



Review Article

Patient-Centered Care in Resource-Limited Settings: A Critical Review of Knowledge, Attitudes, and Practices (KAP)

Anas M. S. Altweel¹, Moutaz F. Gebril¹, Aram Elhashem², Hwuida Kh. A. Maghouth³, Hussien Hamid⁴, Heithum S. Baiu⁵, Ahmed. S. Mikael⁶, Mahmoud A. Aloriby⁷

¹. Healthcare Management Program, School of Human and Social Sciences, Libyan International University. Benghazi, Libya

². Department of Dental Public Health and Preventive Dentistry, Faculty of Dentistry, Benghazi University.

³. Department of Pharmacology and Toxicology, Faculty of Pharmacy, University of Benghazi, Benghazi – Libya

⁴. Clinical Laboratory Sciences Program, School of Health and Medical Sciences, Libyan International Medical University. Benghazi – Libya

⁵. Department of Health Education, Faculty of Public Health, University of Benghazi, Benghazi, Libya

⁶. Department of Research Centre, Libyan International University, Benghazi, Libya

⁷. Department of Pathology, University Medical Centre, Libyan International University, Benghazi, Libya

Corresponding Author, Mahmoud A. Aloriby: Email: mahmoud.aloriby@limu.edu.ly

Abstract

Patient-centred care (PCC) is emerging as a core principle of high-quality healthcare, where clinical decisions align with patients' values, preferences, and sociocultural contexts. However, despite strong theoretical and some empirical backing for the impact of PCC on patient satisfaction, adherence, and clinical outcomes compared to standard care, its adoption has been erratic—especially in low- and middle-income settings. This literature review critically appraises Knowledge, Attitudes and Practices (KAP) surrounding PCC, with relevance to Benghazi in Libya and the wider global context. Although healthcare professionals appear to have adequate theoretical knowledge of PCC-related principles, a persistent divide remains between what they know and how they practice in the clinical environment. Value-based models are commonly restricted by entrenched provider-driven attitudes, organisational opposition to change, and system-level so-called competing priorities that place efficiency above patient involvement. Their quality has also been impeded by practical limitations such as poor resourcing, inadequate training and lack of gold standard assessment. Various sociodemographic factors like education, age, sex, and socioeconomic status also add to KAP perspectives and resulting variations in patient experience and engagement. Generally, PCC concepts still exist conceptually in the local context, but they lack the necessary operationalisation to be effective. Educational, organisational, and policy-level interventions are needed to counter these challenges and close the gap between research and practice.

Keywords: Patient-centred care, Knowledge, Attitudes, Practices, Resource-limited settings.

Introduction

The promotion of patient-centred care (PCC) is an integral part of a high-quality health care system, but is also part of what is described as a paradigm shift away from traditional provider-driven approaches toward those that acknowledge patients' autonomy, shared decision-making and individualised approaches to care.[1]. This shift is rooted in the belief that better health outcomes are not solely a function of medical interventions — they will also be contingent on how much care aligns with what matters to patients and their social and cultural backgrounds. Despite considerable theoretical and policy support for the notion of PCC, including in low- and middle-income settings where structural, cultural, and organisational barriers may hinder its application, persistent diverging implementation of PCC in health systems is reported [1].

Although many organisations are most often associated with positive patient satisfaction, treatment adherence, and clinical outcomes, these benefits in practice and patient care realities heavily depend on providers' knowledge about PCC, attitudes toward PCC concept adoption into the routine nursing practice framework, including clinical care, and daily practices. In this regard, one key tool for evaluating whether PCC is effective in the real world is the Knowledge, Attitudes and Practices (KAP) framework. KAP studies can identify gaps in health care workers' understanding of PCC, their perception of its value and its consistency in clinical practice [2]. Yet modern scholarship did demonstrate that, in reality, increased consciousness by itself does not move from the best generic to forceful reception — factors to avoid or mitigate, indicating a more detailed appraisal-oriented approach.



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Most research on PCC is conducted in high-resource healthcare systems worldwide where institutional support, training and policy frameworks are implemented, making their use in everyday practice possible. There still isn't much evidence on developing regions, such as North Africa and the Middle East, and what evidence exists is scattered." This gap is particularly apparent in less developed countries such as Libya, which has long faced challenges around infrastructure, workforce capacity and governance in the health sector [2]. Other phenomena, such as cultural attitudes toward doctors, patients' expectations and the resource constraints of the system, are likely to limit the use of PCC in such cases. For this reason, assumptions made in high-income settings may not be readily applicable, highlighting the importance of conducting research in different contexts.

Libya's second-largest city, Benghazi, is the perfect place to study how PCC operates within a complex and ever-changing system. There is not much practical data yet on how well patient care collaboration tends to be understood and implemented, both by health care providers and patients in this case. Moreover, there has not been a systematic exploration of the association between knowledge and attitude with actual clinical practice, which poses challenges in developing targeted interventions that can enhance care.

This review will critically assess the current literature regarding KAP concerning PCC, with a specific emphasis on highlighting gaps applicable to the Benghazi context. This review aims to assess how effectively PCC principles are implemented on the ground by synthesising both global and regional evidence, including exploring the key barriers and facilitators that impact their delivery. This review also seeks to place PCC in the broader context of healthcare reform, balancing potential benefits with the challenges presented by its implementation in resource-scarce and diverse cultural settings.

The central aim of the review is to move from normative advocacy towards a critical examination of how PCC's understanding beyond theory can be useful in practice. This can also contribute to future research, policy making, and clinical practice aimed at improving approaches toward person-centred care in the Libyan healthcare system.

Patient-Centered Care: Definitions and Importance

PCC is defined as an approach that ensures patient values guide all clinical decisions. It is crucial for improving patient satisfaction, adherence to treatment, and health outcomes [3,4]. It involves engaging patients as active participants in their care, ensuring that their voices are

heard in clinical decision-making processes [5]. Research has shown that effective communication between healthcare providers and patients significantly enhances the quality of care delivered. By prioritising patient preferences and involving them in their care decisions, healthcare providers can create a more supportive environment that fosters trust and collaboration [6].

PCC is recognised as a key component of high-quality care and more efficient use of healthcare resources. The approach is particularly relevant in diverse communities, where cultural competence and individualised care are essential [6]. In developing countries such as Libya, there is a pressing need to assess KAP regarding PCC to inform healthcare policies and practices. The importance of PCC cannot be overstated; it has been associated with numerous benefits, including enhanced patient satisfaction, improved adherence to treatment plans, and better health outcomes [4].

Arguments Supporting PCC

PCC is supported by a robust body of evidence highlighting its benefits across various domains. Research consistently demonstrates that engaging patients more actively in their care processes leads to enhanced satisfaction levels [4]. Furthermore, studies indicate that this active involvement is associated with improved health outcomes, suggesting that a collaborative approach to healthcare fosters better results [5]. Beyond the direct benefits to patients, implementing PCC can also contribute to a more efficient use of healthcare resources, potentially reducing unnecessary interventions and leading to cost savings [7].

Counterarguments against PCC

Despite the widely recognised benefits of patient-centred care, its implementation is often fraught with challenges. Resistance from healthcare providers, who may be more accustomed to traditional, provider-centric models, can impede the adoption of PCC [8]. Moreover, resource limitations, particularly in settings with constrained infrastructure like Libya, can hinder the development of training programs and other necessary support systems for effective PCC implementation. Cultural barriers may also play a significant role, as existing perceptions about authority figures can impede the open communication between patients and providers that is essential for fostering a truly patient-centred environment [9].

Knowledge, Attitudes, and Practices (KAP) Framework

The KAP framework serves as a useful model for assessing the understanding of a specific topic, particularly relevant in understanding healthcare delivery,



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their attitudes toward it, and their actual practices. In the context of PCC, this framework can help identify how well residents understand PCC principles, how they feel about its implementation, and how effectively they engage with these practices in real-world settings [10,11]. Understanding these relationships between knowledge and patient outcomes is essential for improving healthcare delivery. The KAP model is particularly useful for designing educational interventions aimed at improving patient-centred practices by addressing knowledge gaps and changing attitudes, and serves as a valuable tool for assessing individuals' perceptions and engagement with PCC [10,11].

Historical Context and Evolution of PCC

The concept of PCC has evolved significantly over the past few decades. Initially focused on the physician's role in delivering care, the model has shifted towards a more holistic view that considers the patient's perspective as central to healthcare delivery. This evolution reflects broader societal changes towards individual rights and autonomy in healthcare decisions [8,12].

The emergence of evidence-based medicine has also played a crucial role in this transition, advocating for care that is informed by both clinical evidence and patient preferences. However, with the increasing emphasis on patient autonomy and satisfaction, PCC has gained prominence worldwide [8,12].

The evolution of PCC is rooted in several key principles, including respect for patients' values and preferences, coordination and integration of care, information and communication, physical comfort, emotional support, involvement of family and friends, continuity and transition, and access to care. These principles are designed to create a partnership between patients and healthcare providers, fostering an environment where patients feel valued and respected [6].

Conceptual Framework and Key Principles of PCC

As PCC rests on several core principles aimed at fostering a holistic and empowering healthcare experience. PCC adopts a comprehensive view of health, extending beyond mere physical symptoms to encompass the emotional, social, and spiritual dimensions of well-being. Shared decision-making forms a crucial component, wherein healthcare providers and patients collaboratively make informed choices regarding treatment options. Cultural competence is also emphasised, reflecting a commitment to recognising and respecting the diverse cultural backgrounds and beliefs of patients [6,9,12].

This framework is further grounded in key principles, including a profound respect for patients' values, preferences, and expressed needs, ensuring that healthcare providers honour individual patient preferences. Effective coordination and integration of care are essential for seamless transitions between different levels of care. Comprehensive information sharing, clear communication, and patient education are also paramount, ensuring patients are well-informed about their conditions and treatment options. Recognising the psychological aspects of patient care, PCC prioritises physical comfort and emotional support to alleviate fear and anxiety during treatment processes. Involvement of family and friends, continuity and smooth transitions, and easy access to care further contribute to an environment where patients feel valued, empowered, and actively engaged in their healthcare journey [6,14].

Theoretical Models Supporting PCC

Several theoretical models provide a foundation for the implementation and practice of PCC, each offering a unique perspective on healthcare delivery. The Patient-Centered Clinical Method emphasises the importance of understanding patients' individual experiences with illness while simultaneously fostering a strong therapeutic relationship between patient and provider [15]. Complementing this approach is the Biopsychosocial Model, which integrates biological, psychological, and social factors that influence health outcomes, thereby providing a comprehensive framework for understanding patient care and addressing the complexities of health and illness.

Furthermore, the Chronic Care Model focuses specifically on improving the management of chronic diseases through enhanced patient engagement, self-management support, and shared decision-making, ultimately aiming to increase patient satisfaction and improve care outcomes. Collectively, these models underscore the multifaceted nature of healthcare delivery and highlight the critical need for adopting a patient-centred approach that considers the diverse needs and perspectives of each individual [15].

Importance of PCC in Modern Healthcare

PCC is recognised as a key component of high-quality care, associated with improved health outcomes, increased patient satisfaction, and more efficient use of healthcare resources. It aligns healthcare with patients' needs, preferences, and values, fostering a partnership between patients and providers that leads to shared decision-making [7,16]. The benefits of PCC are multifaceted. For patients, it improves health outcomes,



Libyan Journal of Medical Research

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enhances physical and social well-being, and empowers them to participate actively in healthcare decisions. For healthcare providers, it strengthens relationships with patients, increases job satisfaction, and provides opportunities to deliver more individualised and effective care [16]. At a system level, PCC improves efficiency, reduces healthcare costs, and enhances the overall quality of care delivery [7].

Methodological Approaches in PCC Research

Recent advancements in PCC research have underscored the importance of employing robust methodologies to effectively assess and implement PCC practices. Various methodological approaches, including surveys, interviews, and observational studies, have been utilised to evaluate KAP regarding PCC. Surveys serve as a valuable tool for estimating KAP among residents, while interviews and focus groups allow for a deeper exploration of the attitudes and practices of both healthcare providers and the public [16].

Surveys

Surveys are commonly employed in PCC research due to their ability to gather quantitative data from large populations. These instruments can be designed to measure various aspects of KAP related to PCC. For instance, effective questionnaire design is crucial for obtaining reliable data. Recent studies emphasise that clarity, relevance, and ease of completion are essential components in crafting effective questionnaires [27]. This is particularly important when assessing KAP among diverse populations, such as those in Benghazi, where cultural differences may influence responses.

Interviews and Focus Groups

Qualitative methods such as interviews and focus groups provide rich insights into the perspectives of participants. These approaches allow researchers to explore the nuances of healthcare providers' and patients' experiences with PCC. Through open-ended questions, researchers can capture detailed accounts of how individuals perceive patient-centred practices and identify barriers to their implementation [16]. This qualitative data complements quantitative findings from surveys by providing context and depth to the understanding of KAP.

Reliability and Validity

Ensuring the reliability and validity of measurement tools is paramount in PCC research. Forero [19]. Discusses the use of Cronbach's Alpha as a statistical measure to assess the internal consistency of scales used in surveys. In studies evaluating KAP regarding PCC, high reliability scores indicate that the items within a scale are measuring

the same underlying construct effectively. This reliability is crucial for obtaining valid data that accurately reflects participants' knowledge and attitudes toward PCC.

Observational Studies

Observational studies also play a role in PCC research by allowing researchers to assess real-world practices in healthcare settings. By observing interactions between healthcare providers and patients, researchers can identify how well PCC principles are being implemented in practice. This method provides valuable insights into the actual behaviours and practices that characterise patient-centred care, which may differ from reported attitudes or knowledge levels.

Mixed Methods Approaches

Combining quantitative and qualitative methods through mixed methods research can enhance the comprehensiveness of PCC studies. By integrating survey data with qualitative insights from interviews or focus groups, researchers can develop a more holistic understanding of KAP regarding PCC. This approach allows for triangulation of data, thereby strengthening the validity of findings [28]

Overall, employing diverse methodological approaches is essential for advancing research on Patient-Centered Care. By utilising surveys, interviews, observational studies, and mixed-methods designs, researchers can gain a comprehensive understanding of KAP regarding PCC. Ensuring the reliability and validity of measurement tools further enhances the quality of data collected. As research continues to evolve in this field, these methodologies will play a crucial role in identifying effective strategies for implementing patient-centred practices across diverse healthcare settings.

Association between KAP and Socio-demographic Variables

The association between KAP regarding PCC and sociodemographic variables is a critical aspect of understanding how different factors influence healthcare delivery in Benghazi. Socioemographic factors such as age, gender, education level, and socioeconomic status play significant roles in shaping individuals' perceptions, knowledge, attitudes, and practices toward PCC. Studies have shown that these factors can affect how individuals perceive and engage with patient-centred care [20,23]

Age

Hernandez & Barlow[17] conducted a systematic review addressing age differences in healthcare expectations among older adults concerning PCC models. Understanding these differences can help tailor



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interventions aimed at improving KAP across various age groups within the Libyan context.

Previous research indicates that younger individuals tend to have more progressive attitudes towards patient-centred practices compared to older adults. For instance, a study conducted in Ethiopia found that patients aged [25-26] years were more likely to receive patient-centred care than older age groups (AOR 0.39, 95% CI 0.32–0.64) [23]. This trend suggests that younger patients may be more open to engaging in shared decision-making processes, reflecting a shift towards greater patient involvement in healthcare.

Conversely, older adults often demonstrate lower engagement levels with PCC due to entrenched beliefs about traditional hierarchical doctor-patient relationships. The findings from various studies indicate that older patients may feel less empowered to voice their preferences or concerns during consultations, leading to a gap between their expectations and the care they receive [23]. This generational divide highlights the need for targeted educational initiatives aimed at older populations to enhance their understanding of PCC principles and encourage active participation in their care.

Gender

Gender differences also significantly impact KAP regarding PCC. Studies have shown that female patients generally exhibit higher levels of knowledge and more positive attitudes towards PCC compared to their male counterparts. For example, a study assessing oral health knowledge among adolescents revealed that males displayed poorer knowledge and practices than females [24]. This trend is consistent across various health domains, where women are often found to be more proactive in seeking information and engaging with healthcare providers.

Furthermore, gender roles may influence how individuals perceive their rights within the healthcare system. Women may be more likely to advocate for their preferences and seek collaborative relationships with providers, while men might adhere more closely to traditional expectations of authority in medical settings. [30] Understanding these gender dynamics is essential for developing interventions that promote equitable access to PCC for all patients.

Education

Nutbeam [10] highlights health literacy as a vital component influencing individuals' ability to engage with health information effectively. Improving health literacy among residents can enhance their understanding of PCC principles, thereby promoting better health outcomes. Thus, education level is one of the most critical predictors

of KAP concerning PCC. For instance, education level has been found to be a significant predictor of knowledge about PCC, with higher education levels associated with better understanding and attitudes toward PCC principles and more favourable attitudes towards its implementation [20].

Mansour et al[20] found that individuals with higher education levels had significantly better understanding and attitudes toward PCC compared to those with lower educational backgrounds. This relationship underscores the importance of educational initiatives aimed at increasing awareness of patient-centred practices among less educated populations.

Moreover, education can empower individuals to engage actively in their healthcare decisions, fostering a sense of agency that is crucial for effective PCC implementation. Individuals with higher education are typically more informed about their rights as patients, which can lead to increased satisfaction with care when their preferences are acknowledged[27].

Socioeconomic Status

Socioeconomic status (SES) also plays a pivotal role in shaping KAP regarding PCC and can impact access to healthcare services and the quality of care received, influencing overall satisfaction with PCC[23]. Individuals from higher SES backgrounds generally have better access to healthcare services and resources, which can enhance their understanding of patient-centred practices [22,23]. Conversely, those from lower SES backgrounds may face barriers such as limited access to information, healthcare services, and support systems that facilitate engagement with providers.

Research has shown that patients with lower SES often report lower satisfaction levels with healthcare services due to perceived inequities in care quality [26]. These disparities highlight the need for targeted interventions aimed at improving access to information and resources for disadvantaged populations in Benghazi.

Thus, the association between KAP regarding PCC and sociodemographic variables such as age, gender, education level, and socioeconomic status is complex yet crucial for understanding healthcare dynamics in Benghazi. Recognising these associations allows for the development of tailored interventions that address specific needs within diverse population groups. By enhancing knowledge and fostering positive attitudes toward PCC across different sociodemographic groups, healthcare providers can improve overall patient engagement and satisfaction within the healthcare system [22,23].

Barriers to Implementing PCC



Libyan Journal of Medical Research

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Despite the benefits of Patient-Centered Care (PCC), several barriers hinder its effective implementation. Common obstacles include time constraints, institutional policies, limited resources, and a lack of standardised measurement tools[25]. For instance, healthcare providers often face heavy workloads that restrict their ability to engage in meaningful patient interactions, which is essential for PCC[26]. Additionally, the organisational culture and the attitudes of healthcare providers toward PCC can significantly impact its adoption. If the organisational environment does not prioritise patient-centred values, staff may feel unsupported in their efforts to implement these practices [27].

Moreover, resistance to change among healthcare professionals can impede the transition from traditional care models to more patient-centred approaches. Many providers may be accustomed to a biomedical model that emphasises clinical outcomes over patient preferences and shared decision-making [27]. This resistance is often compounded by a lack of training and awareness about the principles and benefits of PCC.

Strategies to overcome these barriers include implementing training programs for healthcare professionals that emphasise the importance of PCC and equip them with the necessary skills to engage patients effectively[20]. Policy changes that support PCC initiatives are also crucial, as they can create an environment conducive to patient-centred practices. Furthermore, integrating technological advancements—such as telehealth and patient engagement platforms—can enhance communication between patients and providers, thereby improving care delivery[27]. Barriers to effective communication between patients and healthcare providers can significantly impact the delivery of PCC. A literature-based study indicated various obstacles, such as cultural differences, language barriers, and inadequate training among healthcare providers, as key factors hindering effective communication[30]. Addressing these barriers through targeted training programs could enhance both provider-patient interactions and overall satisfaction with care received. Kwame & Petrucka [9] examined barriers and facilitators affecting nurse-patient interactions concerning PCC communication strategies. Identifying these factors can inform training programs aimed at enhancing nurses' abilities to engage with patients effectively.

Continuous feedback and improvement processes are essential for adapting to changing patient needs and healthcare advancements. Regular assessments of PCC implementation can help identify areas for improvement

and ensure that care remains aligned with patient preferences [24]. By addressing these barriers and fostering a culture that values patient engagement, healthcare organisations can enhance the effectiveness of PCC.

Recommendations to Improve KAP toward PCC

To enhance Knowledge, Attitudes, and Practices (KAP) toward Patient-Centered Care (PCC) in Benghazi, several strategic recommendations can be proposed:

Educational Initiatives

Implementing targeted training programs for healthcare professionals is vital to improving their knowledge and attitudes toward PCC. These educational programs should encompass key topics such as shared decision-making, cultural competence, and the biopsychosocial model of health[26,27]. By equipping healthcare providers with the necessary skills and knowledge, they can better engage with patients and address their unique needs effectively. Continuous professional development opportunities should also be offered to ensure that staff remain updated on best practices in PCC.

Policy Changes

Advocating for policy reforms that support the implementation of PCC is essential. Legislative changes could mandate the incorporation of patient-centred practices within healthcare settings and allocate resources for their effective execution[20,23]. Such policies should emphasise the importance of patient involvement in care decisions and establish frameworks for accountability in delivering PCC.

Patient Activation

An increase in patient activation leads to improved self-management behaviours among patients with chronic conditions. This relationship underscores the importance of fostering an environment where patients feel empowered to take charge of their health through informed decision-making[27].

Technological Integration

Incorporating technological advancements can significantly enhance patient engagement, communication, and overall care delivery. The use of patient portals, telehealth services, and mobile health applications can facilitate better communication between patients and healthcare providers, making it easier for patients to access information and participate in their care[28]. Technology can also streamline processes and reduce barriers to accessing care.

Community Engagement

Engaging the community in PCC initiatives through public awareness campaigns is crucial. Involving patients



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and their families in the care process fosters a culture that values patient-centred approaches[29]. Community outreach programs can educate the public about their rights in healthcare settings and encourage active participation in health-related decisions.

Continuous Improvement

Encouraging continuous feedback and improvement processes is essential for adapting to evolving patient needs and advancements in healthcare. Regular assessments of KAP among healthcare providers and patients can help identify areas for improvement in PCC practices[30]. Establishing mechanisms for collecting feedback from patients regarding their experiences will also inform ongoing quality improvement efforts.

By implementing these recommendations, healthcare organisations in Benghazi can foster an environment that promotes patient-centred care, ultimately enhancing patient engagement and satisfaction within the healthcare system.

Conclusion

Patient-centred care (PCC) is an essential component of high-quality healthcare and is associated with improved communication, patient satisfaction, treatment adherence, and health outcomes. However, despite increasing awareness of PCC principles, important gaps remain in knowledge, attitudes, and practices among both healthcare providers and patients, particularly in resource-limited settings such as Benghazi, Libya. Organisational barriers, limited resources, insufficient staff training, and sociocultural factors continue to hinder the effective implementation of PCC. This review also demonstrates that sociodemographic characteristics, including age, gender, education, and socioeconomic status, influence how patients engage with healthcare services and should be considered when designing PCC initiatives. Furthermore, the limited availability of context-specific research in Libya highlights a substantial evidence gap that restricts the development of effective policies and interventions.

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