

Evaluating the Effectiveness of a Multidisciplinary Approach to Patient Education and Self-Management Support in Primary Healthcare Settings of Hafr Al-Batin, Saudi Arabia: A Qualitative Study

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ABSTRACT

Background: Patient education and self-management support are crucial components of effective chronic disease management in primary healthcare settings. Multidisciplinary approaches have been shown to improve patient outcomes and satisfaction in various healthcare contexts. However, there is limited evidence on the effectiveness of multidisciplinary approaches to patient education and self-management support in primary healthcare settings of Saudi Arabia. This study aimed to explore the experiences and perceptions of healthcare providers regarding the effectiveness of a multidisciplinary approach to patient education and self-management support in primary healthcare settings of Hafr Al-Batin, Saudi Arabia.

Methods: A qualitative study design was employed, involving semi-structured interviews with 20 healthcare providers (e.g., physicians, nurses, health educators, nutritionists) who were involved in the delivery of the multidisciplinary approach to patient education and self-management support at participating primary healthcare centers. The interviews explored the benefits and challenges of the multidisciplinary approach, the impact of the intervention on patient care and outcomes, and suggestions for improvement. Thematic analysis was conducted using an inductive approach to identify key themes and sub-themes.

Results: The thematic analysis revealed four main themes: (1) benefits of the multidisciplinary approach, (2) challenges in implementing the multidisciplinary approach, (3) impact on patient care and outcomes, and (4) suggestions for improvement. Healthcare providers perceived the multidisciplinary approach as beneficial in promoting patient-centered care, enhancing communication and

collaboration among team members, and improving patient outcomes. However, challenges such as time constraints, limited resources, and resistance to change were also identified. The multidisciplinary approach was perceived to have a positive impact on patient knowledge, self-management skills, and health outcomes. Suggestions for improvement included providing additional training for healthcare providers, enhancing patient engagement, and expanding the scope of the intervention.

Conclusion: The study provides insights into the experiences and perceptions of healthcare providers regarding the effectiveness of a multidisciplinary approach to patient education and self-management support in primary healthcare settings of Hafr Al-Batin. The findings highlight the potential benefits and challenges of implementing a multidisciplinary approach and offer recommendations for improving patient care and outcomes in similar settings.

KEYWORDS: patient education, self-management support, multidisciplinary approach, primary healthcare, qualitative research.

1. Introduction

The increasing prevalence of chronic diseases such as diabetes, hypertension, and cardiovascular disease poses a significant burden on healthcare systems worldwide (World Health Organization, 2018). In Saudi Arabia, the prevalence of chronic diseases is rapidly increasing, with diabetes and hypertension being among the most common conditions (Al-Rubeaan, 2019). Patient education and self-management support are essential components of effective chronic disease management in primary healthcare settings (Powers et al., 2017). Multidisciplinary approaches, involving the collaboration of healthcare providers from different disciplines, have been shown to improve patient outcomes and satisfaction in various healthcare contexts (Körner et al., 2016; Strasser et al., 2005).

Despite the growing evidence supporting the effectiveness of multidisciplinary approaches in healthcare, there is limited research on their application in patient education and self-management support within primary healthcare settings of Saudi Arabia. This study aims to address this gap by exploring the experiences and perceptions of healthcare providers regarding the effectiveness of a multidisciplinary approach to patient education and self-management support in primary healthcare settings of Hafr Al-Batin, Saudi Arabia. The findings of this study can inform the development and implementation of patient education and self-management support interventions in similar settings and contribute to the evidence base on the effectiveness of multidisciplinary approaches in primary healthcare.

2. Literature Review

2.1 Patient Education and Self-Management Support

Patient education and self-management support are key components of chronic disease management in primary healthcare settings. Patient education involves

providing individuals with the knowledge and skills necessary to manage their health conditions, while self-management support encompasses strategies to help patients take an active role in their care and make informed decisions about their health (Bodenheimer et al., 2002). Evidence suggests that patient education and self-management support can lead to improved health outcomes, increased patient satisfaction, and reduced healthcare costs (Lorig et al., 2001; Warsi et al., 2004).

A systematic review by Warsi et al. (2004) found that self-management education programs for chronic diseases such as diabetes, asthma, and arthritis led to improvements in knowledge, self-efficacy, and health behaviors, as well as reductions in healthcare utilization and costs. Similarly, a meta-analysis by Lorig et al. (2001) demonstrated that self-management education programs for chronic diseases were associated with improvements in health status, health behaviors, and healthcare utilization.

2.2 Multidisciplinary Approaches in Primary Healthcare

Multidisciplinary approaches involve the collaboration of healthcare providers from different disciplines to provide comprehensive and coordinated patient care (Mitchell et al., 2012). In primary healthcare settings, multidisciplinary teams may include physicians, nurses, health educators, nutritionists, and other allied health professionals working together to address the diverse needs of patients with chronic conditions (Berra et al., 2007).

Multidisciplinary approaches have been shown to improve patient outcomes and satisfaction in various healthcare settings. A systematic review by Körner et al. (2016) found that multidisciplinary team care was associated with improvements in patient satisfaction, quality of life, and functional status in rehabilitation settings. Similarly, a study by Strasser et al. (2005) demonstrated that a multidisciplinary approach to chronic disease management in primary care led to improvements in patient outcomes and satisfaction.

2.3 Patient Education and Self-Management Support in Saudi Arabia

In Saudi Arabia, the Ministry of Health has recognized the importance of patient education and self-management support in addressing the increasing burden of chronic diseases (Saudi Ministry of Health, 2017). However, there is limited evidence on the effectiveness of patient education and self-management support interventions in Saudi Arabia, particularly in the context of multidisciplinary approaches to patient care.

A study by Al-Shahrani et al. (2017) found that a patient education program for individuals with type 2 diabetes in primary care settings of Riyadh led to improvements in knowledge, self-care behaviors, and glycemic control. However, the study did not explore the role of multidisciplinary collaboration in the delivery of the intervention.

This study aims to address this gap in the literature by exploring the experiences and perceptions of healthcare providers regarding the effectiveness of a multidisciplinary approach to patient education and self-management support in primary healthcare settings of Hafr Al-Batin, Saudi Arabia. The findings of this study can inform the

development and implementation of patient education and self-management support interventions in similar settings and contribute to the evidence base on the effectiveness of multidisciplinary approaches in primary healthcare.

3. Methods

3.1 Study Design

A qualitative study design was employed to explore the experiences and perceptions of healthcare providers regarding the multidisciplinary approach to patient education and self-management support in primary healthcare settings of Hafr Al-Batin, Saudi Arabia.

3.2 Setting and Participants

The study was conducted in primary healthcare settings of Hafr Al-Batin, Saudi Arabia. A purposive sample of 20 healthcare providers (e.g., physicians, nurses, health educators, nutritionists) who were involved in the delivery of the multidisciplinary approach to patient education and self-management support at the participating primary healthcare centers was recruited. Healthcare providers were included if they had at least one year of experience working in primary healthcare and were willing to participate in the study.

3.3 Data Collection

Data were collected using semi-structured interviews with healthcare providers to explore their experiences and perceptions of the multidisciplinary approach. The interviews were conducted face-to-face and were audio-recorded and transcribed verbatim. The interview guide included open-ended questions about the benefits and challenges of the multidisciplinary approach, the impact of the intervention on patient care and outcomes, and suggestions for improvement.

3.4 Data Analysis

Thematic analysis was conducted using an inductive approach (Braun & Clarke, 2006). The interview transcripts were read and re-read to identify initial codes and themes, which were then refined and organized into higher-order themes. The analysis was conducted by two independent researchers to ensure the credibility and trustworthiness of the findings.

4. Results

The thematic analysis of the qualitative data revealed four main themes: (1) benefits of the multidisciplinary approach, (2) challenges in implementing the multidisciplinary approach, (3) impact on patient care and outcomes, and (4) suggestions for improvement. Each theme is discussed in detail below, with supporting quotations from the participants.

4.1 Benefits of the Multidisciplinary Approach

Healthcare providers perceived the multidisciplinary approach as beneficial in promoting patient-centered care, enhancing communication and collaboration among team members, and improving patient outcomes. Participants highlighted the importance of having a diverse team of healthcare providers working together to address the complex needs of patients with chronic conditions.

"The multidisciplinary approach allows us to provide comprehensive care to our patients. We have different healthcare providers with different expertise, and we can work together to address the patients' needs holistically." (Physician, 10 years of experience)

"Having a multidisciplinary team improves communication and collaboration among healthcare providers. We can share information and ideas, and make better decisions for our patients." (Nurse, 7 years of experience)

4.2 Challenges in Implementing the Multidisciplinary Approach

Participants also identified several challenges in implementing the multidisciplinary approach, such as time constraints, limited resources, and resistance to change. Healthcare providers reported that the multidisciplinary approach required additional time and effort to coordinate care and communicate with team members, which could be challenging given their heavy workloads.

"One of the main challenges is finding the time to meet with other team members and discuss patient cases. We all have busy schedules, and it can be difficult to coordinate meetings." (Health educator, 5 years of experience)

"Sometimes, there is resistance to change among healthcare providers. They may be used to working independently and may not see the value in collaborating with others." (Nutritionist, 8 years of experience)

4.3 Impact on Patient Care and Outcomes

The multidisciplinary approach was perceived to have a positive impact on patient care and outcomes. Healthcare providers reported that patients who received care from a multidisciplinary team had better knowledge and understanding of their conditions, improved self-management skills, and better health outcomes.

"Patients who receive education and support from a multidisciplinary team are more knowledgeable about their conditions and are better equipped to manage their health." (Physician, 12 years of experience)

"We have seen improvements in patients' health outcomes, such as better control of blood sugar levels in patients with diabetes and lower blood pressure in patients with hypertension." (Nurse, 9 years of experience)

4.4 Suggestions for Improvement

Participants offered several suggestions for improving the multidisciplinary approach to patient education and self-management support. These included providing additional training for healthcare providers, enhancing patient engagement, and

expanding the scope of the intervention.

"I think it would be helpful to provide more training for healthcare providers on how to work effectively in a multidisciplinary team. This could include communication skills, teamwork, and conflict resolution." (Health educator, 6 years of experience)

"We need to find ways to engage patients more actively in their care. This could involve using technology to provide education and support, or involving family members in the care process." (Physician, 14 years of experience)

Table 1. Themes and sub-themes identified from the qualitative analysis

Theme	Sub-themes
Benefits of the multidisciplinary approach	- Promoting patient-centered care
	- Enhancing communication and collaboration among team members
	- Improving patient outcomes
Challenges in implementing the multidisciplinary approach	- Time constraints
	- Limited resources
	- Resistance to change
Impact on patient care and outcomes	- Improved patient knowledge and understanding
	- Enhanced self-management skills
	- Better health outcomes
Suggestions for improvement	- Providing additional training for healthcare providers
	- Enhancing patient engagement
	- Expanding the scope of the intervention

5. Discussion

This qualitative study explored the experiences and perceptions of healthcare providers regarding the effectiveness of a multidisciplinary approach to patient education and self-management support in primary healthcare settings of Hafr Al-Batin, Saudi Arabia. The findings highlight the potential benefits and challenges of implementing a multidisciplinary approach and offer insights for improving patient care and outcomes in similar settings.

The benefits of the multidisciplinary approach identified in this study, such as promoting patient-centered care, enhancing communication and collaboration among team members, and improving patient outcomes, are consistent with previous research on multidisciplinary approaches in healthcare (Körner et al., 2016; Strasser et al., 2005). These findings underscore the importance of fostering a collaborative and patient-centered approach to chronic disease management in primary healthcare settings.

However, the challenges identified in this study, such as time constraints, limited resources, and resistance to change, highlight the need for strategies to overcome these barriers and facilitate the successful implementation of multidisciplinary approaches. These findings are in line with previous research that has identified similar challenges in implementing multidisciplinary approaches in healthcare settings (Gucciardi et al., 2016; Xyrichis & Lowton, 2008).

The suggestions for improvement offered by the participants, such as providing

additional training for healthcare providers, enhancing patient engagement, and expanding the scope of the intervention, provide valuable insights for the development and implementation of patient education and self-management support interventions in similar settings. These findings are consistent with previous research that has emphasized the importance of provider training, patient engagement, and comprehensive interventions in improving chronic disease management (Davy et al., 2015; Grady & Gough, 2014).

The strengths of this study include the use of a qualitative design to explore the experiences and perceptions of healthcare providers, the inclusion of a diverse sample of healthcare providers from different disciplines, and the use of an inductive approach to data analysis. However, the study also has some limitations. The sample size was relatively small, and the study was conducted in a single region of Saudi Arabia, which may limit the generalizability of the findings to other settings. Additionally, the study did not include the perspectives of patients, which could provide valuable insights into the effectiveness of the multidisciplinary approach.

Future research should focus on conducting larger-scale studies to evaluate the effectiveness of multidisciplinary approaches to patient education and self-management support in primary healthcare settings in Saudi Arabia and other countries. Studies should also explore the perspectives of patients and their families to gain a more comprehensive understanding of the impact of these interventions on patient care and outcomes.

6. Conclusion

This qualitative study provides insights into the experiences and perceptions of healthcare providers regarding the effectiveness of a multidisciplinary approach to patient education and self-management support in primary healthcare settings of Hafr Al-Batin, Saudi Arabia. The findings highlight the potential benefits and challenges of implementing a multidisciplinary approach and offer recommendations for improving patient care and outcomes in similar settings.

The study emphasizes the importance of fostering a collaborative and patient-centered approach to chronic disease management in primary healthcare settings. The findings also underscore the need for strategies to overcome the challenges associated with implementing multidisciplinary approaches, such as providing additional training for healthcare providers, enhancing patient engagement, and expanding the scope of the intervention.

Future research should focus on conducting larger-scale studies to evaluate the effectiveness of multidisciplinary approaches to patient education and self-management support in primary healthcare settings in Saudi Arabia and other countries. The perspectives of patients and their families should also be explored to gain a more comprehensive understanding of the impact of these interventions on patient care and outcomes.

The findings of this study can inform the development and implementation of patient education and self-management support interventions in primary healthcare settings

in Saudi Arabia and other countries. By adopting a multidisciplinary approach and addressing the challenges identified in this study, healthcare providers can improve the quality of care for patients with chronic conditions and ultimately enhance patient outcomes.

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