

# "The role of nursing in promoting dentistry" By:

1. Name / Huda Ahmed Jabril Khormi Speciality / General Dentistry

**Employer / Mizhera Primary Health Care Center** 

2. Name / Wafa Mousa Yahya Ajeebi Speciality / Technician Dental Assistant

**Employer / Jazan Regional Health Command Center** 

3. Name /Hana Yahya Mohammed Bashi Speciality /Technician Dental Assistant Employer /King Fahd central hospital

4. Name/Majidah Yahya Khalil Yahya Employer /Sabya general Hospital

**Speciality / Technician-Operation Rooms** 

5. Name /Ola Ali Ahmed salemEmployer /Sabya General HospitalSpeciality / Technician - Nursing

6. Name /Amal Ali Hammadi Zayed

Employer /Abu Arish North Primary Health Care Center Speciality /Nursing technician

> 7. Name /Manal abdu mohammed zidan Employer /Jazan Specialized Dental Centre

> > Speciality /Technician-Nursing

8. Name /Mohammed Ibrahim Ahmad Ajeebi Speciality /Nursing technician

Employer /Al-Gharaa primary health care center in Sabya

9. Name /Bdor awad rashidiya

Employer/ Al Lahn Primary Health Care Center Speciality / Medical Secretary

10. Name / Asma Bhays Hussain Jarab

Employer/ Jazan Regional Health Command Center Speciality / Medical secretary

11. Name /Amani Mohammed Ahmed Mukhdhari Speciality /Technician-Nursing

**Employer /Damad General Hospital** 

12. Name /Suzan Nasser Ahmed Mahdi Speciality /Technician-Nursing Employer / Damad general hospital



#### **Abstract:**

The term "dental nurse" is ubiquitous in the field of dentistry, but sadly, they don't have a designated organization of dental nurses. Unfortunately, there are a wide range of individuals working as dental nurses, from unskilled workers to highly trained professionals like registered nurses. The absence of standards and adequate training and certification for dental nurses is to blame for this disparity. When it comes to dental care, the dental nurse plays a crucial role. As members of the dental team, dental nurses assist patients, dentists, and other dental professionals in a range of settings. Dental surgery nurses are responsible for a wide variety of tasks, including but not limited to: keeping the dental clinic or surgery clean and organized, preventing infections and cross-infections, recording information about patients' dentition, periodontium, and soft tissues, preparing, mixing, and handling various dental materials, supporting clinicians during various dental procedures, keeping complete contemporaneous dental records, preparing patients and equipment for dental radiography, communicating with patients, advising them within their abilities, helping patients and colleagues during medical emergencies, and ensuring patients receive proper oral health care. In this environment, there is a growing demand for dental nurses who are highly skilled, competent, and knowledgeable so they can assist dental clinicians and provide excellent treatment to patients.

**Key words:** nurse, dentist, patient, clinicians, medical, healthcare.



## **Introduction:**

The term "dental nurse" is ubiquitous in the field of dentistry, but sadly, does not have a designated organization of dental nurses. Unfortunately, there are a wide range of individuals working as dental nurses, from unskilled workers to highly trained professionals like registered nurses. The absence of standards and adequate training and certification for dental nurses is to blame for this disparity. When it comes to dental care, the dental nurse plays a crucial role. As members of the dental team, dental nurses assist patients, dentists, and other dental professionals in a range of settings. (Gaffar, B., et al. 2023).

Dental surgery nurses are responsible for a wide variety of tasks, including but not limited to: keeping the dental clinic or surgery clean and organized, preventing infections and cross-infections, recording information about patients' dentition, periodontium, and soft tissues, preparing, mixing, and handling various dental materials, supporting clinicians during various dental procedures, keeping complete contemporaneous dental records, preparing patients and equipment for dental radiography, communicating with patients, advising them within their abilities, helping patients and colleagues during medical emergencies, and ensuring patients receive proper oral health care. In this environment, there is a growing demand for dental nurses who are highly skilled, competent, and knowledgeable so they can assist dental clinicians and provide excellent treatment to patients. (Haber, J., & Hartnett, E. 2019).

Unfortunately, there is not a professional group of dental nurses in the world, despite the fact that the phrase "dental nurse" is frequently used in the field of dentistry. The dental nurse is an essential member of the dental team; yet, this position is sadly filled by a diverse range of individuals, ranging from individuals who lack the necessary qualifications to dental professionals such as registered nurses. This disparity can be attributed to the absence of suitable training and certification opportunities for dental nurses, as well as the absence of standards in the field. Over the past few years, the healthcare industry in India has continued to experience remarkable expansion. As a consequence of this, the industry is also witnessing an increase in the demand for human resources, which includes a wider range of specialists, including nurses, doctors, allied health professionals, and technicians. Referring to the most recent report that was published by the Public Health Foundation (PHF). (Baginska, J., et al. 2021).

In this context, there is a growing demand in the healthcare system for qualified dental nurses who possess the highest levels of professionalism, abilities, and competence in order to serve as a source of support for dental clinicians and to deliver high-quality patient care. The need for competent dental nurses is growing as the practice of dentistry undergoes a period of disruption. Additionally, this demand can be attributed to the fact that patients have a demand for skilled and qualified staff; dental nurses are required to be familiar with a variety of routine and non-routine dental procedures; the requirement for the highest standards of quality assurance; and the ongoing changes in health and safety guidance and legislation. As a direct result of this, the demands and obligations placed on dental nurses who operate in a range of dental settings have increasingly increased. (Keboa, M., et al. (2019).



It is commonly acknowledged that enhancing oral health will have a beneficial effect on the overall health and well-being of any community, despite the fact that the professional group of dental nursing is still in its very early stages of development. The dentists themselves have been the driving force behind the establishment of this complete set of qualifications. They are seeking for services that are both professional and of high quality in order to serve the patients' best interests.

There is no one more important than the dental nurse when it comes to providing dental care. Patients, dentists, and other dental professionals can receive assistance from dental nurses in a variety of settings. Dental nurses are members of the dental team. Among the many responsibilities of dental surgery nurses are the following: (Haresaku, S., et al. 2020).

keeping the dental clinic or surgery clean and organized; preventing infections and cross-infections; documenting information provided by dental clinicians regarding patients' teeth, gums, and soft tissues; preparing, mixing, and handling various dental materials; supporting dentists during various procedures; keeping complete contemporaneous dental records; preparing patients, equipment, and materials for dental radiography; communicating with patients, assisting them, monitoring their progress, and assuring them of their well-being; offering advice within their expertise; assisting both patients and coworkers in the event of a medical emergency; and finally, prescribing dental health advice from dentists. (Haresaku, S., et al. 2018).

Improving the prevention and control of oral diseases should be based on policy approaches that integrate oral and general health. The 60th World Health Assembly's Oral Health Action Plan recognizes this. "The need to incorporate programs for promotion of oral health and prevention of oral diseases into programs for the integrated prevention and treatment of chronic diseases" is identified, and "the intrinsic link between oral health, general health and quality of life" is emphasized. When it comes to oral and dental health, non-dental health care practitioners (such as doctors, pharmacists, and nurses) often lack enthusiasm, expertise, and training, which is a major obstacle to integration. According to Clemmons, maintaining good oral health is not part of a nurse's job description. This could be a result of nursing schools neglecting to teach students about basic dental hygiene (Institute of Medicine). It is imperative that health care education incorporates the importance of teamwork between general and oral health care in order to enhance the knowledge and attitudes of health care practitioners. (Almutairi, H. A. S. 2023).

## The qualifications of the dentist nursing:

A dental nurse who works in a regular dentistry office may be responsible for a variety of tasks within the surgery, such as reception responsibilities (including the scheduling of appointments), payments and banking, and even taking part in the administration of the business. The various functions that a dental nurse might be responsible for perform are contingent on the specific requirements of the practices.

The requirements that must be met in order to become a dental nurse can differ from country to country



and from legislation to regulation. On the other hand, the following is a broad summary of the normal requirements and steps to become a dental nurse: (Burn, K., et al. 2022).

• Learning: The majority of dental nurses have earned degrees from accredited institutions. Options typically included in these programs, which might range in duration and structure, are: (Shmarina, E., et al. 2023).

Many people who work as dental nurses have earned some sort of credential in the field, specifically a diploma or certificate. The usual fare in these courses includes dental anatomy, oral hygiene, infection prevention, dental procedures, radiography, and patient care.

In order to get the skills necessary to become a dental nurse, some countries' prospective nurses participate in apprenticeship programs. Healthcare companies and dentistry offices frequently fund these programs, which offer a hybrid of classroom and on-the-job training.

Dental nursing degree programs are available in certain countries. These programs often lead to an Associate's or Bachelor's degree in dental hygiene or dental nursing. The education and professional opportunities offered by these programs may be more extensive.

- Clinical Training: Dental nurses, irrespective of the course of study they have selected, typically take part in clinical training to obtain hands-on experience in tasks including collecting X-rays, organizing patient files, sterilizing equipment, and supporting dentists chairside. (Allen, H. B., et al. 2019).
- Getting Certified or Registering with a Regulatory Body: In many countries, dental nurses are generally required to do one or the other. It is customary to fulfill continuing education requirements, pass pertinent exams to demonstrate competency, and provide documentation of education and training as part of this process. (Ramos-Gomez, F., et al. 2021).
- Continuing Education: The profession of dentistry nursing is dynamic and demands constant learning and skill improvement. It may be necessary for dental nurses to take part in workshops or continuing education courses in order to stay current on developments in patient care, infection control procedures, dental technology, and regulatory changes. (Claiborne, D. M., et al. 2020).
- Competencies: Along with academic credentials, effective dental nurses typically exhibit particular competencies and personal qualities including:
- > The ability to engage with patients, dentists, and other healthcare professionals in a successful manner because of exceptional communication skills.
- Maintaining records, sterilizing instruments, and evaluating patients are all examples of duties that need careful attention to detail and precision.
- Empathy and compassion for the oral issues and comfort of patients are essential.



- Ability to work well in a team atmosphere and collaborate with other members of the dental healthcare team.
- > The ability to learn new methods, technologies, and protocols, as well as the desire to undergo change.

It is essential to keep in mind that the particular qualifications and requirements for dental nursing might differ from one jurisdiction to another. Therefore, persons who are interested in pursuing a career as a dental nurse should conduct research on the standards and regulations that are appropriate to their locality. In addition, being a member of professional organizations or obtaining advice from experienced dental nurses can provide highly beneficial insights on the prerequisites and career path that are required. (Bhagat, V., et al. 2020).

## The importance of having a dental nurse:

It is the responsibility of dental nurses to ensure that dental practices and clinics run efficiently and effectively all the time. The following are some of the most essential reasons why they are important: (Seleskog, B., et al. 2018).

- Patient care: Dental nurses are frequently the initial point of contact for patients, and they are responsible for medical care. Patient greeting, medical history collection, and ensuring the patient's comfort throughout their visit are all tasks that they perform. Patients are able to feel more at ease as a result of their caring demeanor, particularly those patients who may be worried about dentistry operations.
- Assisting dentist: During dental operations, nurses provide chairside assistance to dentists. This
  ensures that patients receive the best possible care. In addition to maintaining a sterile atmosphere,
  they are responsible for handing instruments and preparing materials. This support makes it
  possible for dentists to concentrate on the treatment in an effective manner. (Mitchell, A. M., et al.
  2018).
- Sterilization and Infection Control: Sterilization and Infection Control Dental nurses are assigned the responsibility of sterilizing instruments, ensuring that the clinic is kept clean, and adhering to stringent guidelines for infection control. The implementation of these procedures is absolutely necessary in order to stop the spread of illnesses and guarantee the safety of patients.
- Educating Patients: Educating Patients Nurses are responsible for educating patients on proper
  oral hygiene practices, instructions for post-operative care, and the significance of maintaining
  regular dental checkups. Patients are given the ability to take better care of their dental health as a
  result of this knowledge. (Coan, L. L., et al. 2019).
- Administrative Tasks: In addition to their clinical responsibilities, dental nurses are responsible for a variety of administrative chores. These work include the management of patient data, the



scheduling of payments, and the management of appointments. In order to ensure that the practice runs smoothly, their organizational abilities are a significant contributor.

Emergency Response: In the event of an emergency, dental nurses are professionally educated to
provide first aid, perform cardiopulmonary resuscitation (CPR) if it is required, and assist in
controlling the situation until additional assistance comes. Because of their fast thinking and
extensive knowledge, they have the potential to save lives in dangerous situations. (Shankland, M.
2021).

Generally speaking, dental nurses are part of the dental team that are absolutely necessary. They make a contribution to the overall patient experience, provide assistance to dentists in the delivery of quality care, uphold safety requirements, and ensure that dental clinics operate efficiently.

## Challenges facing nurses in the field of dentistry:

Dental nurses encounter a number of issues that are distinct from those faced by their counterparts in other areas of the healthcare industry. Challenges such as the following are examples: (Ahmed, F., et al. 2018).

- Specialized Knowledge: Dental nurses are required to acquire specialized knowledge on dental
  treatments, oral health, and dental equipment in order to practice dentistry clinically. Because of
  this, it is necessary to engage in continual education and training in order to keep up with the most
  recent developments in dental treatment.
- Patient Anxiety and Fear: A significant number of patients suffer worry and panic when they go to the dentist, which can occasionally result in behavior that is difficult or problematic. To ensure that patients receive appropriate care, nurses need to be proficient in calming anxious patients and providing an environment that is comfortable for them. (Nash, W. A., et al. 2018).
- Infection Control: The intimate contact with human fluids and the exposure to infectious organisms that are inherent to dental practice make infection control an essential component of the profession. To ensure that infection control policies are followed to the letter, nurses are required to maintain a clean workplace and ensure that all equipment is properly sterilized.
- Physical Demands: Dental work can be physically taxing, particularly during procedures that
  require standing for extended amounts of time and exact hand-eye synchronization between the
  dentist and the patient. There is also the possibility that nurses will be required to assist with patient
  placement, which can put strain on the body over time. (Nash, W. A., et al. 2018).
- Communication and Collaboration: A dental environment is a place where several healthcare professionals, such as dentists, hygienists, and nurses, work together to provide comprehensive care. In this context, effective communication and teamwork are critical components of the dental care process. For the purpose of ensuring a seamless workflow and the best possible outcomes for patients, nurses need to be able to communicate effectively with both patients and their colleagues.



- Workplace Stress: Nurses in dentistry, like nurses in any other healthcare profession, may feel stress in the workplace due to the huge number of patients they care for, the limited amount of time they have, and the emotional demands of providing care to patients. In order to avoid burnout, it is essential for nurses to engage in self-care practices and seek support whenever it is required. (Sanders, K. A., et al. 2021).
- Regulatory Compliance: Nurses are required to comply with the regulatory requirements and rules
  that are specific to dentistry practice. These include things like the Health Insurance Portability
  and Accountability Act (HIPAA), radiography safety, and the supervision of hazardous items.
  Maintaining compliance calls for continuous training as well as an awareness of the ethical and
  legal duties that are involved.

It is common practice to address these problems by utilizing a combination of education, training, good communication, collaborative effort, and a dedication to providing care that is centered on the patient.

## **Conclusion:**

Dental illness is a serious public health concern that has a considerable impact on the quality of life, which in turn has an impact on all aspects of life, including the performance of an individual and life in general. It is clear that the oral health of people living in urban areas and those living in rural areas of industrialized countries is very different from one another. In light of the current circumstances, it is imperative that a national policy be developed and put into action in order to improve oral health care, along with making it more inexpensive and accessible to the general people through the use of dental nurses. It is possible to accomplish this by regulating and recognizing the field of dental nursing as a profession. This will not only improve health literacy but will also reduce the disparities that exist in dental health. There is a demand for dental health planners and policy makers who possess the appropriate qualifications and training to comprehend the specific requirements and resources that are necessary for the formulation of an efficient strategy.



#### **References:**

- 1. Haber, J., & Hartnett, E. (2019). The interprofessional role in dental caries management: Impact of the nursing profession in early childhood caries. Dental Clinics, 63(4), 653-661.
- 2. Gaffar, B., Bakhurji, E., AlKhateeb, R., AlHashim, H., AlGaoud, H., AlDaamah, Z., ... & Virtanen, J. I. (2023). Exploring factors influencing nurses' attitudes towards their role in dental care. PLoS One, 18(7), e0288927.
- 3. Keboa, M., Beaudin, A., Cyr, J., Decoste, J., Power, F., Hovey, R., ... & Macdonald, M. E. (2019). Dentistry and nursing working together to improve oral health care in a long-term care facility. Geriatric Nursing, 40(2), 197-204.
- 4. Baginska, J., Rodakowska, E., Kobus, A., & Kierklo, A. (2021). The role of Polish school nurses in the oral health promotion for 7–19 year-old children and adolescents. European Archives of Paediatric Dentistry, 22, 265-272.
- 5. Haresaku, S., Uchida, S., Aoki, H., Akinaga, K., Yoshida, R., Kubota, K., & Naito, T. (2020). Factors associated with nurses' performance of oral assessments and dental referrals for hospital inpatients. BMC oral health, 20, 1-10.
- 6. Haresaku, S., Monji, M., Miyoshi, M., Kubota, K., Kuroki, M., Aoki, H., ... & Naito, T. (2018). Factors associated with a positive willingness to practise oral health care in the future amongst oral healthcare and nursing students. European journal of dental education, 22(3), e634-e643.
- 7. Almutairi, H. A. S. (2023). Bridging the Gap: Collaborative Efforts between Dentistry and Nursing in Patient Care. Saudi J Oral Dent Res, 8(12), 416-420.
- 8. Burn, K., Griffiths, L., McColl, E., & Daldry, M. (2022). Dental nurse led teaching-From Plymouth to Antarctica. BDJ Team, 9(8), 34-36.
- 9. Shmarina, E., Ericson, D., Götrick, B., & Franzén, C. (2023). Dental professionals' perception of their role in the practice of oral health promotion: a qualitative interview study. BMC Oral Health, 23(1), 43.
- 10. Allen, H. B., Gunaldo, T. P., & Schwartz, E. (2019). Creating Awareness for the Social Determinants of Health: Dental hygiene and nursing student interprofessional service-learning experiences. American Dental Hygienists' Association, 93(3), 22-28.
- 11. Ramos-Gomez, F., Kinsler, J. J., Askaryar, H., Verzemnieks, I., & Garell, C. (2021). Evaluation of an interprofessional education program in pediatric dentistry, medicine, and nursing. Journal of Dental Education, 85(7), 1228-1237.
- 12. Claiborne, D. M., Poston, R., & Joufi, A. (2020). Innovative collaborative service-learning experience among dental hygiene and nurse practitioner students: a pediatric oral health pilot study. American Dental Hygienists' Association, 94(3), 29-36.



- 13. Bhagat, V., Hoang, H., Crocombe, L. A., & Goldberg, L. R. (2020). Incorporating oral health care education in undergraduate nursing curricula-a systematic review. BMC nursing, 19(1), 66.
- 14. Seleskog, B., Lindqvist, L., Wårdh, I., Engström, A., & von Bültzingslöwen, I. (2018). Theoretical and hands-on guidance from dental hygienists promotes good oral health in elderly people living in nursing homes, a pilot study. International journal of dental hygiene, 16(4), 476-483.
- 15. Mitchell, A. M., Riccelli, A., Boucek, L., Puskar, K. R., Hagle, H., & Lindsay, D. (2018). Effect on dental hygiene students of a substance use simulation conducted with nursing students. Journal of Dental Education, 82(5), 469-474.
- 16. Coan, L. L., Wijesuriya, U. A., & Seibert, S. A. (2019). Collaboration of dental hygiene and nursing students on hospital units: An interprofessional education experience. Journal of Dental Education, 83(6), 654-662.
- 17. Shankland, M. (2021). Delivering dental health promotion in developing countries: should this be carried out by non-dental professionals? Evidence-Based Dentistry, 22(1), 18-19.
- 18. Ahmed, F., Rao, A., Shenoy, R., & Suprabha, B. S. (2018). Knowledge, attitude, and behavior of nurses toward delivery of Primary Oral Health Care in Dakshina Kannada, India. Journal of Indian Society of Pedodontics and Preventive Dentistry, 36(1), 21-25.
- 19. Nash, W. A., Hall, L. A., Ridner, S. L., Hayden, D., Mayfield, T., Firriolo, J., ... & Crawford, T. N. (2018). Evaluation of an interprofessional education program for advanced practice nursing and dental students: the oral-systemic health connection. Nurse education today, 66, 25-32.