



## Systematic Review

# Barriers to Utilization of Dental Care Services Among Culturally Diverse Migrant Construction Laborers: A Systematic Review.

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### ABSTRACT

**Introduction:** Access to dental care services is a vital aspect of overall health and well-being, yet it is not equally available to all populations. Cultural and language differences are significant barriers to dental care for migrant construction labourers. Many migrants come from countries with healthcare systems that operate differently from those in their host country, leading to misunderstandings or mistrust of the healthcare system.

**Aim:** To assess and observe the barriers to the utilization of dental care services among culturally diverse migrant construction labourers.

**Materials and methods:** This systematic review was conducted following the standards outlined in the Preferred Reporting Items for Systematic Reviews (PRISMA) guidelines and the PRISMA declaration. The Randomized and Non-randomized trials among the migrant laborer's population, studies that provided basic dental care to migration workers and among different populations were included. The review trials were excluded, grey literature, Cross-sectional or observational studies and studies done on the elderly were excluded. The sources of systematic reviews were Pubmed, Google Scholar and Cochrane.

**Results:** From an initial search yielding 124 articles, 4 duplicates were excluded. Screening based on titles led to the exclusion of 75 articles. Automation tools identified 3 articles as ineligible. After reviewing abstracts, 32 articles were excluded. Full texts could not be retrieved for 4 articles. Ultimately, 5 articles did not meet the inclusion criteria, resulting in 1 article that was included in the study.

**Conclusion:** Due to the low quality of evidence and high risk of bias, a definitive conclusion could not be reached. However, as per the included study, there was significant relevance for barriers to the utilization of dental care services and the socioeconomic status of the migrant construction labourers.

**Keywords:** Barriers, Dental services, Utilization

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## INTRODUCTION

Access to dental care services is a vital aspect of overall health and well-being, yet it is not equally available to all populations. Culturally diverse migrant construction laborers, in particular, face unique challenges and obstacles that impede their ability to seek and obtain proper dental care. Identifying and understanding these barriers is crucial for crafting targeted interventions and policies to enhance health outcomes for this vulnerable group. A significant barrier to dental care utilization among migrant construction laborers is their socioeconomic status. These workers often hold low-wage positions, limiting their financial capacity to afford dental services. Even in countries with public healthcare systems, out-of-pocket costs for dental care can be prohibitive for those with low incomes. The transient nature of construction work also leads to unstable income and employment, further compounding financial difficulties [1].

The employment conditions of migrant construction laborers heavily influence their access to dental care. Many work on temporary or informal contracts, often without employer-sponsored health insurance. Without insurance, dental care costs can be extremely high. Additionally, the demanding nature of construction work, characterized by long hours and physically strenuous tasks, often leaves workers with little time or energy to seek dental services[2].

Cultural and language differences are significant barriers to dental care for migrant construction laborers. Many migrants come from countries with healthcare systems that operate differently from those in their host country, leading to misunderstandings or mistrust of the healthcare system. Language barriers further complicate the situation, making it hard for workers to communicate their needs, understand treatment options, and follow care instructions, resulting in lower utilization of dental services and poorer oral health outcomes [3].

Legal and immigration status also play a critical role in dental care utilization. Migrant workers who are undocumented or have insecure immigration status may avoid seeking healthcare, including dental care, out of fear of deportation or other legal consequences. This fear can prevent them from accessing necessary services, even in cases of significant pain or serious dental issues. Furthermore, policies that exclude non-citizens from public healthcare programs can further limit access to dental care for migrant workers. Geographic and logistical barriers contribute to the underutilization of dental care services among migrant construction laborers. Construction sites are often situated in remote or underserved areas with few healthcare facilities, including dental clinics. Even when services are available, transportation can be a significant barrier. Migrant workers may lack access to reliable transportation, making it difficult to attend appointments. Additionally, the itinerant nature of their work means frequent relocations, disrupting the continuity of care and making it challenging to establish a regular relationship with a dental care provider [4].

Awareness and health literacy are crucial factors affecting dental care utilization. Many migrant workers may be unaware of the importance of dental health and the availability of services. Low health literacy can impede their ability to understand health information and navigate the healthcare system. Tailored educational interventions are essential for improving their understanding of dental health and encouraging the use of dental care services. Psychological and social barriers also hinder the utilization of dental care among migrant construction laborers. Fear and anxiety about dental procedures, often stemming from past negative experiences or cultural beliefs about dental care, can deter individuals from seeking treatment. Social stigma associated with poor dental health or perceived discrimination within the healthcare system can also discourage migrant workers from accessing dental services. The presence or absence of social support networks plays a role as well; isolated individuals or those lacking supportive communities may be less likely to seek and use healthcare services [5].

The nature of construction work itself poses specific health risks affecting dental health. Construction workers are frequently exposed to dust, chemicals, and other hazardous materials that can contribute to oral health problems. The physically demanding nature of their job can lead to accidents and injuries involving the teeth and mouth. Despite these increased risks, migrant construction laborers often do not receive adequate occupational health support or dental care [6].

Overcoming these barriers requires a multifaceted approach that considers the complex interplay of socioeconomic, cultural, legal, geographic, and psychological factors. Policy interventions aimed at providing affordable dental care, regardless of employment or immigration status, are crucial. Enhancing the availability of culturally and linguistically appropriate dental services can bridge the gap for migrant workers. Community-based outreach and education programs are essential for raising awareness about the importance of dental health and the availability of services. Improving the working conditions and rights of migrant construction laborers, including access to health insurance and occupational health services, can also make a significant difference. Addressing the broader social determinants of health, such as housing, education, and income stability, is vital for improving the overall well-being of migrant workers and their access to dental care [7].

Conducting a review of the barriers to dental care utilization among culturally diverse migrant construction laborers is essential for several reasons. This group encounters unique and complex challenges that limit their access to dental services, adversely affecting their overall health and well-being. Gaining insights into these barriers can guide the creation of targeted interventions, policies, and healthcare practices tailored to their specific needs. By identifying and addressing these obstacles, we can promote health equity, improve dental health outcomes, and facilitate the incorporation of culturally competent care into the healthcare system for this vulnerable population.

## **AIM**

To assess and observe the barriers to the utilization of dental care services among culturally diverse migrant construction laborers.

## **OBJECTIVES**

- To assess the barriers to the utilization of dental care services among culturally diverse migrant construction laborers.
- To observe the barriers to the utilization of dental care services among culturally diverse migrant construction laborers.

### **Null Hypothesis (Ho):**

There are no significant barriers that affect the utilization of dental care services among culturally diverse migrant construction laborers.

### **Null Hypothesis (Ha):**

There are significant barriers that affect the utilization of dental care services among culturally diverse migrant construction laborers.

## **MATERIALS AND METHODS**

### **Protocol and Registration:**

This systematic review was conducted following the standards outlined in the Preferred Reporting Items for Systematic Reviews (PRISMA) guidelines and the PRISMA declaration. Ethical committee approval was not required, as this is a systematic review study.

### **Structured Question:**

Are there significant barriers that affect the utilization of dental care services among culturally diverse migrant construction laborers?

## **STUDY SELECTION**

### **Inclusion Criteria:**

- Randomized and Non-randomized trials in the migrant laborers population.
- Studies that provide basic dental care to migration workers.
- Studies done in different populations were included.

### **Exclusion Criteria:**

- Simple review trials were excluded.
- Grey literature was excluded.
- Cross-sectional or observational studies were excluded.
- Studies done in the elderly were excluded.

### **Sources Used:**

- Pubmed
- Google Scholar
- Cochrane

**Manual Search:**

To ensure that no relevant articles were missed, a manual search was conducted in addition to the database searches. Journals were accessed through the institutional library.

**Search Methodology:**

(barriers to utilisation) AND (dental care)) OR (oral healthcare)) OR (oral hygiene)) OR (dental hygiene)) AND (migrant laborers)) OR (construction laborers)) AND (cultural diversity)) OR (different population)) OR (varied culture)

**Risk of Bias:**

The Risk of bias was assessed using the Cochrane Collaboration's tool for randomized controlled trials and the ROBINS-I tool for non-randomized clinical studies.

**Quality Assessment:**

The methodological quality of selected articles was individually assessed using the risk-of-bias assessment tool outlined in the Cochrane Handbook for Systematic Reviews of Interventions. Key domains evaluated included random sequence generation, allocation concealment, blinding of participants and personnel, blinding of outcome assessment, incomplete outcome data, and selective reporting bias. Each study's risk of bias was categorized as follows:

- low risk if all domains were deemed low risk,
- moderate risk if one or more domains were unclear, and
- high risk if one or more domains were deemed high risk.

The Grading of Recommendations, Assessment, Development, and Evaluations (GRADE) method was employed to assess the overall quality of evidence and aid in formulating recommendations for interventions.

**RESULTS:**

From an initial search yielding 124 articles, 4 duplicates were excluded. Screening based on titles led to the exclusion of 75 articles. Automation tools identified 3 articles as ineligible. After reviewing abstracts, 32 articles were excluded. Full texts could not be retrieved for 4 articles. Ultimately, 5 articles did not meet the inclusion criteria, resulting in 1 article that was included in the study.

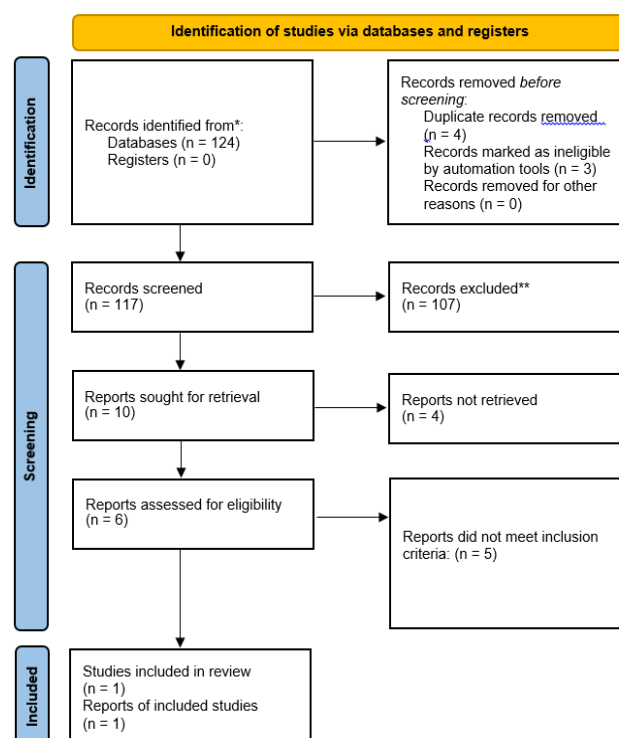
**PRISMA FLOWCHART:**

Figure 1: Flowchart for article selection performed in the Systematic review.

The author's name, the year the study was published, the country, the study design, the sample size in each group, the chronological age and gender of the participants, the intervention, the control, and the follow-up period are included studies discussed in Table 1. Any differences of opinion on the data extraction were settled by debate in the group or by consulting with a third reviewer. Fields marked as "unknown" were those for which information was unavailable in a publication or online abstract.

S.no	Author	Year of publication	Population	Study design	Sample size	Study Subjects		Outcome
						Age	Gender	
1	Nagarajan H et al,	2022	India	Cross-sectional study	385	20-45	Male and Female	Positive correlation between Socioeconomic status and barriers in utilization. Insignificant correlation between Socioeconomic status and treatment center approached.

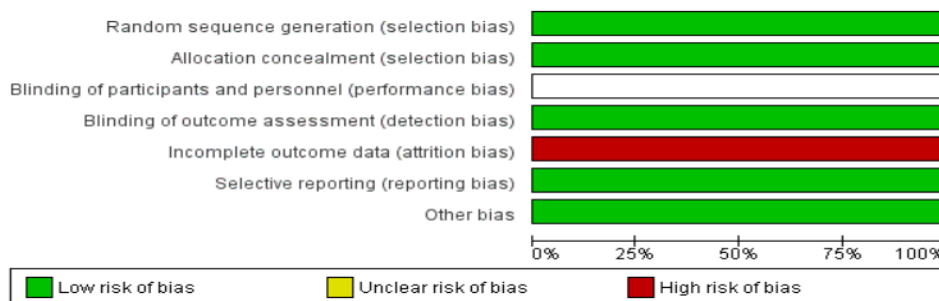
**Table 1:** Study characteristics of the included studies.

**Characteristics of the included studies:**

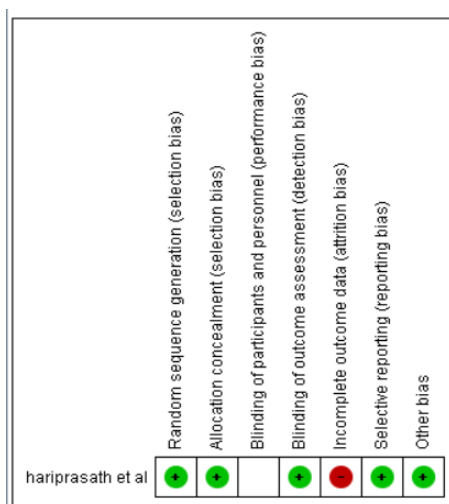
The characterization of the included studies is discussed in Table 1. The study included both male and female participants in the age range of 20-45 years. The study focussed on correlation between the socioeconomic status and barriers in utilization and treatment center approached.

**Risk Of Bias Within Studies:**

The risk of bias within the studies is shown in Figures 2 and 3.



**Figure 2:** Risk of bias chart.



**Figure 3:** Risk of bias for included study.

As denoted in Figures 2 and 3, the included study obtained a low risk of bias for random sequence generation, allocation concealment, blinding of participants and personnel, selective reporting, and other biases. The study also obtained a high risk of bias for incomplete outcome data.

### **Overall Quality Assessment:**

Using the GRADE system of assessment, there is low quality of evidence and heterogeneity, as the included study obtained a high risk of bias. Since there is a lack of complete outcome data, it is not possible to conclude the barriers to the utilization of dental care services among culturally diverse migrant construction laborers. Additionally, well-conducted randomized controlled clinical trials with minimal bias are essential for reaching a definitive conclusion.

## **DISCUSSION**

The main objective of this review was to determine the barriers to the utilization of dental care services among culturally diverse migrant construction laborers. Migrant construction laborers play a vital role in the workforce of many countries, helping build and maintain critical infrastructure. Despite their essential contributions, they face numerous challenges in accessing basic health services, including dental care. The obstacles to utilizing dental care among these workers are varied, involving economic, cultural, and systemic factors. This discussion will examine these barriers in detail. Financial constraints are one of the main barriers preventing migrant construction laborers from accessing dental care. Many of these workers have low wages and inconsistent employment, making dental services unaffordable. Dental care is often seen as a non-essential service, causing many to skip regular check-ups and treatments until they experience severe pain or problems. High costs for dental procedures, lack of insurance, and absence of employer-provided health benefits exacerbate this issue [8].

Health insurance is often either unavailable or too expensive for migrant workers in many countries. Even when health insurance is available, it frequently excludes dental coverage. This lack of insurance leads to high out-of-pocket costs for dental care, discouraging migrant workers from seeking necessary treatments. Language differences create significant challenges in accessing dental care. Many migrant construction laborers may not be fluent in the local language, making it difficult to communicate with healthcare providers. This communication gap can lead to misunderstandings, misdiagnoses, and inadequate treatment. Additionally, the inability to comprehend health-related information and instructions complicates the utilization of dental services. Cultural beliefs and practices greatly influence health behaviors, including dental care. In some cultures, dental issues might be seen as minor health concerns that do not need professional attention. Traditional remedies and home treatments might be preferred over visiting a dentist. Furthermore, cultural stigmas associated with dental problems can deter individuals from seeking help due to fear of judgment or discrimination [9].

The geographical distribution of dental care facilities often poses a barrier for migrant workers, who may live in remote or underserved areas with limited access to healthcare services. The lack of transportation options and the long working hours of construction laborers make it difficult to visit dental clinics, which typically operate during standard business hours. The scarcity of dental professionals willing to work in rural or low-income areas further limits access to care. Navigating the healthcare system can be particularly challenging for migrant workers. Complex administrative procedures, paperwork, and the need for identification or residency documentation can deter individuals from seeking dental care. Migrant workers may lack the necessary documents or fear repercussions related to their immigration status, leading them to avoid healthcare services altogether [6].

Dental anxiety and fear are common psychological barriers to utilizing dental care. Past negative experiences, fear of pain, and general anxiety about dental procedures can prevent individuals from seeking necessary care. For migrant workers, these fears may be heightened by unfamiliarity with the healthcare system and distrust of medical professionals. Social isolation is another significant barrier faced by migrant construction laborers. Being away from their home country, family, and support networks can lead to feelings of loneliness and depression. This isolation can result in a lack of motivation to seek health services, including dental care. Additionally, the transient nature of their work and frequent relocations can disrupt the continuity of care, making it difficult to maintain regular dental check-ups and treatments. Many migrant workers may have limited knowledge about dental health and the importance of regular dental care. Educational deficits about the causes of dental problems, preventive measures, and the benefits of early intervention can lead to neglect of oral health. Without proper education, migrant workers may not recognize the signs of dental issues or understand the long-term consequences of untreated dental conditions [10].

Outreach programs that provide dental health education and services to migrant populations are often limited in scope and availability. These programs are essential for raising awareness and providing accessible care to underserved communities. The lack of targeted outreach efforts means that many migrant workers remain uninformed about available dental services and how to access them. To address economic barriers, policies need to ensure affordable dental care for migrant workers. This could include expanding public health insurance programs to cover dental services and providing subsidies or sliding scale fees based on income. Employers can also contribute by offering dental benefits as part of their health insurance packages for employees [11].

Healthcare providers should be trained in cultural competence to effectively communicate and engage with migrant populations. Hiring bilingual staff and using translation services can help bridge the language gap. Additionally, culturally sensitive education materials and outreach programs should be developed to address specific beliefs and practices related to dental health. Simplifying administrative procedures and reducing bureaucratic hurdles can make it easier for migrant workers to access dental care. This could involve creating one-stop health service centers where individuals can receive comprehensive care without navigating multiple systems. Policies that protect the rights and confidentiality of migrant workers can also encourage them to seek care without fear of legal repercussions. Mobile dental clinics and community-based dental programs can bring services directly to migrant workers, especially those in remote or underserved areas. These initiatives can provide preventive care, screenings, and treatments on-site, reducing the need for transportation and time off work. Collaborating with local organizations and employers can help in the successful implementation of these programs [12].

Increasing dental health education among migrant workers is crucial. This can be achieved through workshops, informational pamphlets, and community events that emphasize the importance of oral health and preventive care. Schools, community centers, and workplaces can serve as venues for these educational activities. The barriers to dental care utilization among culturally diverse migrant construction laborers are complex and interconnected. Addressing these challenges requires a multifaceted approach that includes policy changes, cultural competence training, enhanced accessibility, and targeted educational efforts. By understanding and addressing these barriers, we can improve the oral health outcomes of migrant workers, ensuring they receive the care they need and deserve [13].

## CONCLUSION

Due to the low quality of evidence and high risk of bias, a definitive conclusion cannot be reached. Conducting well-designed randomized controlled clinical trials with a low risk of bias is necessary to provide a conclusive decision. However, as per the included study, there is significant relevance for barriers to utilization of dental care services and the socioeconomic status of the migrant construction laborers.

## FINANCIAL SUPPORT AND SPONSORSHIP

Nil

## CONFLICTS OF INTEREST

There are no conflicts of interest

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