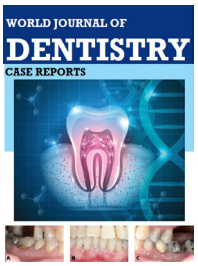
REVIEW ARTICLE - OPEN ACCESS

World Journal Of Dentistry And Case Reports DOI: http://dx.doi.org/10.51521/WJDCR.2024/1/102

Contents lists available at bostonsciencepublishing.us

World Journal Of Dentistry And Case Reports



Forgotten Smiles: Analyzing Dental Care Access for Underserved Communities Worldwide and Recommendations for Improvement

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ARTICLE INFO

Article history:
Received 24 October 2024
Revised 30 October 2024
Accepted 05 November 2024
Published 10 November 2024

KEYWORDS:

Dental Care,
Forgotten Smiles,
Global Health

ABSTRACT

Abstract: This paper examines the critical issue of dental care access for marginalized communities on a global scale. The introduction provides essential background information on growing disparities in this field. This paper then discusses the current state of dental care for underserved people. The next section identifies key barriers to care such as financial constraints and geographic limitations. To address these challenges, this paper recommends two primary strategies: community-based initiatives and global health policy reforms. Community-based programs can provide localized, affordable dental care, while policy reforms can improve access on a broader scale. This paper concludes by championing continued research and advocacy to improve dental care access for vulnerable people.

Introduction

Access to dental care for underserved populations is an important public health challenge on a global scale. Many communities face systemic barriers that prevent them from obtaining necessary oral health services. From Nigeria to Appalachia, dental clinics seek to address the oral health needs of thousands of marginalized communities with varying degrees of success. Furthermore, there tends to be a glaring lack of dental insurance coverage for many low-income adults. The Henry J. Kaiser Family Foundation Staff reviewed the coverage and access issues faced by non-elderly adults in low-income brackets. They found that a significant portion of this population lacks dental insurance. This often limits their ability to seek necessary care.

Even when services are available, out-of-pocket costs can be extremely high. This can lead many people to abstain from dental treatment until their oral health issues become severe. Unfortunately, this often results in more expensive procedures that could have been avoided with earlier interventions. The review by the Kaiser Family Foundation highlights the need for grassroots and policy changes to expand dental coverage for low-income people. This approach may help ensure that they can access preventive care and avoid more serious oral health problems in the future.

The Current State of Dental Care Access for Marginalized Populations

Inaccessibility to dental care affects millions of people globally – particularly those from low-income backgrounds (Garcia *et al*.). Sanders suggests that these people often live in dental care deserts where providers are scarce. Many of these areas are rural. In these regions, transportation and affordability further exacerbate this problem. Moreover, Vujicic *et al*. note that dental care tends to present a high level of financial barriers compared to other types of health care services.

This issue stems from the fact that dental services are often not covered fully by insurance. This forces patients to pay large amounts of money from their own reserves. Indeed, Hurst explains that dental insurance coverage has significantly declined in the United States over the years. While insurance used to cover approximately half of the care, it now tends to only cover an estimated 20% of it. This can leave behind a growing number of individuals and families that struggle to afford necessary treatments (Tucker).

This affordability crisis is also exacerbated by the increasing number of adults seeking dental care due to unmet needs from their childhood. Hurst suggests that such delayed access to care may lead to more complex and costly treatments. For example, orthodontic clinics for low-income patients are often flooded with people hoping to receive affordable care.

The demand for such services often far outweighs the supply. In some cases, hundreds of people may seek treatment, but only around 30-40 of the most severe cases might be selected for care (Hurst). This highlights the immense demand for affordable dental care in communities where access is limited to those with the most pressing needs.

Furthermore, the increasing costs and limited insurance coverage for dental care contribute to a vicious cycle of poor oral health among low-income populations (Mojtahedi *et al*.). As fewer people can afford preventive care, the severity of oral health problems escalates. This may then lead to higher treatment costs in the future. Hurst's experience in clinics serving low-income patients underscores the reality that many individuals only seek care when their dental issues have reached a critical stage. This can cause severe stress and negatively impact both mental and physical health. Sheiham and Watt suggest that this stressful and reactive approach demonstrates the urgent need for greater dental care accessibility to underserved populations.

Barriers to Dental Care for Underserved Populations

Barriers to dental care remain a pressing issue for marginalized people. Gupta and Vujicic highlight that the main obstacles to

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receiving dental care relate to affordability. They note that dental services are often too expensive for low-income individuals. Their research shows that even when dental clinics exist, the costs of traveling to them may prevent many people from seeking care. This creates a cycle in which preventable dental issues worsen over time and can lead to more complex and expensive treatments.

Furthermore, Gupta and Vujicic emphasize that without changes in policy to lower the cost of dental services or expand dental coverage, these affordability barriers will continue to persist.

Wallace and MacEntee explored additional factors that influence access to dental care for low-income people beyond affordability. Their study found that while affordability was the most commonly reported barrier, availability and acceptability were also significant challenges. Many low-income people reported dif f iculty finding dental practices that accept patients without insurance. They also stated that it was rare to find practices that consistently offer sliding-scale payment options.

Furthermore, the acceptability of services influenced whether individuals sought treatment. These factors included cultural sensitivity and the quality of care. Wallace and MacEntee's research reveals that to improve access to dental care, efforts must address not only the financial barriers but also the availability and quality of care.

There are also numerous barriers to dental care among low-income adults in rural communities and found that geographic isolation exacerbated their challenges. In rural areas, the often limited number of dental providers makes it difficult for low-income individuals to access care. Even when services are available, transportation issues further complicate access. This is because many rural residents may lack reliable means of reaching dental clinics. Furthermore, Brown *et al.* suggest that adults in rural areas who lack dental insurance are more likely to skip routine check-ups and seek care only when problems become severe. This leads to higher treatment costs and worse health outcomes over time.

Individuals with disabilities can also face significant obstacles to achieving oral health. Rouleau et al. highlights that this population may lack physical access to dental facilities and face a deficiency of specialized training among dental professionals. Unfortunately, many dental clinics may not be equipped to accommodate the needs of patients with mobility issues or other disabilities (Makansi *et al*.).

As a result, these people may not receive necessary dental care. In turn, this can lead to worse oral health outcomes in the long term. These observations demonstrate the need for more inclusive dental care models that address the unique barriers faced by vulnerable populations. This can help ensure that a greater number of people have the opportunity to maintain their oral health.

Recommendations

Community-Based Initiatives

Community-based initiatives can be either mobile or static. Balogun *et al.* reported that mobile dental clinics may offer essential oral health services to communities where access to dental care is often limited. Bala reviewed the effectiveness of mobile dental clinics in reaching underserved children. This method is particularly beneficial in rural and low-income communities, where dental offices may be scarce (Heaton et al.). In addition to increasing accessibility, mobile clinics promote preventive care by reaching patients who might not otherwise seek treatment until their conditions worsen.

The presence of mobile clinics helps raise awareness about the importance of oral health in overall well-being (Balogun *et al*.). However, these mobile clinics often face financial constraints. Without consistent funding, maintaining such mobile services is dif f i cult and can leave many people without regular dental care. This major challenge highlights the need for more robust support to ensure that mobile clinics can continue to serve the populations that rely on them.

Moreover, Harrell et al. highlight the efforts of static clinics to help underserved people. These clinics are designed to provide more specialized services that may not be feasible in mobile clinics. These services can include oral surgery and emergency treatments that require a more extensive infrastructure.

Unfortunately, Harrell et al. have consistently noted that while these centers can significantly improve access, they are not a complete solution to the problem. Many individuals still continue to face extremely steep barriers to easy access that include, but are not limited to, transportation issues and lack of awareness about available services. This underscores the complexity of addressing dental care access and the importance of a comprehensive approach.

To address this issue, there is another static community-based initiative that can play an important role in extending access to dental care for underserved populations. This is particularly true for children. Simmer-Beck et al. highlight the value of school-based collaborations in addressing the needs of these children. These programs help overcome barriers to access by bringing care directly to people who may need it.

As a result, children who might otherwise lack access to dental services can receive preventive and restorative treatments. In order to increase the professional dental care workforce in such settings, it can be helpful to recruit dental therapists and expand their roles (Friedman and Mathu-Muju).

According to Brickle and Self, these providers can allow for more flexibility in care delivery. To complement these school-based initiatives, Stormon *et al*. add that other static community clinics targeting people who live below poverty thresholds have been successful in delivering necessary care. These initiatives cater to populations who face multiple barriers, such as homelessness and financial instability (Lebrun-Harris et al.). Shin et al. suggest that there is a growing demand for static community dental health centers in locations with high levels of homelessness.

Furthermore, community dental clinics that provide care to the homeless play a crucial role in improving preventive oral health services. According to Paisi *et al*., these clinics are essential in addressing the dental needs of individuals who would otherwise be unable to afford care. Both Kumar et al. and Fellows et al. suggest that community dental clinics may not merely improve oral health but also enhance the overall well-being of the individuals that they serve.

Community-based public health education programs may also play a critical role in addressing disparities. There is a vast potential for these programs to raise awareness about the importance of seeking dental care. Furthermore, ongoing scholarly research suggests that integrating oral health educational resources into primary care clinics' agendas can serve as a key point of intervention. It is also important to continually stress culturally appropriate oral health education. This can lead to better patient adherence to preventive practices.

In addition, community-based dental interventions such as providing universal dental sealants can boost oral health among underserved populations. Lastly, community-based dental education for practitioners-in-training can be an important factor in shaping future providers' attitudes toward underserved populations. Rohra *et al.* found that dentists who receive training in marginalized community settings are more likely to serve vulnerable people upon graduating from dental school.

Global Health Policy and Reform in Dental Care

To address the global dental health crisis effectively, several key policy recommendations have emerged. As Bagramian *et al.* emphasize, prioritizing education and expanding access to preventive care are crucial steps toward mitigating the rising rates of tooth decay and cavities, particularly among socioeconomically marginalized populations. A proactive approach that focuses on policies that promote affordable dental services is essential for reducing the oral health burden globally. Bersell also underscores the importance of legislation that integrates dental care into general health reforms. These reforms can include expanding access to dental services and training more dental professionals for underserved people.

Moreover, Owens et al. highlight that many emergency department visits for dental issues could have been avoided with better access to routine care.

This demonstrates the need for health policy reforms that emphasize preventive oral health measures. This approach can reduce the strain on emergency services and improve patient outcomes. In addition, Dudko *et al.* suggest that reforms which address long dental waiting lists and expand subsidized care are essential for helping marginalized people access oral health services.

Furthermore, targeted policy interventions, such as increasing funding for public dental services, can help ensure timely and affordable care for underserved populations. As a result, such policies can prevent the progression of untreated dental conditions into more severe health issues. These recommendations offer a roadmap for global dental health policy reforms that prioritize prevention and accessibility.

Related workforce policies can also be crucial in this regard. In many jurisdictions worldwide, workforce policies have a significant impact on access to dental care. Maxey et al. suggest that there is a relationship between these policies and patients' access to dental services. They discovered that locations with more flexible workforce policies (such as allowing dental hygienists to practice independently) experienced an increase in access to care for underserved populations. These policies helped alleviate the shortage of dental providers in rural and low-income areas, where access to dental care is often limited.

Interestingly, the study also identified challenges in the implementation of these policies. These challenges can include resistance from traditional dental practices and regulatory hurdles. Despite these obstacles, the research by Maxey et al. suggests that workforce policy reforms can play a powerful role in expanding access to dental care for underserved patients.

In addition, Formicola *et al.* suggest that policies should promote various delivery models aimed at strengthening the oral health safety net for underserved populations. To this end, it is vital to craft policies that support the aforementioned community-based models that were effective in improving access to dental care. Examples of these models include providing universal sealants as well as school-based dental care services. Policies that support these models can allow dental professionals to reach populations that might not otherwise seek care due to financial or geographic barriers.

Conclusion and Future Directions

This paper has highlighted the critical issue of dental care access among marginalized communities throughout the world. It has examined the current state of dental care access, explored key barriers, and offered recommendations through community-based initiatives and health policy reforms. These approaches not only provide immediate access to preventive care but also help reduce long-term disparities in oral health (Northridge *et al.*).

Moving forward, further research is needed to explore the long-term impact of several key promising areas. One of these areas is dental sealant programs. They have been shown to reduce dental decay globally, especially in low-income and geographically isolated communities. Investigating the cost-effectiveness of scaling these programs in different regions could help shape future public health strategies (Nájera et al.).

Another area that warrants additional research relates to expanding the capacity of dental schools to assist marginalized communities worldwide. To this end, dental schools can continue to innovate their educational outreach efforts. Future research should focus on how dental schools can scale their community clinic models to reach more vulnerable populations and integrate culturally competent care into their programs (MacDougall). By further exploring these areas, the future can be shaped to provide comprehensive and affordable oral health solutions for underserved communities worldwide.

Ethical Consideration:

Not applicable

Conflict of interest:

None

Acknowledgements:

None

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