COMPARATIVE PERFORMANCE OF PUBLIC AND PRIVATE SECTOR HEALTH EDUCATION IN PAKISTAN: PARENT’S PERSPECTIVE.

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Objective: Objective of the present study was to identify the perceptions of parents about performance of public and private sector health education institutes and parameters of their preference while choosing a medical or dental college for their children.

Methods: It was a qualitative study by design and parents of FSc and A-Level students were selected for semi-structured interviews. Purposive sampling was done for inclusion of participants and grounded theory approach was used for data collection and analysis. Constant comparative method was used for thematic content analysis. Computer Aided Qualitative Data Analysis Software NVIVO was used for data management and analysis.

Results: Four major themes including, affordability, college standard, academic excellence and patient exposure emerged from the data. Parents generally perceived private medical colleges low in performance and less trustworthy as compared to public sector health education institutes.

Conclusion: Majority of parents perceived Government medical and dental colleges as their first option because of low fees, strong infrastructure, more competition and patient exposure, lower faculty turnover rate and more confidence in institute recognition. While private colleges were low on their priority list.

Introduction:-
Medical profession is still the most sought after profession in Pakistan, and there are thousands of brilliant students who wish to join medical colleges.1 Most of the students are unable to get admission in public sector medical and dental colleges due to the lack of seats, high merit and tough competition.1, 2 There is a great shortage of doctors in the country, 3 therefore to fulfill the demand of public and to overcome shortage of government medical and dental institutes there has been a massive growth in the private medical education sector in recent years. However the private colleges are very expensive and standard of most of private medical colleges has been observed unsatisfactory, especially when the factors like infra-structure of college, patient flow in affiliated and constituent teaching hospitals, entrance criteria of students and faculty turnover rate is compared with public sector colleges. This paper focuses on perceptions of parents about performance of public and private sector health education institutes and parameters of their preference while choosing a medical or dental college for their children.
Methods:

This study utilized qualitative grounded theory research approach. The study was ethically approved from an institutional review board (IRB). Duration of study was eight months starting from December 2014 to August 2015. Purposive sampling was done initially and parents of FSc and A-Levels students living in Rawalpindi, Islamabad, Lahore and Mirpur Azad Kashmir were included in the study. A sample size of 18 was completed based on data saturation from parents of students studying in eight different schools.

Semi-structured, in-depth interviews were used as data collection instrument. A mix of both in person and telephonic interviews were conducted with parents of students studying in different Pakistani schools including, Roots IVY School Rawalpindi, City School Islamabad, Beacon house School system Islamabad, Federal College Islamabad, Sir Syed College Rawalpindi, Kashmir model College Mirpur,

Army public School Rawalpindi and Lahore grammar School. The duration of interviews ranged from 15 to 30 minutes. A set semi-structured question guide was drawn up to obtain pertinent opinions from participants. To ensure internal validity and reliability semi-structured qualitative interview guide was developed using “AMEE guide 87 developing questionnaire” as reference. We pilot tested questions with faculty members of our institute before commencement of study for clarity and unambiguity.

Participants were interviewed in both English and Urdu languages according to their comfort level. Interviews were done in confidentiality and field notes were also maintained to increase credibility of data. Afterwards the data in Urdu was transcripted in English language by us, having command on both languages. Data collection procedure took three months and included interviews followed by transcription of each interview.

Grounded theory approach was used for thematic content analysis, so data collection and analysis occurred simultaneously. Initially data analysis was done manually using open, axial and selective codes. Data was reduced further by creating internal coherence, strong distinction between sub-themes and finally themes were refined.

After getting basic idea about categories and themes, data was entered in Computer Aided Qualitative Data Analysis Software NVIVO for data management and analysis.

Presentation and visualization of results was ensured using NVIVO data tables, flow charts, models and group queries (figures 1, 2, 3). Qualitative summaries were generated to help interpret the data according to issues and themes analyzed.

Results:

There were 18 survey participants. Age of participants varied from 33 to 52 years and belonged to middle and high socioeconomic status. All of the men surveyed were employed and generally belonged to professions including army, law, education and business. Whereas 40% of women surveyed were employed and associated with teaching profession (Table 1). All participants were Muslims by religion and they were not asked to specify their nationality/caste etc.

A total of 108 codes were created from data. Six categories and twenty subcategories were identified initially as a result of open coding (Table 2). Categories were further interlinked in the process of axial and selective coding and finally led to the emergence of four themes based on the shared views from the participants (Table 3). Themes were affordability, standard, academic excellence and patient exposure (figure 4).

Most frequently discussed theme was affordability. A representative statement from one of the interviews is as follows:

"I will like government setup, because if my child is capable he will get admission in government medical college, otherwise medical profession is so expensive that it should be managed at government level and personally I think very few private colleges are good in Pakistan but in my opinion there is no such option in front of me “(Participant 2)

The second most important theme was standard of medical and dental colleges and sub-themes were infra-structure, reputation/recognition and faculty. Representative statements for each sub-theme from different interviews are as
follows:

“I will again emphasize that standard of medical education in government medical colleges is still better than private medical colleges and we are satisfied with them” (Participant 1)

“Secondly there recognition is more. And private sectors medical colleges are not still able to establish their repute locally and internationally as compared to established government colleges and they are far behind as compared to government colleges” (Participant 3)

Other representative statements are

“I will go for government sector medical colleges, reason being EXACT case is in front of us and we don’t know to rely on whom. You have full confidence and reliance on government sector medical colleges” (Participant 5)

“I definitely want my daughter to study in government college and its main reason is faculty is much stable in private sector as turnover rate is less due to so many reasons” (Participant 18)

The third commonly found theme was academic excellence and competition. A representative statement from one of the interviews is as follows:

“If we compare government and private medical colleges, students of government colleges are better than private sector colleges” (participant 4)

The fourth and final theme emerged was patient exposure. Almost 70% of the participants considered it as an important factor to be a good physician and dentist. They believed that government medical colleges have increased flow of patients and students can well practice and enhance their clinical skills there. A representative statement from one of the interviews is as follows.

“No of patients for their practical experience is also less in private setup, so I would like my child to go for government sector” (Participant 15)

Almost 90% of the participants considered government health institutes more reliable and gold standard for medical education. Only two participants perceived private medical colleges better or at par with public colleges as far as infra-structure and experienced faculty were concerned. Majority of participants were satisfied with knowledge and skills of Pakistani doctors and dentists but almost all of participants exhibited reservations regarding attitude of Pakistani doctors. They compared their attitude with foreign doctors and found them having empathy, better attitude and values. There was no significant difference between the views and opinions of male and female participants in the study although slight differences were found between perceptions of participants demographically. Parents living in Mirpur (a small city in peripheral Pakistan) perceived private medical and dental colleges at par with Government colleges and they quoted examples of Agha Khan, Riphah University and shifa college of medicine as good medical colleges, while parents living in Rawalpindi and Islamabad (major cities) perceived private medical colleges inferior to public ones in all abovementioned respects.

Results of group query further confirmed categories and themes embedded in data (Figure 2).

Discussion:

Since past two decades, there has been rapid proliferation/mushrooming of private medical and dental colleges in Pakistan. Current number of PMDC registered medical and dental colleges is 141, out of which 50 are public sector and 91 private sector colleges (Table 4), which means private sector medical colleges have actually outgrew Government institutes. Admission criteria to public medical schools are based on qualifying entry test (NTS) examination after a tough competition with high achievers, while admission into private institutions is dependent not only on relative academic merit, but also very much on the ability of the student to afford the education. In the present study most frequently discussed theme was also affordability of medical and dental education in private medical institutes. Since education at private medical colleges is four to five times more expensive, so 90% of parents preferred Government institutes for their children. This finding is in accordance with international trends in medical education where private schools are times more expensive then government ones and most of parents there also prefer public medical colleges for their children.

Second most important theme according to interviewees’ was standard of medical colleges and sub-themes were infra-structure, faculty (number, qualification and experience), recognition and affiliation of medical and dental colleges. Majority of parents perceived government medical colleges better in all four sub areas than private
colleges. They found government institutes more trust worthy as far as degree recognition is concerned and perceived faculty as more experienced and qualified with low turnover rate which positively effects educational process of students. This finding is in contrast to other parts of the world. Some of the best medical colleges in the world are in USA and from among those the top medical colleges are in the private sector, like Harvard, John Hopkins, Stanford, Yale etc. Whereas some studies concluded that public colleges appear to be more efficient in satisfying public demand in terms of quality of provision.⁷

Another important concern while choosing any educational institute and especially medical is academic excellence and professionalism of its graduates. In our study it was found as third important theme while comparing both public and private medical setups. Different studies have explored this factor.⁸ The present study also found this factor an important constituent of college choice decision and found parents generally agreed upon the fact that brilliant students of country join government medical colleges. Participants of the study also highlighted the fact that when their children study with high achievers, they also become hardworking and focused towards high academic achievements.

Final theme emerged from the study was patient exposure in medical colleges for enhancement of clinical skills. Another majority of parents emphasized on importance of this factor in increasing competencies of medical and dental graduates. There is plenty of literature available on importance of clinical exposure and patient interaction as a key educational strategy ⁹,¹⁰ but we could not find any literature internationally on difference in patient exposure of medical and dental graduates in public and private sectors. Pakistani parents are well aware of this fact and they prefer government colleges as they know that treatment is either free or cheaper in government hospitals, so more patients are available to students for practice. They emphasized the fact that a competent doctor needs a lot of undergraduate patient exposure in his medical school.

Constant comparison and interlinking of themes resulted in thematic representation of parental perceptions regarding comparison of government and private medical colleges (Figure 3).

The results of this study cannot be generalized due to its contextual and qualitative nature. Further quantitative studies are required in this research area to increase validity of present results.

**Conclusion:**

It is concluded from the present research that parents perceived government sector medical colleges as their first option for their children reasons being low fee structures, studying with high merit peers, better infra-structure, experienced and stable faculty, and lot of patient exposure during clinical years. They further perceived Pakistani medical and dental graduates as brilliant in knowledge and skills, but majority of them put a question mark on their attitudes, values and empathy levels. Parents generally compared and found foreign doctors better than Pakistani doctors. Further quantitative studies needs to be done based on themes generated from the present study to increase generalizability of the study.

**Table 2:** Perceptions about private and public sector medical and dental education, number of interviewees who cited each theme and total number of codes generated

| Themes                                | Interviewees | Codes |
|---------------------------------------|--------------|-------|
| **Govt medical colleges**             |              |       |
| Government medical graduates          | 7            | 41    |
| More employment opportunities         | 2            | 7     |
| Politics                              | 3            | 5     |
| Better infra-structure                | 1            | 1     |
| More patient exposure                 | 2            | 6     |
| Full confidence and reliance          | 2            | 2     |
| Recognition                           | 2            | 3     |
| Make students hardworking             | 1            | 2     |
| Affordability                         | 16           | 19    |
| Education system, faculty and patient exposure | 3 | 4 |
| Few private colleges are good in Pakistan | 3 | 3 |
| **Private medical colleges**          | 9            | 27    |

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| Private medical graduates       | 4   | 12 |
|--------------------------------|-----|----|
| Lack of confidence             | 3   | 5  |
| Affiliation                     | 1   | 1  |
| Comparatively new               | 1   | 1  |
| Difficult to afford             | 8   | 12 |
| No politics                     | 1   | 1  |
| Better than govt colleges       | 1   | 2  |
| Low merit students              | 3   | 7  |
| Less patient exposure           | 3   | 10 |
| **Standard of doctors and dentists in Pakistan** | **18** | **16** |
| Foreign doctors                 | 5   | 5  |
| Not satisfied with pakistani doctors | 6   | 6  |
| Satisfied with pakistani doctors | 8   | 10 |
| **Total codes**                 | **108** |    |

Figure 1: Initial thematic analysis on NVIVO
Figure 2: Group query for perception of parents

Figure 3: NVIVO model representing perception of parents about private and government sector medical colleges.
Table 3: Themes and sub-themes

| S No | Themes            | Sub-themes                      |
|------|-------------------|--------------------------------|
| 1    | Affordability     |                                |
| 2    | Standard          | Infra-structure                |
|      |                   | Faculty                        |
|      |                   | Affiliation                     |
|      |                   | Recognition                     |
| 3    | Academic excellence|                                |
| 4    | Patient exposure  |                                |

Government medical colleges  Government medical graduates  Private medical colleges  Private medical graduates  Standard of Pakistani doctors/dentists  Foreign doctors

Better infra-structure  More patient opportunities  Affiliation issues  Comparatively new  Difficult to afford  Low merit students  Less patient exposure  Lack of confidence  Attitude problem  Better doctors

6 categories and 20 sub-categories

Affordability | Standard | Academic excellence | Patient exposure
---|---|---|---
31 | 20 | 20 | 16

4 themes

Figure 4: Thematic analysis.

Table 4: Registered public/private medical and dental colleges in Pakistan

| S No | Province    | Dental colleges Public | Dental colleges Private | Total | Medical colleges Public | Medical colleges Private | Total |
|------|-------------|------------------------|------------------------|-------|-------------------------|-------------------------|-------|
| 1    | Punjab      | 4                      | 15                     | 19    | 18                      | 34                      | 52    |
| 2    | Sindh       | 4                      | 12                     | 16    | 9                       | 14                      | 23    |
| 3    | KPK         | 2                      | 5                      | 7     | 8                       | 9                       | 17    |
| 4    | Baluchistan | 1                      | 0                      | 1     | 1                       | 1                       | 2     |
| 5    | AJ&K        | 0                      | 0                      | 3     | 1                       | 4                       | 5     |

Grand total  141,  Public  50,  Private  91

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Table 1: Participants’ demographics

| Gender  | Resident | Occupation          |
|---------|----------|---------------------|
| 11 females | 7 Rawalpindi | 2 Army Officers     |
| 9 males   | 7 Mirpur  | 2 Lawyers           |
|          | 4 Islamabad | 6 house wives       |
|          |           | 5 educationists     |
|          |           | 2 business man      |
|          |           | 1 yoga instructor   |

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