadership should prioritize the activation and sustained functioning of multidisciplinary quality improvement teams, ensuring that training received by healthcare workers, such as on the Kenya Quality Model of Health, is translated into functioning, adequately supported teams rather than remaining at the training stage.

Fourth, facilities should strengthen systems for tracking and following up on action points arising from maternal death and near-miss audits, with clear accountability mechanisms to ensure that identified gaps are addressed rather than merely documented.

Finally, given that referral efficiency for complicated cases was rated comparatively low, county health management should invest in strengthening referral pathways and communication linkages between facilities to ensure that complicated obstetric and newborn cases are transferred promptly to appropriate levels of care.

8.0 AREAS FOR FURTHER RESEARCH

Future research should consider longitudinal designs that track changes in inter-professional collaboration and perinatal care quality over time, given the cross-sectional nature of the present study. Additionally, future studies could examine the combined influence of inter-professional collaboration alongside other Donabedian-aligned process and structure factors, such as data-informed decision-making, life-saving commodity security, and referral system functionality, to establish their joint contribution to perinatal care quality. Comparative studies across other Kenyan counties with differing staffing and resource profiles would further enhance understanding of the contextual factors shaping inter-professional collaboration in maternal and newborn care.

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