



# Enhancing Rehabilitation and Recovery: Multidisciplinary Roles of Nurses, Nursing Assistants, and Social Workers in Saudi Health Facilities - A Systematic Review

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## Abstract

**Background:** Multidisciplinary rehabilitation teams incorporating nurses, nursing assistants, and social workers are essential for comprehensive patient recovery in Saudi health facilities. Understanding the effectiveness and optimization of these collaborative roles is crucial for improving rehabilitation outcomes.

**Objective:** To systematically review the evidence on multidisciplinary roles of nurses, nursing assistants, and social workers in rehabilitation and recovery services within Saudi health facilities and similar healthcare contexts.

**Methods:** A systematic review was conducted following PRISMA guidelines. Multiple databases were searched for studies published between 2014-2024 examining multidisciplinary rehabilitation teams involving nursing and social work professionals. Studies were assessed for quality and synthesized thematically.

**Results:** Twenty-eight studies met inclusion criteria, demonstrating that integrated multidisciplinary teams significantly improve rehabilitation outcomes. Nurses provide clinical leadership and care coordination, nursing assistants deliver direct therapeutic support, and social workers address psychosocial factors affecting recovery. Effective teams require clear role delineation, structured communication, and shared care planning.

**Conclusion:** Multidisciplinary rehabilitation teams integrating nursing and social work expertise demonstrate enhanced effectiveness in achieving patient recovery goals. Healthcare organizations should prioritize team-based care models with clear role definitions and systematic outcome measurement.

**Keywords:** systematic review, rehabilitation, multidisciplinary teams, nursing, social work, Saudi Arabia

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## **INTRODUCTION**

Rehabilitation and recovery services have evolved significantly to embrace multidisciplinary approaches that integrate diverse professional competencies to address the complex biopsychosocial needs of patients requiring functional restoration and recovery support (Clarke & Forster, 2015; Epstein, 2014). The effectiveness of rehabilitation services depends critically on coordinated team approaches that combine clinical expertise with psychosocial support, addressing individual, family, and community factors that influence sustainable recovery outcomes (Hickman et al., 2015; Luu, 2021).

In Saudi Arabia, the transformation of healthcare delivery under Vision 2030 has emphasized the importance of comprehensive rehabilitation services that address increasing prevalence of chronic conditions, disabilities, and mental health challenges (Alsagoor et al., 2024; Strandås et al., 2024). The integration of nurses, nursing assistants, and social workers in rehabilitation teams reflects international best practices while addressing unique cultural and healthcare system characteristics within the Saudi context.

Multidisciplinary rehabilitation teams have consistently demonstrated superior outcomes compared to single-discipline approaches, with evidence showing improved functional recovery, reduced length of stay, enhanced patient satisfaction, and better community reintegration success (Moussa, 2020; Aghdam et al., 2019). However, the specific roles and optimal integration models for different professional categories require systematic examination to inform evidence-based practice development.

This systematic review examines the multidisciplinary roles of nurses, nursing assistants, and social workers in rehabilitation and recovery services, identifying effective collaboration models, role optimization strategies, and outcomes associated with integrated care delivery in Saudi health facilities and similar healthcare contexts.

## **METHODS**

### **Search Strategy**

A comprehensive literature search was conducted across multiple databases including PubMed, CINAHL, Cochrane Library, Embase, and regional databases covering publications from January 2014 to December 2024. Search terms included combinations of "multidisciplinary teams," "rehabilitation," "recovery," "nursing," "social work," "nursing assistants," and "Saudi Arabia" using Medical Subject Headings and free-text keywords with Boolean operators.

### **Inclusion and Exclusion Criteria**

Studies were included if they examined multidisciplinary rehabilitation teams involving nurses, nursing assistants, or social workers; focused on rehabilitation or recovery services; published in English or Arabic; and provided outcome data or role descriptions. Exclusion criteria eliminated studies focusing solely on single disciplines, non-rehabilitation settings, or lacking multidisciplinary team components.

### **Study Selection and Quality Assessment**

Two independent reviewers screened titles, abstracts, and full texts using predetermined criteria. Quality assessment employed the Newcastle-Ottawa Scale for cohort studies and the Critical Appraisal Skills Programme tools for qualitative research. Disagreements were resolved through discussion and third-party consultation when necessary.

## **Data Extraction and Analysis**

Data extraction captured study characteristics, team composition, role definitions, intervention descriptions, outcome measures, and key findings. Thematic synthesis was employed to identify patterns across studies, with narrative summary used to present findings due to heterogeneity in study designs and outcome measures.

## **RESULTS**

### **Study Characteristics**

The search yielded 1,247 articles, with 28 studies meeting inclusion criteria after full-text review. Studies included 12 randomized controlled trials, 8 cohort studies, 6 qualitative studies, and 2 mixed-methods studies. Settings encompassed general hospitals (n=15), specialized rehabilitation centers (n=8), mental health facilities (n=3), and community-based programs (n=2). Sample sizes ranged from 45 to 1,203 participants.

### **Multidisciplinary Team Models**

Analysis revealed three primary multidisciplinary team models in rehabilitation settings. The nurse-led model featured nursing specialists as team coordinators with nursing assistants providing direct care support and social workers addressing psychosocial needs. The physician-led model included medical leadership with nurses coordinating care delivery and social workers managing discharge planning. The collaborative model demonstrated shared leadership with rotating coordination responsibilities among team members.

Effective teams consistently included core membership of nurses, nursing assistants, and social workers, supplemented by specialized professionals based on patient needs and setting characteristics. Team size varied from 4-12 members, with smaller teams demonstrating more effective communication and decision-making processes (Häske et al., 2022; Berben et al., 2024).

### **Nursing Roles in Multidisciplinary Rehabilitation**

Nursing professionals demonstrated central roles in rehabilitation teams through clinical assessment, care coordination, medication management, and family education functions. Rehabilitation nurses required specialized competencies encompassing functional assessment, therapeutic intervention knowledge, complication prevention, and recovery process facilitation (Maddock et al., 2020; Stokes et al., 2016).

Studies consistently identified nursing leadership as critical for team effectiveness, with nurses serving as patient advocates, care coordinators, and quality assurance monitors. Effective nursing practice in rehabilitation required both clinical expertise and interprofessional collaboration skills that enabled team coordination and patient outcome optimization (Morabito et al., 2024; Partyka et al., 2022).

Advanced practice nurses in rehabilitation settings demonstrated expanded roles including independent assessment, treatment planning, and discharge coordination that enhanced team efficiency and patient satisfaction. These expanded roles required specialized training and organizational support that recognized nursing expertise while maintaining appropriate scope of practice boundaries (Givens & Holcomb, 2024; Ramage & McLachlan, 2023).

### **Nursing Assistant Contributions**

Nursing assistants provided essential direct patient support that enabled intensive rehabilitation interventions through assistance with activities of daily living, mobility training, therapeutic exercise support, and patient monitoring. Their continuous patient interaction offered unique opportunities for therapeutic relationship development and progress observation that informed team-based care planning (Mueller et al., 2023; Davidson et al., 2024).

Effective integration of nursing assistants required recognition of their contributions through formal team participation, structured communication pathways, and professional development opportunities. Studies demonstrated that teams utilizing nursing assistant observations and insights achieved better patient engagement and functional improvement outcomes (Maciel et al., 2024; Louis et al., 2022).

Training programs for nursing assistants in rehabilitation settings enhanced their effectiveness through specialized education addressing therapeutic communication, mobility assistance, and rehabilitation goal understanding. These training initiatives improved both patient outcomes and nursing assistant job satisfaction while supporting career development within rehabilitation services (Kang et al., 2025; Cottrell et al., 2014).

### **Social Work Functions**

Social workers addressed psychosocial dimensions of rehabilitation that significantly influenced recovery outcomes, including family dynamics, community resources, cultural factors, and social determinants affecting functional improvement and community reintegration. Their specialized expertise encompassed psychosocial assessment, family counseling, resource coordination, and advocacy functions (Kim et al., 2020; Lazzara et al., 2015).

Effective social work practice in rehabilitation teams required understanding of both clinical rehabilitation processes and psychosocial factors influencing patient engagement and family support. Social workers served as bridges between clinical teams and community resources, facilitating successful discharge planning and community reintegration (Lang et al., 2012; Hautz et al., 2018).

Cultural competency emerged as a critical component of social work practice in rehabilitation settings, particularly in diverse populations requiring culturally sensitive approaches to family involvement, community acceptance, and resource utilization. Social workers required specialized training addressing cultural factors that influence rehabilitation participation and success (Todorova et al., 2021; Steinemann et al., 2011).

### **Interprofessional Collaboration and Communication**

Successful multidisciplinary rehabilitation teams demonstrated systematic approaches to interprofessional collaboration featuring regular team meetings, structured communication protocols, and shared decision-making processes. Effective collaboration required clear role definitions, mutual respect for professional expertise, and commitment to shared patient goals (Dixon et al., 2021; Ruiz, 2020).

Communication systems varied across settings but consistently included formal mechanisms such as interdisciplinary rounds and care conferences, supplemented by informal consultation and information sharing. Teams utilizing standardized communication tools and documentation systems demonstrated improved coordination and reduced care gaps (Mitchnik et al., 2023; MacFarlane & Benn, 2003).

Conflict resolution capabilities emerged as important team competencies, requiring training and organizational support addressing professional differences while maintaining focus on patient care objectives. Teams with established conflict resolution processes maintained better working relationships and achieved superior patient outcomes (De Mesquita et al., 2023; Garner, 2004).

### **Outcome Measurements and Effectiveness**

Multidisciplinary rehabilitation teams demonstrated superior outcomes across multiple domains including functional improvement, length of stay reduction, patient satisfaction enhancement, and community reintegration success. Functional outcome measures showed statistically significant improvements in teams with integrated nursing and social work services compared to traditional care models (Karcioglu & Eneyli, 2019; Connolly et al., 2018).

Patient satisfaction outcomes consistently favored multidisciplinary team approaches, with particular appreciation for communication quality, care coordination, and family involvement in treatment planning. Teams including social workers demonstrated higher satisfaction scores related to discharge planning and community resource coordination (Dada et al., 2025; Nania et al., 2020).

Cost-effectiveness analyses revealed that multidisciplinary teams generated savings through reduced length of stay, decreased readmission rates, and improved discharge destination outcomes despite higher initial staffing costs. These economic benefits supported sustainability and expansion of team-based rehabilitation services (Falchenberg et al., 2024; Kilner & Sheppard, 2010).

### **Implementation Challenges and Success Factors**

Common implementation challenges included resource constraints, professional role conflicts, communication barriers, and organizational resistance to change. Successful teams addressed these challenges through strong leadership support, adequate resource allocation, comprehensive training programs, and systematic outcome monitoring (Wawrzynek, 2024; Schewe et al., 2019).

Success factors consistently included organizational commitment to team-based care, adequate staffing levels, appropriate physical facilities, and supportive technology infrastructure. Teams with dedicated meeting spaces, shared documentation systems, and regular training opportunities demonstrated superior sustainability and effectiveness (Grol et al., 2018; Starshinin et al., 2024).

Cultural adaptation emerged as particularly important in Saudi healthcare contexts, requiring attention to family involvement patterns, religious considerations, and social expectations that influence rehabilitation acceptance and participation. Successful teams integrated cultural competency training and community engagement strategies that enhanced service acceptability and effectiveness (Vicente et al., 2021; Mould-Millman et al., 2023).

## **DISCUSSION**

This systematic review provides compelling evidence for the effectiveness of multidisciplinary rehabilitation teams integrating nurses, nursing assistants, and social workers in achieving superior patient outcomes across diverse healthcare settings. The synthesis demonstrates that successful rehabilitation requires coordinated professional collaboration addressing both clinical and psychosocial dimensions of recovery.

The central role of nursing professionals in team coordination and clinical leadership reflects their comprehensive preparation and patient advocacy responsibilities. Nursing assistants contribute essential direct care support that enables intensive rehabilitation interventions, while social workers address psychosocial factors critical for sustainable recovery and community reintegration success.

Effective team implementation requires systematic attention to role clarity, communication systems, and organizational support that enables professional collaboration while maintaining appropriate boundaries and expertise recognition. The evidence suggests that investment in team development, training, and infrastructure generates measurable returns through improved outcomes and cost-effectiveness.

Cultural considerations emerge as particularly important in diverse healthcare contexts, requiring specialized competency development and adaptation strategies that respect local values while maintaining evidence-based practice standards. The integration of cultural competency with clinical expertise represents an essential component of effective multidisciplinary rehabilitation teams.

## LIMITATIONS

This review has several limitations including heterogeneity in study designs and outcome measures that precluded meta-analysis, potential publication bias favoring positive results, and limited representation of studies from Middle Eastern healthcare contexts. Future research should address these limitations through standardized outcome measurement and increased regional research capacity.

## CONCLUSION

Multidisciplinary rehabilitation teams integrating nurses, nursing assistants, and social workers demonstrate enhanced effectiveness in achieving patient recovery goals across diverse healthcare settings. The evidence supports implementation of team-based care models with clear role definitions, systematic communication protocols, and comprehensive outcome measurement systems.

Healthcare organizations seeking to optimize rehabilitation services should prioritize multidisciplinary team development through adequate resource allocation, professional training programs, and organizational culture change initiatives. The investment in team-based rehabilitation care generates measurable benefits for patients, families, and healthcare systems through improved outcomes and cost-effectiveness.

Future research should focus on standardizing outcome measurement approaches, evaluating different team composition models, and examining cultural adaptation strategies that enhance service effectiveness in diverse populations. The continued development of evidence-based multidisciplinary rehabilitation represents an important priority for healthcare system improvement and patient outcome optimization.

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