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# Quackery: A Major Persisting Issue in the Dental Profession of Nepal

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#### **ABSTRACT**

**Background:** Quackery in the dental profession is a significant and persistent issue in Nepal, particularly in urban areas like Hetauda city. This practice involves the provision of dental services by individuals lacking formal education, training, or licensing, posing serious risks to patient health and safety. This study aims to assess the prevalence of quackery in Hetauda city, Nepal, and its implications for dental care quality and patient safety. It also seeks to understand the reasons behind patients' continued use of unlicensed dental practitioners and to provide recommendations for addressing this issue.

**Method:** A cross-sectional study was conducted in 25 dental clinics across Hetauda city. Data collection included structured interviews with licensed dental practitioners, patient surveys, and observational assessments of clinic operations and infection control practices. Quantitative data were analyzed using descriptive statistics, while qualitative data from interviews were thematically analyzed.

**Result:** The study found that 28% of the surveyed clinics employed unlicensed practitioners. Clinics with quacks exhibited significantly lower standards of care, including inadequate infection control and improper procedures. Only 30% of patients were aware of their dental care providers' qualifications, with many opting for quacks due to affordability and accessibility. A higher incidence of complications and adverse outcomes were reported among patients treated by unlicensed practitioners. Qualitative findings highlighted patient trust in quacks, frustrations of licensed practitioners, and regulatory gaps.

Conclusion: Quackery remains a major issue in the dental profession in Hetauda city, Nepal. Addressing this problem requires a multifaceted approach, including improved regulation, increased public awareness, and stringent enforcement of licensing standards. Ensuring that all dental practitioners are properly qualified and licensed is essential for protecting patient safety and maintaining the credibility of the dental profession in Nepal.

Key words: quackery; dental profession; Nepal; patient safety; healthcare regulation; public awareness.

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### INTRODUCTION

The dental profession in Nepal faces numerous challenges, with quackery being a significant and persistent issue. Quackery involves the provision of dental services by individuals without formal education, training, or licensing. This practice poses serious risks to patient health and safety, leading to substandard care, improper treatments, and potential long-term complications. Despite efforts to regulate the healthcare sector, quackery continues to thrive in various regions of Nepal, particularly in urban and semi-urban areas where regulatory enforcement may be lax. Quackery in the dental profession not only undermines the integrity of healthcare but also places a vulnerable population at risk. In Hetauda city, anecdotal evidence and preliminary observations suggest a high prevalence of unlicensed dental practitioners. These quacks often attract patients by offering lower fees and easy accessibility, exploiting the gaps in the healthcare system. The lack of formal education and training among these practitioners leads to improper diagnoses, inadequate treatment, and poor infection control, contributing to adverse health outcomes. The persistence of quackery poses a significant challenge to licensed dental professionals who adhere to standards and regulations, creating an uneven playing field and diminishing public trust in the profession.<sup>1</sup> This study is crucial for several reasons. First, it aims to quantify the prevalence of quackery in the dental profession in Hetauda city, providing concrete data to support anecdotal claims. Second, it seeks to understand the implications of quackery on the quality of dental care and patient safety, highlighting the specific areas where unlicensed

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practitioners fall short. Third, by incorporating patient perspectives, the study will shed light on the reasons behind the continued patronage of quacks, including factors such as cost, accessibility, and awareness.<sup>2</sup> Furthermore, this research will provide valuable insights for policymakers and regulatory bodies, emphasizing the need for stringent enforcement of licensing standards and the development of public awareness campaigns. By addressing the issue of quackery, this study aims to contribute to the improvement of dental care quality and the protection of patient safety in Nepal. The findings will also serve as a foundation for future research and interventions aimed at eradicating quackery from the healthcare sector.<sup>3</sup>

### **METHODS**

A cross-sectional study was conducted in 25 dental clinics across Hetauda city, utilizing multiple data collection methods. Structured interviews were held with licensed dental practitioners to gather information on their qualifications, experience, and perceptions of quackery. Patient surveys were administered to assess their awareness and experiences with dental care, while observational assessments evaluated clinic operations, infection control practices, and the presence of unlicensed practitioners. Quantitative data were analyzed using descriptive statistics to determine the prevalence of quackery and its impact on dental care quality, and qualitative data from interviews were thematically analyzed to provide deeper insights.

### **RESULTS**

Table 1 shows the distribution of licensed and unlicensed practitioners across private dental clinics in Hetauda city. It indicates that out of the total 25 clinics surveyed, 28% employed unlicensed practitioners, underscoring the prevalence of quackery in the local dental care landscape.

Table 1. Distribution of dental clinics by practitioner type.		
Clinic Type	Licensed Practitioners	Unlicensed Practitioners
Government Clinics	0	0
Private Clinics	18	7

Table 2 presents the percentage of private clinics meeting adequate infection control standards. It reveals that a significant portion of private clinics fall short of adhering to recommended practices, emphasizing the need for stricter enforcement and monitoring of infection control measures across all clinics.

Table 2. Compliance with infection control practices.		
Clinic Type	Adequate Infection Control (%)	Inadequate Infection Control (%)
Government Clinics	0	0
Private Clinics	60	40
Total	60	40

Table 3 illustrates the awareness levels among patients regarding the qualifications of their dental care providers. It shows that a substantial number of patients treated by unlicensed practitioners were unaware of their lack of qualifications, highlighting a critical gap in patient knowledge and potential risks associated with seeking care from quacks.

Table 3. Patient awareness of practitioner qualifications.		
Awareness Level (%)	Licensed Practitioners	Unlicensed Practitioners
Aware	75	25
Not Aware	15	85

Table 4 presents the percentage of reported complications among patients treated by licensed and unlicensed practitioners. It demonstrates higher reported incidences of infections and improper treatments among patients treated by unlicensed practitioners, underscoring the potential health risks associated with quackery in dental practice.

Table 4. Reported complications by practitioner type.			
<b>Complication Type</b>	Licensed Practitioners (%)	Unlicensed Practitioners (%)	
Infection	12	30	
Improper Treatment	8	20	
Other (Specify)	5	15	

Table 5 summarizes qualitative themes extracted from interviews with licensed dental practitioners regarding the challenges posed by quackery. It highlights patient preferences, practitioner concerns about unfair competition, and the necessity for enhanced regulatory oversight to address the issue effectively.

# **Quantitative Findings:**

The study revealed that 28% of the dental clinics in

Table 5. Qualitative themes from practitioner interviews		
Theme	<b>Examples of Statements</b>	
	"Patients often choose quacks due to lower costs."	
Frustrations of Licensed Practitioners	"Licensed dentists face unfair competition from quacks."	
Regulatory Gaps	"There is a need for stricter enforcement of licensing laws."	

Hetauda city had unlicensed practitioners providing dental care, significantly affecting the quality of care. Clinics with quacks exhibited notably lower standards, such as inadequate infection control and improper procedures. Furthermore, only 30% of patients were aware of the qualifications of their dental care providers, leading to a higher incidence of complications and adverse outcomes among those treated by unlicensed practitioners.

# **Quantitative Analysis**

Prevalence of Unlicensed Practitioners: Out of the 25 dental clinics surveyed, 7 (28%) employed unlicensed practitioners. These quacks were found to perform various dental procedures without the necessary qualifications.

# **Quality of Care Indicators**

Clinics operated by quacks scored lower on infection control measures, with 60% lacking proper sterilization equipment. This deficiency increases the risk of infections among patients due to inadequate sanitation practices. Moreover, 70% of treatments administered by quacks were found to be substandard, resulting in higher rates of patient complications. These inaccuracies highlight the dangers posed by untrained practitioners who lack the necessary skills and equipment to provide safe and effective medical care.

## **Patient Awareness:**

Only 30% of surveyed patients were able to accurately identify the qualifications of their dental care providers, indicating a low awareness level among the public regarding healthcare qualifications. Despite this, 50% of patients who sought treatment from quacks cited cost and accessibility as primary reasons for their choice, highlighting a significant perception of risk versus the perceived benefits of

affordability and convenience.

# **Qualitative Findings**

Many patients choose to trust quacks despite knowing the risks, drawn by the affordability and accessibility of their services. This trust persists despite concerns over inadequate infection control measures and substandard treatment accuracy, which contribute to higher rates of complications. Licensed healthcare professionals express frustration over the lack of regulatory enforcement and the competitive disadvantage they face against quacks. They advocate for stronger regulatory frameworks to address these gaps and ensure patient safety, emphasizing the urgent need for stricter enforcement measures in healthcare settings.

# **Thematic Insights**

Patients often place their trust in quacks due to the lower fees and greater accessibility they offer. Despite being aware of the risks, affordability and convenience remain significant factors in their decision-making process. One patient candidly admitted, "I go to him because he's nearby and cheaper, even though I know he's not a real dentist." Licensed dentists, on the other hand, express frustration over the competition and the compromises in quality that quacks represent. A licensed dentist lamented, "It's disheartening to see quacks thriving while we struggle to adhere to standards." There is a clear consensus among practitioners for stronger regulatory frameworks and stricter enforcement to address this issue. As one practitioner emphasized, "Stronger laws and enforcement are crucial to curb this menace." These perspectives underscore the urgent need for comprehensive regulatory measures to safeguard patient health and uphold professional standards in dental care.

## **DISCUSSION**

The study highlights a significant issue of quackery in Hetauda city, presenting substantial threats to patient safety and undermining the dental profession's integrity. Unlicensed practitioners frequently provide substandard care, leading to complications and adverse outcomes. The findings align with broader concerns about dental quackery and the

challenges in health care delivery in developing regions<sup>4</sup>. Implementing stricter regulatory oversight and licensing requirements is crucial. According to the World Health Organization, robust health systems are essential for achieving Sustainable Development Goals (SDGs).1 Effective regulation can prevent quackery by ensuring that only qualified professionals provide dental care. Strengthening regulatory frameworks can help mitigate the risks posed by unlicensed practitioners and ensure that dental services meet acceptable standards.<sup>5</sup> Public education is vital in combating quackery. Kumar and Takhar emphasized the continuous threat of dental quackery to public health, highlighting the need for awareness campaigns.<sup>2</sup> Educating the public about the risks associated with unlicensed practitioners and the importance of seeking care from licensed professionals can reduce the prevalence of quackery. Awareness campaigns can also empower patients to make informed decisions about their dental health<sup>6</sup>. Rigorous enforcement of licensing standards is essential for maintaining the quality of dental care. The Ministry of Health, Nepal, in its annual report, stressed the importance of regulatory bodies in ensuring compliance with standards.<sup>3</sup> Regulatory authorities must take decisive action against clinics employing unlicensed practitioners to safeguard public health. Regular inspections and strict penalties for violations can deter quackery and promote adherence to professional standards.7 Bhandari et al. identified several barriers to quality dental care in rural Nepal, including limited access to licensed professionals and inadequate regulatory oversight. Addressing these barriers requires a multifaceted approach involving policy reforms, capacity building, and community engagement.4 Improving access to quality dental care in underserved areas can reduce the reliance on unlicensed practitioners and enhance overall health outcomes.8 Strengthening the regulation and oversight of dental practice is essential to combating quackery. Petersen emphasizes the importance of preventive measures in oral health care, highlighting that strong regulatory frameworks are crucial for preventing diseases such as oral cancer.<sup>5</sup> Rigorous

regulation can ensure that dental practitioners meet the necessary qualifications and adhere to professional standards, thereby safeguarding patient health and improving overall care quality.9 Public awareness is a key component in the fight against dental quackery. Benjamin describes oral health as a "silent epidemic" that requires increased public awareness and education.<sup>6</sup> Educating the public about the dangers of unlicensed practitioners and the importance of seeking care from licensed professionals can help mitigate the risks associated with quackery. Awareness campaigns should focus on informing the community about the potential complications and adverse outcomes of receiving care from unqualified individuals.10 The rise of digital and social media presents both challenges and opportunities in addressing dental quackery. Mackey et al. discuss how digital social media can influence youth behavior, including the nonmedical use of prescription medications.<sup>7</sup> Similarly, social media can spread misinformation about dental care, but it also offers a platform for public health campaigns. Leveraging social media for educational initiatives can reach a broad audience and effectively communicate the risks of quackery and the benefits of licensed dental care. 11 Specific studies on dental quackery, such as those by Sandesh et al. and Nagaraj et al., provide insights into the prevalence and impact of unlicensed dental practitioners. These studies underscore the need for strict enforcement of licensing standards and penalties for violations.<sup>8,9</sup> Regulatory bodies must conduct regular inspections and take decisive action against clinics employing unlicensed practitioners to ensure compliance with professional standards.<sup>12</sup> Kandelman et al. highlight the significant relationship between oral health, general health, and quality of life. Ensuring access to quality dental care is essential for overall wellbeing, particularly for vulnerable populations such as the elder11. Addressing quackery is crucial for maintaining high standards of care and preventing the negative health outcomes associated with substandard dental practices. 13,14 Lalloo et al. and Tandon discuss the broader challenges in dental health care delivery, including socioeconomic factors and workforce

limitations. These barriers often drive individuals to seek care from unlicensed practitioners. 13,15 Comprehensive strategies to improve access to quality dental care, such as policy reforms, capacity building, and community engagement, are needed to reduce reliance on quackery and enhance health outcomes. The study's findings underscore the urgent need for comprehensive measures to address dental quackery in Hetauda city. Strengthening regulatory oversight, increasing public awareness, and enforcing licensing standards are critical steps toward improving patient safety and ensuring the integrity of the dental profession. Collaborative efforts between government agencies, professional bodies, and the community are essential to combat quackery and promote quality dental care in Nepal.<sup>1,15</sup>

#### **CONCLUSIONS**

Ouackery in the dental profession remains a significant and pressing issue in Hetauda city, Nepal. This practice endangers patient safety and undermines professional standards, highlighting the urgent need for intervention. Addressing this problem requires a multifaceted approach that includes the implementation of stringent regulations, enhanced public education, and strict enforcement of licensing standards. Ensuring that all dental practitioners are properly qualified and licensed is crucial for delivering safe and effective dental care. By combating quackery, we can protect patient health, uphold the integrity of the dental profession, and ensure the credibility and trustworthiness of dental services in Nepal. This study underscores the necessity for collaborative efforts among policymakers, regulatory bodies, and the public to eradicate quackery and improve the overall quality of dental care.

# Recommendations

To address the challenges posed by quackery in Nepal's dental profession, several key strategies are essential. Strengthening the regulatory framework is crucial, necessitating stricter policies to ensure all dental practitioners are licensed and qualified, coupled with rigorous inspections to weed out unlicensed practitioners. Public awareness campaigns are vital

to educate communities about the risks associated with unlicensed dental care and emphasize the importance of verifying practitioners' qualifications. Improving access to quality dental care involves increasing availability and affordability, particularly in underserved areas, alongside financial support for low-income patients. Continuous professional development for licensed practitioners and establishing robust support systems are essential to maintain high standards of care. Engaging community leaders and promoting health literacy will empower patients to make informed decisions. Strengthened enforcement mechanisms, including clear penalties for unlicensed practice, and research initiatives to monitor and combat quackery are pivotal. Collaboration with educational institutions to integrate ethical training and uphold professional standards completes a comprehensive approach to eradicating quackery and ensuring safer dental practices nationwide in Nepal.

# Limitations and suggestion for future researcher

The study, conducted in 25 dental clinics in Hetauda city, Nepal, has several limitations that affect its generalizability and depth of findings. Firstly, the sample size and geographic scope may not adequately represent other regions or rural areas of Nepal, where quackery prevalence and healthcare practices could differ significantly. Observational assessments were conducted at specific times, possibly affecting the accuracy of data on clinic operations and infection control practices, as clinics might alter their behavior in the researchers' presence. Patient selection from those visiting formal dental services may exclude individuals who avoid such clinics, potentially missing a significant segment affected by quackery. Qualitative data, while insightful, is subject to interpretation bias and may not be broadly applicable beyond the study context. Lastly, focusing solely on Hetauda limits the study's applicability to other parts of Nepal with differing socio-economic and healthcare landscapes.

Future research should address these limitations by expanding the sample size and geographic coverage to ensure broader representation. Longitudinal studies could capture changes in practices over time, offering a more comprehensive view of quackery trends. Methods to verify self-reported data should be enhanced to improve data reliability. Despite these constraints, the study provides crucial insights into dental quackery in Nepal, underscoring the ongoing need to enhance dental care standards and regulatory oversight across the country.

### Conflict of Interest: None

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