

TOWARDS THE GP, PROPHYLACTIC AND THE NEW METHODS OF TREATMENT

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Abstract. The National Health Insurance Fund (NHIF) data shows that only a small portion of the health insurance holders in the country have visited their GP for the mandatory prophylactic check-up. This fact is rather disturbing. The study aims at investigating the ethical dimensions and the patients' opinions towards the GPs, prophylactics and the new methods for early diagnostics and treatment. Material and Methods: A questionnaire was prepared for the purposes of the study. The methods utilized were a direct individual anonymous questionnaire, statistical – descriptive, analytical (Chi-square). The answers were examined and statistically processed according to age, gender and education level of the participants. Results: 1. A large percentage of the participants, 88.8% has a GP, however, the situation with the personal dental practitioner is rather different - 66% does not have one. 2. A large percentage of the participants believe in prophylactics, but do not attend regular prophylactic checks which is related to the prevailing mistrust towards the GP, as well as to the education level of the patients - those with higher education believe in and attend prophylactic checks more regularly. 3. The percentage of those who believe in the new methods and means for treatment is high, over 80%, while no difference is found in relation to the patients' education level. 4. There is no difference in the answers regarding the regular prophylactic checks depending on gender. Conclusion: The strict regulation of the practice of GP and sanctions to the nonregular to prophylaxis patients are needed.

Key words: GP, prevention, promotion, public health care

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INTRODUCTION

rimary Health Care (PHC) covers primary health care, prophylaxis, health promotion and health education of population. The basis of PHC is the access, equality, necessity of technology, inter-discipline cooperation and the active participation of the society. The leading figure is the Gen-

eral Practitioner (GP), who treats acute and chronic diseases and provides prophylaxis and health education for all ages and both genders. GPs are prepared to treat patients with multiple diseases. Their role is with great importance to aging population, orientated to all needs of the patients. GPs are capable to open the right doors in the health care system after their diagnostic of the patient [1, 2, 5].

The National Health Insurance Fund (NHIF) data shows that only a small portion of the health insured patients in Bulgaria have visited their GP for the regular, mandatory prophylactic check-up. This fact is rather disturbing. The lack of interest to the annual prophylactic check-ups, which may be lifesaving could not be explain only with the low health education of the population. There should be other explanation [7, 8, 10, 11].

The vicious practice of underestimation of prophylaxis and prevention of health and morbidity of patients continues [12, 15]. According to the law GPs should inform their patients for the annual check-ups. In the GP's office in an easily visible place should be positioned all the information of the check-ups, what should they include and how regular should they have been done [4, 10, 11]. Paradoxically, neither NHIF, nor GP, nor patients are interested to finish their liability.

AIM

The study aims at investigating the ethical dimensions and the patients' opinions towards the GPs, prophylactics and the new methods for early diagnostics and treatment.

To reach the aim four **tasks** were formulated:

1. To investigate the percentage of patients who have GP and GDP (general dental practitioner).

- 2. To investigate the percentage of trust towards GP and GDP.
- 3. To study the activity of patients towards regular prophylaxis.
- 4. To investigate the patients' attitude towards new diagnostic methods for early diagnostic and treatment.

MATERIAL AND METHODS

A questionnaire was prepared for the purposes of the study. The methods utilized were a direct individual anonymous questionnaire, statistical – descriptive, analytical (Chi-square). The answers were examined and statistically processed according to **age, gender and education level** of the participants.

The questionnaires were collected for period of 2 months and the participants are workers in the "Fantastiko" shop, "The Dots" company, "Work and Law", my patients with different professions, parents and workers in the ESPA School, neighbors and my friends.

391 participants took part in the survey but only 385 of the questionnaire forms were filled adequately. Only they were included in the statistics process – totally 385.

Questionnaire

Questions to patients

gender M F age 18-44 25-44 45-49 60+ education secondary higher

- 1. Do you have General practitioner (GP)?
 - A. Yes
- B. No
- 2. Do you have General dental practitioner (GDP)?
 - A. Yes
- **B**. No
- 3. Do you trust your GP/GDP?
 - A. Yes
- B. No
- C. Seeking another opinion
- 4. Do you believe in prophylaxis of diseases?
 - A. Yes
- **B**. No
- **C.** I do not pay attention to prophylaxis
- 5. Are you regular to prophylactic check-ups?
 - A. Yes Medical
- B. Yes Dental
- C. No
- 6. Do you believe that with good oral hygiene and special gel you can prevent caries decay?
 - A. Yes
- **B**. No
- C. Not sure
- 7. Do you trust new methods and technologies of treatment?
 - A. Yes
- B. No
- C. I am skeptical

RESULTS

From 385 participants, according to **sex**: 46.5% are male and 53.5% are female. According to **age** 18-24-year-olds are 21.3%, 25-44-year-olds are 39%, 45-59-year-olds – 30,6% and over 60-year-olds are only 9.1%. According to **education** – 71.4% is with higher education, and 28.6% is with secondary education.

 Results of the first task – To investigate the percentage of patients who have GP and GDP (general dental practitioner). Included questions: No. 1, 2

Majority of participants have GP-88.8%.

However, it is absolutely different toward GDP – 66% does not have GDP.

- According to age 56% of 18-24-year-olds have GP, 96% of 25-44-year-olds have GP 100%, 45-59-year-old and over 60-year-olds have GP almost 100%. It is amazing the result that 43.9% of 18-24-year-olds do not have GDP. The group of over 60-year- olds is with the highest proportion of having GDP 54.3%. The rest two groups have GDP on average 33%.
- According to sex 85.5% of men and 91.7% of women have GP/GDP. Women have GP/GDP 8% more than men.
- According to education, the highest proportion of patients with secondary education at the age of 18-24 years does not have GP and also over 70% does not have GDP. Higher education correlates to higher proportion of having GP/GDP.

Table 1. Percentage split of the answers of question No. 1

	Frequency	Percentage	Valid rate	Accrual rate
Yes	342	88.8	88.8	88.8
No	43	11.2	11.2	100.0
Total	385	100.0	100.0	

Table 2. Percentage split of the answers of question No. 2

	Frequency	Percentage	Valid rate	Accrual rate
Yes	131	34.0	34.0	34.0
No	254	66.0	66.0	100.0
Total	385	100.0	100.0	

Results of the second task – To investigate the trust of patient towards GP/GDP. Included question: No. 3

Question No. 3: Do you trust your General practitioner/general dental practitioner?

The result of trust is very unconvincing – only 14.5% has trust. The proportion of the untrusting is almost the half – 41.3%. The overall proportion of the untrusting and the ones who are seeking for another opinion is 85.5%.

- According to age: for the youngest 18-24-year-olds, around 70% does not trust their GP/GDP. Up to the oldest group over 60-year-olds 42% does not have trust. The third answer "seeking another opinion" is preferable in the groups of 25-44- and 45-59-year-olds, and 50% in each group. This may be due to the fact that in that age is the highest activity and highest number of workers which makes their financial possibilities higher and they are able to seek another opinion.
- According to sex: Women look for another opinion 10% more than men, but the women do not trust their GP/GDP 13% more than the men.
- According to education: The mistrust (answer "No") is shown in 60% of people with secondary education, while 50% of the ones with higher education prefer to seek another opinion.
- Results of the third task To study the activity of patients towards regular prophylaxis; questions: 4, 5.

Table 3. Connection between the answers of Question No. 3 with age

Question No. 3 to Age		Age				Total	
Question No. 3 to Age		18-24 years 25-44 y 45-59 y 60 y, > 60 y		60 y, > 60 y	Total		
V ₂ -		Count	4	35	9	8	56
	Yes	% within age group	4.9%	23.3%	7.6%	22.9%	14.5%
0.0	No	Count	57	44	43	15	159
Q-3		% within age group	69.5%	29.3%	36.4%	42.9%	41.3%
	Seeking another opinion	Count	21	71	66	12	170
Seeking another opinion		% within age group	25.6%	47.3%	55.9%	34.3%	44.2%
Total		Count	82	150	118	35	385
		% within age group	100.0%	100.0%	100.0%	100.0%	100.0%

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Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	51.687ª	6	.000
Likelihood Ratio	51.687	6	.000
Linear-by-Linear Association	1.774	1	.183
N of Valid Cases	385		

 $^{^{\}rm a.}$ 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.09

Question No. 4: Do you believe in prophylaxis of diseases?

The percentage of the believers in prophylaxis is high – 57.9%.

- According to age: 74.7% in the age group of 25-44-year-olds believe in prophylaxis, followed by 60+-year-olds, 60% of whom also believe. 18-24-year-olds are the ones who believe less only 31.7%. At the average only around 10% of all the groups does not believe in prophylaxis (which is motivating). 59.8% of the group of 18-24-year-olds does not pay attention to prophylaxis, for the other groups the average percentage is 23%.
- Sex: In contrast to men, the bigger percent of women do believe in prophylaxis. A lower proportion of women do not pay attention to it 29.1%, while 39.1% of men do not pay attention to prophylaxis.
- Education: More than 50% of participants with secondary education do not pay attention to prophylaxis, for the ones with higher education only 25.5%. 69.5% of participants with higher education believe in prophylaxis versus 29.1% of those with secondary education.

Table 4. Percentage split of the answers of question No. 4

	Frequency	Percentage	Valid rate	Accrual rate
Yes	223	57.9	57.9	57.9
No	31	8.1	8.1	66.0
Do not pay attention to prophylactic	131	34.0	34.0	100.0
total	385	100.0	100.0	

Question No. 5: Are you regular to prophylactic check-ups?

Here it is used the "valid rate", which means a lack of answers, and is used for the proportion of participants who are regular only in medical, dental or both checkups. The number of the ones who are not regular for check-ups is very high – 81.3%. The people who are absolutely adequate and careful for their health are at least 11.5%.

- Age: From 18-24-year-olds only 1.2 % is regular in prophylactic in both medical and dental check-ups. Among 25-59-year-olds, around 13% is regular in both types of check-ups; and for 60+-year-olds 20%. The participants who do not visit prophylactic check-ups are 96.3% in the age group of 18-24 years, followed by the age group of 45-59 years 80%, and 25-44-year-olds 77.2%. The participants who are regular in dental check-ups are only 3% for all groups.
- Sex: In both men and women the percentage of not visiting regular prophylactic check-ups is more than 80%. There is no significant difference in answers according to sex.

Table 5. Connection between the answers of Question No. 5 with sex

0	No. 5 and On		Sex	T. L. I	
Question	Question № 5 and Sex		man	woman	Total
		Count	5	13	18
	Yes – medical	% within sex	2.8%	6.3%	4.7%
Q-5	Yes – Dental	Count	4	6	10
		% within sex	2.2%	2.9%	2.6%
	NI-	Count	158	154	312
	No	% within sex	88.3%	75.1%	81.3%
	Yes – both medical and dental	Count	12	32	44
res – both medical and dental		% within sex	6.7%	15.6%	11.5%
Total		Count	179	205	384
		% within sex	100.0%	100.0%	100.0%

- Education: The difference is not high but the participants with higher education are more regular in prophylactic check-ups.
 - Results of fourth task To investigate the patients' attitude towards new diagnostic methods for early diagnostic and treatment; questions: 6, 7.

Question No. 6: Do you believe that with good oral hygiene and special gel you can prevent caries decay?

Question No. 7: Do you trust new methods and technologies of treatment?

60% believes in good oral hygiene, which is a part of personal responsibility of patients, and also in the new method of treatment of caries decay. Only 12.7% of the participants answered with "No".

- Age: The most skeptical are the patients in the group of 60+-year-olds. 60% of the participants between 18-24- and 25-44-years old believe in oral hygiene and the new method of prevention of caries decay. Only around 13% of all age groups do not believe in good oral hygiene and the new methods of prevention of caries decay.
- Sex: Women tend to believe in good oral hygiene and the new methods of prevention of caries by only 5% more than men.
- Education: The participants with higher education tend to believe in good oral hygiene and the new methods of prevention of caries decay by 6% more than the rest. The difference for the non-believers is greater: secondary education 20.9%, and higher education 9.5%.

Table 6. Connection between answers of question No. 6 with education

Question No. 6 and Education		Educ	Education			
		primary	primary high			
	Voc	Count	51	140	191	
Yes		% within EDUC	46.4%	50.9%	49.6%	
0.7	No	Count	23	26	49	
Q-7	No	% within EDUC	20.9%	9.5%	12.7%	
	Not our	Count	36	109	145	
Not sure		% within EDUC	32.7%	39.6%	37.7%	
Total		Count	110	275	385	
		% within EDUC	100.0%	100.0%	100.0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9,423ª	2	.009
Likelihood Ratio	8,735	2	.013
Linear-by-Linear Association	,051	1	.821
N of Valid Cases	385		

Question No. 7: Do you trust new methods and technologies of treatment?

Here the skeptics are only 11.9%, the non-believers are 4.7%, and the believers are 83.4%.

- Age: For the age group of 18-24-year-olds, 91.5% trust new methods of treatment. The proportion decreases with rising of the age of the participants. However, it is still very high in 60+-year-olds 65.7%. The average share of non-believers for all groups is less than 5%.
- Sex: Among non-believers there is no big difference in sex only 4.5%. However, the women have trust and are less skeptical towards new methods of treatment 15% more than the men.
- Education: There is no significant difference participants with higher education have trust by 2% more than the rest.

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Table 7. Connection between answers of question No. 7 with age

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Overtice No. 7 and Are				T				
Questi	Question No. 7 and Age		18-24 years	25-44 y	45-59 y	60 y, > 60 y	Total	
	yes	Count	75	134	89	23	321	
		% within age group	91.5%	89.3%	75.4%	65.7%	83.4%	
Q-8		Count	2	6	8	2	18	
Q U	no	% within age group	2.4%	4.0%	6.8%	5.7%	4.7%	
	I am alcantia	Count	5	10	21	10	46	
	I am skeptic	% within age group	6.1%	6.7%	17.8%	28.6%	11.9%	
Total		Count	82	150	118	35	385	
Total		% within age group	100.0%	100.0%	100.0%	100.0%	100.0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.032ª	6	.001
Likelihood Ratio	21.7635	6	.001
Linear-by-Linear Association	19.371	1	.000
N of Valid Cases	385		

DISCUSSION AND RECOMMENDATIONS

GP is the figure who coordinates the healing and prevention of patients [2, 5]. The role of GP in prophylaxis and prevention of diseases is irreplaceable! In the view of GPs, the low payment, the higher number of patients, the higher number of illness and sanctions of NHIF lead to unstable healthcare, mistrust of patients in doctors, prevention, prophylaxis and medicine. May be that is the reason why patients are seeking alternative methods of treatment [3, 10].

Because of the lack of knowledge the patient is not ready and free to choose by himself and he should rely on his physician. The physician should take care of his patients and do the best for them. Medical ethics is related to principles of moral attitude and behavior. Physicians should be loyal to the patients, society, profession and standards. The interests of the patients and physicians should be fairly guaranteed by law [3, 4, 8, 10, 11].

To sum up, the results of the survey show the trust of participants/patients in prophylaxis and it is of great importance. The positive attitude shows that despite the lack of health education, people are ready to change!

In this context, the most acceptable ethical principle is: "The greatest amount of good for the greatest number of people!"

- The responsibility is shared between the medical professionals and patients!
- In the future there is a need of strict control of the role of the GP according to prophylaxis and also control and sanctions for patients!
- According to health promotion and health education recommendations to perform annual media campaigns showing the benefits of the annual prophylaxis and the sanctions for the non-regular patients can be addressed to NHIF and Ministry of Health Care. Surprisingly, the majority of people do not know what the regular check-ups include, where and when they could be done.
- There is a lack of correlation between quality and price of the medical services due to non-existing criteria and non-existing department of independent external control of quality of medical services and in particular of the quality of the prophylaxis check-ups [1, 6].
- The trust of patients in the new methods of treatment in occasion of poverty results in reduced sources of coping mechanisms because of the social inequality. The unsolved medical problems affect all! That is the reason why these problems should be a part of the activity of the politicians [5, 6, 7].
- Modern society enables and does not solve the problems with unhealthy way of living, unhealthy atmosphere and polluted nature, unhealthy home and work place. The recommendation is to struggle and do our best to succeed in stable development of health care with the active role of the government and nongovernment organizations [13, 14].
- The problems with the need of social activity and monitoring and control of the used resources, medi-

cal ethics, and control of the results of the high technologies in medicine are not solved. There is a need for change in preparing a staff that is ready to answer the new responsibilities of the public health, health problems, and new medical culture and prepared to support the modern medical methods and their effect to the society [9, 13, 14].

CONCLUSIONS

- A large percentage of the participants, 88.8%, have a GP, however, the situation with the personal dental practitioner is rather different – 66% does not have one.
- A large percentage of the participants believe in prophylaxis, but do not attend regular prophylactic check-ups which is related to the prevailing mistrust towards the GP, as well as to the education level of the patients – those with higher education believe in and attend prophylactic checks more regularly.
- The percentage of those who trust the new methods and means for treatment is high, over 80%, while no difference is found in relation to the patients' education level.
- 4. There is no difference in the answers regarding the regular prophylactic check-ups depending on sex.

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