The Role Of Dental Nurse In Dental Practice–A Future Perspective

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ABSTRACT: Dental nurse is a common term used in dentistry but unfortunately India lacks a professional group of dental nurses. Dental nurse is an integral part of the dental team but unfortunately this segment is occupied by different sets of people from nonqualified individuals to professionals like registered nurse. The reason behind this discrepancy is lack of standardization and non-availability of proper training and certification of dental nurses.

The dental nurse is an essential member of the dental team. Dental nurses work within a variety of dental environments and provide support to dental clinicians, patients and the dental team. The range of duties performed by dental surgery nurses include; preparing and maintaining the dental clinic/ surgery; prevention of infection and cross infection; recording information provided by a dental clinician relating to the patients dentition, periodontium and soft tissues; preparing mixing and handling a range of dental materials; providing chair-side support to the clinician during a range of dental procedures; maintaining full contemporaneous dental records; preparation of equipment, materials and patients for dental radiography; communicating, supporting, monitoring and reassuring patients; providing advice within their own capabilities; supporting patients and colleagues if there is a medical emergency and providing patients with oral health advice prescribed by the dentist.

Within this context there is an increased need in the healthcare setting for qualified dental nurses with the highest standards of professionalism, skills and expertise to provide high quality patient care and support for the dental clinician.

KEYWORDS–Dentistry, Nurses, Healthcare, Man power.

INTRODUCTION

The demand for quality health care is driving the transformation of the healthcare sector in India. In India, oral health is not given its due diligence. According to a Frost and Sullivan report around 40-50 per cent of Indian population has never visited a dentist even though nearly 70 per cent of population is suffering from dental diseases. Even then the scope for the Indian dental care services market is huge. It was estimated to be \$739 million in 2010 and is expected to reach \$1302.5 by 2015 data CAGR of 12 percent¹.

Dental nurse is a common term used in dentistry but unfortunately India lacks a professional group of dental nurses. Dental nurse is an integral part of the dental team but unfortunately this segment is occupied by different sets of people from nonqualified individuals to professionals like registered nurse. The reason behind this discrepancy is lack of standardization and non-availability of proper training and certification of dental nurses². The healthcare sector in India has been growing rapidly in recent years and is estimated to reach a value of \$280 billion by 2020. Consequently, the sector is also experiencing an incremental demand for human resources from doctors and nurses to allied health professionals and technicians. With reference to the recent Public Health Foundation of India (PHFI) report, India has a shortfall of six million allied health professionals³.

Within this context there is an increased need in the healthcare setting for qualified dental nurses with the highest standards of professionalism, skills and expertise to provide high quality patient care and support for the dental clinician.

As the practice of dentistry changes, the need for qualified dental nurses increases. This need is also attributed to patients' demand for skilled and qualified staff; dental nurses requiring to be familiar with a range of routine and non-routine dental procedures; the need for the highest standards of quality assurance; and continual changes in health and safety guidance and legislation. Consequently,

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demands and responsibilities have become greater for dental nurses working within a variety of dental environments⁴.

The professional group of dental nursing is in its infancy however it is widely recognized that improving oral health will have a positive impact on the general health and well being of any population. The development of this suite of qualifications has been triggered from the dentists themselves who are looking for professional and quality services to serve the best interests of their patients.

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In a general dental practice environment the dental nurse may work in several areas of the surgery including: reception duties (making appointments), payments and banking, and getting involved in the administration of the practice. The varying roles that a dental nurse might undertake will depend upon the practices' particular requirements⁵.

Thus this review aimed at the importance of quality dental care with efficient manpower especially the roles, responsibility and duties of dental nurse.

OUALIFICATION

A) GNM

- B) B.Sc Nursing
- C) PB.B.Sc Nursing/ particularly trained as assistant in dental hospital.

Indian Dental Nursing is currently accepting students for One year studies and training leading to examination for the award of Diploma in Dental Nursing².

DUTIESOFA DENTALNURSE

Dental nurses are registered dental professionals who provide clinical and other support to registrants and patients. As a dental nurse, they can undertake the following if they are trained, competent and indemnified:

- Prepare and maintain the clinical environment, including the equipment
- Carry out infection prevention and control procedures to prevent physical, chemical and microbiological contamination in the surgery or laboratory
- Record dental charting and oral tissue assessment carried out by other registrants
- Prepare, mix and handle dental bio-materials
- Provide chair side support to the operator during treatment
- Keep full, accurate and contemporaneous patient records
- Prepare equipment, materials and patients for dental radiography
- Process dental radiographs
- Monitor, support and reassure patients
- Give appropriate patient advice
- Support the patient and their colleagues if there is a medical emergency
- Make appropriate referrals to other health professionals

ADDITIONAL SKILLS DENTAL NURSES COULD DEVELOP INCLUDE

- Further skills in oral health education and oral health promotion
- Assisting in the treatment of patients who are under conscious sedation
- Further skills in assisting in the treatment of patients with special needs
- Further skills in assisting in the treatment of orthodontic patients
- Intra and extra-oral photography
- Pouring, casting and trimming study models
- Shade taking
- Tracing cephalographs

ADDITIONAL SKILLS CARRIED OUT ON PRESCRIPTION FROM OR UNDERTHEDIRECTION OF, ANOTHER REGISTRANT

• Taking radiographs

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- Placing rubber dam
- Measuring and recording plaque indices
- Removing sutures after the wound has been checked by a dentist
- Constructing occlusal registration rims and special trays
- Repairing the acrylic component of removable appliances
- Applying topical anaesthetic to the prescription of a dentist
- Constructing mouth guards and bleaching trays to the prescription of a dentist
- Constructing vacuum formed retainers to the prescription of a dentist
- Taking impressions to the prescription of a dentist or a CDT (where appropriate)
- Dental nurses can apply fluoride varnish either on prescription from a dentist or direct as part of a structured dental health programme.
- Dental nurses do not diagnose disease or treatment plan. All other skills are reserved to one or more of the other registrant groups

DENTALNURSES – GLOBALSCENARIO

A scheme for dental nursing was established in wellington, New Zealand in 1921 due to theextensivedentaldiseasesamongarmyrecruitsduring 1stworldwar.TAHunterisregardedasthe founder and pioneer in establishment of dental nurses in New Zealand.

Formal training in the field of dental nursing was first established in 1930 during which the importance of role of dental surgery assistant was recognized. This created the need for a specific type of education for a chair side assistant that would prepare them for providing support both in surgical procedures and the overall management of patients.

In 1993, the Nuffield Foundation identified the training and regulation of dental auxiliaries and reported the role of the dental nurse as 'formally reappraised, defined, and nationally the incidence of oral disease, which is largely preventable and manageable, can be reduced by providing basic treatment needs and carrying out health promotion activities. This necessitates an extensive dental work force which would include dental surgeons, general dentists, dental auxiliaries, and PCDs.¹⁸

A remarkable contribution can be made by the synergistic work of dentists and professional dental nurses. Thus, qualified dental nurses with good standards of professionalism and skills for providing good quality patient care are indispensable. Unfortunately, in India, dental nursing is just beginning to emerge as a profession. Indian Dental Nursing offers Diploma in Dental Nursing certification to students after completing training and assessment following a one-year studyperiod.⁶

Thus, establishment of systematic education and training of dental nursing professionals in India would positively impact oral health, leading to enhanced health and welfare of the general population as a whole.

RECOMMENDATIONS&GUIDELINES

What qualities are essential for a dental nurse?

A dental nurse is usually the patients' first contact on entering the dentist's surgery. People are often very nervous while visiting dentist and a dental nurse must be able to put the patient at ease–a dental nurse needs good people skills. In the surgery a dental nurse needs to be able to work quickly and keep calm. As some of the chair-side work can be very precise, a dental nurse is expected to have a high degree of manual dexterity.

Objective of dental nursing studies programme

Any course or programme that aims to prepare students for the profession of dental nursing must demonstrate the role of a dental nurse within a variety of dental settings. It must teach how to prepare and maintain the clinical environment for a range of clinical procedures. Also demonstrate the recording of information presented to them by a dental clinician relating to the patients dental and oral tissues. In addition the course must discuss how to maintain patient confidentiality and patient data protection and show how to maintain health and safety for self, members of the dental team, patients and visitors. Professional competence is required as well as knowhow of basic life support and the ability to support the dental team during a medical emergency.

With increasing awareness more people would be willing to spend on dental health creating demand for more dental clinics. This demand cannot be fulfilled without the support of dental nurses. Hence, in coming years, dental nursing will be a sought after profession.

Who should opt for a dental nursing career?

If one's calm, good with people, interested in dentistry and keen to train on the job, becoming a dental nurse could be a good option for them. Being a dental nurse will provide one with an opportunity to work in a dental setting and to be a part of dental team.

The challenges for a dental nurse will have to work with people who are scared of the dentist so one has to know how to put people at their ease.

The ideal dentist: dental nurse ratio should be 1:1. With 25,000 graduate dentists passing out each year and a vast pool of registered dentists, there is huge scope for those who seek to make a career as a dental nurse.

CONCLUSION

Dental disease is a significant public health concern that greatly impacts the quality of life, which in turn affects the performance of an individual and life in general. There is a vast difference in the oral health status between urban and rural populations of India and developed countries.¹⁹

The existing situation demands the formulation and implementation of a national policy in India to develop oral health care and make it more affordable and accessible to the population through dental nurses. This can be achieved by standardizing and recognizing the field of dental nursing as a profession, which will also enhance health literacy and lessen the inequalities in dental health.²⁰

There is a need for dental health planners and policy makers who have the relevant qualifications and training to understand the unique needs and resources for the development of an effective policy. It is the responsibility of the Dental fraternity in India to implement such policies in collaboration with the state and central governments, to ensure better oral health and quality of life throughout the country.

REFERENCES

1. An Bord Altranais (2005) Requirements and Standards for Nurse Registration Education Programmes (2nd Edn), An Bord Altranais, Dublin, Republic of Ireland

- Joel L (2013) Kelly's Dimensions of Professional Nursing. (10thEdn),Mc Graw Hill, NewYork, USA.
- 3. AACN (2016) FY2017-2019 Strategic Plan Goals and Objectives,2005
- 4. Report of the Commission on Nursing: a blueprint for the future. Department of Health, Dublin, Republic of Ireland.
- Prosser M, Trigwell K (2015) Understanding Learning and Teaching: the experience in higher education. SRHE &Oxford University Press, Buckingham, UK.
- Vandali V. DentalNurse: Most Demanding Speciality JOJ Nursing & HealthCare. 2018:7(5);1-3.
- 7. Milarvie A M. The rise of the dental nurse. Vital. 2008;5(2):28-9.
- Nash DA, Friedman J W, Kardos TB, KardosRL, Schwarz E, Satur J, et al. Dental therapists: a global perspective. Int Dent J. 2008; 58(2):61-70.
- 9. JonesCM, Walker A. The role of extended duties dental nurses in applying fluoride varnish for the prevention and control of dental caries. Dent Update.2010; 37(8):549-52.
- Awojobi O, Movahedi S, Jones E, Gallagher JE. The evaluation of an innovative dental nurse training pilot scheme. Br Dent J. 2018; 224(11):875.
- NandraS, Aiyegbusi O. Dental nurse to dentist-a battle against all odds? BDJ Team.2018; 5(2):18024.
- Mc Glashan G, Watson DJ, Shanks S. Professionals complementary to dentistry: The expanding role of PCDs. Dent Update. 2004; 31(9):529-32.
- 13. Collier A. What extended duties can a dental nurse provide? Dental Nursing.2011; 7(5):278-82.
- Marcenes W, Kassebaum NJ, Bernabe E, Flaxman A, Naghavi M, Lopez A, et al. Global burden of oral conditions in 1990-2010: A systematic analysis. J Dent Res.2013; 92(7):592-7.
- 15. Watt RG. Strategies and approaches in oral

disease prevention and health promotion. Bull World Health Organ. 2005; 83(9):711-8.

- Vundavalli S. Dental manpower planning in India: current scenario and future projections for the year 2020.Int Dental J. 2014; 64(2):62-7.
- 17. Chandu VC, Pachava S, Viswanath V, Khanna A, Kaur R. Strategies for improving accessibility to oral health care services in rural India: An insight. Int J Oral Health MedRes.2017;4(2):44-6.
- 18. Mathur MR, Singh A, Watt R. Addressing inequalities in oral health in India: need for skill mix in the dental work force. J Family Med Prim Care.2015; 4(2):200-2.
- Gambhir RS, Gupta T. Need for oral health policy in India. Ann Med Health Sci Res.2016; 6(1):50-5.
- 20. Singh VR. Dental Manpower Inside Into an Indian Perspective. 2018:1-84.

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