

Original Research Paper

Applying Marketing Tools in Dental Practice; A Cross-sectional Study among Saudi Dental Practitioners.

Shahad Osama AlMadani¹, Ahad Khalid Alharbi¹, and Shahzeb Hasan Ansari^{2*}

¹Dental Intern, Riyadh Elm University, Riyadh, Saudi Arabia.

²Faculty Preventive Dentistry, Riyadh Elm University, Riyadh, Saudi Arabia.

Accepted 5th June, 2021.

Introduction: Similar to other businesses, healthcare services also require strong marketing strategies as their success solely depends on patient turnover. Healthcare managers are responsible for ensuring proper visibility and advertising of their organizations and practice in order to be more productive. **Materials and Methods:** This is a cross-sectional study conducted among dental practitioners in Saudi Arabia using an online survey. A total of 244 Saudi general practitioners from different cities of Saudi Arabia participated in this study. **Results:** Spearman's correlation was conducted which revealed that the overall correlation was not statistically significant apart from 3 variables in correlation with work experience and 2 variables in correlation with age. **Conclusion:** The most commonly used marketing strategies used by dental practitioners were attending educational seminars on a regular basis, hiring competent staff, buying new generation equipment, and decorating the clinic in an attractive manner.

Keywords: Dental business, Marketing strategies, Dental services.

INTRODUCTION

The success of any business depends strongly on the methods used to market its products and services. To achieve that, several tools may prove to be effective, which include the use of social media and other electronic means of communication. Marketing in business promotion may be a part of its strategy as well as tactical planning. This is imperative as new methods of advertising and marketing keep evolving providing options for the business developers (Vinerean, 2017; Hall et al, 2016).

Speaking of tools used in marketing, the use of several types of media may be fruitful in the successful attraction of clients towards any business. These include social as well as print media, technology such as email and business websites. However, it is important for business owners and managers to properly utilize these methods in order to improve the visibility of their businesses (Dietrich, Rundle-Thiele & Kubacki, 2017; Lacobucci, 2018).

Similar to other businesses, healthcare services also require strong marketing strategies as their success solely depends on patient turnover. Healthcare managers are responsible for ensuring proper visibility and advertising of their organizations and practice to be more productive. As far as marketing in healthcare is concerned, tools such as health

promotion, use of technology, and offering prevention regimes play a crucial role in developing a successful business. These methods should be geared towards achieving short-term as well as long-term organizational goals. (Gilligan & Lowe, 2018; Anderson, Rayburn & Sierra, 2019; Preston et al, 2018).

Although it is correct that dental services are needed by everyone, but everyone's needs or wants are different. Hence, modern marketing provides a more efficient way to reach out to the potential with a relatively small spend. It is pertinent to note that getting the word out to the people who might need dental services is not just in practitioners' best interest, it is also a service to the public at large as well (Hansen, 2018).

Marketing in dentistry is as important as providing patients with high-quality treatment. The success of dental practice depends vastly on the methods used to promote as well as advertise it among surrounding communities. The current financial situation in Saudi Arabia suggests that the owners of dental practice use innovative and creative techniques to attract patients. The image of a dental practice stands out as the important factor in improving patient flow and productivity eventually. In addition to the traditional marketing strategies discussed above, provision of a high-quality service as well as

*Corresponding author: Shahzeb Hasan Ansari, Email: shahzebhasan@riyadh.edu.sa

improved patient satisfaction (Carausu et al, 2018; Shukla et al, 2019).

STUDY HYPOTHESES

Dental practitioners lack skills in developing marketing strategies.

AIMS OF THE STUDY

- To determine the knowledge and practice of Saudi dental practitioners towards the use of marketing tools in dental practice.
- To list down various types of marketing strategies used by dental practitioners.
- To determine a correlation between certain demographic factors with the overall marketing strategies.

MATERIALS AND METHODS

Study Design

This is a cross-sectional study conducted among dental practitioners in Saudi Arabia using an online survey.

Study Sample

A total of 244 Saudi general practitioners from different cities of Saudi Arabia participated in this study.

Study Instrument

Online questionnaire was constructed consisting of questions related to demographics and marketing tools used in dental practice.

Instrument Validity and Reliability

A pilot study was conducted by letting the survey be filled by 20 participants and the data was inserted in SPSS version 22 to determine the reliability by using Chronbach's coefficient alpha (Value was .759). Validity of the questionnaire was tested by sending it to experienced researchers in REU and no changes were made.

Statistical Analysis

Collected data was analyzed using SPSS version 22, where descriptive as well as inferential statistics were conducted. Means were calculated and correlation was achieved using Spearman's correlation as the data was not normally distributed.

RESULTS

A total of 244 Riyadh-based dentists filled the survey and it was noted that n=144 (60%) were males and the rest were females. As far as the age groups were concerned, n=132 (54.6%) were 20-30 year old, n=76(31.9%) were 31-40 year old, n=20 (7.6%) were 41-50 year old and n=16 (5.9%) were 61-60 year old. According to their work experience, n=146 (61.3%) had 1-5 years of experience, n=34 (13.4%) had 6-10 years, n=30 (11.3%) had 10-15 years and n=34 (13.4%) had 16+ years of experience. On the basis of educational level,

n=174 (72.5%) had bachelor's qualifications and the remaining were postgraduates. As far as the type of dental practice was concerned, n=25 (10%) owned their practice, n=204 (84.2%) worked as employees, and n=15 (5.8%) worked as partners.

Mean values were calculated by giving code 1 to strongly disagree, 2 to disagree, 3 to neutral, 4 to agree, and 5 to strongly agree. Means and standard deviations can be observed in table 2. Spearman's correlation was conducted which revealed that the overall correlation was not statistically significant apart from 3 variables in correlation with work experience (table 3) and 2 variables in correlation with age (table 4). The power of sample can also be observed in table 5.

This is a cross-sectional study among Saudi dental practitioners to gauge the application of marketing tools in dental practice. The respondents were neutral when it came to be treating a wide range of dental conditions as it is important for success, thinking that competing on price is the best strategy to beat the market, that their prices are not that high for the patient to look for alternative clinics/hospitals, that their prices are not low as well as it conveys lower quality, that they are trying to for cost-cutting measures to reduce prices further and they send greeting cards to patients to maintain congenial business relationships. In a study conducted in Greece, it was found that the majority of dentists dismiss price lowering as an indication of low-quality services which is in contradiction to our findings. Around 41% followed a competition-based pricing policy which is in line with our findings (Dobros & Katsaliaki, 2017).

The respondents agreed that they address specialized dental conditions as these ensure quality and effectively meets patients requirements, that the decoration of the premises is of great importance, they participate in social clubs to ensure the expansion of patient circle, that a reminder program is set for alerting the patients, that they occupy an assistant for faster services, ensure non-urgent appointment are scheduled within 3 days of the request and that they have bought new generation equipment in the last 5 years In a study it was shown that there is a huge gap between the new advances technologies and clinical practice in place (AIRahabi, 2016).

In another study conducted, it was found that 8 out of 10 dentists have bought new generation equipment during the last 5 years, which is higher than our findings. Also, a very low rate of dentists employed an assistant and more than half of the dentists did not participate in social events. Further, low interest was reported towards the implementation of reminders for alerting patients. Additionally, very few dentists send greeting cards to their patients. Furthermore, the majority of dentists try to temporarily address an emergency situation on the same day, and arrange a non-urgent appointment within three days (Dobros & Katsaliaki, 2017).

The respondents strongly agreed that they inform the patient about the cost before any dental activity and that they attend at least every two years a seminar to improve scientific knowledge. In another study conducted it was found that 9 out of 10 dentists in the sample attend at least one seminar every two years (Dobros & Katsaliaki, 2017).

In a study carried out in India, an equal number of practitioners agreed and disagreed on the issue that marketing may make dentistry seem more like a trade than a health care service (Nayak, 2016).

The results were further compared with the work experience of the respondents to determine if statistically significant associations exist. Statistically significant differences were found and a negative correlation of .182 exists with work experience when it comes to the decoration of dental premises (p-value: .045).

Table 1: Demographics of study participants

Demographic Variables	Frequencies
Gender	Males: n=144 (60%) Females: n=100 (40%)
Age Groups	20-30 years: n=132 (54.6%) 31-40 years: n=76 (31.9%) 41-50 years: n=20 (7.6%) 51-60 years: n=16 (5.9%)
Work Experience	1-5 years: n=146 (61.3%) 6-10 years: n=34 (13.4%) 10-15 years: n=30 (11.3%) 16+ years: n=34 (13.4%)
Educational Level	Bachelors: n=174 (72.5%) Post-graduation: n=68 (27.5%)
Type of dental practice	Personally owned: n=25 (10%) Work as an employee: n=204 (84.2%) Work as a partner: n=15 (5.8%)

Table 2: Mean scores of the survey questions related to marketing

Survey Questions	Mean (SD)
I treat the whole range of dental conditions because it is important for the success of my profession	3.2 (1.17)
I address only specialized dental conditions because this more effectively meets the needs and requirements of patients	3.51 (1.13)
The decoration of the premises of the dental service is of great importance	3.86 (1.08)
Competition on price level is the most common way of addressing the competition	3.15 (1.30)
The prices of my services are not very high for not turning the patient to another dentist	3.15 (1.04)
The prices of my services are not very low, because it suggests low-quality dental treatment	3.18 (1.22)
I am trying to reduce the cost of my services, to keep prices low	2.79 (1.15)
I participate in social clubs for expanding my patients' circle	3.35 (1.08)
I apply a reminder program (by phone or letter) for alerting my patients	3.39 (1.18)
I send greeting cards to my patients for Eid and Birthdays	3.07 (1.30)
I always inform the patient about the cost before of any dental activity	4.27 (.90)
I attend at least every two years a seminar to improve my scientific knowledge	4.21 (.98)
I occupy an assistant for faster-better service	4.14 (.93)
I ensure that a non-urgent appointment with a patient is scheduled within 3 days of the initial request.	3.48 (.95)
I bought new generation equipment for the last 5 years.	3.76 (1.0)

Table 3: Correlation of work experience and marketing strategies

Survey Questions	Correlation with Work Experience
I treat the whole range of dental conditions because it is important for the success of my profession	p: .112 p-value: .224
I address only specialized dental conditions because this more effectively meets the needs and requirements of patients	p: -.118 p-value: .203
The decoration of the premises of the dental service is of great importance	p: -.182 p-value: .045*
Competition on price level is the most common way of addressing the competition	p: -.192 p-value: .037*
The prices of my services are not very high for not turning the patient to another dentist	p: .074 p-value: .423
The prices of my services are not very low, because it suggests low-quality dental treatment	p: -.016 p-value: .862
I am trying to reduce the cost of my services, to keep prices low	p: -.063 p-value: .498
I participate in social clubs for expanding my patients' circle	p: .104 p-value: .264
I apply a reminder program (by phone or letter) for alerting my patients	p: .102 p-value: .272
I send greeting cards to my patients for Eid and Birthdays	p: .193 p-value: .036*
I always inform the patient about the cost before any dental activity	p: .079 p-value: .395
I attend at least every two years a seminar to improve my scientific knowledge	p: .073 p-value: .434

I occupy an assistant for faster-better service	p: .007 p-value: .940
I ensure that a non-urgent appointment with a patient is scheduled within 3 days of the initial request.	p: -.071 p-value: .447
I bought new generation equipment for the last 5 years.	p: .012 p-value: .893

Table 4: Correlation of age with marketing strategies

Survey Questions	Correlation with Age
I treat the whole range of dental conditions because it is important for the success of my profession	p: -.083 p-value: .371
I address only specialized dental conditions because this more effectively meets the needs and requirements of patients	p: .100 p-value: .280
The decoration of the premises of the dental service is of great importance	p: -.110 p-value: .232
Competition on price level is the most common way of addressing the competition	p: -.181 p-value: .037
The prices of my services are not very high for not turning the patient to another dentist	p: .066 p-value: .478
The prices of my services are not very low, because it suggests low-quality dental treatment	p: -.024 p-value: .795
I am trying to reduce the cost of my services, to keep prices low	p: -.019 p-value: .842
I participate in social clubs for expanding my patients' circle	p: .080 p-value: .387
I apply a reminder program (by phone or letter) for alerting my patients	p: .050 p-value: .590
I send greeting cards to my patients for Eid and Birthdays	p: .179 p-value: .035*
I always inform the patient about the cost before any dental activity	p: -.016 p-value: .862
I attend at least every two years a seminar to improve my scientific knowledge	p: .098 p-value: .293
I occupy an assistant for faster-better service	p: -.006 p-value: .951
I ensure that a non-urgent appointment with a patient is scheduled within 3 days of the initial request.	p: -.190 p-value: .041*
I bought new generation equipment for the last 5 years.	p: -.070 p-value: .452

Table 5: Power of sample

Mean	4.27
Std Deviation	.9
Sample size	122
Alpha	0.05
Sample mean	4.5
Standard Error of the Mean	0.08
Critical value	4.40
Beta	0.12
Power	0.88

This means that dentists with lesser work experience are more inclined towards thinking that the décor of the dental premises is of great importance. As the more experienced dentist has established a name, therefore, do not think much of decoration and rely more on their name as brand value.

Also, statistically significant differences were found and a negative correlation of .192 exists with work experience when it comes to competing on prices (p-value: .037). This means that dentists with lesser work experience are more inclined towards competing on prices than the more experienced ones, as the more experienced dentists have established a name, and

therefore, would charge a premium on services than the newbie.

Further, statistically significant differences were found and a positive correlation of .193 exists with work experience when it comes to sending cards to maintain patient relationships (p-value: .036). This means that dentists with more work experience are more inclined towards sending cards to patients than the less experienced ones, as the more experienced dentists have established a name. As a result, they would adopt non-financial rewards to make their patients feel valued so they do not compromise on price.

As far as comparison with age is concerned, statistically significant differences were found and a positive correlation of .193 exist with age when it comes to sending cards to maintain patient relationships (p-value: .035). This means that the more aged dentists are more inclined towards sending cards to patients than the young ones. This falls in line with similar findings when compared with work experience.

Also, statistically significant differences were found and a negative correlation of .190 exists with age when it comes to scheduling non-urgent appointments within 3 days of initial request (p-value: .041). This means that the young dentists are more inclined towards scheduling non-urgent appointments within 3 days than the old ones, showing that the young dentists are more proactive in-patient services.

In another similar study, age and years of service were found to be negatively correlated to the financial investment in new technologies (Dobros & Katsaliaki, 2017). Also, another study showed that the majority of the dentists directly or indirectly invoke marketing and less experienced dentists favored marketing as a tool which was statistically significant (Shukla et al, 2019).

REFERENCES

1. AlRahabi, M., 2016. Attitudes of general practice dentists in private dental clinics in Almadinah Almunawarah toward novel endodontic technologies. *Giornale Italiano di Endonzia*, 30(1), pp.10-13.
2. Anderson, S., Rayburn, S.W. and Sierra, J.J., 2019. Future thinking: the role of marketing in healthcare. *European Journal of Marketing*.
3. Carausu, E.M., Dascalu, C.G., Lupu, I.C., Burlea, L.S., Feier, R.D. and Zegan, G., 2018. Marketing in Dentistry: Opinion Survey on Promotion of the Dental Office. *Revista de Cercetare si Interventie Sociala*, 63, p.346.
4. Dietrich, T., Rundle-Thiele, S. and Kubacki, K., 2017. *Segmentation in social marketing*. Springer Singapore.
5. Dobros, M. and Katsaliaki, K., 2017. Applying Marketing Tools in Dental Practice: The Case of Greek Dentists. *dental practice*, 11, p.17.
6. Gilligan, C. and Lowe, R., 2018. *Marketing and healthcare organizations*. CRC Press.
7. Hansen, S., 2018. How to target your ideal patients with digital marketing strategies.

CONCLUSIONS

- The most commonly used marketing strategies used by dental practitioners were attending educational seminars on a regular basis, hiring competent staff, buying new generation equipment and decorating the clinic in an attractive manner.
- The least commonly used marketing strategies included keeping in touch with patients after treatment, reducing the cost of services, and expanding the range of treatment provided to the patients.
- Overall, there is no significant correlation between age and work experience except for a couple of variables.

CONFLICT OF INTEREST

There is no conflict of interest among the authors regarding the publication.

8. Lacobucci, D., 2018. Contemporary Disruptions in the Realm of Research Methods in Marketing. *Handbook of Advances in Marketing in an Era of Disruptions: Essays in Honour of Jagdish N. Sheth*, p.391.
9. Lindsey Hall, K.K., Baker, T.L., Andrews, M.C., Hunt, T.G. and Rapp, A.A., 2016. The importance of product/service quality for frontline marketing employee outcomes: The moderating effect of leader-member exchange (LMX). *Journal of Marketing Theory and Practice*, 24(1), pp.23-41.
10. Nayak, P.P., Raju, V.K., Kshetrimayum, N., Ramesh, L., Nayak, S.S. and Kamath, V., 2016. Dentists' outlook on advertising in their line of work in Bengaluru, India: A cross-sectional study. *World Journal of Dentistry*, 7(3), pp.141-145.
11. Preston, T., Guess, W., Hopkins, K., Harding, J. and Sarofim, S., 2018. Marketing's Influence on Consumer Health, Healthcare Professionals, and the Healthcare Industry. *Back to the Future: Revisiting the Foundations of Marketing*, p.269.
12. Shukla, H., Chandak, S., Rojekar, N. and Bhattad, D., 2019. MID [Marketing in Dentistry]: A Cross Sectional Study. *Int J Health Sci Res*, 9(3), pp.128-36.
13. Vinerean, S., 2017. Importance of strategic social media marketing. *Expert journal of marketing*, 5(1).