

MANAGEMENT ATTITUDES OF DENTISTS IN DENTAL OFFICES

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ABSTRACT

The aim of the study was to analyze the attitudes and the knowledge of dentists. **Material and methods** A questionnaire-based study was conducted including 152 dentists (72,4%-female, 27,6% males) aged between 25-65 years, from Moldavia, Romania. The questionnaire included 23 questions related to preventive practices in the dental office. Data were statistically analyzed using the SPSS14.00 program and chi-square test ($p \leq 0.05$). Results: The evaluation of the results was based on experience level in years: Gr.1=0-5, Gr.2=5-10, Gr.3=10-20, Gr.4=more 20. **Results** Although there are differences between groups are not statistically significant $p \geq 0,05$ the dentists considered that a management course is necessary and think a function should be managed by the office physician using standards established by management but they have not the information management systems. **Conclusions** The development of networks of specialized courses to train personnel in dental office management is imperative.

Key words: dental management, dentists

INTRODUCTION

Management of dental work in the dental office is of overwhelming importance if we think that achieving poor management will be detrimental to clinical activity. Achieving good management in the dental office will be an integral part of the success of the medical act at present, with multiple international sources of information available Australian Research Centre for Population Oral Health, 2010, Shaw, R. (2011), Brunton et al., 2012, Spears, R., L. P. Leite, et al. (2013) Huang et al., 2013, Vundavalli, 2014, Gallagher et al., 2015. At the national level, no studies have yet been conducted on the correlation between ensuring good management and clinical effectiveness in the dental office. Carrying

out a study on its application in dental practices is imperative for practice at current standards. However, this can not be done if the knowledge of medical staff is not in line with the current trend. Achieving dental office management is a reality in terms of performance. Performance also means using well-established management standards that include planning and organizing, business plan, evaluations, and auditing. We ask ourselves the extent to which effective management influences individual performance. In this respect, the purpose of this study was to analyze the attitudes and knowledge of dentists in the Moldovian region regarding the management of the dental office.

MATERIAL AND METHODS

The study was conducted using the questionnaire method. The questionnaire contained 23 questions and was applied to 152 dentists aged between 25 and 65 years.

The questions were:

1. What is the form by organization of your office?
2. What do you think is useful in helping to open a cabinet?
3. Have you followed a management course?
4. What does cabinet management do in your opinion?
5. Do you think that the universities should offer more management training courses?
6. Do you think that the operation of a dental office should be managed by a doctor or a specialized person?
7. Are you currently using established management tools and standards?
8. If your office uses established management tools and standards, what are they for?
9. Do you have the initial budget of the cabinet based on the historical background?
10. Do you have manual for management procedures in your office?
11. What is your pricing policy based on first?
12. Do you have any management information system in your office?
13. What is politics for marketing in your cabinet?
14. Do you send the patients to specialist doctors?
15. Do you have employees in your office?
16. What kind of employees or collaborators do you have?
17. If you have an employee or collaborator, what tasks does this have?
18. Do you have a contract with the Health Insurance House?
19. What do you protect against malpractice?
20. Do you use the Internet in your office? If so for what?
21. Preoccupation to prevent transmission of infection will influence the clinical decision in a possible infected patient?
22. Do you made periodic testing for major blood diseases?
23. In order to increase your office productivity, which of the following activities do you find unnecessary?

The inclusion criteria aimed to ensure that the subjects were dentists and managers in dentistry area. The subjects enrolled in the study were divided according to their professional experience in four groups as follows: Group 1 = Between 0 and 5 years 10.5% (N = 16), Group 2 = Between 5-10 years 24.3% (N = 37), Group 3 = 10-20 years 40.8% (N = 62), Group 4 = over 20 years 23.7% (N = 36). Dates were collected after completing face-to-face responses and entered into the SPSS 14.00 program establishing a confidence interval of 95% ($p \leq 0.05$). The results of the study were analyzed by comparative Chi-square test comparing the individualized data obtained per age group.

RESULTS AND DISCUSSIONS

The results of the study show that the doctors work in the following form of cabinet operation: Limited Company 23.68% (36), Individual Cabinet 73.68% (112), Cabinet Association 0.65% (1), Civil Society by Dental Medicine 1.97% (3). The forme by operation of the cabinets was chosen by them without first calling to specialized assistance 93.42% (142), $p = 0.000$.

Although in their opinion they acknowledge that the management increases the efficiency of the clinical activity, ensuring its continuous development 92.10% (140) $p = 0.104$, thus increasing the flow of patients 27.63% (42) $p = 0.042$ only 38.15% (58) attended management courses offered by universities or specialist firms.

Most of the subjects surveyed believe that universities should offer more training courses in management 95.39% (145) $p = 0.401$. Only 40.78% (62) of them consider that the functioning of a dental office should be managed by a person with management training $p = 0.024$, 57.23% (87) physician and only 1.97% (3) by an economist. At present, over 58.55% (89) of those surveyed do not use management standards, 47.36% (72) use them for planning and organizing, 60.52% (92) for the business plan, 21.05% (32) for evaluations and 11.84% (18) for audit.

In 40.78% (62) of the doctors do not realize the budget of the cabinet on the basis of the forecast, based on the historical $p = 0.000$. Their pricing is market-inspired or priced at 42.76% (65) and only 37.5% (57) responded that it is based on a rigorous cost calculation $p = 0.073$, 12.5% (19) mentioning that prices change according to the patient, 7.23% (11) indicating another situation. In most cabinets 42.1% (64) there are manuals of medical procedures, in 30.92% (47) there

are manuals of procedures for the occupied post and for management, 11.84% (18) consider that there are still no written procedures $p = 0.011$, 6.57% (10) mentioning another situation and only 1.97% (3) management procedures.

Only 16.44% (25) (Gr.1-3, Gr.2-5, Gr.3-11, Gr.4-6), $p = 0.952$, of subjects have a complex management system for programming, medical information (patient record), financial or other information. 31.57% (48) of the subjects have, for the management of medical information (the patient's record), a small number of Gr. 1 (4) $p = 0.147$, 23.02% (35) Gr.1-0, Gr.2-4, Gr.3-21, Gr.4-10), $p = 0.007$, 17.76% (27) for the management of financial or other information (Gr.1-0, Gr.2-5, Gr.3-12, Gr.4-10), $p = 0.091$, 46.05% (70) do not have any management program (Gr.1-9, Gr.2-18, Gr.3-33, Gr.4-10), $p = 0.085$ and 82.89% (126) mentions that cabinet management is based on satisfied patients who bring other patients.

Most of the doctors 76.97% (117) $p = 0.033$ have employed collaborators, but only 52.63% (80) $p = 0.101$, 101 dental assistants, 3.28% (5) nurses, 5.26% (8) reception, 42.1% (64) cleaning, 35.52% (54) financial services $p = 0.026$ (Table 1) 44.73% (32) dentists and 23.68% (36) specialists (Table 2). Nurses are assigned the task of answering the telephone, preparing the materials, programming the patients, helping with some work, and only 38.15% (58) of them providing four-hand work, $p = 0.001$ (Table 3).

Table 1. Distribution of responses for those who said they had collaborations in dental practices

	Experience				Total	p
	Gr.1 = 0-5	Gr.2 = 5-10	Gr.3 = 10-20	Gr.2 = > 20		
Orthodont	12	31	54	32	129	0,629
Surgeon	16	27	56	34	133	0,011
Implantolog	9	24	43	22	98	0,790
Endodontist	0	5	7	3	15	0,474
Periodontist	5	8	22	19	54	0,047
Another category	4	5	6	8	23	0,237

Table 2. Distribution of answers to the question "What kind of employees or collaborators do you have?"

	Experience				Total	p
	Gr.1 = 0-5	Gr.2 = 5-10	Gr.3 = 10-20	Gr.2 = > 20		
Dentist	4	8	17	13	32	=0,172
Specialist dentist	6	7	15	8	36	0,532
Assistance	7	19	40	14	80	0,101
Prophylaxis nurse	1	1	3	0	5	0,545
Employee reception	0	0	5	3	8	0,210
Office manager	0	0	0	0	0	-
Personal hygiene	5	17	31	11	64	0,234
Financial Service	3	17	27	7	54	0,026*

Table 3. Distribution of answers for the question "If you have a hired or collaborating assistant, what tasks does this have?"

	Experience				Total	p
	Gr.1 = 0-5	Gr.2 = 5-10	Gr.3 = 10-20	Gr.2 = > 20		
Answer the phone	8	24	42	7	81	0,000*
Prepare the materials	11	24	40	15	90	0,104
Helps some work	7	22	31	13	73	0,247
Work at four hands	6	17	32	4	54	0,001*
Make appointments	10	24	40	6	80	0,000*

To the question: "What do you think is useful assistance in opening a cabinet? "It was revealed that only 46.1% are aware of the fact that this assistance provides support in several directions. The rest of the subjects considered useful specialist

assistance only for certain segments and 6.6% did not consider it necessary. Differences between the groups studied were statistically significant $p \leq 0.05$. This can be explained by the fact that 68, 3% never attended a management course.

Most of the respondents, 92.1%, know that

the application of management principles increases management efficiency, with 61.2% of them aware of the fact that the cabinet continues to develop, only 27.6% consider management to ensure the flow of patients.

More than 57.2% of physicians believe that the operation of a cabinet should be managed by a physician, although 52% of them do not use established management standards. Physicians believe that in 40.8% of cases, the operation of a cabinet should be managed by a person with management training, 46.1% of them using management standards that they use for planning and organizing 60.5%, plan business 20.4%, ratings 21.7%, audit 11.8%, others 0.7%.

Most of the 51.3% doctors make the initial budget of the cabinet according to the revenue history and the goals they want to fulfill, with 40.8% considering that this cannot be predicted in any way.

Only 2% of the doctors answered in the affirmative to the question whether there is a manual of procedures and medical conduct and management procedures in

your office, 8.6% of them considering that they are not necessary, probably those who are the prices are in function of the patient (12.5%).

With regard to price policy, it is based on a rigorous calculation only in 37.8% of cases $p = 0.073$.

The marketing policy of the cabinet is based on satisfied patients in the vast majority of cases (126), (Gr.1-11, Gr.2-36, Gr.3-49, Gr.4-30), $p = 0.032$, Based on internal marketing (medical performance, cabinet layout, discounts) - 94 respondents answered (Gr.1-8, Gr.2-22, Gr.3-44, Gr.4-20), $p = 0.341$, based on external marketing - 34 subjects (Gr.1-16, Gr.2-29, Gr.3-44, Gr.4-29), $p = 0.072$, another situation being found in 9 cases $p = 0.137$.

The contract with the National Health Insurance House is carried out by approximately half of the subjects, which is a secondary source of income, although for 7.23% (11) this contract represents an important source of income, indicating the economic and financial level of the Cabinet in conditions of practicing with equipment and materials purchased on the international market. Table 4.

Table 4. Distribution of answers for the question "Do you have a contract with the National Health Insurance House?"

	Experience				Total	p
	Gr.1 = 0-5	Gr.2 = 5-10	Gr.3 = 10-20	Gr.2 = > 20		
Yes, it is an important source of income	4	1	1	5	11	,000*
Yes, but it's a secondary source of income	1	20	40	15	76	,000*
Not	11	16	22	16	65	,000*

The use of the Internet in the dental office is performed mainly for professional information 44.73% (68) with insignificant differences according to experience $p =$

0.291, very little for communicating with the patient 10.52% (16), for relaxation 13.81 % (21) to select suppliers 26.97% (41) predominantly for Gr. 3, $p = 0.020$, very little for another purpose 5.96% (9).

Interestingly, 53.28% (84) of them do not use the Internet at all (Gr.1-8, Gr.2-17, Gr.3-36, Gr.4-23), the differences being not significant $p = 0.448$. It is very important that although most of the subjects work more than four hours a day 51.31% (78) and even over 7 hours

34.86% (53) Table 5, they do not achieve minimal protection against malpractice 33.55% (51) do not document and do not have a standard consent procedure. Table 6.

Table 5. Distribution of answers for the question "How many hours do you work on a day?"

	Experience				Total	p
	Gr.1 = 0-5	Gr.2 = 5-10	Gr.3 = 10-20	Gr.2 = > 20		
1-4 hours / day	8	2	4	6	20	0,001*
4-7 hours / day	4	22	32	20	78	
over 7 hours / day	4	13	27	9	53	

Table 6. Distribution of responses to the question "How do you protect yourself from malpractice?"

	Experience				Total	p
	Gr.1 = 0-5	Gr.2 = 5-10	Gr.3 = 10-20	Gr.2 = > 20		
I do not realize	0	0	1	0	1	0,000*
I document all cases with photos and consent	0	9	12	2	23	
I document all cases with consent	16	19	27	7	69	
I do not document and do not have a standard consent procedure	0	7	19	25	51	
Another situation	0	2	4	2	8	

Also 67.76% (103) by physicians are concerned about the prevention of transmission of the infection and are influenced in the clinical decision to treat a potentially infected patient, the differences being not significant according to the experience group $p = 0.278$, although those in Grade 3 were 27.63% majority (42) 19.7% (29) being inflamed sometimes when they know that the patient is possibly infected. Only 11.84% (18) of them apply the principle of universal precautionary protocol to apply the same working conditions to all patients, treating all of them as infected.

However, under these conditions, 93.42% (142) perform a periodic test.

A good management of the cabinet entails increasing the trend towards success. Cabinet productivity is provided by several factors, implicitly by eliminating unnecessary activities. Given the problem of the increase of cabinet productivity at the expense of the disinfection of the dental unit between patients, 57.23% (87) of the situations, the sterilization of the handpieces is clear, the dental practice do not know the premises of ensuring success managerial (Table 7).

Table 7. Distribution of answers to the question "In order to increase the productivity of your office which of the following activities do you find unnecessary?"

	Experience				Total	p
	Gr.1 = 0-5	Gr.2 = 5-10	Gr.3 = 10-20	Gr.2 = > 20		
Disinfection of dental unit between patients	11	16	36	24	87	0,308
Sterilization of handpieces	0	3	5	2	10	
Positioning the patient before the clinical procedure	0	4	5	3	12	
Adjust the height of the dental chair	0	2	2	0	4	
Changing the patient's position during treatment	5	12	15	5	37	
Adapting the light source	0	0	0	2	2	

CONCLUSION

1. The comparative analysis of the results regarding the management behavior of dentists in the N-E region reveals the urgency of improving the behavior of dentists to the challenges of social life.

2. Physician protection and, implicitly, his / her responsibility to day-to-day maneuvers is pressing and consistently justifies the completion of training courses in the field of dental health care management.

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