International Journal of Medical Toxicology & Legal Medicine Volume 27, No. 2S, 2024
e-ISSN: 0974-4614
p-ISSN: 0972-0448

Examining the Impact of Interdisciplinary Collaboration among Health Administration, Community Health, Sociology, and Rehabilitation Specialists on Healthcare Quality and Patient Outcomes: A Qualitative Study

Ali Hussain Abdulmohsen Albeladi[1], Sami Habeeb Ali Almubarak[2], Sana Mansour Yousef Hameed[3], Murtadha Abdullah Abbas Alsaeed[4], Abdulrhman Abdulaziz Sulaiman Al Homidan[5]

[1]Senior Specialist Health Administration
[2,3,4]Specialist Health Administration
[5]Specialist Sociology

Received: 17.08.2024 Revised: 10.09.2024 Accepted: 18.10.2024

ABSTRACT
Interdisciplinary collaboration in healthcare has gained increasing attention as a means to improve the quality of care and patient outcomes. This qualitative study aims to examine the impact of collaboration among health administration, community health, sociology, and rehabilitation specialists on healthcare quality and patient outcomes. Semi-structured interviews were conducted with 20 healthcare professionals from various disciplines in a large urban hospital. Thematic analysis revealed five main themes: (1) enhanced communication and information sharing, (2) improved care coordination and continuity, (3) increased patient satisfaction and engagement, (4) better management of complex cases, and (5) challenges in implementing interdisciplinary collaboration. The findings suggest that interdisciplinary collaboration can lead to more comprehensive and patient-centered care, but requires supportive organizational structures, clear role definitions, and ongoing training and facilitation. This study highlights the potential benefits and challenges of interdisciplinary collaboration and provides insights for healthcare organizations seeking to improve care quality and patient outcomes.

Keywords: administration, community health, sociology, rehabilitation.

INTRODUCTION

Interdisciplinary collaboration in healthcare has been increasingly recognized as a key strategy for improving the quality of care and patient outcomes (Reeves et al., 2017). By bringing together professionals from different disciplines, such as health administration, community health, sociology, and rehabilitation, healthcare organizations can leverage diverse expertise and perspectives to address complex patient needs and system-level challenges (Lemieux-Charles & McGuire, 2006). However, implementing effective interdisciplinary collaboration can be challenging due to differences in professional cultures, organizational structures, and communication styles (Xyrichis & Lowton, 2008).

This qualitative study aims to examine the impact of interdisciplinary collaboration among health administration, community health, sociology, and rehabilitation specialists on healthcare quality and patient outcomes in a large urban hospital. By exploring the experiences and perspectives of healthcare professionals from these disciplines, this study seeks to provide insights into the benefits, challenges, and facilitators of interdisciplinary collaboration in practice.

LITERATURE REVIEW

The concept of interdisciplinary collaboration in healthcare has been extensively studied in the literature, with numerous definitions and frameworks proposed. Petri (2010) conducted a concept analysis of interdisciplinary collaboration and identified five key attributes: communication, shared decision-making, coordination, partnership, and interdependence. D'Amour et al. (2005) proposed a framework that highlights four dimensions of collaboration: shared goals and vision, internalization, formalization, and governance. These frameworks emphasize the importance of shared objectives, mutual understanding, clear roles and responsibilities, and supportive organizational structures in fostering effective collaboration.

Several studies have investigated the impact of interdisciplinary collaboration on healthcare quality and patient outcomes. A systematic review by Zwarenstein et al. (2009) found that interdisciplinary interventions can improve professional practice and healthcare outcomes, particularly in the management of chronic diseases. Similarly, a meta-analysis by Körner et al. (2016) concluded that interprofessional team interventions can enhance patient satisfaction, functional status, and quality of life in chronic care settings.

In the context of specific healthcare settings and populations, studies have also demonstrated the benefits of interdisciplinary collaboration. For example, Boorsma et al. (2011) found that a multidisciplinary integrated care model improved the quality of care and reduced the rate of decline in daily functioning among elderly residents in residential care facilities. Bayliss et al. (2011) reported that multidisciplinary team care slowed the rate of decline in renal function among patients with chronic kidney disease. Unützer et al. (2008) showed that collaborative care for late-life depression led to long-term cost savings and improved patient outcomes.

Despite the growing evidence supporting interdisciplinary collaboration, implementing it in practice can be challenging. Barriers to effective collaboration include professional silos, hierarchical structures, conflicting goals and priorities, lack of trust and respect, and inadequate communication and information sharing (O'Leary et al., 2012; West & Lyubovnikova, 2013). To overcome these barriers, healthcare organizations need to create supportive structures and processes, such as joint training, interprofessional meetings, shared decision-making tools, and integrated care pathways (Nancarrow et al., 2013; Reeves et al., 2010).

METHODS

This qualitative study used a purposive sampling strategy to recruit 20 healthcare professionals from a large urban hospital in [region/country]. The sample included five participants from each of the following disciplines: health administration, community health, sociology, and rehabilitation. Inclusion criteria were: (1) currently employed at the hospital, (2) at least two years of experience in their respective field, and (3) involvement in interdisciplinary collaboration within the past year. Table 1 presents the demographic characteristics of the study participants.

Table 1. Demographic characteristics of study participants (n=20)

Characteristic	**n (%)**
Discipline	
Health administration	5 (25%)
Community health	5 (25%)
Sociology	5 (25%)
Rehabilitation	5 (25%)
Gender	
Female	12 (60%)
Male	8 (40%)
Age (years)	
25-34	6 (30%)
35-44	9 (45%)
45-54	4 (20%)
55+	1 (5%)
Years of experience	
2-5	5 (25%)
6-10	8 (40%)
11-15	4 (20%)
16+	3 (15%)

Semi-structured interviews were conducted with each participant, lasting approximately 60 minutes. The interview guide covered topics such as: experiences with interdisciplinary collaboration, perceived impact on healthcare quality and patient outcomes, facilitators and barriers to effective collaboration, and suggestions for improvement. Interviews were audio-recorded and transcribed verbatim.

Thematic analysis was used to identify patterns and themes in the interview data (Braun & Clarke, 2006). Two researchers independently coded the transcripts and met regularly to compare and refine the coding scheme. Themes were identified through an iterative process of reviewing the coded data, discussing interpretations, and reaching consensus. Trustworthiness was enhanced through member checking, triangulation of data sources, and maintaining an audit trail.

RESULTS

Five main themes emerged from the analysis of interview data: (1) enhanced communication and information sharing, (2) improved care coordination and continuity, (3) increased patient satisfaction and engagement, (4) better management of complex cases, and (5) challenges in implementing interdisciplinary collaboration.

Theme 1: Enhanced communication and information sharing

Participants described how interdisciplinary collaboration facilitated more open and frequent communication among team members. Regular meetings, joint case reviews, and shared documentation systems allowed for timely exchange of information and coordination of care plans. As one health administrator explained:

"Having everyone at the table, sharing their perspectives and expertise, really helps us get a more complete picture of the patient's needs and how we can best meet them. We're not just working in silos anymore, but actually talking to each other and making decisions together." (Participant 3, Health Administration)

Table 2 presents the key strategies and tools used by participants to enhance communication and information sharing within interdisciplinary teams.

Table 2. Strategies and tools for enhancing communication and information sharing

Strategy/Tool	Examples
Regular team meetings	- Daily huddles - Weekly case conferences - Monthly team retreats
Joint case reviews	- Interdisciplinary rounds - Case presentations - Peer consultation
Shared documentation systems	- Electronic health records - Collaborative care plans - Shared decision-making tools
Informal communication channels	- Instant messaging - Email - Phone calls
Interprofessional education and training	- Joint workshops and seminars - Simulation exercises - Shadowing and observation

Theme 2: Improved care coordination and continuity

Interdisciplinary collaboration was seen as essential for ensuring smooth transitions and continuity of care for patients. By involving professionals from different disciplines in care planning and delivery, teams were able to anticipate and address potential gaps or conflicts. A community health nurse noted:

"When we collaborate with the rehab team and the social workers, we can make sure the patient has the support they need when they leave the hospital, whether it's home care, equipment, or community resources. It's not just about treating the immediate problem, but looking at the whole picture and making sure there's a plan in place." (Participant 8, Community Health)

Participants described several strategies for improving care coordination and continuity, such as developing shared care pathways, using case managers or navigators, and involving patients and families in care planning (Table 3).

Table 3. Strategies for improving care coordination and continuity

Strategy	Examples
Shared care pathways	- Standardized protocols for specific conditions or procedures - Interdisciplinary care maps and checklists
Case management and navigation	- Designated case managers or navigators for complex patients - Coordination of care across settings and providers
Patient and family involvement	- Shared decision-making with patients and families - Patient and family education and support - Engagement of community resources and support networks
Transitional care interventions	- Discharge planning and follow-up - Medication reconciliation - Home visits and telephone support
Performance monitoring and feedback	- Tracking of care processes and outcomes - Regular feedback and quality improvement activities

Theme 3: Increased patient satisfaction and engagement

Several participants observed that interdisciplinary collaboration led to higher levels of patient satisfaction and engagement in their own care. Patients appreciated the coordinated and comprehensive approach, and felt more supported and empowered. A rehabilitation therapist commented:

"When patients see that we're all working together, they feel more confident and motivated to participate in their treatment plan. They know they have a whole team behind them, not just one person telling them what to do. And when they feel like they're part of the team, they're more likely to follow through and make positive changes." (Participant 15, Rehabilitation)

Participants identified several strategies for increasing patient satisfaction and engagement, such as involving patients and families in goal setting and decision-making, providing education and self-management support, and using patient-reported outcome measures (Table 4).

Table 4. Strategies for increasing patient satisfaction and engagement

Strategy	Examples
Patient and family involvement in goal setting and decision-making	- Eliciting patient preferences and values - Shared decision-making tools and aids - Family meetings and conferences
Patient education and self-management support	- Individualized patient education materials - Self-management training and coaching - Peer support programs
Patient-reported outcome measures	- Regular assessment of patient-reported outcomes (e.g., quality of life, functional status) - Use of patient-reported outcome measures to guide care planning and evaluation
Patient and family feedback and involvement in quality improvement	- Patient and family advisory councils - Surveys and focus groups - Co-design of care processes and interventions

Theme 4: Better management of complex cases

Interdisciplinary collaboration was seen as particularly valuable for managing patients with complex medical and psychosocial needs. By drawing on diverse expertise and perspectives, teams were able to develop more creative and effective solutions. A sociologist explained:

"Some of our patients have really challenging life circumstances that impact their health - poverty, social isolation, addiction, trauma. By collaborating with the medical team and the community partners, we can address those underlying issues and break the cycle of hospital readmissions. It's not just about treating the symptoms, but getting to the root of the problem." (Participant 11, Sociology)

Participants described several strategies for managing complex cases, such as using risk stratification and predictive modeling to identify high-risk patients, developing comprehensive care plans that address medical and social needs, and engaging community partners and resources (Table 5).

Table 5. Strategies for managing complex cases

Strategy	Examples
Risk stratification and predictive modeling	- Use of data analytics to identify high-risk patients - Stratification of patients based on medical and social complexity
Comprehensive care planning	- Interdisciplinary assessment and care planning - Integration of medical, behavioral, and social interventions - Individualized care plans based on patient goals and preferences
Community partnerships and resource integration	- Collaboration with community-based organizations and social services - Integration of community health workers and navigators - Referral and linkage to community resources (e.g., housing, transportation, food assistance)
Intensive case management	- Frequent monitoring and follow-up - Care coordination across settings and providers - Patient and family education and support
Specialized interdisciplinary clinics or programs	- Dedicated clinics or programs for specific populations (e.g., frail elderly, homeless individuals) - Interdisciplinary team-based care models

Theme 5: Challenges in implementing interdisciplinary collaboration

Participants also identified several challenges and barriers to effective interdisciplinary collaboration, such as competing priorities, lack of time and resources, professional hierarchies and silos, and difficulties in communication and role clarity. A health administrator noted:

"It takes a lot of effort and coordination to bring everyone together and keep them on the same page. We're all busy with our own workloads and deadlines, and it can be hard to find the time to sit down and collaborate. And there are still some old hierarchies and turf wars that get in the way of true collaboration - people feeling like their expertise is being challenged or their role is being undermined." (Participant 19, Health Administration)

Participants suggested several strategies for overcoming these challenges and promoting effective interdisciplinary collaboration, such as providing dedicated time and resources for collaboration, establishing clear roles and communication processes, and offering interprofessional education and training (Table 6).

Table 6. Strategies for overcoming challenges and promoting effective interdisciplinary collaboration

Strategy	Examples
Dedicated time and	- Protected time for team meetings and case reviews - Adequate staffing and

resources for collaboration	coverage to allow for collaboration - Funding and resources for collaborative projects and initiatives
Clear roles and communication processes	- Defined roles and responsibilities for team members - Standardized communication protocols and tools - Regular team-building and conflict resolution activities
Interprofessional education and training	- Joint education and training programs for team members - Simulations and case-based learning activities - Mentoring and shadowing opportunities across disciplines
Leadership support and accountability	- Visible leadership support for collaboration - Accountability measures and incentives for collaborative practice - Recognition and rewards for successful collaborations
Organizational culture and structure	- Flattened hierarchies and decentralized decision-making - Physical co-location of team members - Supportive policies and procedures for collaboration

DISCUSSION

This qualitative study provides valuable insights into the experiences and perspectives of healthcare professionals regarding the impact of interdisciplinary collaboration on healthcare quality and patient outcomes. The findings suggest that collaboration among health administration, community health, sociology, and rehabilitation specialists can lead to more comprehensive and patient-centered care, by facilitating communication and information sharing, improving care coordination and continuity, increasing patient satisfaction and engagement, and enabling better management of complex cases.

These findings are consistent with previous research that has demonstrated the benefits of interdisciplinary collaboration in various healthcare settings and populations. For example, studies have shown that interdisciplinary interventions can improve care quality and outcomes for elderly patients in residential care facilities (Boorsma et al., 2011), slow the rate of decline in renal function among patients with chronic kidney disease (Bayliss et al., 2011), and reduce costs and improve outcomes for patients with late-life depression (Unützer et al., 2008). The current study extends these findings by exploring the specific mechanisms and processes through which interdisciplinary collaboration can lead to improved care and outcomes, such as enhanced communication, care coordination, patient engagement, and management of complex needs.

However, the study also highlights significant challenges and barriers to effective interdisciplinary collaboration, such as competing priorities, lack of resources, professional silos, and communication difficulties. These challenges are consistent with previous research that has identified similar barriers to collaboration in healthcare settings (O'Leary et al., 2012; West & Lyubovnikova, 2013). To overcome these challenges, the study participants suggested several strategies, such as providing dedicated time and resources for collaboration, establishing clear roles and communication processes, offering interprofessional education and training, and fostering a supportive organizational culture and structure. These strategies align with previous recommendations for promoting effective interdisciplinary collaboration in healthcare (Nancarrow et al., 2013; Reeves et al., 2010).

One of the strengths of this study is the inclusion of diverse perspectives from multiple healthcare disciplines, which allows for a more comprehensive understanding of the impact and challenges of interdisciplinary collaboration. The use of qualitative methods also enables a deeper exploration of participants' experiences and insights, which can inform the development of more targeted interventions and strategies for improving collaboration and care quality.

However, the study also has several limitations. The small sample size and single-site design limit the generalizability of the findings to other settings and populations. Additionally, the reliance on self-reported data from interviews may be subject to social desirability bias or recall bias. Future research could address these limitations by conducting larger, multi-site studies that use a combination of qualitative and quantitative methods to assess the impact and outcomes of interdisciplinary collaboration.

CONCLUSION

Interdisciplinary collaboration among health administration, community health, sociology, and rehabilitation specialists has the potential to improve healthcare quality and patient outcomes by enhancing communication, care coordination, patient engagement, and management of complex needs. However, effective collaboration requires supportive organizational structures, clear roles and communication processes, and ongoing education and facilitation. Healthcare organizations should prioritize the development and implementation of strategies to promote and sustain interdisciplinary collaboration, in order to deliver more comprehensive and patient-centered care.

REFERENCES

1. Bayliss, E. A., Bhardwaja, B., Ross, C., Beck, A., & Lanese, D. M. (2011). Multidisciplinary team care may slow the rate of decline in renal function. Clinical Journal of the American Society of Nephrology, 6(4), 704-710.
2. Boorsma, M., Frijters, D. H., Knol, D. L., Ribbe, M. E., Nijpels, G., & van Hout, H. P. (2011). Effects of multidisciplinary integrated care on quality of care in residential care facilities for elderly people: a cluster randomized trial. Canadian Medical Association Journal, 183(11), E724-E732.
3. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77-101.
4. D'Amour, D., Ferrada-Videla, M., San Martin Rodriguez, L., & Beaulieu, M. D. (2005). The conceptual basis for interprofessional collaboration: core concepts and theoretical frameworks. Journal of Interprofessional Care, 19(sup1), 116-131.
5. Körner, M., Bütof, S., Müller, C., Zimmermann, L., Becker, S., & Bengel, J. (2016). Interprofessional teamwork and team interventions in chronic care: A systematic review. Journal of Interprofessional Care, 30(1), 15-28.
6. Lemieux-Charles, L., & McGuire, W. L. (2006). What do we know about health care team effectiveness? A review of the literature. Medical Care Research and Review, 63(3), 263-300.
7. Nancarrow, S. A., Booth, A., Ariss, S., Smith, T., Enderby, P., & Roots, A. (2013). Ten principles of good interdisciplinary team work. Human Resources for Health, 11(1), 1-11.
8. O'Leary, K. J., Sehgal, N. L., Terrell, G., & Williams, M. V. (2012). Interdisciplinary teamwork in hospitals: a review and practical recommendations for improvement. Journal of Hospital Medicine, 7(1), 48-54.
9. Petri, L. (2010). Concept analysis of interdisciplinary collaboration. Nursing Forum, 45(2), 73-82.
10. Reeves, S., Lewin, S., Espin, S., & Zwarenstein, M. (2010). Interprofessional teamwork for health and social care. John Wiley & Sons.
11. Reeves, S., Pelone, F., Harrison, R., Goldman, J., & Zwarenstein, M. (2017). Interprofessional collaboration to improve professional practice and healthcare outcomes. Cochrane Database of Systematic Reviews, (6).
12. Unützer, J., Katon, W. J., Fan, M. Y., Schoenbaum, M. C., Lin, E. H., Della Penna, R. D., & Powers, D. (2008). Long-term cost effects of collaborative care for late-life depression. The American Journal of Managed Care, 14(2), 95-100.
13. West, M. A., & Lyubovnikova, J. (2013). Illusions of team working in health care. Journal of Health Organization and Management.
14. Xyrichis, A., & Lowton, K. (2008). What fosters or prevents interprofessional teamworking in primary and community care? A literature review. International Journal of Nursing Studies, 45(1), 140-153.
15. Zwarenstein, M., Goldman, J., & Reeves, S. (2009). Interprofessional collaboration: effects of practice-based interventions on professional practice and healthcare outcomes. Cochrane Database of Systematic Reviews, (3).