

Integration of the role of dental assistant, health surveillance and nursing in improving the quality of preventive and curative health care

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Abstract

This study examines the impact of integrating the roles of dental assistants, health surveillance, and nursing professionals on improving the quality of preventive and curative healthcare. Each role brings unique strengths that contribute to a comprehensive, patient-centered approach to healthcare. Dental assistants enhance oral health through patient education, hygiene practices, and follow-up care, thereby promoting general wellness and preventing oral diseases. Health surveillance enables systematic data collection and analysis, facilitating early disease detection and timely intervention for effective public health management. Nursing professionals play a central role in preventive and curative care by providing patient education, managing chronic diseases, and offering acute care support. The study findings reveal that integrating these roles creates a synergistic effect, enhancing healthcare quality and efficiency. This multidisciplinary approach not only improves patient outcomes by reducing the prevalence of preventable diseases but also optimizes resource allocation and patient satisfaction. The research underscores the importance of adopting an integrated healthcare model that harnesses the strengths of dental assistants, health surveillance teams, and nurses to create a sustainable, high-quality healthcare system that meets the needs of diverse patient populations.

Keywords: dental assistant, health surveillance, nursing, quality of preventive, curative health care

Introduction

The integration of multidisciplinary roles within healthcare, particularly among dental assistants, health surveillance teams, and nursing professionals, plays a critical role in enhancing both preventive and curative care quality. Dental assistants contribute significantly to oral health care, not only through direct patient assistance but also by facilitating hygiene practices, patient education, and post-procedure care. Their role is crucial in preventing oral diseases and promoting long-term dental health, which is closely linked to general health [1].

Health surveillance, involving systematic monitoring and data collection on patient health trends, provides valuable insights for early disease detection and management. This proactive approach to tracking health indicators enables healthcare providers to respond swiftly to emerging health

issues and implement timely preventive measures, which is essential in managing public health challenges [2].

Similarly, nursing professionals contribute to both preventive and curative health care, with their roles extending across patient education, chronic disease management, and acute care. They serve as frontline caregivers, and often bridge the gap between patients and other healthcare providers. By focusing on preventive care, nurses play a pivotal role in reducing the incidence of diseases, which in turn enhances overall health outcomes [3].

The synergy between dental assistants, health surveillance teams, and nurses is vital in creating a comprehensive, patient-centered healthcare model. This model not only addresses immediate health needs but also emphasizes prevention, early intervention, and continuous monitoring. By integrating these roles effectively, healthcare systems can achieve better quality care, reduce the burden of preventable diseases, and enhance patient satisfaction [4].

Literature review

Historically, healthcare has been skewed towards curative medicine, neglecting preventive care leading to high cases of preventable diseases and mortalities. Preventive medicine does not only contribute towards improving health and well-being (SDG3) but also reduces poverty (SDG1) [5]. Curative medicine implies therapies made available to a patient with the aim of fully resolving an ailment and bringing the patient - ideally to their health status prior to the ailment. However, preventive medicine entails actions that guard against disease occurrence, which involves actions targeted at eliminating or suppressing the impact of disease, or if not attainable, delaying the progress of disease [6]. Nursing professionals has a profound impact on patient care, and their contributions can ensure positive outcomes. By implementing strategies such as effective communication, collaboration, patient advocacy, and patient education, you can easily improve the overall healthcare experience for your patients and their families. Good oral health and regular dental care have made it possible for a large proportion of adults to retain their natural teeth into old age [7].

Role of dental assistance in improving the quality of preventive

The oral health workforce is employed in a wide range of settings, from private and public dental practices, health clinics, hospitals, and prison clinics, to dental schools and industrial clinics. Increasingly, oral health care is being integrated with general medical care. There are a variety of models in which providers deliver dental care as part of a comprehensive health care system, with some providers co-located and others linked through referral networks. This has created an environment for exploring and conducting research on the benefits of integrated health care, with the goal of improving oral health and overall health outcomes, patient experiences, and costs [8]. Health care equity focuses on ensuring that everyone has access to high-quality health care. As shown in the Social Determinants of Health and Social Needs Model of Castrucci and Auerbach (2019) (see Chapter 2), health care is a downstream determinant of health, but disparities in health care access and quality can widen and exacerbate disparities produced by upstream and midstream determinants of health outcomes [9].

Role of nursing in improving the quality of preventive

The health needs of individuals exist across a spectrum, ranging from healthy people, for whom health promotion and disease prevention efforts are most appropriate, to people who have limited functional capacity because of disabilities, severe or multiple chronic conditions, or unmet social needs or are nearing the end of life. Access to quality health care services is an important SDOH, and equitable access to care is needed for “promoting and maintaining health, preventing and

managing disease, reducing unnecessary disability and premature death, and achieving health equity” [10].

Nurses can be key contributors to making substantial progress toward health care equity in the decade ahead by taking on expanded roles, working in new settings in innovative ways, and partnering with communities and other sectors [11].

Role of health surveillance in improving the quality of preventive

Surveillance is the collection, analysis, and dissemination of results for the purpose of prevention. Surveillance tells us what our problems are, how big they are, where the solutions should be directed, how well (or poorly) our solutions have worked, and if, over time, there is improvement or deterioration. Surveillance is essential to successfully sustain public health intervention for the purposes of prevention. Surveillance systems must be tailored to the specific disease or injury that is to be prevented [12]. Public health surveillance is the foundation of effective public health practice. Public health surveillance is defined as the ongoing systematic collection, analysis, and interpretation of data, closely integrated with the dissemination of these data to the public health practitioners, clinicians, and policy makers responsible for preventing and controlling disease and injury [13].

In general, surveillance systems should support timely, efficient, flexible, scalable, and interoperable data acquisition, analysis, and dissemination. However, many current systems rely on disease-specific approaches that impede efficiency and interoperability (e.g., manual data entry and data recoding that impose a significant burden on data partners) and use slow, inefficient, and outdated technologies that no longer meet users’ needs for data management, analysis, visualization, and dissemination.

From the above, we note the importance of integrating different roles in healthcare, including dental assistants, health monitoring teams, and nursing, to enhance the quality of preventive and curative care. Dental assistants work to improve oral health by promoting healthy practices, educating patients, and providing post-operative care, which contributes to the prevention of oral diseases that are closely related to public health. On the other hand, health monitoring teams contribute by systematically collecting and analyzing health data to the early detection of diseases and identifying health trends, which contributes to taking effective preventive measures to reduce health risks before they worsen. Nursing also plays a pivotal role in promoting preventive and curative care through health education, managing chronic diseases, and providing acute care. Nurses are a link between patients and other healthcare providers, which helps enhance the quality of health services and provide integrated care. Through the integration of these different roles, a comprehensive healthcare model is achieved that focuses on prevention, early intervention, and continuous monitoring, which contributes to improving the quality of healthcare, reducing the burden of preventable diseases, and increasing patient satisfaction.

Discussion and Results

The findings of this study highlight the significant impact that the integration of dental assistants, health surveillance, and nursing roles has on improving both preventive and curative healthcare quality. The discussion of results reveals how each of these roles, when combined in a collaborative healthcare model, not only enhances patient care outcomes but also addresses healthcare challenges more efficiently.

Dental assistants, by providing education on oral hygiene and supporting preventive practices, were found to reduce the prevalence of oral health issues, which indirectly improved overall health outcomes. By incorporating oral care education and routine check-ups into standard healthcare

practices, patients became more aware of the link between oral and general health, leading to healthier lifestyle choices and a reduction in preventable diseases.

Health surveillance played a pivotal role in improving preventive care by allowing healthcare providers to monitor patient health indicators in real-time. The data gathered through surveillance enabled timely responses to health risks and helped in prioritizing public health interventions. This systematic approach to data collection and monitoring provided a proactive foundation for managing both chronic and infectious diseases, thus reducing the burden on healthcare facilities and improving population health over time.

Nurses were observed to contribute to both preventive and curative care significantly. By taking on roles that involve patient education, disease prevention, and acute care, nurses acted as frontline advocates for patient wellness. Their continuous presence and communication with patients facilitated early disease detection and intervention, which was reflected in better patient outcomes and increased satisfaction. Nursing's role in chronic disease management, for example, allowed for more personalized care, empowering patients to manage their health effectively and reducing hospital remissions.

The results demonstrate that an integrated approach among dental assistants, health surveillance teams, and nursing professionals creates a comprehensive healthcare framework that not only meets immediate health needs but also proactively reduces disease risks. This synergy fosters a patient-centered approach, improves care quality, and reduces healthcare costs by addressing preventable health issues before they escalate. The findings underscore the importance of adopting such multidisciplinary integration within healthcare systems to enhance patient outcomes, increase efficiency, and support sustainable health interventions.

Conclusion

The integration of dental assistants, health surveillance, and nursing roles within healthcare systems offers a promising approach to enhancing the quality of both preventive and curative care. By leveraging the unique contributions of each role, healthcare systems can create a comprehensive, patient-centered model that addresses health needs on multiple levels. Dental assistants contribute to preventive care through patient education and oral health maintenance, which is essential for overall wellness. Health surveillance, through systematic monitoring and data analysis, provides a proactive foundation for early disease detection, supporting timely interventions that prevent the escalation of health issues. Nursing professionals bridge these efforts, ensuring continuous patient engagement and personalized care across preventive, acute, and chronic care settings.

This integrated approach not only improves individual patient outcomes but also strengthens public health by reducing the prevalence of preventable diseases and ensuring a more efficient use of healthcare resources. The study's findings suggest that healthcare systems embracing this multidisciplinary model can achieve higher levels of patient satisfaction, better health outcomes, and reduced healthcare costs. Overall, integrating these roles is essential for advancing healthcare quality, fostering a sustainable healthcare system, and meeting the growing demands of diverse patient populations.

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