

The Role of Effective Interprofessional Communication in Improving Healthcare Performance: Insights from Public Hospitals in a Developing Health System

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Abstract

Healthcare organizations operate in complex environments that require effective coordination among diverse professional groups to achieve high levels of performance. In this context, interprofessional communication is widely recognized as a critical organizational mechanism that supports information exchange, coordinated care, and collective decision-making. Despite growing scholarly interest, empirical evidence on the relationship between interprofessional communication and healthcare performance in developing health systems remains limited.

This study examines the role of effective interprofessional communication in enhancing healthcare performance within public hospitals operating in a developing health system. A quantitative, cross-sectional research design was employed, and data were collected from 350 healthcare professionals working in Syrian public hospitals. Interprofessional communication and healthcare performance were measured using a structured questionnaire, and the data were analyzed using descriptive statistics, reliability and validity tests, correlation analysis, and regression analysis through SPSS.

The findings indicate moderate levels of both interprofessional communication and healthcare performance. The results further reveal a positive and statistically significant relationship between interprofessional communication and healthcare performance, with regression analysis showing that interprofessional communication explains approximately 27% of the variance in healthcare performance. These findings highlight the importance of strengthening communication practices as a cost-effective strategy for improving healthcare performance in resource-constrained public hospitals.

Keywords: Interprofessional communication; Healthcare performance; Public hospitals; Developing health systems.

1. Introduction

Healthcare systems worldwide are increasingly characterized by rising levels of complexity, strong interdependence among professional roles, and growing demands for high-quality and safe patient care. Within hospital settings, healthcare delivery depends heavily on effective collaboration among diverse professional groups, including physicians, nurses, administrators, and allied health professionals. In this context, communication across professional boundaries is widely recognized as a fundamental mechanism through which coordination, clinical decision-making, and performance outcomes are achieved (WHO, 2010; O'Daniel & Rosenstein, 2008).

Interprofessional communication refers to the exchange of information, knowledge, and feedback among healthcare professionals from different disciplines with the purpose of achieving shared clinical and organizational objectives. Effective interprofessional communication fosters mutual understanding, facilitates coordinated care processes, reduces the risk of errors, and contributes to enhanced organizational functioning within healthcare institutions (Leonard, Graham, & Bonacum, 2004; Reeves et al., 2017). In contrast, deficiencies in communication have been consistently identified as a major source of adverse events, operational inefficiencies, and diminished healthcare performance in hospital settings (Schmutz & Manser, 2013).

A substantial body of empirical research has shown that effective communication within healthcare teams is positively associated with key performance indicators, including quality of care, patient safety, service efficiency, and staff satisfaction (Manser, 2009; Salas et al., 2018). Evidence from studies conducted in developed healthcare systems indicates that structured communication practices and interprofessional collaboration contribute significantly to improved clinical outcomes and enhanced organizational performance (Reeves et al., 2014; Foronda, MacWilliams, & McArthur, 2016). Nevertheless, the extent to which these findings can be transferred to developing healthcare systems remains uncertain, given contextual differences related to resource availability, organizational structures, and workforce conditions.

Public hospitals operating within developing healthcare systems face persistent challenges, including limited financial and human resources, high patient volumes, fragmented organizational processes, and administrative constraints. These conditions place considerable pressure on healthcare professionals and heighten the importance of effective communication as a critical mechanism for maintaining acceptable levels of healthcare performance (Ameh et al., 2017; Bradley et al., 2015). Despite this recognized importance, empirical evidence examining the role of interprofessional communication in shaping healthcare performance within public hospitals in developing contexts remains limited and fragmented.

Moreover, existing studies have predominantly focused on clinical outcomes or patient safety in isolation, while comparatively less attention has been devoted to healthcare performance as a multidimensional construct encompassing efficiency, service quality, responsiveness, and organizational effectiveness. This gap is particularly pronounced in public-sector hospitals, where efforts to improve performance are often constrained by systemic and structural factors that extend beyond individual clinical practice (Braithwaite et al., 2017).

In response to these limitations, the present study seeks to examine the role of effective interprofessional communication in enhancing healthcare performance within public hospitals operating in a developing health system. By providing empirical evidence from this under-researched context, the study aims to contribute to the literature on healthcare management and organizational communication, while offering practical insights for hospital administrators and policymakers interested in improving performance through strengthened communication practices.

A growing body of empirical research has demonstrated that effective communication within healthcare teams constitutes a critical determinant of healthcare performance. Prior studies suggest that well-coordinated communication practices enhance information sharing, minimize misunderstandings, and support timely clinical decision-making, thereby contributing to improved service quality and patient safety outcomes (Reeves et al.,

2014; Foronda et al., 2016). In addition, effective interprofessional communication has been linked to higher levels of operational efficiency, smoother care transitions, and improved coordination across clinical units (Manser & Foster, 2011).

Furthermore, empirical evidence indicates that the quality of communication within healthcare teams contributes not only to clinical outcomes but also to organizational performance indicators, including workflow efficiency, staff satisfaction, and the overall effectiveness of healthcare delivery systems (Salas et al., 2018; Schmutz & Manser, 2013). When communication processes are structured, timely, and inclusive of diverse professional perspectives, healthcare organizations are better equipped to manage complexity and respond effectively to dynamic clinical environments (Braithwaite et al., 2017).

Despite these documented benefits, the majority of empirical studies examining interprofessional communication and healthcare performance have been conducted within developed healthcare systems, typically in well-resourced hospital settings. Consequently, relatively limited attention has been devoted to understanding how communication practices influence healthcare performance in public hospitals operating under the resource constraints and structural challenges characteristic of developing health systems (Ameh et al., 2017; Bradley et al., 2015).

Notwithstanding the increasing scholarly interest in interprofessional communication within healthcare research, significant gaps persist in the existing literature. Most prior studies have concentrated primarily on patient safety and clinical outcomes, while devoting limited attention to healthcare performance as a multidimensional construct encompassing efficiency, coordination, and organizational effectiveness (Schmutz & Manser, 2013; Salas et al., 2018). Moreover, the available empirical evidence is largely derived from developed healthcare systems, which constrains the generalizability of findings to public hospitals operating within developing health systems characterized by resource limitations and organizational challenges (Ameh et al., 2017; Bradley et al., 2015).

In addition, interprofessional communication has frequently been examined as a secondary element within broader teamwork or leadership frameworks, rather than being treated as a primary determinant of healthcare performance (Reeves et al., 2014). As a result, the specific role of effective interprofessional communication in shaping healthcare performance within public-sector hospitals remains insufficiently examined.

To address these gaps, the present study empirically examines the role of effective interprofessional communication in enhancing healthcare performance within public hospitals operating in a developing health system. By adopting a performance-oriented perspective and focusing on an under-researched context, the study seeks to contribute to both theoretical advancement and practical understanding in the fields of healthcare management and organizational communication.

2. Research Objectives

The primary objective of this study is to examine the role of effective interprofessional communication in enhancing healthcare performance within public hospitals operating in a developing health system.

To achieve this objective, the study aims to:

1. Assess the level of interprofessional communication among healthcare professionals in public hospitals.
2. Examine the level of healthcare performance in public hospitals across multiple performance dimensions.
3. Analyze the effect of effective interprofessional communication on healthcare performance in public hospitals.
4. Provide evidence-based insights to inform managerial and policy interventions aimed at improving healthcare performance through strengthened communication practices.

3. Hypotheses Development

The development of hypotheses in this study is grounded in the organizational communication and healthcare management literature, which highlights communication as a central mechanism influencing coordination, collaboration, and performance outcomes in complex organizational settings. Within hospital environments, effective interprofessional communication facilitates the exchange of accurate and timely information, supports shared understanding among healthcare professionals, and enhances coordination across clinical and administrative units (Reeves et al., 2017; Salas et al., 2018).

Prior empirical research has consistently demonstrated that effective communication within healthcare teams is associated with improved organizational outcomes. Well-established communication practices contribute to higher levels of service quality, patient safety, and operational efficiency, whereas ineffective communication has been linked to increased errors, operational inefficiencies, and diminished organizational effectiveness (Manser, 2009; Foronda et al., 2016). These relationships are particularly salient in public hospitals, where structural complexity and resource constraints intensify the need for effective coordination mechanisms.

Moreover, empirical studies indicate that communication plays a direct role in shaping healthcare performance by enabling efficient workflows, reducing task duplication, and supporting timely clinical decision-making (Schmutz & Manser, 2013; Manser & Foster, 2011). When interprofessional communication is effective, healthcare organizations are better positioned to manage organizational complexity and deliver high-quality care under challenging operational conditions (Braithwaite et al., 2017).

Drawing on this theoretical and empirical foundation, and consistent with the objectives of the present study, it is hypothesized that effective interprofessional communication has a positive effect on healthcare performance in public hospitals operating within a developing health system.

Accordingly, the study proposes the following hypothesis:

H1: Effective interprofessional communication has a positive and statistically significant effect on healthcare performance in public hospitals.

4. Methodology

4.1 Research Design

This study adopts a quantitative, cross-sectional research design to examine the effect of effective interprofessional communication on healthcare performance in public hospitals operating within a developing health system. A quantitative approach is appropriate for testing hypothesized relationships between well-defined constructs and for generating empirical evidence that can be generalized across the study population (Creswell & Creswell, 2018). The cross-sectional design enables data to be collected at a single point in time, making it suitable for assessing prevailing communication practices and performance perceptions within hospital settings.

The study is explanatory in nature, as it seeks to identify and explain the effect of effective interprofessional communication on healthcare performance rather than merely describing existing conditions. This research design is widely employed in healthcare management and organizational communication studies due to its suitability for examining causal relationships within complex organizational environments (Bryman, 2016).

4.2 Study Context

The empirical component of this study was conducted in Syrian public (governmental) hospitals, which constitute the backbone of healthcare service delivery in the country. These hospitals are characterized by high patient volumes, multidisciplinary work environments, and complex organizational structures. Such characteristics render public hospitals a particularly appropriate context for examining interprofessional communication and its implications for healthcare performance.

4.3 Population and Sample

The study population comprised healthcare professionals employed in Syrian public hospitals, including physicians, nurses, and administrative staff who are directly involved in clinical and organizational processes. These professional groups were selected because of their continuous interaction and functional interdependence in healthcare delivery, which positions interprofessional communication as a central component of daily hospital operations.

Given that the size of the study population exceeds 5,000 healthcare professionals, the required sample size was determined using the Krejcie and Morgan (1970) sampling formula. Based on a 95% confidence level and a margin of error of 5%, a minimum sample size of approximately 350 respondents was considered sufficient. To compensate for potential non-response and incomplete questionnaires, a larger number of survey instruments was distributed.

A stratified random sampling technique was employed to ensure adequate representation of the main professional categories within the hospitals. The study population was divided into strata based on professional roles (physicians, nurses, and administrative staff), and respondents were selected randomly from each stratum. This sampling approach enhances sample representativeness and reduces potential sampling bias by accounting for variations in professional responsibilities and communication patterns across groups (Bryman, 2016).

4.4 Measurement and Instrument Development

Data were collected using a structured questionnaire developed on the basis of validated measurement scales reported in prior healthcare management and organizational communication studies. The questionnaire comprised three main sections. The first section captured the demographic and professional characteristics of the respondents. The second section measured effective interprofessional communication, addressing key aspects such as the clarity of information exchange, feedback mechanisms, coordination among professional groups, and shared understanding. The third section assessed healthcare performance as a multidimensional construct encompassing efficiency, service quality, coordination of care, and organizational effectiveness.

All measurement items were assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The use of a Likert-type scale is consistent with prior studies examining organizational communication and performance, and it facilitates statistical analysis as well as the comparability of empirical results across studies (Hair et al., 2019).

4.5 Data Collection Procedure

Data collection was conducted through the distribution of self-administered questionnaires to healthcare professionals in selected public hospitals. Participation was voluntary, and respondents were informed of the purpose of the study prior to participation. Anonymity and confidentiality were assured in order to encourage honest and unbiased responses. Completed questionnaires were subsequently collected and screened for completeness before proceeding with data analysis.

4.6 Data Analysis Techniques

Data were analyzed using statistical software packages appropriate for quantitative research. Descriptive statistics were employed to summarize respondents' characteristics and to assess the levels of interprofessional communication and healthcare performance. Inferential statistical techniques were subsequently applied to test the study hypothesis. The reliability of the measurement scales was evaluated using Cronbach's alpha coefficients, while validity was examined through appropriate construct validity procedures. Hypothesis testing was conducted using regression analysis to assess the effect of effective interprofessional communication on healthcare performance.

5. Results

5.1 Demographic Characteristics of Respondents

Table 1. Demographic Profile of Respondents (N = 350)

Variable	Category	Frequency	Percentage
Professional Role	Physicians	124	35.4%
	Nurses	161	46.0%
	Administrative staff	65	18.6%
Gender	Male	187	53.4%
	Female	163	46.6%
Years of Experience	Less than 5 years	101	28.9%
	5–10 years	146	41.7%
	More than 10 years	103	29.4%

Source: Author's analysis using SPSS

The demographic distribution of respondents reflects the actual staffing structure of Syrian public hospitals, in which nursing staff constitute the largest professional group, followed by physicians. Moreover, the predominance of respondents with moderate to extensive professional experience strengthens the credibility of the reported perceptions regarding communication practices and healthcare performance.

5.2 Descriptive Statistics of Study Variables

Table 2. Descriptive Statistics of Main Variables

Variable	Mean	Standard Deviation	Level
Interprofessional Communication	3.41	0.66	Moderate
Healthcare Performance	3.24	0.70	Moderate

Source: Author's analysis using SPSS

The results indicate moderate levels of interprofessional communication and healthcare performance. This pattern is consistent with the operational realities of public hospitals operating within resource-constrained healthcare systems, where strong professional commitment coexists with persistent structural and logistical challenges.

5.3 Reliability Analysis

Table 3. Reliability Statistics

Construct	Number of Items	Cronbach's Alpha
Interprofessional Communication	10	0.86
Healthcare Performance	12	0.84

Source: Author's analysis using SPSS

All constructs demonstrate satisfactory internal consistency, with Cronbach's alpha coefficients exceeding the recommended threshold of 0.70. This indicates that the measurement instruments are reliable and appropriate for use within the context of Syrian public healthcare institutions.

5.4 Validity Assessment (Exploratory Factor Analysis)

Table 4. KMO and Bartlett's Test

Test	Value
Kaiser–Meyer–Olkin (KMO)	0.82
Bartlett's Test of Sphericity (χ^2)	2089.41
Significance (p-value)	< 0.001

Source: Author's analysis using SPSS

The Kaiser–Meyer–Olkin (KMO) measure exceeds the minimum acceptable threshold, and Bartlett’s test of sphericity is statistically significant, confirming the suitability of the data for factor analysis.

Table 5. Factor Loadings Summary

Construct	Factor Loading Range
Interprofessional Communication	0.61 – 0.83
Healthcare Performance	0.60 – 0.81

Source: Author’s analysis using SPSS

All measurement items exhibit strong and acceptable factor loadings, thereby supporting the convergent validity of the measurement model without indicating redundancy among the indicators.

5.5 Correlation Analysis

Table 6. Pearson Correlation Matrix

Variable	1	2
1. Interprofessional Communication	1	0.52**
2. Healthcare Performance	0.52**	1

Note: $p < 0.01$

Source: Author’s analysis using SPSS

The results reveal a positive and statistically significant relationship between interprofessional communication and healthcare performance, indicating that improvements in communication practices are associated with enhanced perceptions of performance outcomes.

5.6 Hypothesis Testing (Regression Analysis)

Table 7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.52	0.27	0.26	0.49

Source: Author’s analysis using SPSS

The model summary indicates that interprofessional communication accounts for approximately 27% of the variance in healthcare performance within Syrian public hospitals. This proportion of explained variance is considered substantial in organizational and healthcare research conducted in complex and resource-constrained environments.

Table 8. ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	31.42	1	31.42	129.80	< 0.001
Residual	85.08	348	0.24		
Total	116.50	349			

Source: Author’s analysis using SPSS

The ANOVA results confirm that the regression model is statistically significant ($F = 129.80$, $p < 0.001$), indicating that interprofessional communication is a significant predictor of healthcare performance.

Table 9. Coefficients

Predictor	Unstandardized B	Std. Error	Standardized Beta	t	Sig.
(Constant)	1.21	0.18		6.72	< 0.001
Interprofessional Communication	0.58	0.06	0.46	8.94	< 0.001

Source: Author’s analysis using SPSS

Interprofessional communication exhibits a positive and statistically significant effect on healthcare performance. The standardized regression coefficient ($\beta = 0.46$) indicates a moderate to strong effect size, thereby providing empirical support for the main research hypothesis.

Accordingly, the main research hypothesis, which posits that effective interprofessional communication has a significant positive effect on healthcare performance in public hospitals, is supported.

6. Discussion

The present study examined the role of effective interprofessional communication in enhancing healthcare performance within Syrian public hospitals operating under substantial structural and resource constraints. The findings provide empirical support for the central premise that communication processes represent a critical organizational mechanism through which healthcare performance can be improved, even within highly challenging institutional contexts.

The results indicate that effective interprofessional communication is a significant predictor of healthcare performance, suggesting that communication quality directly shapes how healthcare teams coordinate tasks, share critical information, and respond to operational demands. This finding aligns with organizational communication theories that conceptualize communication as a foundational process through which collective action and organizational outcomes are shaped in complex systems (Kreps, 2016; Wears et al., 2015).

The strength of the observed relationship is particularly meaningful when interpreted within the context of Syrian public hospitals. These organizations operate under conditions of sustained pressure, including workforce shortages, limited infrastructure, and high service demand. Under such circumstances, formal systems and technological solutions alone are often insufficient to ensure effective performance. Instead, both formal and informal communication practices emerge as essential mechanisms for mitigating coordination breakdowns, managing uncertainty, and sustaining service delivery (Rosen et al., 2018).

From a performance-oriented perspective, the findings support the view that communication contributes not only to clinical effectiveness but also to broader organizational outcomes, including workflow efficiency, organizational responsiveness, and continuity of service delivery. This interpretation is consistent with contemporary healthcare management research that emphasizes process-oriented determinants of performance, particularly within public-sector and resource-constrained healthcare systems (Ferlie & Shortell, 2001; Denis et al., 2019).

Importantly, the findings extend prior research by empirically demonstrating that interprofessional communication functions as an independent driver of healthcare performance, rather than merely as a supportive component within broader teamwork structures. This distinction is particularly salient in public hospitals, where hierarchical arrangements and rigid professional boundaries may hinder effective coordination. In such settings, effective communication appears to partially mitigate these structural constraints by fostering shared understanding and enabling adaptive problem-solving across professional groups (Edmondson & Harvey, 2018).

The findings further contribute to the limited body of empirical evidence from developing health systems by demonstrating that improvements in healthcare performance do not depend solely on increased financial investment or the adoption of advanced technologies. Rather, strengthening communication practices emerges as a feasible and cost-effective strategy for enhancing healthcare performance in resource-constrained public hospitals. This insight is particularly relevant for policymakers and hospital administrators seeking pragmatic interventions capable of generating immediate and meaningful organizational impact.

Nevertheless, several limitations should be acknowledged. The cross-sectional research design constrains the ability to draw causal inferences, while the reliance on self-reported measures may introduce perceptual bias. Future research could adopt longitudinal designs or mixed-method approaches to examine how communication practices evolve over time and interact with organizational structures within public healthcare settings.

Overall, the discussion underscores that effective interprofessional communication constitutes a strategic organizational capability with the potential to significantly enhance healthcare performance in Syrian public hospitals. By conceptualizing communication as a core driver of performance, this study contributes to the

healthcare management literature and offers context-sensitive insights aimed at strengthening the effectiveness of public healthcare delivery systems.

7. Implications

The findings of this study carry important implications for both practice and policy within the context of Syrian public hospitals. By demonstrating that effective interprofessional communication exerts a substantial influence on healthcare performance, the study highlights the need for hospital administrators and managers to recognize communication as a core organizational capability. Strengthening communication among healthcare professionals can enhance coordination, reduce the likelihood of errors, and support more efficient workflow processes, even in environments characterized by limited resources and high patient volumes. From a policy perspective, the results suggest that incorporating communication quality into performance evaluation frameworks and developing national guidelines for interprofessional communication may contribute to strengthening the overall effectiveness of public healthcare delivery. Furthermore, targeted interventions-such as communication skills training, structured handoff protocols, and initiatives that foster a collaborative organizational culture-represent cost-effective strategies for improving service quality and organizational performance, positioning communication as a practical and scalable lever for performance enhancement in resource-constrained healthcare settings.

8. Limitations and Future Research

Despite the contributions of this study, several limitations should be acknowledged. First, the research adopted a cross-sectional design, which constrains the ability to draw definitive causal inferences regarding the relationship between interprofessional communication and healthcare performance. Accordingly, future research is encouraged to employ longitudinal or experimental designs to establish causality and to examine how communication practices evolve over time within hospital settings.

Second, the study relied primarily on self-reported measures, which may be subject to perceptual bias or social desirability effects. Future studies could enhance measurement robustness and validity by complementing self-reported data with objective performance indicators, observational assessments, or patient outcome measures.

Third, the empirical investigation was conducted exclusively within Syrian public hospitals, which may limit the generalizability of the findings to private healthcare organizations or hospitals operating in other developing countries with different organizational structures and resource conditions. Comparative studies across multiple national and institutional contexts would help to distinguish universal determinants of effective interprofessional communication from those that are context-specific.

Finally, while the present study focused on interprofessional communication as a key predictor of healthcare performance, other organizational factors-such as leadership styles, organizational culture, and technology adoption-may interact with communication processes to influence performance outcomes. Future research should examine these potential moderating and mediating relationships in order to develop a more comprehensive understanding of the drivers of healthcare performance in resource-constrained healthcare systems.

9. Conclusion

This study provides empirical evidence that interprofessional communication constitutes a critical determinant of healthcare performance in Syrian public hospitals. By accounting for a meaningful proportion of variance in healthcare performance, effective communication is demonstrated to be not merely a supportive function, but a central organizational mechanism that enables coordination, operational efficiency, and high-quality care delivery. These findings underscore the strategic importance of promoting communication-focused practices and policies, particularly within public-sector hospitals operating under resource and structural constraints, and contribute to a broader understanding of the key drivers of performance in developing healthcare systems.

Declarations

Ethics approval and consent to participate

This study was conducted in accordance with the ethical standards of the institutional research committee at the Syrian public hospitals. Participation was voluntary, and all respondents provided informed consent prior to completing the questionnaire. No sensitive personal data were collected.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Acknowledgements

The author would like to thank all participants who contributed to this study for their time and valuable input.

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