



## HUMAN'S COMPLEXITY AND MAN'S ATROCITY: CAUSES OF MEDICAL MALPRACTICES AMONG PAKHTUNS OF PAKISTAN

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### ABSTRACT

*This study investigates various socio-economic causes of medical malpractices among Pakhtuns of District Swat Khyber Pakhtunkhwa Pakistan. A comprehensive survey was conducted in Saidu Group of teaching hospitals Mingora and data was collected through structured questionnaire from 115 educated respondents through stratified random sampling with proportional-allocation method including patients, nurses, and paramedical staff. A triangulated (Qualitative and Quantitative) approach was adopted to record the responses of the respondents' perceptions regarding medical malpractices. The study reveals that various socio-economic causes contribute to the malpractices such as lack of health-education, untrained practitioners, un-sterilized procedures, lust for money, corruption and, vested interest groups. The study recommends that proper health education; awareness among people, proper health policy, ban on quackery and deterrence to drug black marketing will help reduce and eliminate medical practices.*

**Keywords:** Health, Medical Malpractice, Medical Instrument, Medical Errors, Corruption

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## INTRODUCTION

As a fundamental human right, healthcare is necessary for individual well-being. Nations have advanced technologically to ensure this right to their citizens (Naz et al. 2012). Modern technology has speeded up diagnosis to eliminate or at least reduce the human error but the battle still lies within the realm of diagnosis (IQM, 2001). The object of care revolves around the basic understanding of what the doctor perceives as human atrophy is caused by wrong perception and understanding by doctors (JCAHO, 2005). Majority of world population lives without adequate supply of food and shelter, education and health deprivation (Berwick, 2002). They are also found vulnerable to ill-health, economic dislocation, and natural disasters (Avraham et al. 2009). Medical practitioners such as physicians, dentists, nurses, midwives and other individuals are responsible for providing healthcare at community level (Baicker et al. 2007). Along with routine health issue, they have to look after personal injuries and illnesses occurring in a wide range of situations from vehicles accidents to injuries sustained playing sports to a simple tripping in the street (CBO, 2006). These injuries can be upsetting and expensive, involving costs such as hospital and doctors' fees, but more importantly they often involved a compromising of the patient's usual quality of life. Due to some laxer acts, they tend to detach from accepted standards of performing their jobs. As a result the patient's health goes worse or sometime may prove fatal (Currie and Bentley, 2008).

We naturally expect that our healthcare professionals will take great pain in treating whatever ails us as it becomes his/her moral obligation. Although, a healthcare provider usually refers to a physician, dispenser, dentist, technician, nurse, pharmacist, midwife or therapist but in many situations this responsibility is taken up by other people (CBO, 2008; Sloan and John, 2009; Kessler and Mark, 1996). This damages the reputation of the professionals and the industry and does a lot of harm to the patient in terms of health and money and is termed as "medical malpractice" (AMA, 2005; Berenson, 2005). Medical malpractice is a legal area of concern that is related to those professionals who are responsible for deviation in medical practice. In this context Bovbjerg (2005) expresses that medical malpractice is the professional negligence by act or omission by a healthcare provider in which he/she deviates from accepted standards of practice in the medical community either by mistake or on purpose and causes injury or death to the patient (Bull, 2004). Medical malpractice can be a result of miscommunication, carelessness, negligence, recklessness, lack of training or incompetence, or preventable mistakes (CBO, 2004). As a result, patient on the receiving end of treatment has to suffer medical malpractice. This also occurs in a multitude of medical situations and can include birth injuries, misdiagnosis or failure to diagnose, medication errors, medical negligence, defective drugs or medical devices, surgical mistakes and wrongful death (Timothy, 1999; Encinosa, 2005). Malpractice may account for various mistakes made by doctors or other medical professionals including misdiagnosis, mistreatment, or various types of negligence (Blendon, 2002).

At times, it can be attributed to simple misdiagnosis on part of the medical fraternity but on the other, it may be some serious medical as well as criminal offense done on purpose (Brennan, 1996). Not all errors in medical diagnosis and treatment are necessarily malpractice as there are certain risks and margins for error that arise inherently in the practice of medicine (Gibson, 2003). Negligence triggers different types of injuries by physicians, surgeons, nurses and others. These may include delayed diagnosis, wrong diagnosis, surgical mistakes and complications, wrong medication, injury to tissues due to surgical mistake, brain injury, birth injury, failure to isolate from patients suffering from infectious diseases and so many others (Hickson, 2004). Similarly, use of non-sterile clinical instruments, use of untested blood and many other negligent actions on the part of healthcare providers can deteriorate condition of patient (Hyman and Charles, 2005). A patient, while under medical treatment, is more or less a helpless spectator in the process and has no real control over it. Sadly, many patients fall victim to medical malpractice (Jost, 2003).

Analysis of historical statistics reveals that many advanced nations have worse condition of malpractice. Following heart disease and cancer, medical malpractice is the third largest cause of death in the United States of America (Kohn, 2000). Medical malpractice statistics also reveal that the number of cases related to malpractices is higher in out-patient settings, as compared to hospitalized patients and when it comes to severity, malpractice cases in hospitals tend to be more severe than the cases in out-patient settings (Kraman, 1999). According to a Harvard Medical Study, approximately 80,000 Americans die every year as a result of medical malpractice. A recent study by Health Grades found that an average of 195,000 hospital deaths in each of the years 2000, 2001 and 2002 in the U.S. were due to potentially preventable medical errors. A 51.7% of ER-related malpractice is related to misdiagnosis of the patients. An Institute of Medical report attempts to quantify the types of medical errors that occur in healthcare settings are technical errors (44%), misdiagnosis (17%), failure to prevent injury (12%) and medication errors (10%). About 70% of all errors were believed to be preventable (Bartholomew et al. 2004). As the National Academy of Science (2006) found that medication errors are among the most commonly noticed medical mistakes harming at least 1.5 million people annually. The academy also observed that 400,000 preventable drug-related injuries occur each year in hospitals, 800,000 in long-term care settings, and roughly 530,000 among Medicare recipients in outpatient clinics. According to a study at the Institute of Medicine of the National Academy of Sciences, around 90,000 people lose their lives annually in hospital owing to medical errors. This is just an estimated figure, and experts feel that the actual figure would be considerably high (Lamb, 2003). Standards and regulations for medical malpractice vary by country and jurisdiction within countries. Medical professionals are required to maintain professional liability insurance to offset the risk and costs of lawsuits based on medical malpractice (Localio, 1996).

Resultantly, the mentioned statistics reflect the situation of malpractice in advance countries and one can think of the situation in Third World. The picture of medical malpractice seems more formidable through such statistics when observed in Asian and South Asian countries including

Pakistan, India, Sri Lanka, Bangladesh and others. In Pakistani hospitals where malpractice and cases of medical abuse are rampant due to under-funded medical care, overloaded doctors and other medical staff, slow adoption of new technologies, economic-reciprocity, lack of social and medical awareness and failure to implement medical laws by government agencies. Poor hygiene, miscommunication, non-sterile techniques, low quality medicines, quick relief ideas and poverty are the other contributing factors to medical malpractice (Mello, 2002). Besides, there is no institution that governs the moral and social obligations that medical staff has to observe in the performance of their duty.

## **THE ARGUMENT**

Quality is a pressing issue faced by healthcare industry along with reducing medical errors and heightening patient safety (Mills, 2010). In Pakistan, medical malpractice works like a medical monster that has defaced the industry. In the last six decades, no government took serious steps for its prevention. The social structure of the country has provided an open chance for even unqualified people to offer treatment for various ailments (Laura, 2004). Patients face numerous problems during treatment mainly lack of basic facilities in the government hospitals, bargaining of medicinal companies, medical unawareness, low socioeconomic conditions of people and improper medico-legal system are the leading causes of malpractice in the country. According to the Economic Survey of Pakistan (2005-06), the government spent a negligible 0.75 percent of GDP on health sector. Pakistan's healthcare system, therefore, is inadequate, inefficient, and expensive; and comprises of an under-funded and inefficient public sector with a mixed, expensive and unregulated private sector. Statistics indicate that only between two and fifteen percent of all medical malpractice victims file a case against the perpetrator or medical professional responsible for the loss and suffering. The social environment also provides spacious market to medicine companies, medical practitioners, dispensers, doctors and even some high class consultants to boost their financial means through exploiting the needy and poor patients (Ali, 2006).

Health professionals like doctors, technicians and other paramedical staff are found responsible in mutual economic bargaining with medicine companies via medical representatives (Posner, 1996). Majority of medical sales representatives have no relevant qualification to represent various products and they are found focused on achieving their targets rather than analyzing patients' needs. They also offer direct and indirect financial gains to professionals especially doctors and consultants for prescribing their company's products which affects the economic and health status of common people to a greater extent (Khan, 2008). There is no visible system for checking quality of medicines that fuels this vicious cycle. In this way, products of very low quality are imposed over the poor people who get very little or no benefit out of it and leads to further complications. The quality of locally-produced medications is uneven. Other contributing causes involved here are deficiency of qualified doctors, postings on political basis, under-funded medical care, negligence, defective drugs or medical devices and misdiagnosis (Nadir, 2003).

### **Objectives of the Study**

To identify the various socio-economic causes of medical malpractices in the target area

To examine the various reasons of bargaining between healthcare professionals and medicine companies

### **Hypotheses of the Study**

H<sub>0</sub>: Socio-economic causes have no significant association with medical malpractices.

H<sub>A</sub>: Socio-economic causes have significant association with medical malpractices.

H<sub>0</sub>: There is no significant reason of bargaining between healthcare professionals and medicine companies.

H<sub>A</sub>: There is a significant reason of bargaining between healthcare professionals and medicine companies.

### **Methodology of the Study**

Healthcare facilities reflect social, economic, political and moral well-being of ordinary citizens. Economic and social growth of a society and country is directly dependant on the health of its constituents (Sania, 2011). Healthy living conditions and access to quality healthcare are fundamental rights of citizens and are essential prerequisites for social and economic development. Any inequality in social, economical or political context between various population groups in a given society will affect the health indicators of that particular society (Nishtar, 2007). Unfortunately, in Pakistan the status of healthcare is at the bottom ebb, medical malpractices combine with it to produce different types of diseases. This study was conducted in *Mingora* city, a gateway and capital to tourist paradise of Pakistan- district Swat. A comprehensive survey was conducted in *Saidu* group of teaching hospitals of *Mingora* using structured questionnaire. A total of 115 respondents were selected with the help of simple random sampling. However, the total population of *Saidu* Group of teaching hospitals was 570. A split of the total staff indicates that among all there are 159 Doctors, 205 Nurses, 166 Paramedics (dispensers and technicians). Further, approximately 40 medical representatives visit the hospitals daily. Total bed capacity of these hospitals is 497 while the average patient flow (Emergency- OPD- Admissions) is more than 500 per day (District Health Survey Report, 2010). For the purpose of this study, a triangulated approach was used that involves both qualitative and quantitative methodology. Qualitatively, the description of the study is supported by field data and secondary information. Besides, quantitative portion of the data has been analyzed in the form of frequency and percentage with the application of ANNOVA (F-test) that tests the null and alternative hypotheses with the application of SPSS (Statistical Package for Social Sciences).

### **RESULTS AND DISCUSSIONS**

The data collected was analyzed with a view to reach to the realities about medical malpractices and their root causes in the target area. In qualitative portion, a detail description was made of the

myth and reality about medical malpractices whereas in the quantitative portion the F-test was applied in order to test null and alternative hypotheses. The qualitative description shows that *Swat* is victim to ineffective law and order situation, excess of corruption and resultant social evils that provide a breeding ground to medical mal-practitioners. Literacy rate of district Swat is higher as compared to other nearby districts owing to its being capital and a relatively developed city, therefore, a huge number of patients commute there for treatment from suburbs and remote areas. Due to lack of education in the countryside, many patients remain unaware of their rights and are reportedly exploited. Various health professionals like doctors, technicians and other paramedical staff are found guilty in the curse. Most of them are involved in mutual economic bargaining with medicine companies via medical representatives. The qualitative analyses express that healthcare professionals in this area are money-making machines. They have been prescribing antibiotics for years now when patients come into their clinics complaining of the common cold (even though antibiotics are ineffectual to treat a cold's viral basis) in large part because of patient demands. This has led to great concern in the medical and scientific communities that such overuse of antibiotics has caused an increase in antibiotic-resistant strains of certain bacteria. In addition, poverty, ignorance, preventable mistakes, vested economic interest and lack of proper medico-legal rules are the leading causes of the mentioned problem in Mingora city.

**Table-1.** Socio-Economic Causes of Medical Malpractices

<i>Socio-economic Causes</i>	<i>Frequency</i>	<i>Percentage</i>
Poverty	31	27%
Illiteracy and Ignorance	21	18%
Lack of Health Education	27	24%
Quackery and Quakers	22	19%
High use of Steroids and Antibiotic	14	12%
<b>Total</b>	<b>115</b>	<b>100%</b>

Table-1 expresses the various socio-economic causes of medical malpractices. The quantitative analyses demonstrate that poverty is the major cause of medical malpractices, which contributes 31 (27%) of the total. In addition, majority of local people are illiterate and ignorant, they have no awareness regarding the evils of medical mal-practice and were counted 21(18%) to this cause. As majority of the people are poor and illiterate, there are no health-educational institutions to teach the masses about the standard of health that is supported by 27 (24%) as a cause of malpractice. The statistical analyses further illustrate that 22 (19%) respondents are of the view that Quackery and Quakers encourage medical malpractices.

Lastly, the analyses elucidate that doctors, medical practitioners are interested in making money rather than health of the patients. In order to achieve their objective, they prescribe use of high steroids and antibiotics, which adversely affect the health of people and cause malpractices; however this factors contributed as 14 (12%).

## Application of Annova / F-Test

The quantitative analysis of the collected data has been conducted in the form of analyses of variance; the assumptions about mean of population parameter were tested in order to verify the hypotheses.

## TESTING OF HYPOTHESIS-I

### Formulation of Hypotheses

$H_0$ : Socio-economic causes have no significant association with medical malpractices.

$H_A$ : Socio-economic causes have significant association with medical malpractices

### Level of Significance

(Alpha)  $\alpha = 0.05$

### Test Statistics

Analysis of variance (ANNOVA):  $F = S^2_b / S^2_w$

where:

$S^2_b$ : between sum of square

$S^2_w$ : within sum of square

**Table-2.** Analysis of Variance

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	11.532	$n_1 = (c-1): 25$	0.46	1.71	.000
Within Groups	24.159	$n_2 = (r-1) 90$	.027		
<b>Total</b>	<b>35.690</b>	<b>115</b>			

(Tabulated value;  $F \geq F \alpha = 1.45$ , Calculated value;  $F = 1.71, 0.000^{**}$ , There is highly significant relationship between socio-economic causes and medical malpractices)

To know the significance of the association between the attributes, the calculated values of the chi-square were compared with corresponding Table-2 at 5% level of significance. Degree of freedom was calculated as:  $d.f. = (r-1) (c-1)$  where "r" and "c" are the number of rows and columns respectively. If the calculated value of F-test was greater than the tabulated values, then the result will be considered statistically highly significant otherwise it will be statistically insignificant.

### Interpretation

The calculated value ( $F = 1.71$ ) is greater than the tabulated value ( $F = 1.45$ ); therefore, the null hypothesis is rejected and alternative hypothesis is accepted, hence it is concluded that socio-economic causes have significant association with medical malpractices. In addition, the calculated values lie in the critical region so the results are statistically significant and the results of the sample data can be generalized to the whole population. This study is of vital importance as it is the

first research study of its nature in Mingora city. This study covers different aspects of human health care system and identifies adverse effects of medical malpractice on common people's health.

**Table-3.** Various Reasons of Bargaining between Healthcare Professional and Medicine Companies

<i>Socio-economic Causes</i>	<i>Frequency</i>	<i>Percentage</i>
Vested Interest Group	33	29%
Corruption	30	26%
Political Influences in Staff Recruitment	14	12%
Untrained Practitioners	23	20%
Private Clinic	15	13%
<b>Total</b>	<b>115</b>	<b>100%</b>

Table-3 demonstrates the various reasons of bargaining between healthcare professionals and medicine companies. As it has been concluded that the medical experts, doctors, nurses, paramedical staff, medicine companies, healthcare professionals are mainly interested in collecting and making money beyond the requirements of their obligations. In this regard, most of the respondents' i.e. 33 (29%) are of the opinion that vested interest groups in the area are the main reason of medical malpractice. In addition, the medical professionals are not sincere with their duties and responsibilities to look after the health of common people and provide them with quality medicine. Therefore, 30 (26%) respondents argue that corruption is a way to medical malpractice. Some of the respondents i.e. 14 (12%) view that untrained practitioners give foundation to medical malpractices. As the area is dominated by local political elites therefore, 23 (20%) respondents argue that political influence in staff recruitment is a way towards medical malpractices. In nutshell, majority of the doctors run their private clinics, where most of their time and energies consumed in malpractices. In this respect, 15 (13%) respondents reflected that the culture of private clinics give rise to medical malpractices.

## TESTING OF HYPOTHESIS-II

### Formulation of Hypotheses

$H_0$ : There is no significant reason of bargaining between healthcare professionals and medicine companies.

$H_A$ : There is a significant reason of bargaining between healthcare professionals and medicine companies.

### Level of Significance

(Alpha)  $\alpha = 0.05$

### Test Statistics

Analysis of Variance (ANNOVA),  $F = S^2_b / S^2_w$



where:

$S^2_b$ : between sum of square

$S^2_w$ : within sum of square

**Table-4. Analysis of Variance**

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	21.44	$N_1 = (c-1): 37$	0.58	1.35	.000
Within Groups	33.50	$N_2 = (r-1) 78$	.43		
Total	54.94	115			

(Tabulated value;  $F \geq F_{\alpha} = 0.05; 0.96$ , Calculated value;  $F = 1.35, 0.000^{**}$ , There is highly significant reason of bargaining between healthcare professionals and medicine companies.)

### Interpretation

The calculated value ( $F = 1.35$ ) lies in the critical region which means that the null hypothesis is rejected therefore the result is statistically significant that further authenticates the result of alternative hypothesis with high significant reasons of bargaining between healthcare professionals and medicine companies (Table-4).

### CONCLUSION

It has been concluded that medical malpractice adversely affects the health status of the local people. The study further explores that the major causes of medical malpractices comprises of misdiagnosis, mistreatment and incomplete knowledge of professionals. In addition, the prevailing poverty, illiteracy, ignorance and unawareness results into malpractices, which adversely affect health of people. It influences all the social spheres like education, family, economy, recreation, and all other aspects of society. The empirical analysis with relation to the secondary information reveals that psycho-habitual demand of quick relief leads to be treated with high doses of steroids and antibiotics. Such an abnormal use of steroids augments the chances of side effects and lowers down the efficiency of immune system. Similarly, untrained practitioners are also involved in treatment of people that fuel malpractice. Curse of Medical malpractice is not limited to lower social class only and middle class also gets affected by it.

Medical and surgical procedures in hospitals were found unsafe and un-sterile which can consequently result in spread of infectious diseases, disability, injury and even death. Furthermore, most of dispensers and quakers in streets are involved in medical malpractice as they have no knowledge of basic human physiology that further deteriorate the status of health in the stated locality. Illegal and illogical intrusion of political personnel affects the recruitment process of practitioners that allow incompetent people in health setup and jeopardize the lives of common masses. This approach further creates a materialistic environment among doctors and culture of private clinics increase that augments the miseries of the poor masses. Furthermore, the experiential

data also reveals that the medicinal companies have adapted a target-oriented approach rather than patient-oriented. Doctors are given handsome gifts and amounts both from medicinal companies and laboratory personnel while such laboratories have also hired un-qualified pathologists that endanger patients.

In nutshell, the research reflects that medical malpractice is among the blistering issues of research areas that need over-extra concentration for elimination. Life and health of individual are important but jeopardized by such culprits that should be dealt seriously and effectively.

## RECOMMENDATIONS

Health is a dominant sector in every society and of vital importance for a stable and prosperous community. Good health is a strong indicator of economic growth, development and socialization and is necessary for education, innovation, political stability, modernization and cultural growth. Such a precious gift is threatened that needs the following measures for protection and stability. In order to avoid the evils of medical malpractices, improvement in the mass-awareness particularly health education can help to overcome the problem. Government's role is of immense importance that can put proper check and balance on medicinal companies, laboratory owners and doctors. The political influence and corruption in bureaucratic channels during staff recruitment should be monitored properly and the responsible should be brought to justice.

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