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Research Article

**EXPLORING FIRST GRADE MEDICAL
STUDENTS' PROFESSIONAL IDENTITY USING METAPHORS**¹Anum Shabir, ²Maryam Nawaz Malik, Iqra Afzal¹Major Shabir Sharif Shaheed THQ Hospital.

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Abstract:

Background: Although professional identity development is an important concept in medical education, the process has been well investigated from a student perspective. This study examined the metaphorical images formulated by first grade medical students in Pakistan to describe physicians in the context of establishing a professional identity, along with its limitations. Fifty four participants gave their conceptualizations of physician. The data was analyzed both qualitatively and quantitatively. Almost 200 metaphorical images were identified-comprising 5 conceptual themes. The use of metaphors to formulate and describe Professional identities can be helpful in reflecting the personal beliefs and values of matriculates to medical college and providing feedback to curriculum development.

Keywords: Medical curriculum, professional identity, metaphors, medical students.

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INTRODUCTION:

A little is known about development process through which a medical student elaborates his/her experiences during their training and how he develops professional identity. As Reisetter (5) and associates states "Professional identity is a view of oneself as a professional, plus competence as a professional, resulting in congruence between personal world view and professional view." (1)

Studies examining medical students professional identity development have shown how medical students develop an understanding about the boundaries of their profession and their professional interaction with others understanding medical students professional identity is important in gaining insight into essential aspects of medical profession such as their career decision making, motivation, job satisfaction, emotions and commitment. Moreover, existing studies about various cultures have considered physicians professional identity as a key factor in physician motivation effectiveness and retention through qualitative research.

Reports of research in which metaphor was employed as a tool for analysis exist across a wide range of medical subjects including medicine, pathology, immunology, mental health, primary health and HIV prevention. In beginning personal metaphors used to integrate the past, present and future to help them find cohesion within their lives. The power of the metaphor, is ability to "clarify meanings in the midst of complexity" making it a useful research tool in understanding the individual physician in term of particular social context.

A similar research on medical student professional identity using metaphors was done by 7 association of American Medical Colleges (4) Sandra Jarvis-Selinger, Daniel D, Pratt and Glenn Regehr. Also department of family medicine University of Nebraska at Omaha, US, Virginia Aita, Jeffery susman, Helen McIlvain, Benjamin Crabtree use metaphor as a qualitative analytical approach to understand complexity in primary research care.

Metaphors can also help medical students articulate and construct representation of themselves and their experience to promote awareness of professional practice. From this point of view, examining a variety of metaphors pertaining to medical education we might be able to gain a good understanding of how medical students see themselves, their patients, their work their health care (i.e., what it is like to be a physician).

Objective of study is to identify nature of lapses in professionalism. This study examines the use of metaphors to assure the following questions.

1. What metaphorical images do Pakistani students use to describe a physician ?
2. What conceptual themes can be derived from these images ?

What implications can be derived for medical curriculum and further research ?

METHODOLOGY:

The study was carried out among the students who have completed their primary and secondary education and eligible for university medical training. Data was collected by using a self administered questionnaire.

The study population consisted of medical students of Gujranwala Medical College Gujranwala Pakistan. Participants were informed about nature of study and permission to use materials from their essays was obtained.

A piece of paper containing the questionnaire was distributed with the instruction to complete it by focusing on five different metaphorical images.

Additionally several close ended demographic questions were included at the bottom of page. The congruence between the metaphoric topic was emphasized through the use of words 'like' & 'because'. By writing about metaphorical images that represented their professional thinking, participants were to make their implicit beliefs explicit.

The data analysis followed the methodology of metaphors analysis. The data was analyzed using SPSS software version 21. Metaphors analysis is essentially a qualitative research related to content analysis but it also allow to apply quantitative procedure to the categorical data that emerge from the underlying meanings and reasoning proffered by participants in each metaphorical relationship.

We followed the data analysis stages and actions by

1. Naming and labeling
2. Sorting (clarification and elimination)
3. Deciding the unit of analysis
4. Sample metaphor compilation and categorization
5. Establishing international reliability
6. Quantitative data analysis

In brief, all metaphorical images were reviewed, independently. In the first stage all metaphorical images were coded and papers with no clear metaphorical images were eliminated. All metaphorical expressions that express medical students understanding of a physician were masked. After coding it was analyzed by SPSS software.

Five major conceptual themes were given and lastly we calculated count (N) and %ages of metaphors in each category.

RESULTS:

There were 54 medical student overall male constituted 29.6% of sample and participants averaged 21.78 years (SD 0.925 years).

Table I: Frequency distribution of socio demographic data of sampled population

		Frequency	% age
Gender	Male	16	29.6
	Female	38	70.4
Mode of education	English	41	75.9
	Urdu	13	24.1
	Total	54	100.0

Table II: Age in year of sampled population

	n	min	max	mean	st.d
age	54	20	24	21.78	0.925

Based on quantitative results, a total of 54 study participants produce almost 200 metaphors under 5 different conceptual themes including ,

1. Physician as a personality
2. Physician as an object
3. Physician as a symbol of prestige
4. Physician as an emotional metaphor
1. Physician as a war metaphor

The physician as a personality:

It was the most prevalent metaphorical image. All 54 participants constituted this concept themes with dominant views being Friends (10) angel (5) Father (5) Mother (4). The main characteristics of this category of metaphors include following statement:

- Physician is like a teacher because he provide guidance
- Physician is like a friend because he tries to comfort his patients.
- Physician is like a mother because she is compassionate and ready to help at any time.

The Physician as an object:

All 54 students constituted this conceptual theme with dominant themes being candle (5), tree (5), lamp (4), diamond (3). The main characteristics of this category included:

- Physician is like machine because his duty is very hectic.
- Physician is like a sofa because he comforts his patients.
- Physician is like a lamp because he gives light to others.

The Physician as a symbol of prestige:

49 participants constituted this conceptual theme with dominant theme being Health (5), Diamond(5), solver (4), crown (4). The main characteristics included:

- Physician is like diamond because high cost availability.
- Physician is like Kohe- noor because he is priceless.
- Physician is like angel because people belief his words.

The Physician as an emotional metaphor:

50 participants constituted this conceptual theme with dominant themes being Care(5), love (8), trust(5), friendship(3). The main characteristics included:

- Physician is like friendship because he stands by his patients.
- Physician is like trust because he shines and like a blessing for patients.
- Physician is like contentment because he gives relief to patients.

The Physician as a war metaphor:

49 participants constituted this conceptual theme with dominant themes are following: Fighter(11), sword(5), savior(4), bullet(3). The main characteristics included,

- Physician is like fighter because he fights with disease of his patients.
- Physician is like sword because he saves his patients.
- Physician is like soldier because he plays active part.

Table III: Gender Personality Cross Tabulation

Personality	Gender		Total
	Male	Female	
Angel	1	3	4
Brother	0	3	3
Caring fellow	2	0	2
Doctor	0	5	5
Faithful leader	0	1	1
Father	1	2	3
Friend	5	6	11
Gentle man	0	1	1
Healer	0	1	1
Hero	0	1	1
Husband	0	1	1
Lover	0	1	1
Teacher	0	3	3
Mother	1	3	4
Parents	0	1	1
Scholar	1	0	1
Sister	1	2	3
Wife	1	1	2
Monster	0	1	1
Machine	1	0	1
Maseeha	0	1	1
Enemy	0	1	1
Extrovert	2	0	2

DISCUSSIONS:

This study explored medical students' perceptions of the professions through the use of metaphors which, first and foremost, offered important insights into the structure of the contemporary Pakistan medical education system. The qualitative analysis of the participants generated metaphors showed that students had positive perception of physician. For example, most prevalent images were 'kindness and help'. These findings further suggest that many physician candidates believe that they have professional duties to health related issues outside their direct clinical

practice, and that these are considered to be individual responsibilities, as expressed through community participation.

These findings are consistent with a view of professionalism in which physician have a responsibility to contribute to helping the society that grant them professional status. The learning environment influences students' perception and behavior. For instance, DHQ Hospital, where participants were educated, had experienced surgical, medical, gynecology, ophthalmology practices with

high skilled professionals in more than a dozen specialties working together to ensure quality patient care.

Certain students may have perceived a physician as an artist, a supernatural power, a savior, a healer, and a monster under the aura of these remarkable developments. Similarly, other participants within their conceptual theme defined a physician as a robot, a machine, a sofa. These may be ample reason for this result: the Pakistan health care system has recently been going through a series of crucial reforms in which the performance based pay system has skewed incentives towards hospital based employment and physician specialization.

Although not directly reflecting an impact on our finding, the potential effects of the mass media can perhaps be discussed relative to students' metaphorical images. Two participants defined a physician as 'Tipu Sultan' a warrior in their metaphorical image of a physician, suggesting that some students may derive their meaning about medicine from learning experiences that include the history of defense of the country. Medical educators can make use of these experiences to engage and involve a wide range of students by inviting them to share their thoughts and questions about their themed stories.

Medical students' another metaphor of physician was as an object. Students think of physician as a beneficial object like a candle & lamp which gives light to all. To be eligible for medical college in Pakistan education system, a student must attain among the highest score in university entrance exam. Thus in Pakistan society medical students are seen as an elite group in terms of mental abilities and knowledge even before they become physician. On the contrary, the perception of physician as a knowledge provider may be associated with kindness and help: physician should help their patients by providing knowledge or answering the patients' questions about their illness and health problems. Patients trust their physicians with their health and, indeed, with their lives.

The remaining three metaphorical concepts of physician were Prestige, Emotional metaphor, war metaphor by medical students- revealing that study participants, in citing such physician and patient-centered metaphors, may have been reflecting on their own past experiences in the medical system. According to the results, most defined physician, their aspiring professional identity, as being a significant figure. These images and metaphors of

physician have the potential to provide the language of practice for medical students and educators to engage in collaborative dialogue to achieve their goals.

Additionally, in analyzing the Pakistani context, the findings from this study indirectly highlight the need to look more closely at how medical students perceive themselves in relation to their chosen profession. The association of students' status as a trainee with these images implies both stability and changes in their beliefs of physicians over the course of their physician training.

CONCLUSION:

Curricular evaluation hinges on measuring whether the goals and objectives of course have been met by determining whether the desired change in the learner's attitudes, knowledge, or skills have been achieved.

Our findings are limited by several factors.

First, despite a substantive sample size, our study was conducted in a single Pakistani medical college. Therefore, further researches indeed to achieve a more complete picture of how Pakistani medical college students think and reason about their professional identity. Further studies may also choose to examine any effect of gender, age, and other grade level.

Second, this research has focused on a single image: that of a physician. In future studies perhaps other medical, non-medical (e.g. son, daughter) or social roles (e.g. gender) can be examined relative to students' identities.

Third, the five conceptual themes discussed in this study should be regarded as somewhat speculative, since they were 'externally devised' rather than generated by the participants themselves. As a result the dividing lines between some themes may be seen as overly arbitrary.

Finally from the methodology used, it is not clear whether participants provided their ideal images of physicians or an image based on experience. Consequently, future research might ask medical students to focus on and generate two types of metaphors: One to represent an experiential-based image and the other to represent an imagined ideal image. Comparing these two metaphors could provide avenues to understanding the discrepancies between 'real' and 'idealized' images of physicians in a medical education system.

These limitations notwithstanding, there are several potential implications of these findings on medical curricula.

First, medical educators have the responsibility to educate their students to help establish their professional identities. They need, therefore, first-hand information about the candidates to develop a better and deeper understanding of them and enhance the curriculum. Since metaphor provide simple way of knowledge and seeing the world, medical students' sense of reality and their own role in their accomplishments of their future health care roles.

Second, first grade is a critical stage in medical education. In identifying beliefs at this level, medical students can reflect on their current understanding of the profession to discover points that help or hinder their progress. The role they considered for themselves, and the perception underlying these, can persist over times and, eventually, transform into erroneous beliefs that Become resistant to change: metaphor analysis as a reflective tool enables students to recognize and challenge implicit ideas and assumptions that may result in change to medical education practice. It can also heighten self-awareness, which, in time, lead to informed educational decision making by both students and professor_ including thinking outside the box of accepted cognitive and situational guidelines.

Clearly, role perception of becoming a physician might change considerably once they enter medical college or progress throughout the different stages of becoming a physician. After becoming aware and contemplating their own images, medical students may entertain alternative metaphors for personal consideration. In this way a process of change could be initiated though awareness of self-chosen images, comparison with alternatives, and the identification of new metaphors more consistent with their own self-images.

In the words of Gills and Johnson, metaphor can help us 'understanding the selves we want to become a despair of becoming.....the selves we have been and the selves we escaped being.....[as well as] the selves we are able to become'.

In this worthwhile endeavor, metaphor may be a most potent cognitive device

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