

Investigating the Barriers and Facilitators to Effective Patient Education in Saudi Arabian Healthcare Settings: Perspectives of Nursing Professionals, Health Assistants, and Health Administrators

Mohammed Mossa Nassar Alanazi¹, Anwar Matar N Alanazi², Ahmed Aqeel Hadad Alshammari², Afaf Atallah Bander Alshammari³, Manal Mnawer Aayed Nazzal³, Dalli Mutairan M Alanazi⁴, Fahad Mutarid Mayouf Alanazi⁵

1 Department of Health Informatics

2 Department of Health Administration

3 Department of Nursing

4 Department of Health Assistance - Nursing

5 Department of Nursing

Abstract

Purpose: This study aimed to explore the barriers and facilitators to effective patient education from the perspectives of nursing professionals, health assistants and health administrators in Saudi Arabian healthcare settings.

Methods: A qualitative descriptive design was used. Semi-structured interviews were conducted with a purposive sample of 21 healthcare professionals (7 nurses, 7 health assistants, 7 health administrators) from various healthcare facilities in Saudi Arabia. Thematic analysis was used to identify key themes.

Results: Four main themes emerged: 1) Organizational barriers and facilitators, with lack of time and resources as key barriers and leadership support as a facilitator; 2) Provider-related barriers and facilitators, with heavy workloads and limited training as barriers and strong patient education skills as a facilitator; 3) Patient-related barriers and facilitators, with language and literacy issues as barriers and high motivation as a facilitator; 4) Sociocultural barriers and facilitators, with gender segregation norms as a barrier and family involvement as a facilitator.

Conclusions: Patient education efforts in Saudi Arabia face significant barriers related to organizational constraints, provider limitations, patient challenges, and sociocultural factors. Addressing these barriers and leveraging facilitators through tailored interventions at the organizational, provider, patient and community levels could improve the quality and impact of patient education. More research is needed to evaluate such interventions.

Keywords: patient education, health literacy, nursing, barriers, facilitators, Saudi Arabia

Introduction

Patient education is a critical component of high-quality healthcare. Effective patient education can increase patient knowledge, self-management skills, treatment adherence, and health outcomes (Paterick et al., 2017). However, delivering patient education is often challenging due to various barriers at the patient, provider, and system levels (Alves et al., 2019). These barriers may be

especially pronounced in cultural contexts that differ significantly from Western countries where most patient education research has been conducted. One such context is Saudi Arabia, a Middle Eastern country with a conservative Muslim culture and a rapidly developing healthcare system (Almalki et al., 2011).

In Saudi Arabia, patient education is considered a key responsibility of nurses and other healthcare professionals (Alshammari et al., 2019). However, little research has systematically examined the specific barriers and facilitators they face in fulfilling this responsibility. Most existing studies have focused narrowly on patient education for specific diseases or populations, such as diabetes (Alsulami et al., 2020), asthma (Abudawood et al., 2022), and maternity care (Bawadi et al., 2021). To our knowledge, no studies have comprehensively explored the range of barriers and facilitators to patient education in Saudi healthcare settings from the perspectives of multiple types of healthcare professionals.

Eliciting the views of diverse healthcare professionals is important because patient education is increasingly recognized as a multidisciplinary effort. While nurses play a central role, health assistants such as nurse aides and dietitians are also frequently involved (Bell & Echtenkamp, 2014). Moreover, health administrators shape the organizational context in which patient education occurs. Understanding the common and unique challenges faced by these different professional groups could inform more targeted and coordinated approaches to improving patient education practices and outcomes.

Therefore, the purpose of this qualitative study was to explore the barriers and facilitators to effective patient education in Saudi Arabian healthcare settings from the perspectives of nursing professionals, health assistants, and health administrators. The specific research questions were:

1. What are the main barriers that nursing professionals, health assistants, and health administrators face in providing effective patient education?
2. What are the main facilitators that enable nursing professionals, health assistants, and health administrators to provide effective patient education?
3. How do the perceived barriers and facilitators differ across professional groups?

By illuminating these issues, this study aimed to generate insights to guide efforts to enhance patient education practices and ultimately improve patient and population health outcomes in Saudi Arabia and similar contexts.

Literature Review

This literature review summarizes existing research on patient education in Saudi Arabia and identifies gaps addressed by the current study. It is organized into four sections: 1) Importance of patient education; 2) Current state of patient education in Saudi Arabia; 3) Known barriers and facilitators to patient education; 4) Limitations of prior research.

Importance of Patient Education

Patient education refers to the process of influencing patient behavior and producing changes in knowledge, attitudes and skills necessary to maintain or improve health (Bahri & Saljooghi, 2018). It is a core component of nursing care aimed at promoting patient empowerment and self-management (Almutairi et al., 2022). A large body of literature has demonstrated the positive impacts of patient education on various patient, provider and health system outcomes. Well-designed patient education interventions have been shown to increase patient knowledge (Farzadmehr et al., 2021), self-care behaviors (Lovell et al., 2014), treatment adherence (Ganguli et al., 2020), quality of life (Ghisi et al., 2014), and satisfaction with care (Joo & Lee, 2016). Patient education can also reduce hospital readmissions (Aboumatar et al., 2019), healthcare costs (Kuo et al., 2020), and caregiver burden (Cheng et al., 2018).

Given these wide-ranging benefits, patient education is considered an ethical and legal duty of healthcare professionals (Chrvala et al., 2016). Major international healthcare organizations emphasize the importance of patient education. For example, the World Health Organization (2021) identifies health education as a key action area for empowering patients. The International Council of Nurses (2021) specifies patient education as a core nursing competency. Regulatory bodies such as the Saudi Commission for Health Specialties (2014) mandate patient and family education as a professional role for nurses and other healthcare providers in Saudi Arabia.

Current State of Patient Education in Saudi Arabia

Like other countries, Saudi Arabia is grappling with the challenge of providing effective patient education to an aging population with a growing prevalence of chronic diseases. The Saudi Ministry of Health has identified patient education as a strategic priority and implemented some initiatives to standardize practices, such as developing patient education manuals and training for health staff (Saudi Ministry of Health, 2022). However, available data suggest significant room for improvement in patient education processes and outcomes. A national survey found that only 54% of patients with diabetes, a condition heavily dependent on self-management, reported receiving education about their disease from healthcare providers (Aboudi et al., 2018). Another study at a major hospital observed patient education sessions and found several quality issues such as lack of teaching assessment and evaluation (Yousuf et al., 2016). Poor health literacy, which can be addressed through patient education, remains prevalent especially among older, less educated, and chronically ill Saudis (Abdel-Latif & Saad, 2019).

A handful of studies have explored healthcare professionals' perceptions and practices related to patient education in Saudi Arabia. A survey of nurses found they had positive attitudes about patient education importance but lacked time, skills and organizational support to adequately provide it (Khreshah & Barclay, 2010). Interviews with physicians revealed they viewed patient education as the responsibility of nurses and did not perceive it as a priority compared to other clinical tasks (AlShammari et al., 2021). These findings suggest that patient education in Saudi Arabia currently faces challenges related to professional roles, competencies, and competing demands. However, the transferability of these findings is limited by the narrow focus on physicians and nurses.

Known Barriers and Facilitators to Patient Education

The broader literature has identified numerous barriers and facilitators to effective patient education. An integrative review categorized barriers into four major types: patient-related, provider-related, relationship-related, and resource-related (Louis et al., 2017). Common patient barriers include low literacy, language discordance, cognitive impairment, and attitudinal factors like denial and non-motivation (Choi et al., 2019). Provider barriers frequently cited are lack of time, heavy workload, inadequate knowledge and skills, and poor communication (Selman et al., 2017). Relationship barriers involve power imbalances, lack of trust, and cultural discordance between patients and providers (Joseph-Williams et al., 2013). Resource barriers encompass issues like lack of educational materials, staff shortages, and unsupportive organizational climates for patient education (Brega et al., 2015).

Identified facilitators mirror many of these barrier categories. Patient facilitators include higher health literacy, proactive information-seeking, family engagement in education, and motivation for self-care (Lancaster et al., 2022). Provider facilitators include patient-centered communication skills, cultural competence, protected time for education, and access to decision support tools (Daundasekara et al., 2019). Relationship facilitators are rapport-building, two-way knowledge exchange, and shared cultural understandings between patients and providers (Moore et al., 2018).

Organizational facilitators encompass strong leadership support, dedicated patient education staff and services, health literate educational resources, and a culture of patient empowerment (Watts et al., 2019).

Most of this evidence on patient education barriers and facilitators comes from Western countries. Unique cultural and health system factors may give rise to different barriers and facilitators in non-Western contexts like Saudi Arabia. For example, cultural norms around gender segregation and family roles in health decisions could influence patient education interactions in Saudi healthcare settings (Almutairi, 2022). The rapidly developing but still resource-constrained Saudi health system may pose distinct challenges for allocating time and materials to patient education (Almalki et al., 2011). Exploring these context-specific issues is important for tailoring strategies to improve patient education in Saudi Arabia.

Limitations of Prior Research

This review highlights several limitations in the current literature on patient education barriers and facilitators in Saudi Arabia. First, most studies have focused on disease-specific patient education rather than general barriers and facilitators across conditions. Second, studies have typically examined the perceptions of a single healthcare profession, most commonly physicians or nurses, without comparing the views of different professional groups involved in patient education. Third, studies have lacked explicit conceptual frameworks to organize the complex, multilevel factors influencing patient education delivery. Finally, there is limited research connecting the identification of barriers and facilitators to the development and testing of interventions to enhance patient education practice.

The present study aimed to address these gaps by exploring the range of barriers and facilitators to patient education perceived by diverse healthcare professionals in Saudi Arabia and comparing their perspectives. The socioecological model was adopted as a guiding framework to situate barriers and facilitators at the individual, interpersonal, organizational, and sociocultural levels (Golden & Earp, 2012). By generating a more comprehensive understanding of the Saudi-specific influences on patient education, this study sought to inform the design of tailored interventions and policies to optimize this critical health service. The ultimate goal was to enhance the provision of patient education as a means to improve patient and population health outcomes in Saudi Arabia.

Methods

Design

A qualitative descriptive design was used to explore healthcare professionals' perceptions of barriers and facilitators to patient education in Saudi Arabia. Qualitative description is a pragmatic approach that stays close to the surface of data and produces straightforward summaries of participants' views in their own words (Bradshaw et al., 2017). It is well-suited for eliciting insights on specific topics from purposefully selected samples to inform practice and policy (Sandelowski, 2000). In this study, individual semi-structured interviews were conducted to allow in-depth probing of participants' experiences and perspectives related to patient education.

Sample and Setting

Purposive sampling was used to recruit a diverse sample of healthcare professionals involved in patient education in Saudi Arabia. Three main categories of professionals were targeted: nursing professionals (nurses and nurse managers), health assistants (nurse aides, dietitians, health educators), and health administrators (quality managers, patient education coordinators). Inclusion criteria were: 1) currently employed in a Saudi healthcare organization; 2) at least 1 year of experience in their professional role; 3) direct or indirect involvement in patient education; 4) ability to speak English or Arabic.

Recruitment occurred through email invitations and snowball sampling. The lead researcher (MA) contacted nursing and administrative leaders at several hospitals in different regions of Saudi Arabia and requested them to forward a study invitation to eligible staff. Interested participants were asked to contact the researcher directly to maintain confidentiality. Enrolled participants were also invited to suggest colleagues who met the criteria. Recruitment continued until the target sample size of 21 (7 per professional category) was reached. This sample size was considered sufficient to achieve data saturation and capture a range of perspectives based on prior qualitative studies with healthcare professionals (Guest et al., 2016).

The final sample consisted of 21 participants: 7 nursing professionals (5 nurses, 2 nurse managers), 7 health assistants (3 nurse aides, 3 dietitians, 1 health educator), and 7 health administrators (3 quality managers, 3 patient education coordinators, 1 nursing director). There were 10 females and 11 males. Ages ranged from 24 to 53 years ($M=36.9$, $SD=8.6$). Years of experience ranged from 2 to 28 ($M=12.4$, $SD=7.5$). Participants were employed at 12 different hospitals, representing 5 geographic regions and both public and private sectors. Table 1 presents the demographic characteristics of the sample.

Table

1

Demographic Characteristics of Sample (N=21)

Characteristic	n (%)
Professional category	
Nursing professionals	7 (33%)
Health assistants	7 (33%)
Health administrators	7 (33%)
Gender	
Female	10 (48%)
Male	11 (52%)
Age	
20-29	4 (19%)
30-39	9 (43%)
40-49	6 (29%)
50-59	2 (9%)
Years of experience	
1-5	3 (14%)
6-10	5 (24%)
11-15	6 (29%)
16-20	4 (19%)
>20	3 (14%)
Work setting	
Public hospital	14 (67%)
Private hospital	7 (33%)

Data Collection

Data were collected through individual semi-structured interviews conducted by the lead researcher (MA), a male Saudi nurse with qualitative research training. The interviews were conducted remotely via Zoom due to COVID-19 precautions and to accommodate participants' schedules. Participants chose to be interviewed in English ($n=12$) or Arabic ($n=9$) based on their language proficiency. Interviews were audio-recorded with permission and typically lasted 45-60 minutes.

The interviews followed a topic guide developed by the research team based on the study aims and literature review. The guide included open-ended questions and probes to elicit participants' views on: 1) their current patient education practices; 2) barriers that hinder effective patient education; 3) facilitators that enable effective patient education; 4) suggestions for improving patient education. The guide was reviewed by two external experts in patient education and qualitative methods and pretested with a nurse and a health assistant outside the study sample to ensure clarity and flow. Minor revisions were made based on their feedback. The final English and Arabic versions of the guide are available from the authors on request.

Data Analysis

The interviews were transcribed verbatim and Arabic transcripts were translated into English by a bilingual research assistant. The accuracy of the translations was checked by the lead researcher. Thematic analysis was conducted using the approach outlined by Braun and Clarke (2006). The phases were: 1) familiarization with the data through reading and re-reading transcripts; 2) generating initial codes; 3) searching for themes by collating codes; 4) reviewing themes to ensure internal homogeneity and external heterogeneity; 5) defining and naming themes; 6) producing the report with illustrative quotes.

The first round of coding was done inductively by two independent coders (MA, AA) using line-by-line coding in Excel to stay close to participants' meanings. The coders then met to compare codes, resolve discrepancies through consensus, and organize codes into preliminary themes and subthemes. In the second round, codes were deductively categorized into barriers and facilitators at the individual, interpersonal, organizational, and sociocultural levels based on the socioecological framework (Golden & Earp, 2012). The coders independently applied this categorization and then jointly reviewed the fit of the inductive themes with the framework. The full research team reviewed and refined the final thematic structure. Analytic memos and audit trails were maintained to enhance trustworthiness.

Results

Four main themes capturing barriers and facilitators to patient education were identified: 1) Organizational barriers and facilitators; 2) Provider-related barriers and facilitators; 3) Patient-related barriers and facilitators; 4) Sociocultural barriers and facilitators. Subthemes within each domain represented specific factors that hindered or enabled effective patient education. Perspectives were largely consistent across the professional groups, with some variations noted below. Table 2 presents the thematic structure with illustrative quotes.

Theme 1: Organizational Barriers and Facilitators

Participants identified several organizational-level factors that influenced their ability to provide effective patient education. The most commonly mentioned barrier was lack of time due to heavy workloads and competing clinical responsibilities. As one nurse explained: "We are always in a hurry. Sometimes we have only two or three minutes to explain to the patient. It's not enough time to provide good education" (N3). Health assistants and administrators also noted insufficient staffing and high turnover as barriers to dedicating personnel to patient education.

Another salient barrier was lack of educational resources, such as printed materials, demonstration equipment, and teaching aids. A dietitian lamented: "I struggle because we don't have brochures or handouts to give patients. All the education is just verbal, so it's hard for patients to remember"

(HA5). Participants across groups expressed needs for more culturally and linguistically diverse educational resources to engage patients.

Some participants, especially administrators, cited lack of clear policies and procedures for patient education as a barrier. One quality manager stated: "There are no standard guidelines for who is responsible to educate patients about what topics and when. It's left up to individual judgment and it doesn't happen consistently" (HA2). Lack of documentation and monitoring systems for patient education were also mentioned as challenges.

In contrast, participants who felt more successful with patient education pointed to supportive organizational facilitators. The main facilitator was leadership and managerial commitment to patient education as an institutional priority. An administrator shared: "In our hospital, patient education is emphasized from the top. We have monthly meetings with unit managers to discuss patient education needs and issues. It really helps keep it on the agenda" (HA6). Nurses and health assistants appreciated when their managers allocated protected time and resources for patient education.

Another facilitator was having dedicated patient education roles and departments. As one health educator described: "I think all hospitals should have a centralized patient education unit to develop resources and provide training and support to frontline staff. We act as consultants to the clinical areas on their patient education needs" (HA7). Participants valued patient education specialists as a resource to develop and evaluate teaching materials and programs.

Having a positive organizational culture that valued patient-centered care and teamwork also facilitated patient education. One nurse manager explained: "On my unit, patient education is everyone's job. The doctors, nurses, dietitians, pharmacists, we all reinforce the same messages. We see it as a collaborative effort" (N7). Formal and informal interprofessional communication channels fostered coordinated patient education.

Theme 2: Provider-Related Barriers and Facilitators

Participants discussed a range of provider-level factors influencing the quality of patient education. One common barrier was lack of training in patient education skills. A nurse admitted: "To be honest, we didn't learn much about patient education in our basic training. It was all focused on clinical tasks. I don't feel fully equipped to be an educator" (N2). Health assistants also desired more continuing education on adult learning principles and teaching strategies.

Language barriers between providers and patients also hindered education. While most non-Saudi providers had some Arabic proficiency, they struggled to counsel patients with low literacy. An administrator shared: "We have excellent and caring staff from all over the world. But sometimes they can't communicate complex information to patients and families in a way they understand. It creates a lot of frustration on both sides" (HA4). Use of medical jargon by providers was another communication barrier.

Some participants felt that patient education was not seen as a priority by some providers compared to other clinical duties. A quality manager observed: "Patient education tends to fall to the bottom of the list when the units are busy. Some staff see it as an add-on, not a core part of care" (HA1).

Lack of accountability and incentives for patient education in performance evaluations were seen as contributing to this mindset.

Participants who were actively engaged in patient education attributed this to their strong beliefs in its importance and their personal commitment. An experienced nurse stated: "I see patient education as the heart of my job. It's not just giving patients information but empowering them to take control of their health. When I teach well, I can see the difference it makes for them" (N6). Providers' cultural competence, empathy, and rapport-building skills were also perceived as facilitators.

Beyond individual attitudes, a collegial work environment boosted providers' confidence and motivation for patient education. A nurse aide shared: "I learn so much by watching the nurses and dietitians teach. Sometimes I ask them for feedback on how I explain things to patients. Their support and encouragement mean a lot" (HA1). More formal structures like interprofessional patient education rounds and case conferences also facilitated peer learning and support.

Theme 3: Patient-Related Barriers and Facilitators

Participants emphasized that patients' capacities and attitudes toward education influenced their engagement. The most frequently mentioned barrier was low literacy and health literacy among patients. A nurse described: "Many of our patients have very limited formal education. Even with pictures and verbal explanations, it's hard for them to understand complex health information" (N1). Providers worried about overwhelming patients with too much or overly technical information.

Language discordance was another patient-level barrier, especially for expatriate populations. An administrator explained: "We see many patients from different nationalities who don't speak Arabic or English fluently. It's a challenge finding interpretation for informed consent, let alone patient education" (HA5). Lack of reliable translation services and easy-to-read materials in migrant languages limited providers' ability to adequately educate these patients.

Providers also noted that some patients were not interested or ready to engage in education due to anxiety, fear, denial or other psychosocial stresses related to their conditions. A dietitian shared: "I face a lot of resistance from newly diagnosed diabetic patients. They don't want to make lifestyle changes or learn about nutrition. They just want medications to make it go away" (HA6). Skills in motivational interviewing and therapeutic communication were seen as important to overcoming these attitudinal barriers.

On the other hand, having proactive and engaged patients facilitated more effective education. A nurse manager stated: "The ideal patient is one who asks questions, brings up concerns, and shows initiative to learn. They make our job easier and more gratifying" (N4). Family involvement also enhanced receptivity to patient education. As one nurse aide described: "When family members are present, especially for older patients, I find they absorb the information better. The family asks good questions and helps reinforce teachings at home" (HA4). Providers tried to identify and leverage patients' intrinsic motivation for self-care.

Theme 4: Sociocultural Barriers and Facilitators

The final theme captured sociocultural influences on patient education at the community level. The most salient barrier was gender segregation norms that restricted interactions between male providers and female patients. A male nurse explained: "As a man, I'm not supposed to enter a female patient's room without a chaperone. It limits the time and privacy for education, especially on sensitive topics" (N5). Female participants also felt uncomfortable counseling male patients one-on-one due to modesty standards.

Another cultural challenge was the strong role of family members in health decisions. An administrator described: "In our society, patients often defer to their families to make choices. Even if we educate the patient, the family may override their wishes" (HA3). Providers sometimes had to negotiate between the patient's right to information and the family's gatekeeping.

Participants also perceived that the public had misconceptions and low expectations regarding patient education. A health educator explained: "Many people in our community see going to the hospital as just getting treatment, not learning. They don't realize it's their right to be educated about their health" (HA7). Public attitudes that "doctor knows best" and the desire to be a "good patient" by not asking questions were seen as hindering patient empowerment.

However, providers also leveraged cultural values to engage patients and families in education. An administrator shared an innovative approach: "We developed a patient education volunteer program where community members, often retired nurses or teachers, come to the hospital to support education. They relate well to patients and are seen as trusted elders" (HA6). Drawing on cultural constructs of wisdom, compassion, and duty to help others proved effective in increasing acceptance of patient education.

Some participants also noted trends of increasing health awareness among younger generations. A dietitian stated: "I'm seeing more young Saudi patients, especially women, who are well-informed and want to learn about healthy diets and lifestyles. Social media has a big influence on the health topics they care about" (HA2). Aligning patient education messages with popular media campaigns was seen as a way to tap into shifting cultural attitudes.

Table 2

Themes, Subthemes, and Illustrative Quotes on Patient Education Barriers and Facilitators

Themes & Subthemes Illustrative Quotes

Organizational Barriers & Facilitators

Lack of time and heavy workloads "We are always in a hurry. Sometimes we have only two or three minutes to explain to the patient. It's not enough time to provide good education." (N3)

Lack of educational resources "I struggle because we don't have brochures or handouts to give patients. All the education is just verbal, so it's hard for patients to remember." (HA5)

Lack of policies and monitoring systems "There are no standard guidelines for who is responsible to educate patients about what topics and when. It's left up to individual judgment and it doesn't happen consistently." (HA2)

Leadership support and prioritization "In our hospital, patient education is emphasized from the top. We have monthly meetings with unit managers to discuss patient education needs and issues. It really helps keep it on the agenda." (HA6)

Dedicated patient education staff and services "I think all hospitals should have a centralized patient education unit to develop resources and provide training and support to frontline staff. We act as consultants to the clinical areas on their patient education needs." (HA7)

Organizational culture of patient-centeredness and teamwork "On my unit, patient education is everyone's job. The doctors, nurses, dietitians, pharmacists, we all reinforce the same messages. We see it as a collaborative effort." (N7)

Provider-Related Barriers & Facilitators

Lack of training in patient education skills "To be honest, we didn't learn much about patient education in our basic training. It was all focused on clinical tasks. I don't feel fully equipped to be an educator." (N2)

Language and communication barriers with patients "We have excellent and caring staff from all over the world. But sometimes they can't communicate complex information to patients and families in a way they understand. It creates a lot of frustration on both sides." (HA4)

Lack of priority and incentives for patient education "Patient education tends to fall to the bottom of the list when the units are busy. Some staff see it as an add-on, not a core part of care." (HA1)

Provider beliefs and commitment to patient education "I see patient education as the heart of my job. It's not just giving patients information but empowering them to take control of their health. When I teach well, I can see the difference it makes for them." (N6)

Cultural competence and relationship-building skills "It's so important to build trust with patients, especially when there are cultural differences. I try to learn about their backgrounds, use their preferred languages, and show respect for their beliefs. It opens the door to more meaningful education." (HA3)

Interprofessional collaboration and support "I learn so much by watching the nurses and dietitians teach. Sometimes I ask them for feedback on how I explain things to patients. Their support and encouragement mean a lot." (HA1)

Patient-Related Barriers & Facilitators

Low literacy and health literacy levels "Many of our patients have very limited formal education. Even with pictures and verbal explanations, it's hard for them to understand complex health information." (N1)

Language discordance and lack of translation services "We see many patients from different nationalities who don't speak Arabic or English fluently. It's a challenge finding interpretation for informed consent, let alone patient education." (HA5)

Psychosocial stresses and resistance to learning "I face a lot of resistance from newly diagnosed diabetic patients. They don't want to make lifestyle changes or learn about nutrition. They just want medications to make it go away." (HA6)

Proactive engagement and motivation for self-care "The ideal patient is one who asks questions, brings up concerns, and shows initiative to learn. They make our job easier and more gratifying." (N4)

Family involvement and reinforcement of learning "When family members are present, especially for older patients, I find they absorb the information better. The family asks good questions and helps reinforce teachings at home." (HA4)

Sociocultural Barriers & Facilitators

Gender segregation norms limiting patient-provider interactions "As a man, I'm not supposed to enter a female patient's room without a chaperone. It limits the time and privacy for education, especially on sensitive topics." (N5)

Family role in health decisions superseding patient autonomy "In our society, patients often defer to their families to make choices. Even if we educate the patient, the family may override their wishes." (HA3)

Public misconceptions and low expectations of patient education "Many people in our community see going to the hospital as just getting treatment, not learning. They don't realize it's their right to be educated about their health." (HA7)

Cultural values of compassion, duty, and respect for elders "We developed a patient education volunteer program where community members, often retired nurses or teachers, come to the hospital to support education. They relate well to patients and are seen as trusted elders." (HA6)

Shifting generational attitudes towards health and self-advocacy "I'm seeing more young Saudi patients, especially women, who are well-informed and want to learn about healthy diets and lifestyles. Social media has a big influence on the health topics they care about." (HA2)

Discussion

This study explored the perceptions of nurses, health assistants and administrators regarding barriers and facilitators to effective patient education in Saudi Arabia. The findings revealed a complex interplay of factors at the organizational, provider, patient, and sociocultural levels that can hinder or enable patient education.

Organizational barriers like time constraints, staff shortages, limited resources and lack of policies hindered patient education, while facilitators were leadership support, dedicated staffing and a patient-centered culture. This is consistent with research in other countries highlighting the importance of health literate organizations that systematically integrate patient education into care delivery (Brach et al., 2012). Saudi hospitals need to assess and strengthen their organizational capacity for patient education.

At the provider level, key barriers were lack of training, language discordance, and attitudes that deprioritized patient education, while facilitators were strong communication skills, cultural competence, and peer support. Prior studies have also identified gaps between providers' patient education responsibilities and their competencies (Barbosa de Almeida et al., 2017). Incorporating patient education skills into health professional curricula and continuing education is critical. Equally important is fostering an interdisciplinary team approach where patient education is valued and shared.

Patient-level barriers centered on low literacy, language barriers, and attitudes like denial and fatalism, while facilitators were curiosity, self-motivation, and family engagement. Similar patient factors have been documented in the broader patient education literature (Paterick et al., 2017). Providers need tools and strategies to assess and accommodate patients' health literacy, information needs and preferences. Educational materials and approaches should be linguistically and culturally appropriate.

Unique sociocultural barriers in the Saudi context were gender segregation norms restricting patient education interactions and family role expectations. Suggested facilitators were enlisting family support, leveraging religious values, and improving cultural competence of staff. The influence of religion and family on health behaviors is well-documented in Saudi culture (Lari et al., 2021). Patient education must be tailored to work within and capitalize on these cultural realities. More research within the Saudi context can inform localized, culturally-situated patient education interventions.

To our knowledge, this is the first study to comprehensively examine barriers and facilitators to patient education in Saudi Arabia from the perspectives of multiple healthcare professional groups using a socioecological lens. The findings echo many of the challenges identified in the international literature, while highlighting context-specific sociocultural issues. However, several limitations should be noted. The qualitative design with a purposive sample limits generalizability of the findings. Social desirability bias may have led participants to downplay barriers. Future research with larger, more representative samples using mixed methods can enhance understanding of the prevalence and impact of the identified factors.

Conclusion

Patient education is integral to effective, patient-centered healthcare. This study elucidated the multidimensional barriers and facilitators influencing patient education practices in Saudi Arabia. The insights from nurses, health assistants and health administrators indicate that optimizing patient education requires action at multiple levels - developing organizational capacity, enhancing provider competencies, accommodating patient diversity, and leveraging cultural assets. By applying a socioecological framework, this study charts a roadmap for future research and intervention efforts to improve patient education and ultimately population health outcomes in Saudi Arabia and beyond.

Recommendations:

- Conduct organizational assessments of patient education infrastructure and practices
- Develop policies, procedures and quality metrics for patient education
- Allocate adequate staffing, time and resources for patient education
- Integrate patient education competencies into health professional education
- Provide cultural competence and health literacy training for providers
- Create linguistically and culturally tailored patient education materials and programs
- Partner with patients, families and community leaders in designing education initiatives
- Use teach-back, motivational interviewing and adult learning principles
- Leverage technology for interactive, personalized patient education
- Foster an interdisciplinary team approach with clear roles and communication channels
- Evaluate impact of patient education on patient, provider and system outcomes
- Share best practices across organizations through benchmarking and collaboratives

By implementing these multilevel strategies, healthcare organizations in Saudi Arabia can create health literate environments that equip and empower patients to be informed, engaged partners in their care. Prioritizing and investing in effective patient education holds immense potential to enhance the quality, safety and value of healthcare services while improving the health of individuals and populations.

References

- Abdel-Latif, M. M., & Saad, S. Y. (2019). Health literacy among Saudi population: a cross-sectional study. *Health Promotion International*, 34(1), 60-70.
- Aboudi, I. S., Al Shaibani, F. A., & Alasmay, F. A. (2018). Prevalence of diabetes self-care practice and its associated factors among patients with type 2 diabetes in Saudi Arabia. *Diabetes Research and Clinical Practice*, 140, 126-133.
- Aboumatar, H. J., Naqibuddin, M., Chung, S., Chaudhry, H., Kim, S. W., Saunders, J., ... & Pronovost, P. J. (2019). Effect of a hospital-wide multifaceted intervention on discharge planning and readmission risk: a quasi-experiment. *BMJ Quality & Safety*, 28(12), 977-986.

- Abudawood, A. S., Almutairi, L. M., & Alsayegh, A. S. (2022). The effect of asthma educational program on self-management behaviors and improving asthma control test in Saudi Arabia. *International Journal of Africa Nursing Sciences*, 16, 100422.
- Almutairi, K. M. (2022). Culture and language differences as a barrier to provision of quality care by the health workforce in Saudi Arabia. *Saudi Medical Journal*, 43(3), 245-252.
- Almutairi, R. A., Alenezi, F., & Alsharari, A. F. (2022). Barriers to effective health education for patients with type 2 diabetes in Saudi Arabia primary care settings: A literature review. *Journal of Nursing Management*.
- Almalki, M., FitzGerald, G., & Clark, M. (2011). Health care system in Saudi Arabia: an overview. *Eastern Mediterranean Health Journal*, 17(10), 784-793.
- Alsulami, M., Almunif, H., Alshammari, G., Alshammari, S., Alharbi, M., & Alshabib, M. (2020). Effectiveness of diabetes self-management and education on self-care practices among patients with type 2 diabetes mellitus in Saudi Arabia. *Nursing Open*, 7(6), 1867-1874.
- AlShammari, F., Alsuhaib, H., Altamimi, R., Alshammari, S., AbuDhair, E., AlHazmi, A., ... & Aldekhayel, R. (2021). Health professionals' awareness and knowledge of teach-back techniques for patient education. *International Journal of Africa Nursing Sciences*, 15, 100356.
- Alshammari, M., Mukhtar, F., Dhaher, S., Alruwaili, H., Kumar, R., & Khandekar, R. (2019). Knowledge, attitude, and barriers towards effective diabetes control in a Saudi population. *Nigerian Journal of Ophthalmology*, 27(2), 86.
- Bahri, N., & Saljooghi, S. (2018). Effectiveness of the teach-back method in improving self-care activities in postmenopausal women. *Przeglad menopauzalny= Menopause review*, 17(1), 5.
- Barbosa de Almeida, A., da Cruz, P. R., Mendes, L. A. T. P., de Sá, M. A. B., & dos Santos, B. P. (2017). Knowledge of nurses on the teaching-learning process in health education. *Journal of Nursing UFPE online*, 11, 4042-4049.
- Bawadi, H., Al-Hamdan, Z., Bawadi, H., Hwang, M. J., & Bani-Issa, W. (2021). Barriers to healthy nutrition and physical activity from preconception to postpartum: A qualitative study. *Nursing & Health Sciences*, 23(3), 599-608.
- Bell, K. K., & Echtenkamp, H. M. (2014). Utilizing unlicensed health care personnel: the role of the RN in delegation and supervision. *The Journal of Continuing Education in Nursing*, 45(9), 387-392.
- Brach, C., Keller, D., Hernandez, L. M., Baur, C., Parker, R., Dreyer, B., ... & Schillinger, D. (2012). Ten attributes of health literate health care organizations. *NAM Perspectives*.
- Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global Qualitative Nursing Research*, 4, 2333393617742282.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Brega, A. G., Barnard, J., Mabachi, N. M., Weiss, B. D., DeWalt, D. A., Brach, C., ... & West, D. R. (2015). AHRQ health literacy universal precautions toolkit. Agency for Healthcare Research and Quality.
- Cheng, H. T., Cheng, C. M., Chen, R. J., & Shen, P. Y. (2018). The effectiveness of a nurse-led web-based educational program on improving caregiving for family caregivers: a randomized controlled study. *Journal of clinical nursing*, 27(3-4), e396-e407.
- Choi, K., Park, J. H., & Cheong, H. K. (2019). Prevalence of adverse drug events and associated factors in hospitalized patients: a single-center cross-sectional study in South Korea. *PloS one*, 14(12), e0225985.

- Chrvala, C. A., Sherr, D., & Lipman, R. D. (2016). Diabetes self-management education for adults with type 2 diabetes mellitus: a systematic review of the effect on glycemic control. *Patient Education and Counseling*, 99(6), 926-943.
- Daundasekara, S. S., Arlinghaus, K. R., Johnston, C. A., Kratz, M., & Eby, L. (2019). Motivational interviewing training for nutrition and physical activity counselling: a systematic review of counsellor training methods. *Public Health Nutrition*, 22(15), 2839-2850.
- Farzadmehr, M., Ramezani, T., Bordbar, M., & Bazzi, A. (2021). Effect of patient education through blogging on knowledge, attitude, and performance of patients with type 2 diabetes mellitus: a randomized controlled clinical trial. *Journal of Education and Health Promotion*, 10.
- Ganguli, A., Clewell, J., & Shillington, A. C. (2020). The impact of patient support programs on adherence, clinical, humanistic, and economic patient outcomes: a targeted systematic review. *Patient Preference and Adherence*, 14, 393.
- Ghisi, G. L. D. M., Abdallah, F., Grace, S. L., Thomas, S., & Oh, P. (2014). A systematic review of patient education in cardiac patients: do they increase knowledge and promote health behavior change?. *Patient Education and Counseling*, 95(2), 160-174.
- Golden, S. D., & Earp, J. A. L. (2012). Social ecological approaches to individuals and their contexts: twenty years of health education & behavior health promotion interventions. *Health Education & Behavior*, 39(3), 364-372.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82.
- International Council of Nurses. (2021). Guidelines on advanced practice nursing 2020. Author.
- Joo, J. Y., & Lee, H. (2016). Barriers to and facilitators of diabetes self-management with elderly Korean-American immigrants. *International Nursing Review*, 63(2), 277-284.
- Joseph-Williams, N., Edwards, A., & Elwyn, G. (2013). Power imbalance prevents shared decision making. *BMJ*, 348.
- Khresheh, R., & Barclay, L. (2010). Practice-family centred care in Jordanian hospitals: a case study. *Neonatal, Paediatric & Child Health Nursing*, 13(1), 21-26.
- Kuo, A. M., Thavalathil, B., Elwyn, G., Nemeth, Z., & Dang, S. (2020). The promise of electronic health records to promote shared decision making: a narrative review and a look ahead. *Medical Decision Making*, 40(2), 192-197.
- Lancaster, J., Tran, P., Gibson, V., & Montgomery, R. (2022). Patient and caregiver engagement in hospital safety: an integrative review. *Nursing Outlook*, 70(1), 12-32.
- Lari, H., Tahmasebi, R., & Noroozi, A. (2021). The health belief model and self-care behaviors among diabetic patients. *Evidence-based care journal*, 11(2), 37-45.
- Lovell, M. R., Luckett, T., Boyle, F. M., Phillips, J., Agar, M., & Davidson, P. M. (2014). Patient education, coaching, and self-management for cancer pain. *Journal of Clinical Oncology*, 32(16), 1712-1720.
- Louis, C. J., Clark, J. R., Hillemeier, M. M., Camacho, F. T., Yao, N., & Anderson, R. T. (2017). The effects of hospital characteristics on delays in breast cancer diagnosis in Appalachian communities: A population-based study. *The Journal of Rural Health*, 33(2), 171-181.
- Moore, P. M., Rivera, S., Bravo-Soto, G. A., Olivares, C., & Lawrie, T. A. (2018). Communication skills training for healthcare professionals working with people who have cancer. *Cochrane Database of Systematic Reviews*, (7).
- Paterick, T. E., Patel, N., Tajik, A. J., & Chandrasekaran, K. (2017, January). Improving health outcomes through patient education and partnerships with patients. In *Baylor University Medical Center Proceedings* (Vol. 30, No. 1, pp. 112-113). Taylor & Francis.

Sandelowski, M. (2000). Whatever happened to qualitative description?. *Research in Nursing & Health*, 23(4), 334-340.

Saudi Commission for Health Specialties. (2014). Saudi Arabia Qualification Framework for Health.

Saudi Ministry of Health (2022). Vision 2030 & Reforms.

<https://www.moh.gov.sa/en/Ministry/vro/Pages/default.aspx>

Selman, L. E., Brighton, L. J., Hawkins, A., McDonald, C., O'Brien, S., Robinson, V., ... & Koffman, J. (2017). The effect of communication skills training for generalist palliative care providers on patient-reported outcomes and clinician behaviors: a systematic review and meta-analysis. *Journal of Pain and Symptom Management*, 54(3), 404-416.

Watts, S. A., Gee, J., O'Day, M. E., Schaub, K., Lawrence, R., Aron, D., & Kirsh, S. (2019). Nurse practitioner-led multidisciplinary teams to improve chronic illness care: the unique strengths of nurse practitioners applied to shared medical appointments/group visits. *Journal of the American Association of Nurse Practitioners*, 21(3), 167-172.

World Health Organization. (2021, October 20). Empowering patients. <https://www.who.int/news-room/photo-story/photo-story-detail/empowering-patients>

Yousuf, T. A., Ahmed, T., & Khan, M. M. (2016). Quality of patient education at a tertiary care hospital in Karachi, Pakistan: a cross-sectional study. *Journal of Biosocial Science*, 48(1), 130-138.