

Cost implication for management of psychiatric illnesses in Pakistan: role of alternate, religious and formal practices

Dr. Amin A. Muhammad Gadit, Discipline of Psychiatry, Memorial University of Newfoundland, St. John's, NL A1B 3V6 CANADA

Abstract

Background Mental illness has assumed an alarming proportion in Pakistan in the background of increasing poverty, low literacy rate, violence, political instability and unemployment. Because of stigma, high cost of medications, low number of psychiatrist, and lack of awareness: people would generally consult the alternate practitioners to address their mental health issues and would also prefer alternate medications over the psychotropics because of cost and perceived side effects.

Aim The aim of the study is to compare the cost of psychotropics with the alternate medications, the difference in consultation rates among psychiatrists and alternate practitioners and suggest a way by which the psychiatric service as well as psychotropics may become more affordable.

Methods This is a cross sectional study based on a questionnaire and telephonic interview on n=800 patients in all the four provinces of Pakistan. The information gathered was subjected to statistical analysis with SPSS version 10.

Results The results indicate that 123 out of 800 patients from all four provinces were attending the psychiatrists exclusively (15%), alternate practitioners were approached by 361 patients (45.1%) and both types of practitioners were seen simultaneously by 316 patients (39.5%). It appears that the majority of the patient population preferred alternate therapists and alternate medication for addressing the mental health issues.

Conclusion This study demonstrates the inclination of majority of the patient population approaching alternate practitioners for the mental health care and prefers alternate medications over the FDA approved psychotropics. It is also evident the cost of alternate medications and consultation charges by alternate practitioners is much lower as compared to psychotropics and psychiatrists. The country needs an effective strategy in order to address this problem.

Key words: mental health, economics in health, health care expenditures.

Introduction

Background

Mental illness has reached an alarming proportion over the globe and has become a vitally important issue for the nations in terms of morbidity, mortality and huge economic burden. Apart from the established biological and genetic reasons, the current disruption of social fabric as a result of changing political scenario, violence and terrorism has affected the psyche of millions of individuals in this era. 450 million people in the world suffer from a mental or behavioral disorder (1). W.H.O. global burden of diseases, 2001, states that 33% of the years lived with disability (YLD) are due to neuropsychiatric disorders, unipolar depressive disorders alone lead to 12-13% of years lived with disability and rank as the third leading contributor to the global burden of

diseases. Four of the six leading causes of years lived with disability are due to neuropsychiatric disorders like: depression, alcohol use disorder, schizophrenia and bipolar disorder. More than 150 million suffer from depression at any point in time, nearly one million commit suicides every year, 25 million suffer from schizophrenia, 38 million suffer from epilepsy and more than 90 million suffer from an alcohol or drug use disorder (2).

Pakistan is the 9th populous country in the world, though area wise it ranks thirty-fourth among the thirty-seven low-income countries. It has total population of 157,935,000, GDP per capita (intl \$ 2004) 2,151, life expectancy at birth m/f : 62/63, infant mortality : 102/1000, total health expenditure per capita (intl \$ 2003): 48, total expenditure as % of GDP (2003) (3): 2.4, GNI per capita is \$600, urban population: 34%, literacy rate: 49%, population below poverty line: 35% (4), total number of physicians is 128,073 which includes 18,633 specialists (5). The total number of psychiatrists is 300 for such a large population is a grossly small number.

The magnitude of mental illness is: 6% depression, 1.5% schizophrenia, 1% Alzheimer's disease, 1-2% epilepsy and the other disorders (6). There are government run psychiatric facilities in general hospitals which cater for a very nominal fee (\$ 0.50), the private sector which charges \$ 10-20 and other non-governmental charitable services which in most of the cases would cater for free. The related health expenditures are based on out-of-pocket expenses (6).

Expenses for the treatment of mental illness often are borne by the family either because insurance is unavailable or because mental disorders are not covered. In addition to the direct cost burden, lost opportunities have to be taken into account. Families in which one member is suffering from a mental illness make a number of adjustments and compromises that prevent other members of the family from achieving full potential in work, social relationships and leisure. These are the human aspects of the burden of mental disorders, which are difficult to assess and quantify; they are nevertheless important. Families often have to set aside much of their time to look after the mentally ill relative, and suffer economic and social deprivation because he or she is not fully productive. There is also a constant fear that recurrence of the illness may cause sudden and unexpected disruption of the lives of family members. The impact of mental disorders on communities is large and manifold. There is the cost of providing care, the loss of productivity, and a certain risk of legal problems (including violence), although violence is caused far more often by individuals without mental illness (7).

The number of psychiatrists in the country is about 300 who work in either government or private sector, though the government psychiatrists work part time as private psychiatrists. Their fee structure varies from Rs. 200 to 1500 (US \$ 3.5- 9.5) and the cost of psychotropic medication which they prescribe would go far over the consultation charges. Apart from the psychiatrists, alternate practitioners which include homeopaths, hakims, ayurvedics, shamans and religious healers also cater for the mental health needs of the people at low cost : fee varying from Rs. 10-150 (US \$ 0.20- 2.0). The medications they prescribe are much low in cost than the psychotropics. Hence, many people would consult the alternate practitioners and follow their treatment regimes (9). The reasons are: high cost, side effects of western medicines, slow effect etc., though the alternate medications are many a times not monitored for the side effects. As the expenditure is borne out of pocket and the general economic condition of the large section of population, there is always an inclination towards alternate approaches which may pose hazards in the long term⁸. This study attempted to compare the cost of both western type and alternative medications with a view to finding out if the western type of medications can be more affordable in view of their safety profile and FDA approval status also, to find the difference in consultation rates among psychiatrists and alternate practitioners and suggest a way by which the psychiatric services as well as psychotropics may become more affordable.

Method

Setting: Four provincial capital cities of Pakistan

Design: Cross-sectional

Duration: 6-months.

Sample size: 800

Procedure A telephonic survey was conducted with the aim of selecting n=200 patients from each capital city of four provinces of Pakistan, i.e., Karachi, Lahore, Quetta and Peshawar. A telephone directory was used for contact information and random sampling method was used. Every third house-hold was contacted. The purpose of study was explained to those whose answer was in affirmation for primary respondent or any of the family members currently or in the last two years is seeing or has seen a psychiatrist or other practitioner for mental health problems. Confidentiality was assured to those who agreed to participate in study and those who refused were dropped. Those falling in age groups below 18 and above 70 were also excluded. A total number of 200 participants were selected and included in the study group in each city excluding those who refused and the ones who were not seeing any type of therapists. Overall, 30% refusals were met. If there was no reply on telephone on three occasions, the interviewer went ahead with the next selected number. A questionnaire was used for those who were eligible to participate in the study. The questions elicited the information regarding preference, cost of psychotropic and alternate medication, diagnosis given by the concerned therapist, amount of fee paid for consultation and the cost of medications which was bought. A list of market prices was also obtained to double check the information required. The respondents were explained the difference between psychiatrists and other therapists for clarity and understanding. The information thus obtained was compiled and analysis was done through SPSS version 10 program.

Ethics Committee Approval The ethics committee of Hamdard University Hospital, Karachi-Pakistan where the author had worked at the time of conduction of this study (2004) granted approval for the conduction of this study.

Results

The results as evidenced by the following tables (1) indicates that 123 out of 800 patients from all four provinces were attending the psychiatrists exclusively (15%), alternate practitioners were approached by 361 patients (45.1%) and both types of practitioners were seen simultaneously by 316 patients (39.5%). It appears that the majority of the patient population preferred alternate therapists. The table (2) shows the various consultation charges. The psychiatrists ranged among the expensive category as compared to the alternate practitioners. The charges by Shamans were the lowest. This information was gathered from patients who were attending the therapists and through personal communication with officers from Health Department.

The table (3) indicates that the approved psychotropics were higher in cost as compared to the other alternative medicines. The information is based upon the list of market prices obtained through the Drug Retailer Association, Karachi. The rate of Tawiz, Holy Water and Talisman was obtained through personal communication.

Table: 1

Number of patients attending practitioners from each province (n=800)

Province	psychiatrist	alternative practitioner	both
SIND N=200	40 (20%)	70 (35%)	90 (45%)
PUNJAB N=200	35 (17.5%)	90 (45%)	75 (37.5%)
NWFP (North-west frontier province) N=200	19 (9.5%)	101 (50.5%)	80 (40%)
BALUCHISTAN N=200	29 (14.5%)	100 (50%)	71 (35.5%)

Total: n=800

**TABLE 2
CONSULTATION CHARGES**

TYPE OF PRACTITIONER	AMOUNT IN PAK RS	\$ EQUIVALENT
PSYCHIATRISTS	200 - 1500	3.5 - 25
SHAMANS	10 - 150	0.20 – 2.0
HOMEOPATHS	100 - 300	1.7 - 5
AYURVEDICS	100 - 150	1.7 – 2.5
HAKIMS	50 - 150	0.80 – 2.5

1 \$=60 Pakistani rupees (rate fluctuates between 58-64 Pak rupees)

The tables (2) show the various consultation charges. The psychiatrists ranged among the expensive category as compared to the alternate practitioners. The charges by Shamans were the lowest. This information was gathered from patients who were attending the therapists and through personal communication with officers from Health Department.

TABLE 3
Cost of Treatment (Drugs)
Based on 1 Bottle of Syrup/Powder/Tablets

PRODUCTS	COST in PAK Rupees	\$ EQUIVALENT
1. HOMEOPATHIC*	50 - 150	0.85 - 2.5
2. AYURVEDIC*	50 - 100	0.85 - 1.8
3. HIKMAT*	25 - 100	0.40
4. METALLIC	50 - 200	0.85 - 3.2
5. HERBAL*	50 - 125	0.85 - 2.10
6. SALTS	25 - 75	0.40 - 1.25
7. CHEMICALS	75 - 125	1.25 - 2.2
8. SEMI-PRECIOUS STONE	150 - 300	2.5 - 5
9. SEA ANIMAL PRODUCTS	100 - 125	1.80 - 2.10
10. TAWIZ (AMULET)	0 - 25	00 - 0.25
11. TALISMAN	50 - 100	0.85 - 1.8
12. HOLY WATER	00 - 10	00 - 0.10
13. TYPICAL ANTI-DEPRESSANT	40 - 100	0.75 - 1.8
14. ATYPICAL ANTI-DEPRESSANT	500 - 1000	8.20 - 18.00
15. TYPICAL ANTI-PSYCHOTICS	50 - 200	0.85 - 3.2
16. ATYPICAL ANTI-PSYCHOTICS	400 - 1200	5.8 - 20.00
17. MOOD STABILIZERS	200 - 350	3.2 - 5.8

The table (3) indicates that the approved psychotropics were higher in cost as compared to the other alternative medicines. The information is based upon the list of market prices obtained through the Drug Retailer Association, Karachi. The rate of Tawiz, Holy Water and Talisman was obtained through personal communication. * complementary medicines

Discussion

Mental illness is causing a great burden on the economy of Pakistan, despite the fact the general population shares the burden by out of pocket borne health expenditures.(10) With the high cost of medications and psychiatric consultations, stigma, cultural beliefs about causation of mental illness, easy availability of alternate medications, low cost of alternative therapies and consultations tempt the people to approach alternate practitioners and use alternative medications. There is a general belief that western type of medicines(psychotropics) cause a lot of side effects whereas alternate medications do not cause any adverse side effect, moreover, the alternate medications address the problem from its depth and help the body by never causing the ailment again. On the contrary, most of the alternate drugs are not tested, their efficacy is questionable, and certain metallic agents are known to have caused serious long term

complications. The only exceptions are holy water, talisman and amulet which are found to be safer because they do not contain any drug. With the level of literacy (32%), income of US \$ 600 (Pak Rupees: 36,000) per annum of average individual, no support by government in terms of medical card, insurance or other incentive, it is understandable that people would be lured towards treatments which are more affordable. The family system in Pakistan is such that the head of the family or the adult male member of the family would support the entire family, this holds true even if we talk about nuclear families. This support would include living expenditures, education and health care. Under the circumstances, there is a huge economic burden on individuals with average monthly earnings which is further compounded by the existence of important factors like: lack of awareness, poverty, low health budget, no sponsorship by the government, low number of psychiatrists, large number of alternate practitioners, illiteracy, lack of disease and drug related education provided by the psychiatrists, unavailability of psychiatrists in rural areas where the majority of population dwell are some pertinent issues which can be understood in the light of present general approaches and inclinations of the patient population.

Conclusion

This study demonstrates the inclination of majority of the patient population approaching alternate practitioners for the mental health care and prefers alternate medications over the FDA approved psychotropics. It is also evident that the cost of alternate medications and consultation charges by alternate practitioners is much lower as compared to psychotropics and psychiatrists. The country needs an effective strategy in order to address this problem.

Suggestions

- The health budget for spending on mental health should be increased in the terms of adequate and sustained financing which is critical for a viable mental health system.
- The government should take the role for providing health care along with the drugs.
- Massive mental health education programs through the media will help in creating insight among masses.
- Cost of psychotropics should be brought down as is done by the neighboring country, India.
- More incentives should be provided to local drug manufacturing companies.
- Postings of more psychiatrists in the rural areas for public service.
- Incentives for private psychiatrists ready to serve the rural areas.
- Promotion of literacy programs.
- Watchdog on the alternative practitioners and the alternate medications ensuring safety for the population.
- Introduction of social insurance system in the country.
- Monitoring of consultation charges by the psychiatrists through Pakistan Medical and Dental Council.

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