

## **Study on the Dental Health Care Industry in India**

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People's quality of life, physical appearance and self-esteem are significantly affected by their oral health. Preventive visits to the dentist facilitate early detection and treatment of oral disorders. The percentage of the population that uses dental services during a given time period is called dental care utilization. Rumor has it that most dental patients only bother to return for follow-up care when they are in excruciating pain. A thorough understanding of how people use health services and the variables that influence this behavior is essential to improving oral health outcomes. There is growing interest in creating models that can explain how people use dental care.

Barriers to regular dental care include things like dental anxiety, cost, income, distance the patient has had to travel for care, and tooth preservation preferences. Dentists and dental health professionals must do their part to educate the public so that they recognize the value of routine dental care and use the equipment for it appropriately.

### **KEYWORDS-**

Oral, Health care, Dental care.

## **INTRODUCTION-**

The relationship between oral health and overall health and quality of life has been well established. It is well known that NCDs and oral health have similar risk factors. Dental caries, periodontal disease, oral cancer and oral symptoms of HIV are the main diseases of the oral cavity according to the WHO. According to the WHO, this includes heart disease, so patients who have heart problems must be treated with special care. It is also necessary to observe proper oral hygiene. The use of unauthorized toothpastes, diets high in sugar, smoking, harmful alcohol consumption and poor oral hygiene are common causes of oral disease.

The position of dental hygienist has existed in India for over a century. The dental hygienist often concludes the examination by collecting oral and systemic data, which are then used to create a dental hygiene diagnosis. Dental hygienists can receive training to expand their expertise and add permanent restoration placements in select states. Finding and selecting applicants who not only have the best chance of succeeding in the program and the final board exam, but also demonstrate the values and attitudes expected of the profession, is a problem for all dental hygiene schools. Much of the literature focuses on the individual success of program participants. national dental hygiene initiatives. Not only in India all over the world students get seats based on their GPA.

## **LITERATURE REVIEW-**

### **1)Utilization of dental care: An Indian outlook**

**Authors:** Ramandeep Singh Gambhir, Prabhdeep Brar , Gurminder Singh , Anjali Sifat, Heena Kakra

**Published On:** July 2013

Dental disease is a serious public health problem with universal distribution and affecting all age groups. However, despite this universal distribution, only a few seek dental care. Thus, a wide gap is created between the actual dental needs of the population and the demand for dental care which is quite understandable from the cited literature. In India, people encounter various obstacles in utilization of dental services. These barriers can be removed by motivating people and making them aware about the oral health problems that remove anxiety and fear so that they develop positive attitude towards dental treatment. It is suggested that mobile dental clinics, dental camps, and dental outreach programs could be solutions to spread awareness and disseminate treatment. There is a need for reasonably priced, rural oral health centers to make dental care available to rural strata of the population. Unmet treatment needs of the people belonging to lower class should be addressed during conduction of dental programs. School-based screening and motivation programs significantly improve the percentage of children who seek free dental treatment at a dental school. These programs can also target lifestyles and needs of the school children.

### **2) Dental care and oral disease in alcohol-dependent persons**

**Authors:** Ahmed Khocht, (D.D.S.), Steven J. Schleifer, (M.D.), Malvin N. Janal, (Ph.D.)b, Steven Keller, (Ph.D.)

**Published On:** November 2008

The patient group investigated in this study represents a unique population that is at greater risk for oral/dental disease yet is often less able to receive appropriate dental care. They exemplify the inadequacies and inequities of our oral health care system. They all come from poor and minority groups with minimal education and limited work skills. Their psychiatric illness, alcohol dependence, and drug addiction further hamper their ability to take better care of themselves. Despite the adverse and difficult living conditions, all subjects owned a toothbrush, and most made the effort to brush their teeth. This desire to own a toothbrush and use it certainly indicates interest in oral health among this group. Alcohol-dependent persons preferred using a hard toothbrush. This choice may be related to a faulty perception that a hard toothbrush would be more effective in eliminating the alcoholic odor after alcohol consumption. Alcohol-dependent persons, despite reporting similar brushing frequency, brushed less effectively than the nonalcohol-dependent persons. In addition, tooth brushing in the alcohol-dependent group did not benefit their oral health (as measured by periodontal clinical AL and percentage of decayed teeth). These findings suggest that alcohol-dependent persons are unable to practice basic dental hygiene adequately.

### 3) Oral Care in the Intensive Care Unit:

**Authors:** Randa F Afibida, MSC, PhD

**Published On:** January 1 2008

Oral hygiene in the ICU is a commonly performed nursing procedure in which the aim is to ensure that patients' mouths are cared for. Pritchard and David<sup>24</sup> indicate mouth care is required to:

1. Achieve and maintain oral cleanliness
2. Prevent infection/stomatitis
3. Keep the oral mucosa moist
4. Promote patient comfort

According to the nursing literature, toothbrushes are not the tools of choice for oral care by nurses. To the contrary, there is strong evidence to support the use of a toothbrush for the effective control of plaque and its associated complications; the toothbrush is recommended to be the tool of choice for mouth care. The practice of using a toothbrush for the maintenance of the oral hygiene of orally intubated patients is not widespread for reasons already discussed. Generally, nurses have not been formally trained in assessing the oral status of patients in ICUs, and oral care protocols for these patients are not usually available. It has been recommended dental hygienists be involved in nursing education programs in order to improve the nurses' knowledge and ultimately their ability to provide better oral care.

### 4.) Title: **Health and social benefits from improving community hygiene and sanitation: an Indian experience**

Link : <https://www.tandfonline.com/doi/abs/10.1080/0960312031000102895>

India has made significant progress in many regions, yet open defecation and manual cleaning of human excreta from bucket privies by scavengers persist. Lack of accessible sanitation technology, knowledge, or motivation may be the cause of low sanitation coverage. Most individuals cannot afford the cost of a septic tank, and disposing of the undigested sludge from septic tanks is still problematic.

### 5.) Computer-aided design and fabrication of dental restorations: Current systems and future possibilities

Link: <https://www.sciencedirect.com/science/article/abs/pii/S000281771464318X>

The possibilities of future dental equipment could be substantially expanded by dental technology. To fully utilize emerging technology, a particular kind of training could be necessary. The capabilities of current dental CAD/CAM systems vary greatly; each has unique advantages and limits. No current technology can directly collect data from the mouth and produce the variety of restoration kinds that may be made using conventional methods.

### 6.)What will be the new normal for the dental industry?

Link: <https://www.nature.com/articles/s41415-020-1583-x>

Any return to the more general provision of care will need to be supported by reducing and managing the infection risks associated with dental aerosol generating procedures (AGPs). The dental business will collaborate closely with the dental profession to research, adopt, and deliver the essential products, services, and procedures to make it possible for more extensive dental activities to resume. Members of the British Dental Industry Association (BDIA) include a wide range of industries. The majority of dentistry businesses in the UK are utilizing the present government-provided support programmes. Numerous dental businesses have chosen to lay off a sizable portion of their workforce, and many of them now allow nearly all of their employees to work remotely when possible.

There are many government mitigations in place, to a greater or lesser extent, throughout dentistry clinics.

### 7.)The Efficacy of two UV toothbrush devices

Link :

<https://www.proquest.com/openview/a09a3de30285556d49118221be29acc0/1?pq-origsite=gscholar&cbl=41679>

In recent years, creating a more sanitary environment has become more important to Americans, as a result of a new awareness of the risks of harbored bacteria in the home. The market for antibacterial products is growing, as people seek out items that will create a more sanitary environment. An experiment evaluated the efficacy of two different toothbrush sanitization machines for household use and sought to determine if one machine's sanitizing Dower was superior to the other. While the oral cavity is known to house a variety of bacteria that can be transferred to a toothbrush during use, studies indicate that bacteria found naturally in the environment may also be transferred

to the toothbrush. Eighty-three Percent of Brushes sanitize with HIGH DENT results in rare or no growth compared to only 33% of those sanitizer with UV Light.

### **8.) Evaluating Sanitization of Toothbrushes Using Various Decontamination**

Methods: A Meta-Analysis

Link: <http://103.69.125.201/index.php/jnhrc/article/view/4>

Toothbrushes play an essential role in personal oral hygiene by effective plaque removal. They get heavily contaminated by bacteria, viruses, yeasts, and fungi which may originate from the oral cavity after every use. When compared with non-active treatment group, the natural agents (garlic, green tree and tea-tree oil) proved to sterilize the toothbrushes effectively with mean difference of -483.34, CI (-914.79, -51.88) and I<sup>2</sup>=100. Toothbrushes exposed to radiation and natural agents proved to sanitize them effectively but chlorhexidine rendered insignificant results.

### **9.)The relationship of medical and dental factors to perceived general and dental health**

Link: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1600-0528.2007.00296.x>

Relative importance of dental and medical features in relation to perceived oral and general health in a sample of 31-year-old individuals. Four medical conditions were associated with perceived poor general health: mental, gastrointestinal, genitourinary disorders and gingivitis. Ninety-four and 82% of individuals reported good–excellent general and oral health. The highest prevalence of dental factors was gingival recession and plaque.

### **10.)Oral Hygiene Practices and Oral Health Knowledge among Students in Split**

Link : <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8872387/>

Dental caries, dental erosion, periodontitis, oral cancer and many other diseases of the soft tissues of the oral cavity are all linked to poor oral hygiene. Smoking has been linked to oral cancer, gingival and periodontal disease, peri implantitis, tooth discoloration, halitosis, taste bud changes, and difficulty healing wounds after surgery. High alcohol intake is associated with an increased risk of developing oral cancer or other potentially malignant disorders. Poor oral hygiene can lead to the development of dental caries and periodontitis. Many of these oral diseases are preventable through education about risk factors.

This is the first such study conducted at the University of Split. The goals of the study were to determine if there is a difference in oral health knowledge among respondents from different scientific fields. Respondents did not significantly differ in their knowledge of oral health by gender, but did differ by age, program and year of study. Different

researches have shown links between increased knowledge of oral health and better oral hygiene and health-related behaviors .

## **METHODOLOGY-**

Dental hygiene is a key part of oral care and includes a number of procedures to protect against dental problems and to maintain the health of the gums and teeth. It includes a mix of dental care procedures performed by individuals and dental professionals to improve oral hygiene and health. In this article, we will take a deeper look at dental hygiene methods.

### **Dental hygiene care process**

The dental hygiene care process is a structured approach to oral health assessment, diagnosis and treatment planning. Using this method, dental hygienists can detect any oral health problems, identify the problem and suggest the best course of action. Assessment, diagnosis, planning and execution are the standard four stages of the procedure.

#### **Assessment**

The first step in the dental hygiene care procedure is an assessment. At this point, the dental hygienist performs an oral assessment, which includes a thorough review of the patient's dental and medical history, clinical examination, oral cancer screening, and periodontal examination. An oral examination may include the use of a dental mirror, probe, and intraoral camera to evaluate the condition of the teeth, gums, and oral tissues. The aim of this assessment is to find any potential oral health problems and to determine the patient's dental hygiene requirements.

#### **Diagnosis**

After the examination, the dental hygienist checks and evaluates the findings to establish a diagnosis. This diagnosis involves finding out if the patient has any oral health problems such as gingivitis, periodontal disease, cavities or tooth decay. The diagnosis phase helps in developing a patient-specific treatment strategy.

#### **Planning**

The next phase is the planning phase, when the dental hygienist develops a personalized treatment plan based on the results of the assessment and diagnosis. A treatment plan outlines specific

procedures that need to be done to maintain oral health, prevent dental problems, or address any problems. The treatment plan takes into account the patient's priorities, preferences and any concerns they may have to ensure the best possible outcome.

## **Implementation**

The final step in the dental hygiene care process is implementation. Here, the patient and dental hygienist will discuss the treatment plan that will be used. This includes a variety of preventive and therapeutic techniques, including fluoride treatment, scaling and root planing, and oral hygiene training. The goal of implementation is to eliminate dental problems, maintain good oral health, and prevent future oral health problems.

## **Preventive dental care**

Preventive dental care is a crucial aspect of dental hygiene. Various techniques can be used to prevent dental problems and promote excellent oral health. Below are some of these preventative dental care practices:

### **Brushing**

To keep your mouth healthy, brushing your teeth is a must. Toothpaste containing fluoride should be used at least twice a day to brush teeth. Dental plaque, food debris and germs that can lead to gum disease and tooth decay are removed by brushing.

### **Flossing**

Plaque and food particles between the teeth that can be missed by simple brushing can be removed with dental floss. Gingivitis and periodontal disease can be avoided by flossing once a day.



## **Mouthwash**

Using mouthwash helps reduce the risk of gum disease, stop tooth decay and minimize bad breath.

## **Dietary recommendations**

Some foods and drinks can damage the gums and teeth. Sugar consumption should be reduced and foods rich in vitamins and minerals including calcium, vitamin D and phosphorus should be eaten regularly.

## **Professional dental care**

Professional dental care is essential for maintaining excellent oral hygiene in addition to daily preventive dental care. Regular brushing and checkups every six months are recommended. To maintain oral health, dental professionals provide comprehensive oral examinations, scaling and polishing, fluoride therapy, and periodontal examinations during these appointments.

## **The role of dental hygienists in dental hygiene**

Dental hygienists greatly help the promotion of dental hygiene. They work with dentists and other oral health specialists to offer care to patients. Dental hygienists perform a variety of operations, including prophylaxis, root scaling and planing, fluoride treatment, and oral hygiene counseling. They also teach patients about maintaining good oral hygiene and avoiding dental problems.



## BASIC FLOW CHART TO MAINTAIN ORAL HEALTH-



### AIMS-

Basically, we are having two goals or aims

**Goal 1:** Identify patient populations that are clinically distinct cohorts of patients receiving dental care and dental hygiene.

**Goal 2:** Conduct a preliminary literature evaluation for a systematic review to identify therapies that give these patient populations information on the influence of oral health on four different dimensions.

## HOW TO BRUSH YOUR TEETH-

# HOW TO BRUSH YOUR TEETH



USE A SMALL AMOUNT OF TOOTHPASTE



BRUSH THE OUTER SURFACE USING UP AND DOWN STROKES



BRUSH THE OUTER SURFACE USING CIRCULAR MOTION



REPEAT FOR THE INSIDE SURFACE OF YOUR TEETH



BRUSH THE CHEWING SURFACE USING BACK AND FORTH STROKES



BRUSH THE SURFACE OF YOUR TONGUE



RINSE OUT YOUR MOUTH USING WATER



BRUSH YOUR TEETH TWICE A DAY

## FUTURE

## SCOPE

As oral hygiene students, we spend a lot of time curled up with our Darby and Wilkins textbooks. We are informed of Irene Newman's humble origins and respect the leadership of the association. In dental hygiene, we turn to icons to help us understand where we have been, where we are now and, most importantly, where we are going. These symbols help us stay true to our origins and understand how dental hygiene has changed over time.

we think our industry is changing very noticeably and significantly. We are approaching a larger call to action as research continues to validate the complex work we do, as industry-specific technologies evolve, and as community demand for our work grows. we think our destiny is ahead of us now rather than in the past. As a result, I have had the privilege of meeting and befriending what I believe to be the future of dental hygiene: female dental hygienists working in the field, publishing research, creating content, sharing ideas, and in other words, marching to the high tunes of their own Cavitron . These experts have brilliant minds that are paving the way for our industry, so I think it's only fitting to recognize the good work they're doing.

The field of dental health has always been very simple. Given this, it stands to reason that the field will continue to expand itself as the demand for geriatric care rises. This can be anything from general supervision to a dental therapist to give hygienists better access to different areas of need. Over time, we discover more about the relationship between the mouth and the rest of the body. This will contribute to the change needed to include the mouth as an integral part of the body. Hygienists from dental practices will flow to other healthcare facilities, where they will emphasize prevention.

### **FINDING:**

Our finding from this study is that the dental industry has seen significant growth in recent years with an emphasis on cosmetic dental treatments and technological advancements that improve patient outcomes. Demand for dental services is expected to continue to grow due to an aging population and greater awareness of the importance of oral health. The use of technologies such as digital imaging and 3D printing allows for more efficient and precise treatment options. However, the industry still faces challenges in terms of affordability and access to care for underserved populations. Dental service organizations are becoming more common and the industry is evolving to stay competitive in a changing market. Overall, the dental sector is positioned for long-term success as it embraces these changes and continues to focus on providing high-quality care and improving oral health.

### **SUGGESTIONS:**

1. Despite advances in dental technology, many individuals cannot afford dental treatment, making it crucial to improve access to care for underprivileged populations. Government-funded programs, community clinics, and partnerships with dental schools are possible solutions. In addition, dental insurance should be made more affordable and accessible, and alternative payment options should be explored.

2. Dental professionals should prioritize educating patients on preventive care, such as regular check-ups and cleanings, to maintain good oral health. Expanding the use of tele dentistry could benefit those who cannot travel to a dental office, particularly those in rural areas.

3. Addressing oral health disparities based on race, ethnicity, and socioeconomic status is crucial, and targeted interventions such as community outreach programs, education campaigns, and research initiatives could be used.

4. While the dental industry has seen significant growth and innovation, more work is needed to improve access to care, reduce costs, and promote good oral health outcomes for all individuals.

### **CONCLUSION-**

As a result, the dental sector has experienced substantial growth recently, with an increased emphasis on cosmetic dentistry treatments and a focus on enhancing patient results through technology improvements. Dental care has undergone a revolution, becoming more precise and effective because to the use of digital imaging, 3D printing, and other technology. Given the significance of oral and dental health, it is anticipated that demand for dental services would rise, resulting in a promising and prosperous future for the industry. It is certain that the dental sector will continue to develop in order to offer top-notch patient care and advancements in oral health. Also, an ageing population favors the dental sector because elderly individuals are more concerned about oral health. As the global population ages, it is anticipated that demand for dental services will persist in the years to come. Increased knowledge of the value of oral health and the advantages of routine dental exams is another trend-driver. Many dental offices affiliate with bigger organizations known as **Dental Service Organizations (DSOs)**, which can offer economies of scale and more negotiating leverage with insurance providers. This pattern is anticipated to persist as smaller practices work to maintain their competitiveness in a shifting market. Notwithstanding these adjustments, the dentistry sector continues to face difficulties, including the need to increase access to care in underprivileged populations and make dental care more affordable for a large number of individuals. Yet, there are numerous chances for development and innovation, particularly in the areas of preventive medical and dental tele dentistry. In conclusion, the dental sector has seen substantial expansion and change in recent years, with a strong emphasis on enhancing patient outcomes through technology, services in aesthetic dentistry, and raised oral health awareness. Despite ongoing difficulties, the industry is positioned for long-term success as it adjusts to shifting demographics and fiercer competition.

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