

Effect of Seasonal Variation in Outpatient Department in Dentistry: Original Research

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Abstract

Background: Dentists are often faced with a large fluctuation in patient's inflow to the clinic due to seasonality. This unpredictability of seasonal variation has high impact on revenue. High seasons bring in significantly more revenue than low seasons; dentists may find that certain months have few new patients and more empty chairs. There has been no study documented to find seasonal variation in patient's inflow to dental clinic. Purpose of this study was to crack the code of relationship between seasonal variation and patients visit to clinic. **Materials and method:** cross-sectional study was performed for a period of one year in five major cities. Selection of dental clinic was done by probability sampling and one clinic was from all five cities were selected. **Result:** Study shows monsoon in India is not fruitful for dental practitioners as it attracts fewer numbers of patients to the clinic following summer season. **Conclusion:** Dental practices can encounter difficulties keeping the doors open if they do not learn to manage changes in seasonality. Study revealed that there was an obvious decline in no patients flow in months of July to September.

Keywords: fluctuation, seasonality, revenue, inflow.

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INTRODUCTION

"To everything there is a season...." If you have been in practice for a while, at least you are vaguely aware there is a rhythm to the year. Tuning into these rhythms can help you manage time, talents, and resources and add to your bottom line. Knowledge of what is your best month each year for establishing new patients? For many practices, it is August. It's the back-to school rush. October, February, March, and April also are fairly good new-patient months. Conversely, November, May, and June are slow new-patient months. The issue of variation in service provision has been noted for both medical and dental procedures [1-3], raising concerns about appropriateness of care [4]. Aim of this study is to evaluate the variability of outcome of the patient in different seasons of the year.

MATERIALS AND METHOD

The undertaking to this study was adhered to the ethical regulation under which data collection, analysis and informed consent were signed. A

probability sampling was conducted across India to select one clinic in five different major cities namely Jaipur, Ahmadabad, Nagpur, Pune and Hyderabad. Criteria for selection of the clinic were, it has to be well connected with transport facilities with cost regulation should be under strict mandate of dental council of India. After selection of clinic a cross sectional study was conducted for a period of one year by comparing total number of OPD registered from all five dental clinics. After collection of data from all five clinics for a period of one year one way ANOVA with Post hoc Tukeys test was conducted to find significance of the present study.

RESULT

A total of 1724 patients reported to the specified dental clinics in Jaipur, Ahemdabad, Nagpur, Pune and Hydrabad. Out of which 555 patients visited in the month of March to June, 478 patients reported in month of July to September and highest no. of patients that is 691 reported in month of October to February.

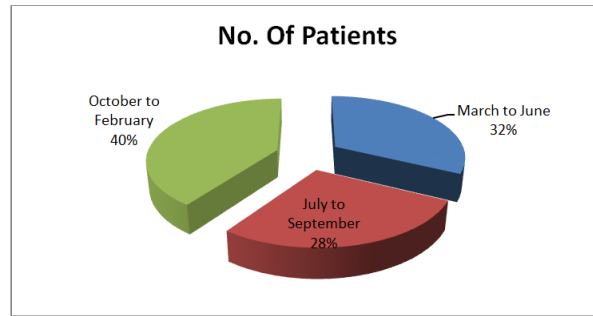


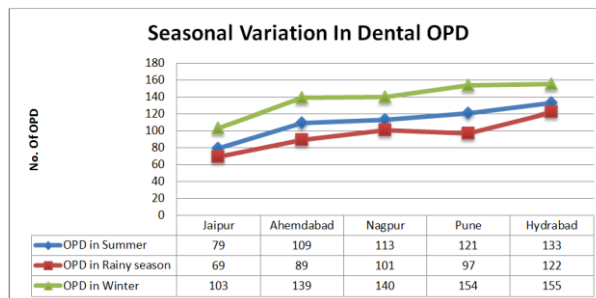
Fig-1: Total number of Patients

Comparison of mean OPD frequency from major cities all over the country was done with one way ANOVA with Post hoc Tukeys test.

Chart 1: Mean Seasonal OPD Frequency variations.

Season	Mean OPD freq		p-value	Post-hoc
	Mean	SD		
Summer	111.00	20.09	0.018	Winter>rainy
Rainy	95.60	19.23		
Winter	138.20	21.06		

Chart 2: Seasonal Variation in Dental OPD



P value for the present study was 0.018 which is highly significant in favour of high no. of patients out come in the month of October to February. This study suggests high no. of patients flow in winter followed by summer and least in rainy season.

DISCUSSION

There are various factors which influences patients to reach to a dental clinic among which can be seasonal condition. Most unfavourable among winter, summer and rainy season is the later one (rainy season). No. of dentist complaints of poor reporting of dental cases during rainy season which might be because of lack of transport, hectic traffic jams, poor infrastructure and road facilities. Some other patient factors that have been related to service patterns include patient demographics such as age and sex [5, 6]. Visit factors related to service patterns include insurance status, reason for visit, and geographic location. Insurance coverage has been positively associated with use and mix of services and oral health [7-9]. Service patterns also have been associated with reason for visit (i.e., emergency visits, defined as relief of pain, vs nonemergency visits), with a less favourable service

mix for emergency visits after controlling for insurance status [10]. December, January, and February are the biggest crown and bridge months for most practices. This is due to dental insurance. Near year-end, people want to use their benefits, and many patients with fresh benefits want to use them the beginning of the next year. In the fall, send a letter to patients explaining that if they or family members have pending treatment, they should not delay.

CONCLUSION

Geographic location also has been associated with service patterns, with more favourable service patterns within urban compared to rural locations and also denotes lack to accessibility for rural patients during rainy season [11, 12]. In agricultural communities, treatment and payment are factors. Farmers often will put off bills until the fall. In many country practices that is OK, but make sure in the fall that these accounts are paid off. You will want your front desk people to be on top of those collection accounts right after harvest. Agricultural community winters are ideal for farmers to come into your office, so recall them then.

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