PRELIMINARY STATISTICAL STUDY ON APPLYING THE MARKETING CONCEPT IN DENTAL TECHNIQUE

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Abstract: We deem that the marketing concept in dental technique may be applied both to an individual dental technique laboratory being strictly meant to dental practices, or it may be applied to a well-defined structure of dental practice – dental technique laboratory (or to a dentist – dental technician team). In this preliminary study, based on two distinct questionnaires applied to both, a group of dentists and a group of dental technicians, we have tried to outline, as far as possible, a future marketing strategy as efficient and productive as possible for the dental technique laboratories.

INTRODUCTION

If we had to offer a clear definition of marketing for the general audience, we could simply and solely state that "it is the art of finding buyers for products and services at a profit" (1) or, using a more suitable definition, that "marketing is the science and art of persuading customers to buy".(2) However, the great Philip Kotler, deemed to be the founder of the modern "marketing management", a professor emeritus of international marketing at the Superior School of Management J. L. Kellogg, Northwestern University, USA (3), defined marketing as "a societal process by which individuals and groups obtain what they need and want through creating, offering, and freely exchanging products and services of value with others".(4)

General information

There are many definitions attributed throughout time to marketing, but one of the most adapted and outlined concept for clinically and pragmatically understanding the dental medicine team (stomatologist – dental technician) is that offered by Dorina Mocuţa in the 5th volume of *Progress in Dental Medicine*, where she estimates that marketing is a "structured and organized approach of selection as well as an approach of research and information of the public on a specific offered service".(6) Further on, the same author specifies that "the purpose of marketing for the dental medicine team is to attract patients to be productive and, simultaneously, to inform the society on the benefits of this practice; the activity's profit comprises not only the medical team's profit (dentist – dental technician), but also their professional contentment".

From our point of view, an efficient marketing plan in dental medicine cannot be achieved without taking into consideration the structure of the dental practice (dentistry practice) – dental technique laboratory or, more simply, the dentist – dental technician team.

Concretely, if we made a dissection of the team activity, according to the classic principle applied by the patients that "the best doctor is that who cures you", and in our case, "a good dentist is the doctor who performs all clinical manoeuvres correctly, without causing pain and trauma to the patients", we should add that a dentist may pass from the "very good doctor" status to the "exceptional doctor" status benefiting by the contribution in his team of a dental technician with whom he

may establish an exceptional cooperation.

In consequence, briefly, as regards this medical speciality, namely dental medicine, the dentist — dental technician team must be one of exception in order to achieve an exceptional treatment of oral rehabilitation, the result being a finished element of exception, this one being represented by a prosthetic restoration. The beneficiary of this treatment is none other than the "patient". But, we must draw attention that both the dentist may team up with one or more dental technicians and the dental technician may, at his turn, team up with one or more dentists.

Returning to the marketing plan in dental medicine, as in any other specific domain, this one consists of 4 parameters, namely:(1-6)

- the product/service: it may contain the practice's theory and purpose, the offered services as well as the medical attendance's quality;
- the price: it represents the cost as well as the mechanisms of the dental medicine attendances;
- the placement: it represents the place as well as the environment where the activity is carried on;
- the promotion: it includes the communication strategies for the target public.

More precisely, an efficient marketing plan for the structure - dentistry practice - dental technique laboratory should have as a final result the increase of the number of clients, in our case, the increase of the number of patients. It is obvious that if, at the end, the patients are satisfied and deem that this dental practice structure (dentistry practice) - dental technique laboratory or, more appropriate, dentist - dental technician team, met their expectations, offering them not only a reasonable price, but also an excellent quality of the oral rehabilitation, these ones will subsequently disseminate favourable recommendations on the respective practice to their friends, relatives and colleagues.

On the whole, the marketing activity in any other specialized domain, involves a lot of staff. Technically speaking, it is necessary to have a manager who coordinates the marketing plan, to transfer responsibilities to the team members, to survey the marketing budget, to estimate the marketing plan efficiency.(4) Or, in dental medicine, this is much harder to be

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accomplished: it is well-known that, according to the disposals of the specialized professional organisations (in our case, the Territorial Boards of Dentists), the most usual marketing instruments, namely the advertisements in mass-media, are not allowed being deemed as unfair competition. Therefore, the most efficient advertisement for the medical team is ensured, as already above-mentioned, by the patients satisfied with the medical service quality.

PURPOSE

As a general rule, in this structure - dental practice – dental technique laboratory (or dentist – dental technician team), the technical division is generally left in the shade, the clinical division being generally brought forward or, more concretely, the dentist. After all, this one has the direct contact with the patient, and the dentist assumes the responsibility of any medical procedure, including the prosthetic restorations even if these involve technical-clinical mixed technological procedures. Therefore, it is obvious that a dental technique laboratory, as efficient it may be, cannot carry on its activity without establishing a collaboration with one or several dental practices, as the commodity market for the dental technique laboratory's products is strictly represented by the dentistry practices.

In order to adequately promote its activity, an efficient marketing plan of a dental technique laboratory is addressed only to the dentistry practices, and not to patients, while a marketing plan within a team structure (dentistry practice – dental technique laboratory) has as target group the patients, those we are interested in dental medicine. Therefore, based on questionnaires having questions as clear and concise as possible, given to an equal number of dentists (53, also including students in the VIth year – the terminal one – of the Dental Medicine Faculty, "Carol Davila" Medicine and Pharmacy University of Bucharest) and dental technicians (53, also including students of the dental technique specialization in the IIIrd year – the terminal one - of the Midwives and Medical Assistance Faculty, "Carol Davila" Medicine and Pharmacy University of Bucharest), we have tried to make a clear distinction between a marketing plan of a dental technique laboratory actually addressed only to the dentistry practices and an unitary marketing plan for the entire medical team (dentist - dental technician, dentistry practice dental technique laboratory), addressed to patients.

MATERIALS AND METHODS

In the present article, we have used the questionnaire as investigation method. In fact, there are two distinct questionnaires in the final study, one given to the dental technicians (also students of this specialization) and another one given to the dentists (also students of this specialization). Each of the two questionnaires contains, in the extended form, a number of 15 questions (15 items) addressed to a number of 106 subjects (all subjects carry on their activity in Bucharest, including the students who attend the university courses and the practical activity also in Bucharest): 53 dental technicians and 53 dentists. For our preliminary study, because of the limited space, we selected only 5 questions of each questionnaire considered the most representative for this study, subsequently performing an extremely concise statistical analysis, graphically represented in a suggestive way.

From the dental technicians, 33 subjects are graduates (62.27%), while 20 subjects are students at the dental technique specialization in the IIIth (terminal) year of the Midwives and Medical Assistance Faculty (M.M.A.F), "Carol Davila" Medicine and Pharmacy University of Bucharest (37.73%) (figure no. 1). From the total of 53 subjects who represented the dental technique, 22 subjects were male (41.5%), while 31

subjects were female (58.5%) (figure no. 2).

Figure no. 1. Percentage of dental technique subjects (62.27% graduate dental technicians, 37.73% students at dental technique specialization)

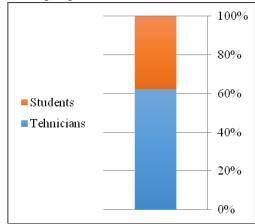
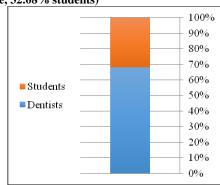


Figure no. 2. Percentage of dental technique subjects divided by gender (41.5% male, 58.5% female)

| Temale | 100% | 80% | 80% | 60% | 40% | 20% | 0% |

As for the dentists, 36 of these are graduates (67.92%), while 17 subjects are students at the Dental Medicine Faculty in the VIth (terminal) year of the Dental Medicine Faculty, "Carol Davila" Medicine and Pharmacy University of Bucharest (32.08%) (figure no. 3). From the total of 53 subjects, 20 were male (37.73%) and 33 were female (62.27%) (figure no. 4).

Figure no. 3. Percentage of dental medicine subjects (67.92% graduate, 32.08% students)



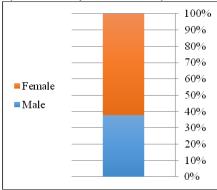
Questionnaire for the dentists

. Are you acquainted with the "marketing" concept or notion?

- Do you believe that the marketing concept can be applied in dental medicine (also in the dental technique)?
- What do you think to be the most efficient marketing method in dental medicine (also in the dental technique laboratory): the mass-media or the patients?
- 4. Do you think that an efficient marketing can be individually performed only by the dentist himself or an independent dental practice or in a team together with the dental technique laboratory?
- 5. Do you consider as a marketing favourable factor the decrease of prices to the prejudice of dental medical treatment's quality (including the prosthetic ones that also involve the dental technique laboratory)?

Figure no. 4. Percentage of dental medicine subjects divided

by gender (37.73% male, 62.27% female)



Questionnaire for the dental technicians

- Are you acquainted with the "marketing" concept or notion?
- Do you believe that the marketing concept can be applied in dental medicine (also in the dental technique)?
- What do you think to be the most efficient marketing method in dental medicine (also in the dental technique laboratory): the mass-media or the patients?
- Do you think that an efficient marketing can be individually performed only by an independent dental technique laboratory strictly addressed to dental practices or in a team together with the dental practice addressed to the patients?
- 5. Do you consider as a marketing favourable factor the decrease of prices to the prejudice of prosthetic restorations' quality (this aspect also involves the dental technique laboratory)?

RESULTS

After analysing the answers of both questionnaires, we have obtained several extremely interesting answers graphically represented in a very concise way as follows:

- I. as regards the questionnaire for the dentists, we have obtained the following answers:
- at the first point of the questionnaire, 46 subjects (86.79%) answered affirmatively of being acquainted with the marketing concept in dental medicine, while 7 subjects (13.21%) answered negatively (figure no. 5);
- at the second point of the questionnaire, 44 subjects (83.01%) believe in applying the marketing concept in dental medicine (also including the dental technique laboratory), while 9 subjects (16.99%) answered negatively (figure no. 6);
- at the third point of the questionnaire, all subjects (100%) answered that the most efficient marketing method in

- dental medicine (also including the dental technique laboratory) are the patients;
- at the fourth point, 24 subjects (45.28%) answered that the most efficient marketing method is individually accomplished by the dentist himself or the dental practice, while 29 subjects (54.72%) deemed that the most efficient marketing method is accomplished by the dental practice dental technique laboratory team (dentist - dental technician) (figure no. 7);
- at the last point (the fifth) of the first questionnaire, 10 subjects (18.86%) answered affirmatively, while the rest of 43 subjects (81.14%) answered negatively (figure no. 8).

Figure no. 5. Percentage of subjects for the 1st point of the dentist's questionnaire (86.79% affirmative answers,

13.21% negative answers)

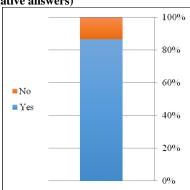


Figure no. 6. Percentage of subjects for the 2nd point of the dentist's questionnaire (83.01% affirmative answers,

13.21% negative answers)

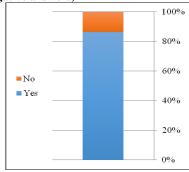


Figure no. 7. Percentage of subjects for the 4th point of the dentist's questionnaire (45.28% of subjects answered that the most efficient marketing method is individually accomplished, while 54.72% deemed to be accomplished in team)

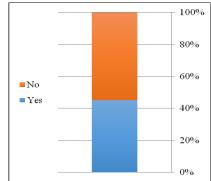


Figure no. 8. Percentage of subjects for the 5th point of the dentist's questionnaire (18.86% affirmative answers, 81.14% negative answers)

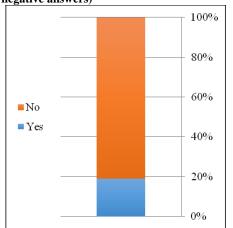


Figure no. 9. Percentage of subjects for the 1^{st} point of the dental technician's questionnaire (83.01% affirmative

answers, 16.99% negative answers)

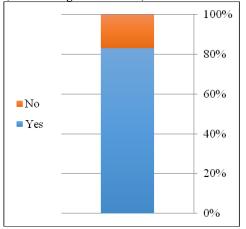
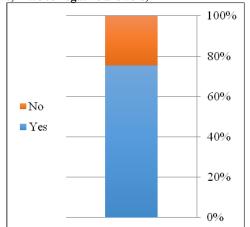


Figure no. 10. Percentage of subjects for the 2nd point of the dental technician's questionnaire (75.47% affirmative answers, 24.53% negative answers)



- II. as regards the questionnaire for dental technicians, we have obtained the following answers:
- at the first point of the questionnaire, 44 subjects (83.01%) answered affirmatively of being acquainted with the marketing concept in dental medicine, while 9 subjects (16.99%) answered negatively (figure no. 9);

- at the second point of the questionnaire, 40 subjects (75.47%) believe in applying the marketing concept in dental medicine (also including the dental technique laboratory), while 13 subjects (24.53%) answered negatively (figure no. 10);
- at the third point of the questionnaire, 23 subjects (43.39%) answered that the most efficient marketing method in dental medicine (also including the dental technique laboratory) is the mass-media, while the rest of 30 patients (56.6%) answered that the most efficient marketing method in dental medicine (also including the dental technique laboratory) are the patients (figure no 11);
- at the fourth point, 23 subjects (43.39%) answered that the most efficient marketing is accomplished by the individual dental technique laboratory, while 30 subjects (56.6%) deemed that the most efficient marketing is accomplished by the structure dental practice dental technique laboratory (dentist dental technician team) (figure no. 12);
- at the last point (the fifth) of the first questionnaire, 14 subjects (26.41%) answered affirmatively, while the rest of 39 subjects (73.59%) answered negatively (figure no. 13).

Figure no. 11. Percentage of subjects for the 3rd point of the dental technician's questionnaire (43.39% in favour of mass-

media, 56.6% in favour of patients)

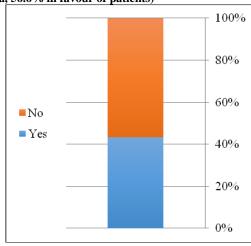
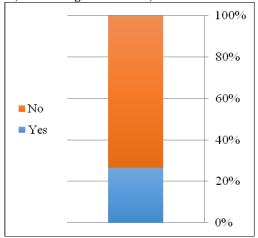


Figure no. 12. Percentage of subjects for the 4th point of the dental technician's questionnaire (43.39% in favour of the individual dental technique laboratory, 56.6% in favour of the dental practice – dental technique laboratory team)

■No
■ Yes
■ 40%
■ 20%
■ 0%

Figure no. 13. Percentage of subjects for the 5th point of the dental technician's questionnaire (26.41% affirmative answers, 73.59% negative answers)



CONCLUSIONS

As already mentioned in this paper, we hereby discuss of a preliminary study whose conclusions, even not very conclusive, may generate the premises of future research on several directions.

Therefore, as ascertained from the statistical analysis, both categories of subjects (dentists and dental technicians) to whom the questionnaire was given, are acquainted with the "marketing concept" (86.79% dentists and 83.01% dental technicians).

At the same time, an overwhelming percentage of the interviewed subjects (75.47% dental technicians and 83.01% dentists) agree to apply the marketing concept in dental medicine, also including the dental technique laboratory. In exchange, the most interesting aspect is that the majority of subjects to whom the questionnaire was given (dentists in totality and 56.6% dental technicians), without knowing that the territorial structures of the Dentist's Board do not allow the advertisement in mass-media as being considered unfair competition, agreed from the very beginning that the best and most efficient marketing method in dental medicine, also including the dental technique laboratory, are the main beneficiaries, namely the patients.

However, the most important aspect we were interested in and which confirmed our suppositions is that, as regards both dentists and dental technicians, over 50% of the interviewed subjects (56.5% dental technicians and 54.72% dentists) agreed that the most efficient marketing is applied to the structure - dental practice – dental technique laboratory, or in better words, to the dentist – dental technician team.

In conclusion, based on the answers of the two questionnaires, we may estimate that an efficient marketing plan in dental medicine (also including the dental technique laboratory), should be applied pre-eminently above all to the mixed structure represented by the clinical division (the dental practice) — the technical division (the dental technique laboratory), but also individually, for each of these structures. Unfortunately, as for the dental technique laboratories, an individual marketing plan is strictly addressed to the dental practices as it is already known that the sole commodity market for the products of these structures (the prosthetic restorations of any type) is represented by the dental practices.

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REFERENCES

- Burns R. Marketing in less than 1000 words. Reactor 15 Ltd; 2013. p. 3.
- 2. http://ebooks.unibuc.ro/filologie/enache-market/1.htm.
- 3. http://ro.wikipedia.org/wiki/Philip_Kotler.
- 4. Kotler P. Marketing Management (14th edition). Prentice Hall; 2011. p. 1-46.
- Ivancevich J. Management: principles and functions (4th edition), BPI/Irwin; 1989.
- Mocuţa D. Theoretical and practical considerations on the management activity in the dental medicine practice. In: Progress in dental medicine, Coordinators: Burlibaşa M, Muntianu L, Tănase G. Ars Docendi Publishing House, Bucharest. 2012;5:65-80.