

Motivational Factors for Aspiring Doctors

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Abstract

The objective of the study was directed at determining the incentives encouraging medical students in the pursuit of a medical career. Motivational entities that propel medical students through years of learning followed by a lifetime of practice are of importance to avoid quitting. The amount of stress involved is tremendous. Recent studies have suggested that personal motives, mentors and socio-economic influence play a role in inspiration, amongst other factors. The study was conducted in All Saints University, Dominica. Commenced in the Jan- April semester of the year 2016. A cross sectional analysis was conducted on a survey sample size of 201 students, using a questionnaire formulated by the researchers. Analysis of the raw data from the questionnaire was computed using STATA IC 14 application. Analysis revealed 59.5% of sample population claimed, "Service to humanity" as a primary purpose for enrollment in medical school. "Respect and honor" ranking second with 12% of population. "Knowledge" and "family expectation" yielded percentages of 8% each. "Others" were selected by 6.5% and 6% selected "financial gain". "Personal interest" was the most motivational motivator with 71% of sample population. "Family" was chosen by 23% of population, being the second most motivational factor. From the statistical analysis we were able to suggest "service to humanity" is the major reason why students endure the strenuous progression of medical school. Being compassionate becomes a primary incentive, making other motivators secondary ambitions. Also, the initiation of determination in the pursuit of medicine is majorly conceived in the minds and hearts of the students personally. Although, family and friends inspire, it is majorly by self-motivation.

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Keywords: Motivation; Medical Students; Medical Education; Aspiring Doctors; All Saints University School of Medicine; Dominica; Medical Profession; Career Choice; Choosing Medicine.

1. Introduction

Medicine is a challenging career that requires a lot of dedication and discipline from students for success. It is of interest to document the necessary motivational factors inclining students to a life of the medical profession. Embarking on a life of medical practice without the proper enthusiasm will not be enough to withstand the immense amount of stress involved [1].

There are multiple motivational interactions that can impact the decision of medical pursuit, ranging from the closest of relations “family” to the non-related “mentors”. Family members being the first influence on individuals from birth have a role to play in the future aspiration of the individual, before the act of self-thinking and independence is initiated. Types of families could range from a “career” oriented to a “non-career” oriented family. Initial exposure from family shapes an individuals’ perception of life. Friends being the next motivational relationship will tend to guide an individual in the development of similar interest and hobbies. An individual is susceptible in doing things to impress friends making them minor role models [2,3].

A major uncompromising motivational factor is that which is within and drives a person. It is the personal interests that guide a person into making choices such as hobbies, selecting companionship and career. The attractions of an individual determine the choices made. Widely used media such as the internet have an motivational effect on children [3]. The type of program an individual watches influences their thoughts. There are many medical programs that could contribute to a medical student’s career choice.

Being influenced by external relationships like family and friends can be limited. Without personal motivation, the interest of pursuit is bound to diminish. Developing a curiosity could arise from a personal instinct of interest in the medical profession. It is possible to have felt a natural inclination towards medicine from a young age. Other ordeals like personal experiences could have led to an interest. After all people are but defined by their personal experiences [4]. In a society where financial stability is of high importance, sustaining a lifetime of never ending responsibility of family and comfort living is necessary. The struggle for high-income profession like medicine is a means of financial ease. Nevertheless, the ever-growing populations have led to an increase in demand for medical practitioners. Medicine is regarded to as a profession of high prestige [5].

Considerations of the factors mentioned have guided us into performing this study. We have considered age, gender and having mentors as possible motivational factors. All in all these considerations should help understand better why an individual would show interest in being a doctor.

2. Materials and methods

A cross sectional analysis was conducted using a questionnaire employing MD students of All Saints University School of Medicine. A medical school located in the Caribbean, All Saints University currently enrolls students in both the Pre-Med and MD program. The MD program is divided into Basic medical sciences and Clinical rotations. The basic medical sciences consists of 5 semesters (MD1-MD5).

The population of study included 201 students from the MD1 to MD5 class: 49 students from MD1, 38 students from MD2, 36 students from MD3, 52 students from MD4, 26 students from MD5. The survey was conducted within the January to April semester of the year 2016, during a mid-school class break. The participants were assured anonymity.

The questionnaire included questions about class, age, gender, “Do you have a mentor?”, “ How many family members are in the health care profession”, “who inspired you to join medical school” and finally “ which of the following would be your major reason for joining medical school”.

The information derived from the survey was then represented in excel sheets using a manual created by the research team to help understand and statistically derive a result. The information was then imported to Stata IC 14, which was used to tabulate and compare variables to identify any statistical significance. Statistical significance was kept constant at $P < 0.05$.

3. Results

Amongst our sample population 59.5% of students said that 'Service to Humanity' was their primary reason for pursuing medicine as a career. The second most common reason chosen by students was 'Respect and Honor' at 12%, 'Knowledge' and 'Family Expectation' were tied at 8%, 'Other' was chosen by 6.5%, and 'Financial Gain' was chosen by 6%.

When gender was tabulated against reasons for choosing medicine as a career the P value was 0.479, indicating that there was no statistically significant correlation. The results showed that females (63.48%) were slightly more likely to choose 'Service to Humanity' as their primary reason than males (54.12%). Also, males (8.24%) were more likely to choose 'Financial Gain' as their primary reason than females (4.35%). Finally, males (9.41%) were also more likely to choose 'Other' than females (4.35%). The remaining reasons showed little statistical variation between the genders. See (Table 1).

When mentor status was tabulated against reasons for choosing medicine as a career the P value was 0.022, indicating that there is a significant statistical correlation. 66.67% of people who have a mentor chose 'Service to Humanity' as their primary reason for choosing medicine, whereas only 52.81% of students who do not have a mentor chose 'Service to Humanity'. However, the starkest contrast between the two groups was seen in those who chose 'Financial Gain'. Only 0.93% of students who have a mentor chose 'Financial Gain', in contrast to 12.36% of students without a mentor, differing by a factor of more than 13. Those with a mentor were also slightly less likely to choose 'Knowledge' or 'Family Expectation' and slightly more likely to choose 'Respect and Honor', with negligible difference in those that chose 'Other'. See (Table 2).

Whether or not the students have family members in medicine showed no statistically significant effect on either the reasons for choosing medicine (P value = 0.435), or the inspiration for choosing medicine as a career (P value = 0.219). However, it is interesting to note that 13.33% of those who have no family members in medicine chose 'Family Expectation' as their primary reason for choosing medicine as a career, versus only 5.71% of students who have at least one family member in medicine. When divided by the number of family members in medicine, the only group who were more likely to choose 'Family Expectation' as their primary reason was the

group of students with 6 or more family members in medicine. In this group 18.18% chose 'Family Expectation'. It should be noted however that the number of students who had 6 or more family members in medicine were only 11 students, making it difficult to form a general statistic. See (Table 3).

Table 1: Comparison of Gender and Reasons for Choosing Medicine (P value = 0.479)

Reasons for Choosing Medicine	Gender	
	Male n (%)	Female n (%)
Financial Gain	7 (8.24%)	5 (4.35%)
Service to Humanity	46 (54.12%)	73 (63.48%)
Knowledge	8 (9.41%)	8 (6.96%)
Respect and Honor	9 (10.59%)	15 (13.04%)
Family Expectation	7 (8.24%)	9 (7.83%)
Not Mentioned	8 (9.41%)	5 (4.35%)

Table 2: Comparison of Mentor Status and Reasons for Choosing Medicine (P value = 0.022)

Reasons for Choosing Medicine	Do you have a mentor?	
	Yes n (%)	No n (%)
Financial Gain	1 (0.93%)	11 (12.36%)
Service to Humanity	72 (66.67%)	47 (52.81%)
Knowledge	7 (6.48%)	8 (8.99%)
Respect and Honor	14 (12.96%)	9 (10.11%)
Family expectation	7 (6.48%)	8 (8.99%)
Not Mentioned	7 (6.48%)	6 (6.74%)

Table 3: Comparison of Family Members in Medicine and Reasons for Choosing Medicine (P value = 0.435)

Reasons for Choosing Medicine	Family Members in Medicine	
	None n (%)	One or More n (%)
Financial Gain	4 (6.67%)	8 (5.71%)
Service to Humanity	31 (51.67%)	88 (62.86%)
Knowledge	6 (10%)	10 (7.14%)
Respect and Honor	8 (13.33%)	16 (11.43%)
Family Expectation	8 (13.33%)	8 (5.71%)
Not mentioned	3 (5%)	10 (7.14%)

Interestingly, 70.15% of students said that they have at least one family member in medicine, although only 23% of students chose 'Family' as their source of inspiration for choosing medicine as a career. Among the students who have no family members in medicine 20% listed family as their inspiration, whereas 24.29% of students who have at least one family member in medicine listed family as their inspiration. (Table 4)

The majority of students (71%) chose 'Personal Interest' as their inspiration for choosing medicine as a career. The second most common source of inspiration was 'Family' at 23%. Only 4.50% listed 'Other' and 1.50% listed 'Friend' as their inspiration for choosing medicine as a career. 20% of those who have no family members in medicine still chose 'Family' as their primary inspiration, versus 24.29% of students who have at least one family member in medicine, indicating that having family members in medicine had little correlation with whether or not family served as a source of inspiration. (Table 5)

Table 4: Comparison of Number of Family Members in Medicine and Reasons for Choosing Medicine (P value = 0.500)

Reasons for Choosing Medicine	Number of Family Members in Medicine						
	0 n (%)	1 n (%)	2 n (%)	3 n (%)	4 n (%)	5 n (%)	≥6 n (%)
Financial Gain	4 (6.67%)	2 (3.85%)	1 (2.5%)	2 (11.76%)	1 (10%)	2 (33.33%)	0
Service to	31 (51.67%)	35 (67.31%)	24 (60%)	12	6 (60%)	3 (50%)	5 (45.45%)

Humanity				(70.59%)			
Knowledge	6 (10%)	3 (5.77%)	2 (5%)	1 (5.88%)	1 (10%)	1 (16.67%)	1 (9.09%)
Respect and Honor	8 (13.33%)	6 (11.54%)	6 (15%)	0	1 (10%)	0	3 (27.27%)
Family Expectation	8 (13.33%)	2 (3.85%)	3 (7.5%)	0	1 (10%)	0	2 (18.18%)
Not Mentioned	3 (5%)	4 (7.69%)	4 (10%)	2 (11.76%)	0	0	0

Table 5: Comparison of Family members in Medicine and Source of Inspiration for Choosing Medicine as a Career (P value = 0.219)

Source of Inspiration for Choosing Medicine as a Career	Family Members in Medicine	
	None n (%)	One or More n (%)
Family	12 (20%)	34 (24.29%)
Friend	0	3 (2.14%)
Personal Interest	43 (71.67%)	99 (70.71%)
Other	5 (8.33%)	4 (2.86%)

4. Discussion

The study was conducted to investigate motivational factors that guide medical students into pursuing medicine as a career choice. The result of the study conveyed that “personal interest” is the most notable motivational factor driving medical students into pursuing medicine, yielding a survey value of 71%, followed by inspiration from family and other reasons respectively. This supports the study conducted by Badria and group, which claims personal interest as the major reason for joining medical school [6].

There are many reasons why a person would be motivated to join medical school. The motivation can arise either by the student’s individual choice or several other motivational factors [7, 8]. In this research, it was observed “service to humanity” was the greatest motive chosen by 59.50% of our sample size. This suggests that majority of medical students feel the need to care and provide for their patients. Although, some might still keep financial goals in mind but it is of a secondary ambition. In our statistical report, only a low 6% chose financial reason, which suggests most people are not willing to submerge themselves into the immense amount of stress

associated with medical school just for financial gain. There is a social belief that doctors make more money than any other profession, but that is only true when referring to many years of practice. In the initial years of career, a physician earns a salary, not too different from other professions [9]. Doctors are generally more respected and regarded of higher standards than many other professions; they are treated with more admiration because of their education [5], this might be the motivational factor for 12% of the students that selected respect and honor as their motivation.

Our study observed that males (27.38%) have more “family” influences in regards to pursuing medicine than females (19.83%). This is arguable, as most families prefer to guide their male offspring into a path of success as men are guided into a future of family responsibility. Medicine being socially regarded as being at the top of the pinnacle of success in today’s society, we can then argue males would be expected to be in the medical profession. Most families are more lenient with the pressure exerted on their female offspring in regards to electing a high status profession. Hilary A. *et al* claims gender is important in the career picking decision, as the ruling to have a family is more of a substantial influence on women than men [10]. Our result also shows that more females 63.48% chose “service to humanity” than males 54.12%, whereas, more males 8.24% chose financial motivation than females 4.35%, implying that males think more toward the financial benefits than woman. Interestingly enough, 13.04% of females chose “respect and honor” compared to a 10.59% of females, again although slight shows females are less financially motivated than males.

An interesting finding is that 100% of the people that selected “friends” for inspiration also indicated “service to humanity” as their reason of choice. This could be because they experienced a close friend endure a medical dilemma, they might feel the best thing to do is to help others by going into the medical profession. Helping others could be a way of making peace with themselves for not being able to help their friend who suffered the ailment. This finding is somewhat similar to the 78.81% that chose “service to humanity” as a reason and also indicated “personal interest” for inspiration. They could have been motivated by just observing that the world in general is filled with misery and the preeminent thing to do to help in whatever way they can by going into medicine, ignoring financial goals. 81.25% of the student’s, who selected the reason “knowledge” for joining medical school and also indicated “personal interest” as an inspiration, could suggest personal curiosity for the human body as a reason to join medical school. A study showed that Intellectual capabilities of parents often have large impacts on what the children desire for a career option [11]. This could be the reason 18.75% of students that selected “knowledge” as a reason for joining medicine and “family” for inspiration. This could be due to the presence of a smart role model in the family that has motivated them into their enthusiasm for medicine.

91.67% of the students who chose “financial gain” have no mentors, this is an interesting observation because the individuals whose primary aim is financial motivation might not be bothered about mentors to guide them into a more fulfilling part of medicine, ignoring financial goals. They might not know the significance of mentors or they might have grown in a low- income family setting. Seeing their family struggle through difficult financial situations might have motivated them to join medicine, believing it is a high-income profession. It was also detected that there was just a slight increase in the number of students with mentors 55.10% compared to 44.90% without mentors, this just proves that with or without mentors both groups are likely as well to be equally ambitious into the pursuit of success. As discussed by Hin Hin Ko *et al*, mentors have an impact in

compelling ambition and focus [12]. 60.50% of people who chose “service to humanity” have mentors and 66.67% of those who have mentors also chose “service to humanity”, while just 52.81% of the group without mentors chose service to humanity. It is also noted that 60.87% of the people that chose “respect and honor” also have mentors, this just proves that mentors guide students into a more successful career setting financial goals as a secondary task [12, 13, 14]. This result backs the previous statement about people without mentors tend to lean more towards financial benefits [13, 14, 15, 16].

Another related finding to mentors is that 74.77% of students with mentors have family members in medicine as oppose to 62.50% who have no family members in medicine. This suggests that the family member in medicine have persuaded the student into attaining an advisor and students with family members in medicine are more likely to have mentors [12]. A majority of medical students have a family member in medicine, 69.64% of students have members in medicine, and this finding could suggest a member of the family who is a practitioner is an important motivator for the student [17,18,19,20].

Surprisingly, 20% of people with no family members in medicine chose family for inspiration. This could suggest an ailment that has befallen a family member and has inspired the student to pursue medicine to try to find a cure. Could possibly influence the need to help others and prevent them from going through the same calamity the ill family member went through. 25% of the people who chose “family expectation” as a reason for pursuing medicine also chose “personal interest” as an inspiration, this suggests that there could be family pressure influencing their career choice.13.33% of people who have no family members in medicine chose “family expectation” as their reason for pursuing medicine. This could be aspiration from the parents wanting a doctor in the family; the student’s career goals have been shadowed by the parent’s vision [6].

Surprisingly, only 5.71% of people with at least a family member in medicine selected “family expectation”. This could suggest maybe due to the presence of a family member in the field of medicine, there is not much pressure for there to be another practitioner in the family, or maybe after realizing there is a lot of stress associated with medicine, only a few families are willing to encourage their children to follow through with the medical profession. This result was contrary to a research conducted by Bernard *et al* [17] suggesting that many doctors encourage their children to be doctors.

5. Conclusion

To understand the reasons why a person would chose to undergo the rigors of medical training, to stand upon the bastions of human wellbeing and defend their fellow man from the slings and arrows of disease and suffering, we need to look no further than human compassion. Service to humanity is by far the most salient reason for choosing medicine as a career amongst aspiring doctors, indicating that altruism is still at the heart of what it means to be a doctor, and that the tenets of the Hippocratic Oath are still alive in the spirit of the modern physician. While medicine offers great financial gain, honor, and knowledge, these factors take a back seat to the desire to be of service to ones fellow man.

Medicine is a fascinating career choice, that captures the minds and hearts of many, and not surprisingly personal interest in the profession is by far the greatest source of inspiration for medical students. Above the influence of family, and above the influence of friends, the inspiration of medical students to take up medicine is

derived from within themselves; from their own interest and fascination with the field.

Medicine is a dynamic profession. The face of medicine is constantly shifting and changing, as are the reasons people may choose to join the profession. However, the reason why a thing is done is not a neutral issue. The reason is important. The reasons why we choose to do what we do will affect the way we practice medicine, they will affect the way that society sees medicine, they will influence society's trust in doctors, and they will determine whether our profession remains a noble pursuit of service to humanity, or becomes simply a marketplace, where health is just another commodity sold for the advancement of personal ambition.

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