

# Obstacle among woman dentist in Tamil Nadu - A Cross sectional Survey

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## Abstract

**Background:** Women in the present era has leaped past the traditional barriers for their gender and have established great standards in all fields including medicine and dentistry. Though structure of dental profession provides opportunities for both male and female. There are many challenges that women dentist face in achieving professional excellence. **Aim:** The purpose of the present study was to evaluate the difficulties faced by women dental practitioners in Tamil Nadu. **Methodology:** The study was carried out among 50 women dental practitioners using a structured questionnaire consisting of 10 multiple choice questionnaires in google form. The questions evaluated the perception of women practitioners about balancing family and dentistry and difficulties in their practice. The responses were recorded and analyzed using descriptive statistics. **Results:** Majority of the women practitioners face difficulties in clinical practice due to various factors such as male dominance, pregnancy and menstrual cycle. However, Majority of dentists believe in balancing their work and family. **Conclusion:** The study concluded that considerable proportion of women report obstacles they face in dental practice. Hence, government authorities and law makers should implement appropriate policies to encourage women dental practitioners to overcome the gender based discrimination and dominance.

**Keywords:** Career, Dentistry, Empowerment, Women

## Introduction

Women empowerment in the modern era has enabled women to be both economically and politically active. Women are now part and parcel of all industrial sectors including Health care. A Career in Health care requires both clinical expertise and theoretical knowledge. (1) In recent times, a considerable proportion of individuals in the health care sector are women. (2) Dentistry has been considered as a job specific for males since many decades, but Dentistry in the current decade has seen enormous growth in both dental practice and education by active research and adoption of advanced technologies that has made a huge leap from the ancient dentistry to the Modern dentistry. (3) In Spite of the ergonomic nature, modern dentistry is no exception for women to pave their foot. (4) Literature evidence has reported a global rise in women choosing dentistry as a career. (5) Marriage has a vital role to play in the life of an individual and it could exert a significant impact on the academic and professional growth of both genders, especially among females. (6) Recent findings have found that women dental practitioners possess the ability to blend the duties of a professional career with those of parenthood. (7) However there exists various gender related practical difficulties that a female dentist may experience in their practice. But there is a scarcity of research analyzing the hardships faced by women in their

dental practice. Therefore, the aim of present study is to understand the difficulties and dilemmas that a women dentist may face in their clinical practice post wedlock.

## Materials and Methods

The study was undertaken using a validated, self-administering questionnaire that was made using Google forms. The questionnaire comprised of two parts, the first part consisted of questions regarding the general and demographic details of the study participants whereas the second part consisted of 10 multiple choice questions based that assess the professional experience, perspective and opinion on different aspects of dilemmas that a women dental practitioner could face in her clinical practice. (Table 1) The questionnaire was circulated to women practioners in the locality of Tamil Nadu through E-mail. An informed consent explaining the purpose and motive of the study was sent attached to the questionnaire and participants who gave their consent and those who were married are included in the study. Answering all the questions was made mandatory to the participants who agreed to take part in the study. A total of 50 women dentists who fulfilled the inclusion criteria participated in the study and the responses given by the participants were recorded and the data obtained was entered in Microsoft Excel (Office 2010) and statistically analyzed SPSS software version 26. Descriptive statistics was used to present the data in mean and percentages.

## Results

The mean age of the women dentists who participated in the present study was  $29 \pm 3.87$  years. More than 80% of our study participants has professional experience less than 10 years and around 77% of the study participants were married for less than 10 years. Based on the type of dental practice, 79% of the participants had private practice and 21% were academicians.

Regarding the balance between work and family, 58% percent of the study participants reported that they balance the family and dentistry equally where as 41% of the participants denied balancing the family and dentistry equally.

Among the study participants, 77% felt that practicing dentistry was difficult during pregnancy. More than 50% of the participants felt discomfort when a male patients ask for a male dentist. On questioning about the perception of male dominance in dentistry, 67% participants have felt male dominance in the dental practice.

Around 41% of the study participants believed that the chemicals used in dentistry causes abortion and 59% of the study population felt it does not cause abortion. 59% participants believed that the practicing dentistry may cause ergonomic and hormonal changes. Regarding their experience of practicing dentistry during mensuration cycle, Around 63% of the participants had experienced difficulty while 37% of the participants have not experienced any difficulty in practicing dentistry during mensuration cycle.

## Discussion

Globalization in recent years has influence nations across the globe and helped women to gain empowerment. Everyone in a society, irrespective of their gender have gained power to express their role and accomplish their goals. Women empowerment has provided the women with freedom of choosing their career and working towards achievements. (8) The advent of women into the health care sector dates back to the early 19th century, when Florence Nightingale emerged as a pioneer in nursing, Dr Elizabeth Blackwell pioneered medicine and Dr Lucy Taylor Hobbs and Dr Henriette Hirschfeld were pioneers in dentistry. (9)

During the early years, when dentistry was in a developing phase as a learned profession, there were considerable difficulties in place, both in terms of education and the chances to practice, for women who were interested in entering the field of dentistry. Although the first dental school was established in 1828 in Bainbridge, Ohio, and the first dental college was established in 1840 in Baltimore, Maryland, it was only after 26 years, that Dr Lucy Hobbs Taylor became the first woman to graduate from a dental school. (10) But today in the twenty-first century, there are plenty of women dentists who have pioneered the field of dentistry deserve recognition and praise for their accomplishments in this field. They have broken through gender and customary barriers, paving the path for other young budding female dentists to follow in their footsteps and enter the dentistry field.

In India, there are considerably large proportion of registered female dentists. (11) However, Women embarking in their career path frequently face various practical barriers that prevent them from continuing or succeeding in their careers due to the gender stereotype. Like any other profession, women dental practitioners may also face numerous obstacles but there are very few research studies assessing the practical difficulties that a woman may face in their practice and career. Hence, our present study was aimed to understand the practical difficulties of practicing women dentists.

Marriage can exert an influence in the career of women, especially among women doctors. (12) Our study included a total of 50 married women dentists to understand their difficulties in practice and balancing personal life. A majority of the study participants reported that they can successfully balance their work and family life. Literature evidence states that the career of a woman tends to get diverted easily due to familial issues. Hence, balancing between family and profession is essential for a successful career. (13) Davidson et al. in their analysis among working orthodontists, refers work-life balance as an essential element in dental practice. Majority of orthodontists who participated in their study suggested gradual cutting of work on specific days per week was considered as a coping mechanism to achieve balance between work and family, especially during raising children. (14)

Majority of the study participants felt that pregnancy causes difficulty in dental practice. According to Pallavi SK et al (15), women may take a break of 6 months from their practice, due to pregnancy and fetal care. It is also known that type of physical activities at work can have an adverse impact in the outcomes of pregnancy such as preterm delivery and low birth weight. (16)

Though majority of the participant believed that chemicals used in dentistry does not cause abortion, around 41% felt that it could lead to abortion. Lindbohm ML et al. in their study among women dental workers, reported an increased risk of miscarriage due to chronic exposure to mercury amalgam and some acrylate compounds and solvents used in dentistry. However, there was no obvious consistent dose-response relationship reported between the chemical exposure and miscarriage. (17) Therefore, taking a break from dental practice during the crucial stages of pregnancy is advised.

Majority of our participants believed that dental practice can lead to ergonomic and hormonal changes, it was also reported that practicing dentistry to be difficult during the menstrual cycle. Study by Ohlendorf et al. confirmed that dentists are more prone for musculoskeletal problems due to the working position (18) Leiz et al. reported a prevalence of musculoskeletal problems in 10.8% to 97.9% of dentists. (19) A direct association between the Musculoskeletal problems and women hormones have also been reported in the literature making women dentists more prone for such disorders due to the working body position. (20) According to the Casual model put forth by Jayaseelan and Rao, menstrual cycle is known to induce occupational stress resulting in difficulty. (21) Practicing dentistry during menstrual cycle may be difficult as reported by our participants.

Dentistry was once considered as a male dominated profession, but now there are equal opportunities for both men and women in dentistry, However, 66.7% of our participants felt the presence of male dominance in dentistry. And more than 50% of women dental practitioners felt discomfort when a male patient asks for male dentist to get treated. Convergence between the genders in dental practice can be attributed to various reasons such as gender insensitivity and lack of parity. (22)

Though there are increasing number of women dentists and private practice set ups by women, there are some difficulties that women practitioners face in their practice. Our study has enumerated the practical difficulties and perception of women dentists.

## Conclusion

There are numerous particular obstacles that women dentists must overcome to achieve success in their career. Our study emphasizes the fact that women dentists strive to achieve a balance between their dental practice and family. Hence, government authorities and law makers should implement appropriate policies to encourage women dental practitioners to overcome the gender based discrimination and dominance. Implementation of initiatives that support the career of women can result not only in the development of women, but also in the development of the society and nation as well. The present study was an attempt to shed a light on various dilemmas that women dentists face in their dental practice. However, further large scale research involving women dentists, investigating various methods to achieve work and life balance should be undertaken, so as to aid women in attaining success in both professional and family life.

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**Table 1: Set of Questions and responses of the women dental practitioners.**

Question	Frequency	Percentage
<b>Years of Professional experience</b>		
More than 10 years	8	15.7
Less than 10 years	43	84.3
<b>Years after Marriage</b>		
more than 10 years	12	23.5
Less than 10 years	39	76.5
<b>Type of Practice</b>		
Private	40	78.4
Academician	11	21.5
<b>Do you balance Family and Dentistry equally</b>		
Yes	30	58.8
No	21	41.2
<b>Does pregnancy causes difficulty in practicing dentistry?</b>		
Yes	39	76.5
No	12	23.5
<b>Experienced any discomfort while male patient asking for male dentist?</b>		
Yes	27	52.9
No	24	47.1
<b>Do you believe that chemical used in dentistry cause abortion?</b>		
Yes	21	41.2
No	30	58.8
<b>Do you feel male dominance in dental practice?</b>		
Yes	34	66.7
No	16	33.3
<b>Does practicing dentistry cause ergonomics, hormonal changes?</b>		
Yes	30	58.8
No	21	41.2
<b>During menstrual cycle practicing dentistry is difficult?</b>		
Yes	32	62.7
No	19	37.3