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Management Strategies for Enhancing Healthcare Workers' Competence in Erectile Dysfunction Education at a Primary Healthcare Center in Manado City, Indonesia

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ABSTRACT

Erectile dysfunction (ED) is a prevalent and treatable condition with substantial impacts on men's quality of life, mental health, and intimate relationships. Despite its clinical importance, ED education at the primary healthcare level remains limited, particularly in sociocultural contexts where sexual health is considered taboo. This study explores healthcare workers' competence in delivering ED education, identifies supporting and inhibiting factors, and formulates educational management strategies to strengthen ED education at a single primary healthcare center in Manado City, Indonesia. A qualitative case study design was employed. Data were collected from 46 healthcare workers through in-depth interviews, focus group discussions, observations of service delivery, and review of relevant internal documents. Data were analyzed using an interactive approach comprising data reduction, data display, and conclusion drawing (Miles et al., 2014). The findings reveal that healthcare workers' competence ranges from low to moderate. While biomedical knowledge of ED is generally present, gaps persist in communication skills, empathy, counseling techniques, and culturally sensitive engagement. ED education is often brief, opportunistic, and non-standardized, limiting patient understanding and behavior change. Supporting factors include availability of private counseling space, leadership support, interprofessional collaboration, culturally appropriate educational media, and partner involvement. Inhibiting factors include time constraints, psychological discomfort among healthcare workers, social stigma, limited structured training, and the absence of standardized operating procedures (SOPs) for ED education. The study proposes a competency-based, continuous

educational management strategy integrating planning, implementation, and evaluation (POAC), supported by coaching, supervision, and culturally responsive patient education practices. These findings contribute to educational management in healthcare by demonstrating how organizational systems and competence development can strengthen sensitive health education at the primary care level.

Keywords: counselling, cultural sensitivity, Erectile dysfunction, educational management, health education, healthcare worker competence, primary care.

INTRODUCTION

Primary healthcare centers play a central role in advancing community health through prevention, early detection, and education. In such settings, healthcare workers are expected not only to manage common clinical conditions but also to provide effective health education that fosters informed decision-making and behavior change. Sexual health education, however, is often underprioritized at the primary care level, especially in contexts where social norms restrict open discussion of sexuality. Erectile dysfunction (ED) represents one such sensitive issue requiring professional, empathetic, and culturally appropriate educational approaches.

ED is commonly defined as the persistent inability to achieve or maintain an erection sufficient for satisfactory sexual performance (McKinlay, 2000). Its prevalence increases with age and is strongly associated with chronic diseases such as diabetes mellitus, cardiovascular disease, metabolic syndrome, and hypertension (Selvin et al., 2007). Beyond physiological factors, ED is linked to psychological distress, relationship problems, and reduced self-esteem (Rosen et al., 2004). Yet ED remains underreported due to stigma, embarrassment, and fear of judgment (Hackett, 2016). As a result, many men do not seek help even when treatment options exist.

Health education is a key pathway for reducing stigma, improving health literacy, encouraging timely care-seeking, and supporting adherence to lifestyle changes and medical management. Primary care is especially well-positioned to deliver ED education because it often serves as the first and most accessible contact point for adult men and families. However, healthcare workers may lack the competencies needed to discuss ED confidently and sensitively. Challenges include limited training in sexual counseling, discomfort in addressing intimate topics, and organizational constraints such as short consultation times and insufficient educational materials.

From an educational management perspective, competence development requires more than ad hoc training. It demands systematic planning, organizing, implementation, and evaluation to ensure that healthcare workers have the knowledge, skills, and attitudes necessary to perform educational tasks effectively (Bush, 2018). The management of continuing professional development within healthcare facilities is therefore crucial. Furthermore, adult learning principles suggest that competence develops through experiential learning, reflective practice, and ongoing feedback rather than one-time lectures (Knowles et al., 2015; Kolb, 1984).

This study investigates ED education at one primary healthcare center in Manado City, focusing on healthcare workers' competence, the contextual factors shaping educational practice, and strategies for strengthening ED education through educational management. The research addresses three

objectives: (1) to describe the level and dimensions of healthcare workers' competence in ED education; (2) to identify supporting and inhibiting factors affecting ED education; and (3) to formulate a practical and theoretically grounded educational management strategy to improve ED education services.

THEORETICAL FRAMEWORK

Educational Management in Healthcare

Educational management refers to systematic processes of planning, organizing, leading/directing, and controlling educational resources and activities to achieve defined learning outcomes efficiently and effectively (Bush, 2018). In healthcare, educational management is essential for aligning competence development with service goals, quality standards, and community needs. It involves designing training programs, allocating resources, establishing policies and SOPs, ensuring supportive supervision, and evaluating outcomes.

Owens and Valesky (2011) emphasize that educational management must address both structural components (resources, procedures, organizational roles) and cultural components (values, norms, leadership influence). In primary healthcare settings, leadership support and organizational climate can determine whether continuing education becomes routine practice or remains sporadic. Transformational leadership, for instance, is associated with professional learning cultures and improvement-oriented practices (Leithwood & Jantzi, 2008). Additionally, educational management in health contexts benefits from evidence-based program planning, where interventions are tailored to behavioral and environmental determinants (Green & Kreuter, 2020).

Healthcare Worker Competence

Competence is a multidimensional construct representing the integrated use of knowledge, skills, and professional attitudes in real practice (Epstein & Hundert, 2002). In health education tasks, competence extends beyond clinical knowledge to include communication ability, empathy, ethical conduct, cultural sensitivity, and counseling skills. The World Health Organization underscores that competence development is fundamental to strengthening primary healthcare quality, particularly where health promotion and patient education are core services (WHO, 2020).

For sensitive topics such as ED, competence requires:

1. Cognitive competence: understanding ED etiology, risk factors, comorbidities, and management options.
2. Affective competence: empathy, comfort with sexual health topics, nonjudgmental attitudes, and respect for patient privacy.
3. Communication competence: skills in counseling, motivational interviewing, active listening, and appropriate language use.
4. Professionalism: confidentiality, ethical boundaries, and referral management. These dimensions align with broader views that professional competence is contextual and must be evaluated through actual performance in clinical interactions (Epstein & Hundert, 2002).

Adult Learning and Experiential Development

Adult learning theory provides a foundation for designing professional development. Knowles' andragogy suggests that adults learn best when learning is relevant, self-directed, problem-centered, and connected to experience (Knowles et al., 2015). Kolb's experiential learning model proposes that learning occurs through cycles of concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb, 1984). For healthcare workers, competence in 114ounselling is often strengthened through role-play, supervised practice, case discussions, and reflective feedback rather than solely didactic instruction.

Blended learning approaches can support continuous competence development. Garrison and Vaughan (2008) argue that combining face-to-face learning with structured online modules enhances flexibility and reinforces learning over time. In primary healthcare, short digital microlearning sessions can complement coaching and supervision, enabling healthcare workers to continuously refine counseling practices.

ED Education and Cultural Sensitivity

ED education includes informing patients about the medical nature of ED, modifiable risk factors, treatment pathways, and psychosocial impacts. It also involves correcting misconceptions and reducing stigma (Laumann et al., 2005). Clinical guidelines emphasize a comprehensive approach, including lifestyle modification, management of comorbidities, psychological assessment when needed, partner involvement, and appropriate referral (AUA, 2020).

Cultural sensitivity is critical because sexual health topics are shaped by social norms, religious beliefs, and gender expectations. Studies show that stigma and taboo can prevent open discussion, leading patients to remain silent and providers to avoid initiating conversations (Gott et al., 2019). Therefore, ED education requires culturally attuned communication strategies that protect dignity, emphasize confidentiality, and use respectful language.

METHOD

Research Design

A qualitative case study approach was chosen to capture the complexity of ED education practice within a real organizational setting. Case study design enables deep exploration of processes, meanings, and contextual influences (Merriam & Tisdell, 2016). The study focused on one primary healthcare center in Manado City as a single case.

Participants

Participants included 46 healthcare workers representing multiple professions: physicians, nurses, midwives, and health educators. Inclusion criteria were involvement in patient education services and active employment at the facility during the study period. Sampling sought variation in roles and experiences to capture diverse perspectives.

Data Collection

Data were obtained through four techniques:

1. In-depth interviews exploring knowledge, experiences, confidence, and perceived barriers and supports.
2. Focus group discussions (FGDs) examining shared norms, interprofessional dynamics, and organizational practices.
3. Observation of counseling spaces, patient flow, privacy conditions, and how education was delivered in routine services.
4. Document review of internal training notes, service standards, and educational materials available at the facility.

Data Analysis and Trustworthiness

Data analysis followed an interactive model: (1) data reduction through coding and categorization, (2) data display via thematic matrices, and (3) conclusion drawing and verification (Miles et al., 2014). Trustworthiness was enhanced through triangulation across methods and participant groups, member checking for key interpretations, and an audit trail of coding decisions.

RESULTS AND DISCUSSION

Competence Level in ED Education

Healthcare workers demonstrated low to moderate competence overall. Most participants reported basic awareness of ED as a medical condition and recognized common risk factors such as diabetes, hypertension, smoking, and stress. However, knowledge was often limited to general statements rather than structured explanations suitable for patient education. Many healthcare workers felt uncertain about how to frame ED as a treatable clinical issue without triggering embarrassment.

Affective competence varied. Some healthcare workers expressed empathy and willingness to help, but many acknowledged discomfort initiating ED discussions. This discomfort was associated with fear of being perceived as inappropriate, concern about patient reactions, and personal unease discussing sexual matters. Several participants described ED as "sensitive" and preferred waiting for patients to raise the issue.

Communication competence was a major gap. Many participants lacked counseling techniques to explore patient concerns, assess readiness for behavior change, or guide partner communication. Education was often delivered as brief advice sometimes limited to lifestyle tips without interactive dialogue, assessment of comprehension, or personalized planning. A number of participants also noted difficulty using culturally acceptable terms, especially when patients were older or when spouses were present.

Professionalism-related competence was generally stronger, particularly regarding confidentiality and respect. Yet without SOPs, practices varied by provider. Referral pathways were inconsistently applied; some healthcare workers referred quickly due to limited confidence, while others delayed referral due to assumptions that patients would refuse specialist care.

Patterns of ED Education Delivery

ED education was rarely provided as a structured service. Instead, it occurred opportunistically during consultations for chronic disease management, family planning discussions, or general health checks. Education was typically short, non-standardized, and dependent on individual provider initiative. Documentation of ED education was minimal, and educational materials specific to ED were limited.

Observation suggested that service flow constraints shaped educational practice. High patient volumes reduced time for counseling. Where private rooms were available, they were not always prioritized for sensitive counseling due to competing demands. Consequently, many providers avoided in-depth discussions to minimize discomfort in semi-public spaces.

Supporting Factors

Five supporting factors emerged:

1. Private counseling space: Availability of a private room increased providers' confidence and patient openness.
2. Leadership support: When leaders encouraged respectful counseling and endorsed training, staff were more willing to engage.
3. Interprofessional collaboration: Team discussions and shared responsibility reduced individual anxiety and improved consistency.
4. Culturally appropriate media: Simple brochures or visual aids using respectful language helped providers explain ED without overly explicit terms.
5. Partner involvement: When managed sensitively, involving partners improved patient motivation and adherence to lifestyle recommendations.

Inhibiting Factors

Four primary inhibiting factors emerged:

1. Time constraints and workload: Short consultation times hindered counseling depth.
2. Psychological barriers among providers: Discomfort, fear of judgment, and uncertainty about wording limited proactive education.
3. Social taboo and stigma: Community norms discouraged open discussion; patients often avoided the topic.
4. Absence of SOPs and structured training: Without clear guidelines and routine capacity building, practice depended on individual preference and experience.

Competency Development Outcome

Participants described that competency-building activities that were practical and structured particularly those including pretest–posttest, role-play, and feedback led to noticeable improvements in knowledge and confidence. A knowledge improvement of approximately 35% was observed following competency-based learning efforts. Providers also reported increased comfort when supported by scripts, counseling frameworks, and supervision.

Competence as an Integrated Construct

The findings reinforce that competence in ED education is not merely biomedical knowledge but an integrated ability involving communication, empathy, cultural sensitivity, and professional judgment. This aligns with Epstein and Hundert's (2002) conceptualization of competence as the habitual and judicious use of multiple capacities in practice. Providers in this study generally had the cognitive foundation, yet educational effectiveness was constrained by affective and communication barriers. In sensitive topics, affective readiness and communication skill may be more decisive than clinical knowledge in determining whether education occurs at all.

The Role of Educational Management

Educational management explains why competence gaps persist. When training is irregular and not embedded in organizational systems, competence development becomes individual rather than institutional. Bush (2018) emphasizes that educational effectiveness depends on management functions that sustain learning: planning, organizing resources, directing implementation, and controlling quality. The absence of SOPs and structured educational routines in this case meant that ED education lacked consistent standards, documentation, and evaluation.

Cultural Context and Stigma

Stigma and taboo emerged as major inhibitors, consistent with literature showing that sexual health topics are often avoided due to social norms and fear of embarrassment (Gott et al., 2019). In such contexts, culturally sensitive communication is essential. Educational media and counseling scripts function as protective tools, enabling providers to communicate respectfully and confidently. Partner involvement, when managed ethically and with patient consent, may also reduce stigma and support behavior change.

Adult Learning Implications

The positive effects of practical training highlight the relevance of adult learning and experiential approaches. Knowles et al. (2015) argue that adults learn best when content is immediately applicable. Role-play, guided practice, and feedback reflect experiential learning cycles described by Kolb (1984). Blended learning (Garrison & Vaughan, 2008) could further support continuous competence development through short modules and refreshers, particularly in busy primary care settings.

Proposed Educational Management Strategy

Based on the findings, a competency-based educational management strategy is proposed using POAC (Planning–Organizing–Actuating–Controlling) integrated with adult learning principles and culturally sensitive counseling.

1. Planning

- Conduct a needs assessment to map competence gaps in ED education (knowledge, counseling, cultural language, referral).
- Define competency standards for ED education at the facility level, including minimum counseling steps.
- Develop a simple ED education curriculum for primary care: risk factors, communication scripts, brief counseling, partner involvement, and referral.

- Prepare culturally appropriate educational materials (brochures, posters, short counseling checklists).

2. Organizing

- Assign a small interprofessional education team (doctor, nurse, midwife, health educator) responsible for training coordination.
- Allocate protected time for micro-training sessions (e.g., 30–45 minutes weekly or biweekly).
- Ensure availability and scheduling of private counseling space for sensitive discussions.
- Establish referral pathways and a directory of services for ED management when higher-level care is required.

3. Actuating (Implementation)

- Implement competency-based training using a blended approach: short lectures + role-play + case discussion + supervised practice.
- Use counseling frameworks such as motivational interviewing principles to strengthen patient-centered communication.
- Introduce "trigger points" for ED education during chronic disease visits (diabetes, hypertension) to normalize the topic clinically.
- Encourage respectful partner involvement with consent, emphasizing shared lifestyle management and supportive communication.

4. Controlling (Evaluation and Quality Improvement)

- Evaluate training using multi-level indicators: reaction (satisfaction), learning (pre/post tests), behavior (observed counseling practice), and results (patient understanding and follow-up actions) consistent with evaluation logic (Kirkpatrick & Kirkpatrick, 2006).
- Monitor documentation of ED education activities in routine records to ensure continuity.
- Conduct periodic peer review and supervision to provide supportive feedback and address provider discomfort.
- Revise SOPs and materials based on evaluation findings and patient feedback.

This strategy aims to institutionalize ED education as a routine, standardized, and culturally respectful service rather than an optional discussion. By integrating competence development with organizational systems, the facility can reduce variability, strengthen provider confidence, and enhance patient outcomes.

CONCLUSION

This qualitative case study at a primary healthcare center in Manado City demonstrates that healthcare workers' competence in ED education is low to moderate, with major gaps in communication, counseling, empathy, and cultural sensitivity. ED education is often brief and opportunistic due to time constraints, stigma, provider discomfort, and the absence of SOPs and structured training. Supporting factors including private counseling space, leadership support, interprofessional collaboration, culturally appropriate media, and partner involvement enable more effective education. A competency-based, continuous educational management strategy grounded in POAC and adult learning principles is recommended. Such a strategy should institutionalize ED education through clear competency standards, structured training, supportive supervision,

standardized procedures, and routine evaluation. Strengthening educational management in primary care can enhance the quality and consistency of sensitive health education, reduce stigma, and improve patient engagement in ED management..

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