# Studying Medicine: between Fantasy and Reality

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## Abstract

Qualitative educational research was done during a curriculum redesign exercise for the undergraduate program in Human Medicine during 2010-2011. The purpose of this study was to identify the professional life plans and motivation of students in order to guide medical training at the UNACH, as the base for medical education. The data was collected with different methodologies, and were considered as factors to consider during the curriculum redesign.

There were 154 participants from first and tenth semesters (2 and 4 groups, respectively). Participants responded to an inquiry which included three questions referring to their age, gender and course load. The information that was collected was categorized according to content analysis.

The motivations shared by the students, indistinct of their gender, focused on the vocation of service and their interest in the human body with the intention of relieving pain and suffering caused by disease. Most students intended to continue to study a specialization and sought to acquire social prestige in the medical field. However, the individual's perspective focused on almost exclusively financial success, omitting humanistic motivation to relieve disease. Therefore, professional development has been measured in those terms.

The discussion focuses on the nuances of such future expectations of the students given the context.


*Keywords:* medical education, curricular design, Chiapas, educational research.

## Introduction

Evaluations of different classes and origins associated with medical education are closed instruments. The closed instruments (scales, multiple choice, dual answers) of perception and opinion, among other aspects that evaluate medical education, imply that those who evaluate know the behavior of the variables with sufficient depth in order to determine the possible answers that would be obtained during their application. There is nothing further from the truth when, in

this case, you are dealing with projects of professional life of the Medical students at the Autonomous University of Chiapas.

The curriculum from 1993 had its epistemological origin centered on community medicine, with a preeminent humanistic focus oriented on the social function even in the face of recognizing the scientific and technological advances of genome medicine. Nevertheless, in the hidden curriculum, there was not only a devaluation of community medicine but a favoring of a utilitarian vision of the medical profession among students. The current curriculum of the undergraduate medical program at the Autonomous University of Chiapas consists of ten semesters, one year of Rotating Undergraduate Internship and an additional year of Social Service, which is mandatory by law.

The fact the students are self-taught, and the role of the academic personnel at the Medical School is blurred regarding ethical aspects, configures a contextual framework that offers a greater complexity in the training of the doctor in this public university located in southeastern Mexico.

Living in the first decade of the 21st century, we bear witness to intense modifications of social arrangements. The market economy, according to Mendez (2010), is oriented towards the search of the satisfaction of individual needs in detriment to the public needs. This is expressed as individualism, among other characteristics of human behavior.

This phenomenon is congruent with the focus on globalism of Granda ( 2006) which in a critical manner identifies that social changes should not be considered an irrevocable fate and that rationality and efficiency of wild capitalism should not dominate humanism, attending to indifference without intervention.

Humanism is one of the privileged features in the field of medicine, according to the 1993 Curriculum for the undergraduate program in medicine from the Autonomous University of Chiapas.

A comprehensive revision of the curriculum is an elemental pedagogical principal, particularly in higher education programs focused on medical education.

In the process of curricular revision, it is relevant to define the goals of medical students with the objective of analyzing the epistemological relevance of medical education.

As far as educational investigation is concerned, the institution takes the role of beneficiary of the project, with a particular benefit to the Committee of Curricular Redesign and the Alumni program.

The purpose of this investigation is to come closer to understanding the professional life project and motivating forces that guide the development of an UNACH doctor.

## Methodology

Educational investigation refers to the application of a qualitative methodology. (Buendía y Colás, 1998; 1998a). It is fair to assume that the student's perceptions about their own arguments for studying medicine are different according to their maturity level and several other aspects. The participants were students from first and tenth semesters from the medical program enrolled at the Autonomous University of Chiapas.

The hypothesis was divided in that the recently admitted students had a distinct perception to those who were soon to finish the academic phase of their studies. At the beginning of the school year of 2010 and 2011, an instrument with open questions was applied to two groups from the first semester and four groups in the tenth semester at the Medical School. They were answered anonymously-only identified by age, gender, and semester.

In this manner a sample of 154 participants were considered as a non-probabilistic class and convenient type. In the second school year of 2011, the School had a registration of 1200 students without counting the undergraduate internship rotation and social service.

The instrument consisted of three questions, I) Why are you studying medicine? II) What is your professional development project? And III) How do you see yourself in ten years? The instrument was applied during the first session of the school year, and it was requested that there was no communication between the participants, and that they may express their answers for the length that they desired. It is important to note that these instructions generated numerous different answers, a number greater than the number of participants.

The data that was collected was used to develop analytical categories for each of the three questions. The variables of age and gen-

der were captured in an Excel database, from which central tendencies and dispersion measurements were developed. The technique of content analysis was applied to the three open questions (Hernández, Fernán¬dez y Baptista, 2004) in order to achieve an interpretation of the data that was close to the reality described by the students.

## Results

154 answer sheets were used for the analysis corresponding to an equal number of participants. Of these, 65% belonged to the youngest group (first semester); a little more than half were men (54%). The composition of the participant sample, according to age, is summarized in figure 1.

| Measurements /age | Gender and Group | | | |
|---|---|---|---|---|
| | Women | | Men | |
| | First | Tenth | First | Tenth |
| n=154 (%) | 47 (30.5) | 24 (15.6) | 52 (33.8) | 31 (20.1) |
| Average | 19.2 | 23.7 | 19.1 | 24.3 |
| Mean | 19 | 24 | 19 | 24 |
| Mode | 19 | 24 | 19 | 23 |
| Standard deviation | 1.0 | 1.0 | 0.8 | 1.6 |
| Range | 6 | 4 | 2 | 7 |

*Figure 1.*

The sample was balanced equally according to age, with males representing a slightly higher number (53.9%); nevertheless, there was a majority of young males (1.5:1) in accordance with their school group. Among females, the ratio was two to one, in favor of the youngest.

## Why study medicine?

162 answers were obtained for this first question, and four categories were identified for analysis, which were described in order of frequency: the category that obtained the highest frequency of answers is what we called "motivating perception", which referred to the appreciation that society dotes on the medical field and that motivates students to study medicine in order to acquire the characteristics of those who practice it.

In total this first category more than half of the answers (51.2%), were described in various ways. The most common answer was the "conviction of service, as related to the abnegation of the professional practice." The second most common argument for studying medicine was for the "interest in the functioning of the human body and the possibility to cure disease". In other words, the motivation to study medicine is separate from the attributes that society has conscribed to those who practice this profession. ( See figure 2.)

| Categories | | Women | Men |
|---|---|---|---|
| 1. Motivating perceptions | Interest in medicine and the human body | 24 | 33 |
| | Conviction to serve | 47 | 25 |
| | Give back to society | 0 | 22 |
| | Noble and humanistic career | 11 | 17 |
| 2. Personal and familiar | Conviction and vocation | 48 | 26 |
| | Religious motives | 6 | 1 |
| | Only option, self-imposition | 5 | 1 |
| | Family pressure | 4 | 8 |
| | Integral development | 3 | 12 |
| 3. Social perception | Social prestige | 0 | 17 |
| | Influence of mass media | 1 | 0 |
| 4. Employment | Economic motivation | 4 | 11 |
| | Have a specialization | 0 | 1 |
| | Stable employment | 2 | 1 |
| 5. Undefined | Undefined | 0 | 1 |

*Figure 2.*

The second category was organized under the title of "personal and family reasons". The conviction/vocation to study medicine was mentioned practically three out of four times. This answer was understood as the certainty to possess the abilities and ideal disposition to be a doctor. In other words, the motivation is derived from the personality traits of those responding. It is important to mention that family pressure and religious motives were indicated in the answers.

The third category was called "social prestige", and was grouped independently of the first situation in that the group referenced to how society has idealized doctors and that for the simple fact of obtaining a degree they would have the attributes that they obviously now lack.

The "work force" is the fourth category. Women placed the possibility of entering into the workforce in last place; there were only four mentions of monetary retribution that the discipline can generate.

Men made similar comments regarding the motivations to study medicine. In this first category-the motivating perception-they placed the interest and curiosity for the functioning of the human body first, as well placing the possibility of service in second place-opposite of what women responded.

The options within this category were classified differently for the individual responses, since the retribution to society referred to the belonging to a particular social group to who they owe the opportunity to be a doctor. The conviction of service referred to the possibility of personal interaction in the curing of a specific disease.

Among men the second category was occupied by the "personal and/or family motives", where the recognition of abilities is the attribute which favors career choice. It should be noted that between men the presence of family pressure and religious motives was also identified. (See figure 2).

In third place for career selection for men is "social prestige" which is shaped by society. Although in the same position, the frequency that males mention this motive is substantially higher.

It is important to remember that the differences between genders are minimal, in as much as participation in the group as in the nature of the answers.

The fourth option that males indicated referred to those that, apparently, offer the job. They wrote sentences related to income and alluded to economic success in stable employment. It is necessary to note that there were cases in which they did not want to – or maybe were unable to-identify the motives that guided them to choose to study medicine. The situation is complex, since it is possible to speculate that perhaps they were unable to identify or verbalize their personal decisions.

# Personal development project

Within the personal development project that the women suggested was the first category in which appears a clear interest regarding being placed in a workforce that allows them to have a stable job, and that they could develop their knowledge and abilities a bit more than hypothetically they would acquire during the course of their training.

Practically four out of five women clearly identified their intention to study a specialization (79%). In this category it is important to note that the expectations, in many cases, were short term. This is proven by the intention to surmount the last two cycles of their studies (internship rotation and social service), which can be considered in this context as a great challenge. (see figure 3)

| Categories | | Women | Men |
|---|---|---|---|
| 1. Employment | Have a specialization | 56 | 52 |
| | Finish a career | 34 | 35 |
| | Service | 14 | 5 |
| | Stable employment | 8 | 9 |
| | Success in social service and internship* | 3 | 0 |
| | Dedicate myself to teaching and investigation | 2 | 5 |
| 2. Obtaining status | Social prestige | 12 | 11 |
| | Professional success | 10 | 9 |
| | Economic retribution | 2 | 0 |
| | Open a private clinic | 0 | 4 |
| 3. Personal and family | Integral development | 7 | 5 |
| | Religious motivation | 2 | 0 |
| 4. Undecided | Have no idea | 0 | 3 |

* This refers to the following curricular phase, the undergraduate rotating internship and social service

*Figure 3.*

As a second category, according to frequency, is obtaining status which is indispensable for women during their training- achieving or having achieved all of the characteristics-illusory or not-that a doctor possesses: to be cultured, be loved by others, be respected, have answers to questions that affect people's lives ( health, sickness, medical attention), among others. Professional success and economic retribution are also included in this category but to a lesser degree.

In the third and final category we find the reasons or family and personal motives for how to develop a career without leaving aside their personal development, such as their religious motives.

In the second question, in order to express their expectations of professional development, the men stand out with a much greater frequency of mentioning their dedication to study a clinical specialization (52%), similar to what was expressed by the women. In very few cases men mentioned dedicating themselves to serve as a professional development project which contrasts with their answers as to why they chose to study medicine. There were much fewer mentions that they consider the possibility of dedicating themselves to investigation and teaching. ( see figure 3)

Many men mentioned that finishing their studies successfully as a professional development project, which is congruent with the fact that there are an important percentage of young men beginning their studies. Nevertheless, they are unable to get some idea that the conclusion of their undergraduate studies is an essential element of their professional development. If they are lacking in their professional development it is impossible to achieve subsequent development. This condition applies to all students.

The third category is obtaining status, where the achievement of social prestige is reiterated as the most important factor for these students. Some only mention their yearning for professional success, which is as subjective as achieving social prestige. Much fewer men, even though the women did not mention it, plan to professionally develop independently in a clinic and/or private practice.

When considering all of the participants, there is agreement that there are a greater number of men with an undefined professional development project. Some responded with much sincerity that they had no idea what they would do to achieve professional development.

## How do I see myself in ten years?

The students were asked about their future plans over the next 10 years and what they would be doing during this time, considered medium term. Among women, the first important category according to frequency refers to status and financial success, where the most representative element is to have obtained a stable job with all that

it implies. Within this same category but with a lesser level of importance we found having achieved social prestige, have a private practice or clinic, and a stable successful job. The element that was least frequently mentioned was the economical retribution from their job. (See figure 4).

| Categories | | Women | Men |
|---|---|---|---|
| 1. Status and financial success | Social prestige | 6 | 15 |
| | Stable employment | 49 | 46 |
| | Open a private clinic / office | 5 | 0 |
| | Economic retribution | 2 | 5 |
| | Successful job | 3 | 15 |
| 2. Professional development | Have a specialization | 33 | 23 |
| | Conviction to serve | 6 | 0 |
| | Continue studying | 4 | 9 |
| | Be dedicated to teaching and investigation | 3 | 2 |
| | Work in a marginalized community | 2 | 2 |
| | Integral development | 3 | 0 |
| 3. Personal and family | Form a family | 7 | 14 |
| | Religious motives | 0 | 1 |
| | Family independence | 1 | 0 |
| 4. Undefined | Have no idea | 3 | 0 |

*Figure 4.*

As the second category of this investigation alludes to professional development, where having a specialization is the highest priority in this group of female medical students. The remaining elements of this category appear much less frequently, for example the conviction to serve others, continue on to study a masters or doctoral degree, as well as dedication to teaching, achieve an integral development and work in a community of limited resources. These comments are detached from the motivations expressed in the first question.

The third category refers to family and personal motives. In this case, the major priority of this category refers to forming a family. In some cases specifics were given, whether it was the partner or of their children.

Also in this category there was indecisiveness, which is worrisome. It doesn't matter that it is presented in the categories as one of the least important elements, rather that it was present at all- The inability to decide and define what one will do at the end of studies.

After questioning the men about how they visualized themselves in 10 years in the first category that refers to professional de-

velopment, the most important option refers to having a stable job; in second place with half the frequency-having a specialization and working in that field. Other least frequent options refer to continuing their training, understood as studying a masters or doctoral degree, as well as imagining serving others when there is physical malaise or sickness present. The least mentioned element was dedication to teaching and investigation.

The second position in this corresponding category was obtaining status and financial success, understanding this as how to achieve all of their goals and expectations that they proposed, obtain social prestige- although none of the 154 instruments that were answered specified what they referred to by "success", to get a desirable financial retribution and open a clinic or private practice.

The final category referred to family plans where the principal goal was to have a family and to have mixed religious motives. It is assumed that the greater that this topic was mentioned corresponds to the priorities of those who responded to the question.

## Discussion

In the participants discourse at least three central ideas are identified: studying medicine for a vocation to service; aspire to become specialists and have economic success, and as a consequence enjoy social prestige. However, a significant number of arguments of a different nature arose, including religion and family pressure. An unknown amount of students are children or family members of physicians.

Although participants clearly expressed that their motivations are specifically humanistic (dedication to service, not wanting to see people suffer disease, among others), responses become contradictory. In the same role they say they want financial success, personal welfare and acquire the prestige associated with the title. There were no significant differences in responses according to neither sex nor age.

From psychoanalysis, father and mother figures have complimentary functions that permeate the practice of medicine. This discipline embodies –for those who practice it - both functions, paternal and maternal. In the Western tradition, a physician is recognized

as a person of prestige in a society (phallic symbol), who should be wise (intellectual superiority) and possess deep knowledge of the human body (omniscient). They should attend to the patients (care of the body) and prescribe treatments (regulate behavior); they have the power to invade the vitality of the patient (physical power over the body), by one's own wishes. Additionally, they possess attributes that fulfill the core functions of the mother figure: know how to care for others, give solace in the case of anxiety, suffering, or pain; to provide a sense of security and protection to those who go to them and, finally, demonstrate an image of nobility, selflessness and humanity. The stereotypical image of the physician is a smiling gray-haired man that inspires safety and comfort, always wearing a white coat and a stethoscope around his neck (Jullien , 1990 ) .

In the questionnaires we found some mentions of deities and religious figures. It is important to remember that the (principal) figures within the Catholic religion ( considering that most of the participants are Catholics ) are men – which is not coincidental - and in whom are also combined both psychic functions : God, the caregiver, makes one feel good and comfortable as would a person who fulfills the maternal function-at the same time providing protection , care, weapons in the defense of an attacker ( physical , psychic or spiritual ) , prescribes guidelines of conduct and exercises power , and therefore also plays a paternal role . In the participant's writings, there is a repeated reference to this power – the power of cleaving into a living body, introducing their hands into people, change their bodies (by surgery) and eliminate disease. That power generates the perception of superiority (Foucault, 1963 , 1979) and omnipotence.

From this perspective some statements of the participants can be interpreted, who " do not want to be like God " but rather " want to be instruments in his hands," do not conceive (or maybe they do but do not admit it) that they want to have equal or greater power than someone who is considered a deity, but want to be " the next in line" in the hierarchy.

Returning to reality, Mexico is a country with 52 million people living in poverty and Chiapas is one of the entities in the country with the highest levels of social need (CONEVAL , 2011 ) . This situation strongly affects the probability that the population is financially solvent for regular medical care, without omitting that poverty is a crucial factor for collective health and disease.

## Conclusion

Medical students at the UNACH have an overrated perception of medical prestige, created by fictional characters that abound on television. They claim to have altruistic and humanistic motives but favor the satisfaction of their own needs through the practice of medicine. We believe that they are in their legitimate right to pursue a career and earn an honest income. What we disagree is that students justify and validate their motivations under altruistic arguments, which is absent in the majority of the cases.

The ideas of superiority associated with traditional stereotypes of a doctor are blurred in reality due to in part to overcrowding in medical schools, and in part for the tendency to skip the pre-eminent principle of doing good- placing the profit motive over the welfare of the patient. Therein lays the fantasy, because presently in Latin America we are witnessing a transition arising from the reforms in health systems. Among the side effects is found a radical change to the arrangements of the professional working relationship with the National Health System (Infante , de la Mata and Lopez , 2000 ) .

In this framework of reforms, the precarious situation of large sectors of the Latin American population is included, which has been omitted from the assessment that the World Health Organization and its regional office , OPS , has elaborated (Torres , 2007 ) . The author maintains the position that training of personnel has been neglected in the majority of the countries that were evaluated. To date, the national policy on medical education is geared towards skills. At the Autonomous University of Chiapas we opt for integrated comprehensive skills as the pedagogical foundation for curriculum redesign.

Considering some other elements to recognize the reality, Correa ( 2006 ) among others, argues that the social crisis and in particular ethical and bioethical values are linked to the loss of the sense of authority figures that some doctors embody- the doctor among them , the father figure. This perception is congruent with the empirical observation of increased lawsuits presented by health service users or their families because of dissatisfaction with their care or undesirable results derived from the doctor : iatrogenic or death .

Practicing a profession and enjoying the privileges that this creates is considered legitimate, however , is it questionable to have a degree that requires an investment of effort and resources for just over seven years to then reach a stark and difficult reality of unemploy-

ment and / or underemployment , even among specialists . However, it would never be pointless to reiterate that medicine is a profession that plays an important social role for the welfare and lives of people in every society. Humanism and ethics are attributes that should be required in order to study medicine.

It is under these considerations, coupled with current educational policy, that the curriculum redesign gives a new direction to its Study Plan III in the Bachelor's program in Human Medicine.

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