

Investigating the Association Between Nurse Practitioners' Autonomy and Patient Access to Primary Care in Rural Areas: A Qualitative Study

Naimah Fehaid Nasser Alrasheedi¹, Muneera Lafi Alharbi¹, Amal Abdullah Bahil Alshammari¹, Norah Hamoud M. Al Shemmari¹, Aziza MaayoufJdaan Al Anzi¹, Salma Madloul Aldhafeeri¹

1. Nursing

Abstract

Objective: This qualitative study aimed to investigate the association between nurse practitioners' autonomy and patient access to primary care in rural areas.

Methods: Semi-structured interviews were conducted with 20 nurse practitioners working in rural primary care settings. Participants were recruited using purposive sampling. The interviews were transcribed verbatim and analyzed using thematic analysis.

Results: Three main themes emerged from the data: 1) the impact of nurse practitioner autonomy on patient access, 2) barriers to nurse practitioner autonomy, and 3) strategies to enhance nurse practitioner autonomy. Nurse practitioners reported that their autonomy positively influenced patient access to care, but they also faced challenges related to scope of practice restrictions and limited support.

Conclusion: Nurse practitioners' autonomy plays a crucial role in improving patient access to primary care in rural areas. Addressing barriers to autonomy and implementing strategies to enhance it can optimize the contribution of nurse practitioners in rural healthcare delivery.

Keywords: nurse practitioners, autonomy, patient access, primary care, rural health

Introduction

Nurse practitioners (NPs) have emerged as key providers of primary care services, particularly in rural and underserved areas (Buerhaus et al., 2018). With advanced education and clinical training, NPs possess the skills and knowledge to deliver high-quality, patient-centered care (American Association of Nurse Practitioners [AANP], 2021). However, the extent to which NPs can practice autonomously varies across jurisdictions, potentially impacting patient access to care (Xue et al., 2016).

In rural areas, where healthcare resources are often scarce, NPs play a vital role in filling primary care gaps and improving access to services (Graves et al., 2016). Autonomy, defined as the ability to make independent clinical decisions and practice to the full extent of one's education and training, is a crucial factor in NPs' effectiveness (Weston, 2008). However, the association between NP autonomy and patient access to primary care in rural settings has been relatively understudied.

This qualitative study aims to address this gap by exploring the perspectives of NPs working in rural primary care settings regarding the association between their autonomy and patient access to care. Understanding this relationship can inform policies and strategies to optimize NP practice and improve healthcare delivery in rural communities.

Literature Review

Nurse Practitioner Autonomy

NP autonomy has been a topic of ongoing discussion and research in the healthcare field. Autonomy refers to the ability of NPs to make independent clinical decisions and practice to the full extent of their education and training (Weston, 2008). The level of autonomy granted to NPs varies across states and countries, with some jurisdictions allowing full practice authority and others requiring physician oversight or collaboration (Xue et al., 2016).

Research has demonstrated the benefits of NP autonomy in various healthcare settings. A systematic review by Laurant et al. (2018) found that NPs with higher levels of autonomy provided care of similar or better quality compared to physicians, with high patient satisfaction. Additionally, NP autonomy has been associated with improved patient outcomes, reduced healthcare costs, and increased job satisfaction among NPs (Kuo et al., 2013; Pron, 2013).

However, NPs often face barriers to practicing autonomously, including scope of practice restrictions, lack of understanding of their role, and resistance from other healthcare professionals (Hain & Fleck, 2014). These barriers can limit NPs' ability to provide comprehensive care and contribute to healthcare access issues, particularly in underserved areas (Poghosyan et al., 2013).

Nurse Practitioners and Rural Health

NPs have been identified as crucial providers in addressing healthcare access issues in rural and underserved areas (Barnes et al., 2018). Rural communities often face challenges in attracting and retaining healthcare professionals, leading to primary care shortages (Weinhold & Gurtner, 2014). NPs, with their advanced education and clinical skills, are well-positioned to fill these gaps and improve access to care (Buerhaus et al., 2018).

Research has demonstrated the positive impact of NPs on rural healthcare delivery. A study by Xue et al. (2019) found that states with full practice authority for NPs had a higher supply of NPs in rural areas compared to states with more restrictive regulations. Additionally, NPs in rural settings have been shown to provide high-quality care, with outcomes comparable to physicians (Stanik-Hutt et al., 2013).

However, NPs in rural areas often face unique challenges, such as professional isolation, limited resources, and increased workload (Colon-Gonzalez et al., 2013). These challenges can impact NPs' job satisfaction and retention, ultimately affecting patient access to care (Spetz et al., 2017).

Patient Access to Primary Care

Patient access to primary care is a critical component of an effective healthcare system. Primary care serves as the first point of contact for patients and plays a vital role in disease prevention, health promotion, and care coordination (Starfield et al., 2005). However, access to primary care services remains a challenge, particularly in rural and underserved areas (Healthy People 2030, n.d.).

Several factors influence patient access to primary care, including provider availability, geographic proximity, insurance coverage, and socioeconomic status (Kullgren et al., 2012). In rural areas, where healthcare resources are limited, these barriers can be particularly pronounced (Douthit et al., 2015).

NPs have been identified as a key solution to improving patient access to primary care (Bodenheimer & Bauer, 2016). By increasing the number of primary care providers and expanding their scope of practice, NPs can help alleviate provider shortages and improve access to care (Graves et al., 2016). However, the extent to which NPs can fulfill this role depends on their level of autonomy and the regulatory environment in which they practice (Xue et al., 2016).

Methods

Study Design

This study employed a qualitative design using semi-structured interviews to explore the perspectives of NPs regarding the association between their autonomy and patient access to primary care in rural areas. Qualitative research allows for an in-depth understanding of participants' experiences and the context in which they practice (Creswell & Poth, 2018).

Participants and Sampling

Twenty NPs working in rural primary care settings participated in the study. Purposive sampling was used to recruit participants with diverse backgrounds and experiences. Inclusion criteria included being a licensed NP with at least two years of experience working in a rural primary care setting. Participants' demographic information is presented in Table 1.

Table 1
Participant Demographics

Characteristic	n (%)
Gender	
Female	18 (90%)
Male	2 (10%)
Age (years)	
25-34	3 (15%)
35-44	9 (45%)
45-54	6 (30%)
55-64	2 (10%)
Years of Experience as NP	
2-5	6 (30%)
6-10	8 (40%)
>10	6 (30%)

Data Collection

Semi-structured interviews were conducted with each participant, lasting approximately 60-90 minutes. An interview guide was developed based on a review of the literature and the study's research questions. The guide

included open-ended questions exploring participants' perceptions of their autonomy, its impact on patient access to care, and the challenges they faced in rural practice. All interviews were audio-recorded and transcribed verbatim.

Data Analysis

Thematic analysis, as described by Braun and Clarke (2006), was used to analyze the interview data. The analysis involved familiarization with the data, generating initial codes, searching for themes, reviewing and refining themes, and defining and naming the final themes. Two researchers independently coded the data and discussed any discrepancies to reach a consensus. NVivo 12 software was used to facilitate the coding and analysis process.

Results

Three main themes emerged from the data analysis: 1) the impact of NP autonomy on patient access, 2) barriers to NP autonomy, and 3) strategies to enhance NP autonomy.

Theme 1: Impact of NP Autonomy on Patient Access

Participants reported that their level of autonomy had a significant impact on patient access to primary care in rural areas. NPs with higher levels of autonomy felt they could provide more comprehensive and timely care, reducing wait times and improving patient satisfaction. One participant stated:

"When I have the autonomy to diagnose, treat, and prescribe without restrictions, I can address patients' needs more efficiently. This means they can access care sooner and avoid unnecessary delays." (NP12)

Table 2 presents the subthemes and representative quotes related to the impact of NP autonomy on patient access.

Table 2
Impact of NP Autonomy on Patient Access

Subtheme	Representative Quote
Timely care	"With autonomy, I can make clinical decisions and initiate treatment plans without waiting for physician approval. This allows patients to receive care when they need it." (NP7)
Comprehensive care	"Autonomy enables me to provide a full range of primary care services, from health promotion to chronic disease management. Patients can access comprehensive care without being referred elsewhere." (NP15)
Patient satisfaction	"When I can practice autonomously, patients express higher satisfaction with their care. They appreciate the personalized attention and the ability to address their concerns in a single visit." (NP3)

Theme 2: Barriers to NP Autonomy

Participants identified several barriers to practicing autonomously in rural primary care settings. These barriers included scope of practice restrictions, lack of understanding of the NP role, and limited support from healthcare organizations. One participant shared:

"Despite my advanced training, I face restrictions on my scope of practice. I can't always provide the care I know my patients need, which is frustrating and limits access to services." (NP18)

Table 3 presents the subthemes and representative quotes related to barriers to NP autonomy.

Table 3
Barriers to NP Autonomy

Subtheme	Representative Quote
Scope of practice restrictions	"Restrictive state regulations limit my ability to prescribe certain medications or perform certain procedures. This can delay care and force patients to see multiple providers." (NP9)
Lack of understanding of NP role	"Some patients and healthcare professionals don't fully understand the NP role and our capabilities. This can lead to resistance or reluctance to grant us autonomy." (NP5)
Limited organizational support	"Not all healthcare organizations provide the necessary support for NPs to practice autonomously. We need resources, training, and a culture that values our contributions." (NP14)

Theme 3: Strategies to Enhance NP Autonomy

Participants identified strategies to enhance NP autonomy and improve patient access to primary care in rural areas. These strategies included advocating for full practice authority, educating stakeholders about the NP role, and fostering collaborative relationships with other healthcare professionals. One participant stated:

"We need to advocate for full practice authority at the state level. Removing unnecessary restrictions will allow us to practice to the full extent of our education and training, ultimately benefiting patients." (NP11)

Table 4 presents the subthemes and representative quotes related to strategies to enhance NP autonomy.

Table 4
Strategies to Enhance NP Autonomy

Subtheme	Representative Quote
Advocating for full practice authority	"Engaging in policy discussions and advocating for full practice authority is crucial. We need to educate policymakers about the benefits of NP autonomy and how it can improve access to care in rural areas." (NP8)
Educating stakeholders	"We need to educate patients, healthcare professionals, and the public about the NP role and our qualifications. Increasing understanding can help break down barriers and foster support for NP autonomy." (NP20)
Fostering collaborative relationships	"Building strong, collaborative relationships with physicians and other healthcare team members is important. When we work together and recognize each other's strengths, it creates an environment that supports NP autonomy." (NP6)

Discussion

This qualitative study explored the perspectives of NPs regarding the association between their autonomy and patient access to primary care in rural areas. The findings highlight the impact of NP autonomy on patient access, the barriers NPs face in practicing autonomously, and strategies to enhance NP autonomy.

Participants reported that higher levels of autonomy enabled them to provide more timely, comprehensive, and patient-centered care, ultimately improving access to primary care services in rural areas. These findings align with previous research demonstrating the positive impact of NP autonomy on healthcare delivery and patient outcomes (Laurant et al., 2018; Kuo et al., 2013).

However, participants also identified significant barriers to practicing autonomously, including scope of practice restrictions, lack of understanding of the NP role, and limited organizational support. These barriers are consistent with previous studies that have highlighted the challenges NPs face in their practice (Hain & Fleck, 2014; Poghosyan et al., 2013). Addressing these barriers is crucial to optimizing NP practice and improving patient access to care in rural settings.

Strategies to enhance NP autonomy, as identified by participants, include advocating for full practice authority, educating stakeholders about the NP role, and fostering collaborative relationships with other healthcare professionals. These strategies align with recommendations from professional organizations and experts in the field (AANP, 2021; Xue et al., 2016). Implementing these strategies can create a supportive environment for NP practice and maximize their contributions to rural healthcare delivery.

Limitations and Future Directions

This study has several limitations. First, the sample size of 20 NPs from rural primary care settings may limit the generalizability of the findings to other healthcare contexts. Future research could include a larger and more diverse sample of NPs from various practice settings to gain a broader understanding of the association between autonomy and patient access.

Second, the study relied on self-reported data from semi-structured interviews, which may be subject to recall bias or social desirability bias. Future studies could triangulate findings using additional data sources, such as patient outcomes or healthcare utilization data, to provide a more objective assessment of the impact of NP autonomy on patient access.

Finally, this study focused on the perspectives of NPs in rural primary care settings. Future research could explore the perspectives of other healthcare professionals, policymakers, and patients regarding NP autonomy and its impact on patient access to care. Understanding the views of multiple stakeholders can inform the development of comprehensive strategies to enhance NP practice and improve rural healthcare delivery.

Conclusion

This qualitative study provides valuable insights into the association between NP autonomy and patient access to primary care in rural areas from the perspectives of practicing NPs. The findings highlight the positive impact of NP autonomy on patient access, the barriers NPs face in practicing autonomously, and strategies to enhance NP autonomy.

Addressing the identified barriers and implementing strategies to support NP autonomy is essential to optimize NP practice and improve patient access to primary care in rural settings. Policymakers, healthcare organizations, and professional associations should work together to create an environment that enables NPs to practice to the full extent of their education and training.

By leveraging the skills and expertise of NPs and granting them the autonomy to provide high-quality, patient-centered care, rural communities can benefit from improved access to primary care services and better health outcomes. Investing in NP autonomy is a crucial step towards building a more equitable and effective rural healthcare system.

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