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# Determinative Factors of being an Effective Health-care Role Model

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#### Abstract

Healthcare professionals have to deal with multiple roles. They are often considered as role models, regarding health, while they are expected to excel in such behaviors. The purpose of this qualitative and quantitative, cross-sectional study is to identify which factors affect the participants' lifestyle, how they characterize health-care professionals as health role models and how a health-care professional's lifestyle influences patient's behaviors. Specially designed questionnaires were distributed to 204 individuals, including health-care professionals and general public. Nine half-hour, semi-structured interviews were carried during 2013. The IBM SPSS Statistics 22 was used, while results considered being statistically significant for p < 0.05. Almost half of respondents gave a neutral answer, regarding the quality of their lifestyle. Both qualitative and quantitative results showed that health professionals are not role models in Greece, despite being their responsibility. This fact can influence both patients' confidence to the professional and intention to follow a health advice. However, some participants felt confident when an exceptional professional -regardless if he/she is a role model- consults them. The adoption of a healthy lifestyle is influenced by the economic crisis, which is affected by the level of education, gender, age and completion of health studies. The impact of their unhealthy behaviors to patients and community could be considered as significant.

Keywords: health-care professionals-patient interaction, role models, health-care

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## 1 Introduction

Lifestyle is a major factor which determine human's quality of life. Healthy lifestyle is related to dietary habits, physical activity, smoking, alcohol consumption and stress [1]. Health-care professionals who follow healthy habits play a crucial role in helping patients to prevent physical and mental illnesses by influencing them to adopt a healthy lifestyle.

Health care professionals are often considered as role models, regarding health, while they are expected to excel in such behaviors, inspiring others [2]. Being a role model is more than being a good professional, while it reflects our personal values and convictions [3]. Furthermore, economic, political and social forces could be considered an influence of the current concept of health promotion [4]. However, why is it so important to be an effective role-model? According to Social Learning Theory [5], a role model functions as a mimic model for the individual, the same way children mimic a parent's behaviors, or the way adults mimic the actions of their peers.

As a result of health-care professionals' poor behavior in health, there is a negative impact on patients' and individuals' health as well, or even in the quality of care that those professionals provide [6], while it has been pointed that healthy behaviors and well-being services could reduce sickness appearances, increase productivity [7], or make health-interventions more effective [8].

Although a proper professional role-model could be more than beneficial for the public, it has been mentioned before, that mandating a behavior for the sake of professionalism can violate a person's freedom and rights [9], while being a role model should not be considered a responsibility, as aggressive or arrogant behaviors –for example- could result to a patient's compliance, as well [10].

Lack of studies regarding the topic has been identified, while few studies seem to focus to the role of nurses as health role models, leaving the important role of other health-care professionals unattached [3, 4, 11].

Nurses show an expanded conception of themselves as role models for health promotion [4], while the health profile of them have found to be relatively poor [11].

The purpose of this study is to understand which factors affect the health-care and non health-care professionals' lifestyle, deeply identify how health care professionals describe and define themselves as role models for healthy behaviors, how potential patients characterize health-care professionals as role models, in Greece, and how the particular lifestyle of a health-care professional affects patients' behaviors. Finally, a variety of aspects that could affect such behaviors were studied, from the view of the studied population.

## 2 Materials and Methods

The fact that the topic researched can be seen as sensitive as well as multidimensional, it was considered proper to perform both qualitative and quantitative techniques to study it. Every individual who participated in the survey gave its full consent, preceded comprehensive and thorough explanation of the study's purpose, procedures and the techniques used.

For the quantitative part, standardized questionnaires were used, with 10 questions specially designed for the purposes of the current study. Questions regarding the lifestyle of the individual were asked, along with questions about its demographics or education.

Furthermore, questions regarding health care professionals and their roles as role-models were asked, as well. The questionnaires were distributed among health-care professionals, health-care students and people of the general public currently living in Greece, in the geographic area of Laconia and Crete. The Cronbach coefficient of the used questionnaire was 0.76 indicating a satisfactory level of internal consistency. In this part, our sample constituted of 204 individuals, varying in age. Data was collected during 2013. The correlations among the categorical variables were assessed via  $X^2$  test. For the statistical analysis, the IBM SPSS Statistics 22 was used, while results considered being statistically significant for p<0.05.

The method of choice for carrying out the qualitative part of the study, were semi-structured interviews with each respondent individually. Nine half-hour interviews were carried by one interviewer, from nine different people, of whom five were health-care professionals. Finally, the sample was incidentally chosen, while the interviews were recorded, using a recorder. All of the interviews were thematically analyzed by a different person than the interviewer, in order to eliminate subjectivity. Data were collected during 2013.

This part of the study includes 9 interviews, from 9 different people of whom 5 are healthcare professionals and 4 have never had a special education regarding health. Thematic analysis was followed to elaborate findings [12]. Data consisted of phrases, sentences, paragraphs and words, used from the individuals to describe a health-providing role model, all the different aspects that influence its effectiveness. Thereafter, themes constructed were compared and grouped into similar categories.

#### **3** Results

#### **3.1 Qualitative Findings**

#### **3.1.1 Non Health-Care Professionals**

#### Lifestyle

The sample consisted from non-healthcare professionals (4 participants) stating that they generally tried to have a healthy lifestyle, but only 2 of them finally achieved this goal. Specifically, they consume 5 meals per day and undertake an almost every day exercise program. In their daily habits, consumption of alcohol and cigarettes is not included, they do not watch TV or play video games and they try to sleep 7 to 8 hours per day. However, one of them spends much time working on the computer (7 hours per day): "I spend 7 or 8 hours per day working on the computer. Unfortunately I cannot do anything to avoid it, it is my job. I'm trying taking some quick breaks or to walk after 2 or 3 hours of working, but this is not always possible". The third person of this sample said that she doesn't follow a healthy lifestyle, although she exercises frequently, because she does not follow any nutrition. It's personal. I can't!" The fourth person tries as much as possible to have a healthy lifestyle, although this target is not totally managed "I exercise 3 times per week, I consume 5 healthy meals per day, but I cannot resist eating candy. I love them".

#### The Significance of Having a Healthy Lifestyle

Non health care professionals were also asked if having a healthy lifestyle is a crucial

characteristic for being an effective health-care professional. Three of them believed it is totally important. There is a point of view which supports that healthcare professionals are role models and as a result, they must have a healthy lifestyle, as "they consist a model. If they don't have a healthy nutrition, they are not clean etc. how can they advise us?". Another point of view is that being role models, health-care professionals should have a healthy lifestyle. Some of the non-healthcare professionals believe that they should be the role models of themselves "Those with a strong character do not need someone else to show them what is correct or wrong". Finally another point of view supports that having a healthy lifestyle for a professional is just as important as having a healthy lifestyle for anyone else. Finally, there was also an interviewee who does not always find it important for a professional to have a healthy lifestyle and commented "It depends. I don't know, if he's a good professional."

#### Healthcare Professionals in Greece

One other question in the interview was about health-care professionals in Greece and specifically if they are a role mode, after all. In this question the answers given from non-health-care professionals were mostly adverse. Two participants referred to an only small percentage of health care professionals as a role model, in Greece and emphasized to the majority of professionals not to be role models: "Well, there are some role models but most of them are not. One of my personal experiences was when I wanted to cut down on smoking. I visited my doctor and his office smelled so much tobacco that I wanted to smoke in there. I couldn't think of something else..." There was also a participant who stated that there are no role models in Greece among health-care professionals, regarding health and another one who believed -according to his personal experience- that most of them are role models and help patients with their behavior.

#### **Discussed** Examples

Following, 2 examples were discussed, a doctor who advises the patient to stop smoking because of some respiratory disorder, although he is smoking, and a dietician who suggests nutrition program to an overweight person, although he is overweight himself. In this part of the interview 3 participants almost agreed that they certainly prefer a professional who had adopted a lifestyle similar to the one he consults people to follow. However, an exceptional professional who does not have a healthy lifestyle and his personal life does not affect the patients, could be selected by these participants, as well. One of them explained: "I don't want to visit a doctor who is not clean, who smokes in his office, who looks unhealthy. I will never choose a doctor with these characteristics. Nevertheless, if the doctor is an excellent professional and -at the same time- clean, decent and his office is a healthy environment, I will not care if he is overweight or if he is smoking outside his working environment". Another participant was more hesitant and said "I could consult him, but it will be difficult to trust him one hundred percent". In other interviews, totally different points of view were expressed. Specifically, there was a person who claimed that he does not care if the professional has a healthy lifestyle. Conversely, taking advice from a perfect role model may have negative results to the patient's health: "I would like to give my congratulations to the role model, but I wouldn't choose him. How can he understand me? In fact, I would feel embarrassed in our conversation. I would totally prefer a doctor who can understand me over the one that cannot". Another participant claimed: "I would like to be consulted from a perfect role model health-care professional. A doctor, for instance, who does not have the same problem with me does not mean he cannot understand me. He has gained experience from his job so he knows how to understand or advise me".

#### **3.1.2 Health-Care Professionals**

#### Lifestyle

The sample consisted of healthcare professionals (5 participants), who also tried to have a healthy lifestyle, but only 1 of them stated that he finally achieved this goal. This participant eats 5 meals per day, undertakes almost every day some physical exercise, and sleeps approximately 7 hours per day. His lifestyle's disadvantage, as he explained to the interview, is the time he passes watching TV: "I don't use the computer a lot; I don't even use it every day. Unfortunately, I watch TV for 3 or 4 hours daily. I like it!" The 4 other participants stated that they do not have a healthy lifestyle, not only because of their workload but also because of a personal choice. In other words, there were 2 healthcare professionals who claimed that their work schedule prevents them from having a balanced nutrition and an everyday exercise program. At this point, it is worth mentioning that there are also some extra factors which deteriorate the phenomenon of having an unhealthy lifestyle. One of these participants explained: "I work 8 hours per day, I have a family which I must care for, and -at the same time- I'm studying. How can I have time for myself? Ok, I'm trying to sleep 8 hours per day but I don't do physical exercise and I don't have a balanced nutrition." Another healthcare professional, who has an unhealthy lifestyle, emphasized that being on an unbalanced diet is because of a personal choice. However, sleeping less than she would like to and using the computer more than she would like to, is because of her workload: "I don't follow a balanced diet, I don't eat breakfast, I don't eat daily at the same time, and I consume lot of caffeine. I have chosen this lifestyle because I don't like limits. Moreover, the maximum I sleep is 7 hours per day, and this happens because of my work. I would actually like to sleep more, I need to sleep more." The fourth participant does not have a healthy lifestyle because of a combination of causes. On one hand, it is his/her personal choice not to have much physical exercise and consume some unhealthy products, but on the other the feeling of craving is increased at work: "I don't have any physical exercise and I consume much caffeine and more than 2 sweets per week. This is not because I work so hard. Actually eating sweets and other unhealthy snacks is because I'm getting very bored while I'm working. I don't work as a healthcare professional anymore and that's why I'm getting so bored."

#### The Significance of Having a Healthy Lifestyle

The healthcare professionals were also asked about the importance of following a healthy lifestyle, in order to give the right example to their patients. In this question three different views were expressed. Specifically, 2 participants supported that the health-care professionals must follow a healthy lifestyle because they are health role models, and not only the patients but also healthy citizens may be affected from their lifestyle: "Of course we must follow a healthy lifestyle; having a balanced diet, exercising and sleeping at approximately 8 hours per day is crucial for us. People of the general public are inspired from us. What is more, how can I say to a patient to do some physical exercise when I have chosen a sedentary lifestyle? How can I encourage a patient to cut down smoking when I smoke and he knows it? Especially, in my village which is small and all the patients have a personal contact with us, knowing if someone smokes or drinks alcohol is frequent and after considering this fact they trust the professional or not." Another

opinion was that healthcare professionals are considered to be particular individuals who have the right to choose if they want to follow a healthy lifestyle or not: "Healthcare professionals are also human beings, and we cannot be forced to follow a healthy lifestyle, we have the right to choose how we want to live our personal life. Of course, in our work we must be dignified and exceptional professionals but in our personal life we have the right to do everything we want." It was also expressed the importance of having a healthy lifestyle, in order to be effective in their work: "We should sleep enough, consume healthy products, have some physical exercise because our work is very hard and only after following these rules of lifestyle, we can be excellent professionals."

#### **Opinion about Health-Care Professionals in Greece**

The participants were asked if health-care professionals in Greece are truly health role models or not. In this question, all of the participants gave a negative answer and some of them mentioned a few exceptions: "No, we are not role models. Definitely, the majority of us are not. However, there is a very small percentage of health professionals in my hospital, who try hard and at the end of the day, they can be characterized as role models." Some of the participants emphasized the relation between the economic crisis and the lack of role-models in Greek health system. Most of them explained that economic crisis has affected the health professionals, as well as the majority of people, however, the reason for not being a role model is not because of the crisis in Greece: "I want to emphasize that health professionals have a very low wage, they work very hard and sometimes they work more than they have to in order to help patients. Despite that fact, as I have already explained, they are not health role models and this does not happen because they are not paid well or because of the general crisis in our country." "No, we are not role models. This happens because of our way of thinking, or because of our culture, or because of our education. I consider our education to be good, generally. We know how to help people, we know what a healthy lifestyle is etc. but we haven't learnt how to follow it in our lives. However, economic crisis has definitely nothing to do with that." Although, there were some participants who reported that in recent years, healthcare professionals wanted just to finish their work, take their salary and live their personal life: "I have observed that in these recent years healthcare professionals want to take their salary and go home or somewhere else. I cannot say they work ineffectively but I don't think they care to be health role models."

#### Feeling of Being a Health Role Model

The participants were asked to express their feelings about being health-care role models. The 4 of them had mixed feelings. In other words, being nervous because of their responsibilities as a role model, combined with being happy and proud because people get inspired and influenced from them: "I'm getting nervous when I think that patients are influenced from my lifestyle, the fact that I smoke, or if I eat fruits and vegetables etc. However, I'm so happy, at the same time. I feel that I can help substantially the others and this is an irreplaceable feeling." Another participant stated that being a role model is totally stressful and can make the individual feel terrible: "I feel embarrassed. Being a role model is terrible because you may have to do things that you wouldn't do under any other circumstances in your lifestyle".

#### **3.2 Quantitative Findings**

The number of people who participated in the quantitative research was 204: 51% were women and 49% were men. The average age of the participants was 40.84 ( $\pm$ 11,926) years. The 50% of the individuals were higher-education graduates, 42,2% were secondary school graduates (31.4% secondary school graduates and 10.8% high school graduates) and the 7.8% were primary school graduates. Most of the participants (60.4%) had, at least once, health related education. The 50% of the participants belonged to a family in which both mother and father had graduated from elementary school. The 38.6% of the participants stated that their mother, had graduated from high school or from a higher level of education and the 40.5% of the participants stated the same for their father (table 1).

The participants were also asked about their lifestyle, whether it is healthy or not. 47.1% of them gave a neutral answer to that question. 55.0% agreed or even strongly agreed that economic crisis has influenced their lifestyle. 66.7% of the participants agreed or even strongly agreed that education plays an important role in adopting or not a healthy lifestyle. 68.9% had a neutral or a totally negative opinion on whether the healthcare professionals are health role models, while the 76.8% agreed or strongly agreed that it is healthcare professionals' responsibility to act as health role models. 70.1% of the participants agreed or strongly agreed that the healthcare professionals have an additional responsibility to follow a healthy lifestyle. 48.1% had a neutral or a very awkward reaction when a healthcare professional gave them a health advice, which he/she did not follow him/herself, while the percentage of people who had never be in such a position reached 29.4%. 62.3% of the participants agreed or strongly agreed that they feel more confident when they have been given a health advice from a professional who personally follows this advice. Finally, 29.4% strongly disagreed that the healthcare professional who does not follow any health advice in his/her own life is not responsible enough to give right or qualitative advices to the patient. 23.5% had a neutral opinion, regarding this matter.

The gender had a statistically significant effect on the opinion about the consequences of financial crisis in Greek peoples' lives (p=0.004). Men believed in a greater degree than women that the economic crisis has affected their lifestyle.

The level of education of the individual statistically significantly affects the healthy lifestyle (p=0.011), the degree of getting influenced by the financial crisis (p<0.001), if the individual's education plays a role in following a healthy lifestyle or not (p<0.001) and if the healthcare professional who does not follow the advice he gives to others is truly able to advise properly the patients (p<0.001). The participants who had graduated from the primary and the secondary school followed, slightly, a healthy lifestyle. The participants who had graduated from the third degree of education do not believe that economic crisis has a strongly negative influence to their lives, compared to others. The participants who had graduated from the secondary school believed that the education of an individual does not play any role in following or not a healthy lifestyle, while the participants who graduated from the primary school did not believe that education plays an important role, as well. They also strongly agreed that the healthcare professionals who do not follow their advise are not responsible enough to advise properly the patients.

The completion of health studies had a statistically significant effect regarding the following states: the healthy lifestyle (p=0.024), the degree of getting influenced by the financial crisis (p<0.001), if the individual's education plays a role in following a healthy

lifestyle or not (p=0.015), if the healthcare professionals must also be health role models (p=0.035) and if the healthcare professionals who do not follow the advices they give to others are truly able to properly advise the patients (p<0.001). Participants who had completed health studies, followed a healthy lifestyle, and did not believe that financial crisis has a negative effect on their lives, believing that education is a regulatory factor in following a healthy lifestyle and that healthcare professionals must be health role models, but they did not believe that healthcare professionals who do not follow any health advice are not responsible enough to advise correctly and qualitatively others.

Finally, a statistically significant difference regarding the age of the participants was found in the adoption of a healthy lifestyle (p=0.025). The younger the person was, in our study, the more he/she chose to follow a healthy lifestyle (Table 2).

### 4 Discussion

The main goal of the research was to identify public's attitudes and opinions toward health-care professionals in Greece and to understand how general public and healthcare professionals define themselves as role models. Emphasis was given to how health-care professionals' lifestyle and behaviors affect patients' future behaviors. In our survey we found that health care professionals are not role models in Greece and that may influence patients' decision to follow or not a healthy lifestyle. The fact that no research towards such attitudes was done in Greece before, remains interesting.

Generally, while adopting a healthy lifestyle is regarded as an anticipated factor, a small amount of our participants (2 out of 4 non-healthcare professionals and 1 out of 5 health-care professionals) stated that they achieve it. A worrying trend in adopting unhealthy lifestyle among health-care professionals has been identified in literature [13, 14].

Current economic crisis in Greece has influenced more than half of our participants' lifestyle. Such attitudes are expressed in other studies, as well, indicating that economic crisis results in psychological stress, changes in life events [15], while modern advances in current health care are also increasingly affected by market forces [16, 17]. On the other hand, some studies indicate that the loss of income caused by economic crisis may have beneficial results on health, in the short term [17, 18]. It becomes obvious that the impact of economic crisis on people's lifestyle is difficult to be identified. This could happen due to the many factors that influence it. Therefore, further research is needed.

Interestingly, the overwhelming majority of our interviewees strongly agreed that health care professionals in Greece are not role models, regarding health, while about 70% of our respondents had a neutral or a totally negative opinion in that issue. Other studies have found that healthy lifestyle of pre-register nurses is relatively poor, despite their well-reflected education [11]. Furthermore, it has been noted that health care professionals cannot be forced to follow a healthy lifestyle, while professional and personal lifestyle choices should be considered as two different things. Other studies have reached that conclusion [4], as well, while it has been noted that nurse's reliability, is much more than just adopting a healthy lifestyle for example [3, 19, 20].

It is worth mentioning that the majority of our sample stated that they feel more confident when they have been given a health advice from a professional who personally follows it, while it is been also noted that an imperfect role model could affect positively patient's attitudes towards health. The latest statement agrees with the position given by Blake and Harrison who found that nurses generally should be health role models. However, this statement is related to patient's health profile [21]. Additionally, patient can consciously be affected by health care professionals' personal practicing remains unchanged [22].

Moreover, we found that individual's level of education affects his/her points of view regarding such issues, while participants who had completed health studies, stated that they follow a healthy lifestyle. Thereafter, the importance of education in adopting healthy behaviors remains one crucial matter. Some authors even support that designing interventions to increase awareness of health-care professionals and how they can be considered role models from their patients could be more than beneficial [11]. Finally, we have to address that being a healthy role model does not overcome the fact of being an exceptional health-care professional [4]. In our research, we found that the importance of being a well-educated and effective health care professional could be as acceptable as being a perfect role model, while a more personal approach to the patients can be effective, as well.

## 5 Conclusion

It is generally considered that health-care professionals are not health role models in Greece. The majority of the participants feel more confident when they have been given a health advice from a professional who follows this advice. Education and economic crisis seemed to have influenced their lifestyle. To sum up, health-care professional's lifestyle has a significant impact to patients' and community's behavior, but that is a matter that one should handle with caution. Since it is rather impossible to force professionals in adopting healthy behaviours, weight could be given in educational and informational projects, addressing the importance of adopting a healthy lifestyle as well as the significant impact that this can have in a patient's welfare.

## 6 Limitations

The research was conducted in a specific geographic area of Greece, Laconia and Crete. This means that the results of the research are relevant to this region and may be some differences to the whole country. Further research is needed to be done in more cities of Greece and in more health-care professionals who work in different types of hospitals. Finally it is worth emphasizing that these results are affected by the economic crisis existing in Greece. However, more research is needed, regarding this topic.

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Table A1 Demographic characteristics		
Gender	Man	100 (49,0) <sup>a</sup>
	Woman	$104 (51,0)^{a}$
Age	40,84 (11,926) <sup>b</sup>	
Education	Graduated from Elementary School	$16(7,8)^{a}$
	Graduated from High School	$22(10,8)^{a}$
	Graduated from High School	$64(31,4)^{a}$
	Graduated from Higher Education	$102(50,0)^{a}$
Studies or Health Seminars	Yes	$123 (60,3)^{a}$
	No	81 (39,7) <sup>a</sup>
Mother's Education	Graduated from Elementary School	101 (50,0) <sup>a</sup>
	Graduated from High School	$23(11,4)^{a}$
	Graduated from High School	$51(25,2)^{a}$
	Graduated from Higher Education	27 (13,4) <sup>a</sup>
Father's Education	Graduated from Elementary School	$100(50,0)^{a}$
	Graduated from High School	$19(9,5)^{a}$
	Graduated from High School	$40(20,0)^{a}$
	Graduated from Higher Education	$41(20,5)^{a}$
<sup>a</sup> frequency (%)	2	
<sup>b</sup> mean (SD)		

## Appendix

#### Health Studies Gender Education (p-value) (p-value) (p-value) Do you think economic crisis has negatively 0,004 <0,001 <0,001 influenced your life? Do you think individual's education plays a role 0,015 0,619 <0,001 in following healthy lifestyle? Do you think that health-care professionals act as 0,713 0,840 0,585 health role models? Do you believe that health-care professionals 0,074 0,782 0,035 should act as health role models? Do you think that health professionals have an 0.703 0.173 0.805 additional responsibility in following a healthy lifestyle? Have you ever found yourself in an awkward 0,648 0.162 0.735 position after getting an advice from a professional who did not follow it? Do you believe that health-care professionals, as 0.971 0.737 0.628 a whole, follow a healthy lifestyle? The health professional, who follows the advice 0,658 0,074 0,750 he recommends is more reliable The health-care professional who does not follow 0,499 <0,001 0,009 his health advice is not able to advise me properly

#### **Table A2: Correlations between the studied factors**