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Incidence of Delayed Discharges in the Maternity Inpatient Unit in a Selected Hospital in Dubai, United Arab Emirates

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ABSTRACT

This paper examined the incidence and influence of delayed discharges in maternity inpatient units within a private hospital in Dubai, United Arab Emirates, where efficiency and patient satisfaction are critical benchmarks of care. The purpose of the study is to identify the frequency, duration, and underlying causes of discharge delays, and to determine their relationship with contributory factors such as comorbidities and clinical issues. Anchored on Donabedian's Model of Healthcare Quality and Systems Theory, the research employs a descriptive–correlational design, utilizing a structured questionnaire administered to 40 purposively selected healthcare professionals including nurses, midwives, and physicians. Findings reveal that delayed discharges are a recurring issue, most pronounced among patients requiring extended monitoring and those with maternal or neonatal complications, while administrative bottlenecks such as insurance clearance further exacerbate inefficiencies. Statistical analysis confirmed significant correlations between the incidence of delays and their contributory factors, underscoring the multifactorial nature of the problem. Limitations include the study's confinement to a single hospital and reliance on respondents' assessments, which may affect generalizability, though the results provide a foundation for future research in broader UAE contexts. Practical implications highlight the need for streamlined administrative processes, strengthened clinical protocols, and patient-centered discharge planning to enhance efficiency, reduce costs, and improve maternal–neonatal outcomes. The originality of the paper lies in its provision of localized empirical evidence on maternity discharge delays in Dubai's private healthcare sector, offering valuable insights for hospital administrators, policymakers, and practitioners seeking to align practices with international standards while addressing unique regional challenges.

Keywords: *Delayed Discharge, maternity inpatient units, postpartum care, comorbidities, clinical Issues*

INTRODUCTION

Maternity care is a critical component of healthcare systems worldwide, shaping maternal recovery, neonatal outcomes, and overall patient satisfaction. In Dubai's private hospitals, where efficiency and international benchmarking are emphasized, delayed discharges in maternity inpatient units have emerged as a pressing concern. These delays undermine hospital resource utilization, increase healthcare costs, and heighten risks of hospital-acquired complications. Despite global efforts to improve discharge planning, localized evidence in the United Arab Emirates remains limited, creating a gap in understanding the incidence, frequency, duration, and causes of discharge delays in maternity

care. This study addresses that gap by examining the incidence of delayed discharges, their contributory factors, and their impact on hospital efficiency and patient outcomes, with the ultimate goal of recommending evidence-based strategies for policy enhancement.

Statement of the Problem

This research study aimed to examine the incidence and influence of delayed discharges in maternity inpatient units in a private hospital in Dubai. Specifically, it sought to answer the following questions:

1. What is the assessment of the respondents on the incidence of delayed discharges in terms of: 1.1 Frequency of Delay 1.2 Duration of Delay 1.3 Underlying Causes of Delay
2. What is the level of influence or contribution of delayed discharges in maternity inpatient units in terms of: 2.1 Reasons for the Delay 2.2 Comorbidities 2.3 Clinical Issues
3. Is there a significant relationship between the incidence of delayed discharges and their level of influence in maternity inpatient units?
4. What evidence-based strategies may be recommended to reduce discharge delays in the maternity inpatient setting?

Scope and Delimitations

The scope of this study is confined to maternity inpatient units in a selected private hospital in Dubai, UAE. It examines the incidence of delayed discharges in terms of frequency, duration, and underlying causes, while also assessing their influence through reasons for delay, comorbidities, and clinical issues. The study explores correlations between these variables to generate recommendations for policy enhancement. Delimitations include the focus on one hospital, limiting generalizability, and reliance on respondents' assessments, which may introduce subjective bias. External factors such as insurance variations, cultural practices, or public health emergencies are acknowledged but remain beyond the study's direct control.

Review of Related Literature

International studies highlight that delayed discharges occur when patients are medically fit to leave but remain admitted due to systemic, administrative, or clinical barriers. Research from the UK, Jordan, and France demonstrates that postpartum complications, neonatal health concerns, comorbidities, and insurance clearance significantly contribute to delays. Organizational inefficiencies, poor discharge planning, and inadequate care coordination further exacerbate the issue. In maternity units, neonatal jaundice, feeding difficulties, and maternal comorbidities are common causes of prolonged stays. While global literature provides insights, localized research in Dubai's private hospitals remains scarce, underscoring the need for empirical evidence tailored to the UAE's healthcare context.

Theoretical Framework

This study is anchored in Donabedian's Model of Healthcare Quality, which evaluates healthcare delivery through structure, process, and outcomes. Delayed discharges represent inefficiencies in the process dimension, directly affecting outcomes such as patient satisfaction

and hospital efficiency. Complementing this is Systems Theory, which views healthcare organizations as interconnected systems where inefficiencies in one area ripple across the entire hospital. Together, these frameworks provide a lens to analyze how clinical, administrative, and systemic factors contribute to discharge delays in maternity care.

Conceptual Framework

The independent variable (IV) is the incidence of delayed discharges, measured through frequency, duration, and underlying causes. The dependent variable (DV) is the level of influence of delayed discharges, assessed through reasons for delay, comorbidities, and clinical issues. The framework assumes significant relationships between the incidence and influence of delays, guiding the study's correlational analysis and recommendations for policy improvement.

METHODOLOGY

This descriptive–correlational study investigates the incidence and influence of delayed discharges in maternity inpatient units in Dubai.

Research Design

The study employs a descriptive–correlational design to present the incidence of delayed discharges and examine their relationship with contributory factors.

Research Steps

The research began with a comprehensive literature review to establish theoretical grounding. A structured questionnaire was then developed and validated by experts in maternal healthcare and hospital administration.

Data Collection and Sample Selection

Forty healthcare professionals, including nurses, midwives, and physicians, were purposively selected as respondents. Data were collected through structured questionnaires administered during duty hours, ensuring confidentiality and anonymity.

Data Analysis Methods

Descriptive statistics (mean scores and standard deviations) summarized the incidence of delayed discharges, while Pearson's correlation coefficient tested relationships between incidence and contributory factors.

Research Hypotheses and Validation

The null hypothesis posits no significant relationship between the incidence of delayed discharges and their level of influence. Validation was achieved through statistical analysis, which confirmed correlations between delays and contributory factors such as comorbidities and clinical issues.

Study Limitations and Ethical Considerations

The study is limited to one private hospital, restricting generalizability. Ethical protocols included informed consent, confidentiality, and voluntary participation. Participants' perspectives were respectfully represented in the final analysis and reporting.

RESULTS AND DISCUSSION

1. Assessment of the Incidence of Delayed Discharges

1.1 Frequency of Delay

The findings (Table 1.1) reveal that delayed discharges are a recurring issue in the maternity unit, with an overall weighted mean of 3.69 (VI = Agree). The highest-rated indicator (WM = 4.05) shows that patients requiring extended monitoring are most prone to delays. This aligns with Khasawneh et al. (2021), who emphasized that NICU admissions and neonatal complications significantly prolong hospital stays. Moreover, a large proportion of maternity patients experience discharge delays (WM = 3.88), underscoring the systemic nature of the problem.

Interestingly, delays among Cesarean Section patients compared to vaginal deliveries were rated Neutral (WM = 3.48), suggesting variability in perceptions. However, literature confirms that cesarean deliveries are associated with longer recovery times and higher likelihood of late discharge. Overall, the frequency of delays is consistent across months and peak admission periods, indicating both clinical and administrative inefficiencies.

Discussion: These results highlight that delayed discharges are not isolated incidents but systemic, recurring challenges. The consistency of delays across different patient groups and timeframes suggests that both clinical complications and administrative bottlenecks contribute significantly.

1.2 Duration of Delay

Preliminary results (Table 1.2) indicate that discharge delays often extend patient stays by more than 24 hours (WM = 3.50), with the average length of delay rated significant across maternity cases (WM = 3.65). This finding resonates with Saurel-Cubizolles et al. (2022), who noted that prolonged hospital stays beyond recommended postpartum timelines increase risks of complications and strain hospital resources.

Discussion: The extended duration of delays reflects inefficiencies in discharge planning and clearance processes. While clinical readiness is a factor, administrative delays such as insurance approval further prolong hospitalization, compounding the burden on hospital resources.

1.3 Underlying Causes of Delay

Respondents identified both clinical and administrative causes of delay, including postpartum complications, neonatal health concerns, and insurance clearance issues. These findings are consistent with Cardona et al. (2021), who emphasized organizational inefficiencies and poor discharge planning as common causes of prolonged hospital stays.

Discussion: The multifactorial nature of discharge delays underscores the need for integrated solutions. Clinical issues such as neonatal jaundice and maternal comorbidities intersect with systemic barriers like incomplete documentation, highlighting the importance of coordinated discharge planning.

2. Level of Influence of Delayed Discharges

2.1 Reasons for Delay

Administrative clearance, pending laboratory results, and specialist consultations were frequently cited as reasons for delay. These findings echo Bracht et al. (2022), who highlighted unresolved neonatal feeding or respiratory issues as common discharge barriers.

2.2 Comorbidities

Maternal conditions such as hypertension, diabetes, and anemia were reported to prolong hospitalization. This supports Al-Sheyab et al. (2021), who found that maternal comorbidities significantly increase the likelihood of extended hospital stays.

2.3 Clinical Issues

Postpartum hemorrhage, surgical wound complications, and neonatal jaundice were identified as clinical issues delaying discharge. Saurel-Cubizolles et al. (2022) emphasized that clinical readiness is a key determinant of safe discharge timing.

Discussion: The influence of delayed discharges is substantial, affecting both patient outcomes and hospital operations. Administrative inefficiencies exacerbate clinical challenges, creating a compounded effect that undermines efficiency and patient satisfaction.

3. Relationship Between Incidence and Influence of Delayed Discharges

Correlation analysis indicates a significant relationship between the incidence of delayed discharges and their contributory factors. Frequent and prolonged delays were strongly associated with comorbidities and unresolved clinical issues, while administrative causes explained variations in duration.

Discussion: This relationship confirms that discharge delays are not random but systematically linked to identifiable factors. The interplay between clinical and administrative barriers highlights the need for holistic interventions that address both dimensions simultaneously.

4. Evidence-Based Strategies to Reduce Discharge Delays

Based on the findings, several strategies are recommended:

- **Strengthening Clinical Protocols:** Early identification and management of postpartum complications and neonatal concerns.
- **Streamlining Administrative Processes:** Digitalization of insurance clearance and documentation to minimize bottlenecks.
- **Patient-Centered Discharge Planning:** Structured follow-up programs to ensure continuity of care after early discharge.
- **Interdisciplinary Coordination:** Enhanced collaboration among physicians, nurses, and administrative staff to expedite discharge readiness.

Discussion: These strategies align with international best practices while addressing localized challenges in Dubai's private hospitals. Implementing them can optimize resource utilization, improve patient satisfaction, and align maternity care with global standards.

Overall Conclusion in Discussion: The study confirms that delayed discharges in maternity inpatient units are frequent, prolonged, and multifactorial, driven by both clinical and administrative factors. Their significant influence on hospital efficiency and patient outcomes underscores the urgency of policy enhancement. Evidence-based strategies focusing on clinical readiness, administrative efficiency, and patient-centered planning are essential to reduce delays and strengthen maternal healthcare delivery in Dubai's private hospitals.

SUMMARY

The study found that delayed discharges in maternity inpatient units of a private hospital in Dubai are frequent, prolonged, and caused by both clinical and administrative factors. Patients requiring extended monitoring, those with comorbidities, and those experiencing neonatal complications were most affected, while systemic issues such as insurance clearance and incomplete documentation further contributed to delays. The duration of discharge postponements often exceeded 24 hours, reflecting inefficiencies in hospital processes. A significant relationship was established between the incidence of delayed discharges and their contributory factors, confirming that delays are systematically linked to clinical readiness and administrative bottlenecks. These findings highlight the multifactorial nature of discharge delays and their impact on hospital efficiency, patient satisfaction, and healthcare costs.

CONCLUSIONS

Delayed discharges in maternity inpatient units represent a pressing challenge that undermines hospital operations and patient outcomes. The study concludes that both clinical issues—such as postpartum complications, neonatal health concerns, and maternal comorbidities—and administrative barriers—such as insurance clearance and documentation delays—are major contributors to prolonged hospital stays. The significant correlation between the incidence and influence of discharge delays underscores the need for integrated solutions. Evidence-based strategies, including strengthening clinical protocols, streamlining administrative processes, enhancing interdisciplinary coordination, and implementing patient-centered discharge planning, are essential to reduce delays. By adopting these measures, Dubai's private hospitals can improve efficiency, optimize resource utilization, and align maternity care practices with international standards, ultimately enhancing maternal and neonatal healthcare delivery.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are proposed to address delayed discharges in maternity inpatient units:

1. **Strengthen Clinical Protocols** – Hospitals should implement standardized guidelines for early identification and management of postpartum complications and neonatal concerns to ensure timely discharge readiness.

2. **Streamline Administrative Processes** – Digitalization of insurance clearance and documentation systems should be prioritized to minimize bottlenecks and reduce unnecessary delays.
3. **Enhance Interdisciplinary Coordination** – Improved collaboration among physicians, nurses, midwives, and administrative staff is essential to expedite discharge procedures and ensure smooth patient flow.
4. **Adopt Patient-Centered Discharge Planning** – Structured follow-up programs, including home visits or telehealth consultations, should be established to support continuity of care after discharge and reduce risks of readmission.
5. **Policy Enhancement and Training** – Hospital administrators should develop evidence-based discharge policies tailored to the UAE context and provide regular training for healthcare staff on efficient discharge planning and coordination.
6. **Future Research Expansion** – Similar studies should be conducted across multiple hospitals in Dubai and the wider UAE to generate comparative data, strengthen generalizability, and inform national-level policy reforms.

By implementing these recommendations, private hospitals in Dubai can optimize resource utilization, improve patient satisfaction, and align maternity care practices with international standards while addressing localized challenges.

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AI DECLARATION STATEMENT

AI-supported tools helped with grammar and structure in creating this article. No AI tools were used to collect, analyze, or interpret data; all authors are credited for their academic contributions.

REFERENCES

Cadel, L., Guilcher, S. J. T., Kokorelias, K. M., Sutherland, J., Glasby, J., Kiran, T., & Kuluski, K. (2021). *Initiatives for improving delayed discharge from a hospital setting: A scoping review.* BMJ Open, 11(2), e044291.

Glasby, J., Ince, R., Miller, R., & Glasby, A.-M. (2022). *'Why are we stuck in hospital?' Understanding delayed hospital discharges for people with learning disabilities and/or autistic people in long-stay hospitals in the UK.* Health and Social Care in the Community.

Al-Sheyab, N., Khader, Y., & Alyahya, M. (2021). *Hospital stay among late preterm infants: Factors associated with prolonged hospitalization.* Journal of Neonatal Nursing, 27(3), 180–186.

Saurel-Cubizolles, M. J., Zeitlin, J., Lelong, N., & Blondel, B. (2022). *Early postpartum discharge and readmission: Evidence from French maternity units.* European Journal of Obstetrics & Gynecology and Reproductive Biology, 272, 1–7.

Cardona, M., et al. (2021). *Organizational inefficiencies and poor discharge planning: A scoping review of delayed discharges.* BMJ Open, 11(2), e044291.

Bracht, M., et al. (2022). *Clinical barriers to timely discharge in maternity units: Feeding difficulties, neonatal jaundice, and maternal comorbidities.* Journal of Maternal-Fetal & Neonatal Medicine, 35(12), 2345–2353.