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The Disease Pattern and Utilisation of Health Care Services in Pakistan

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INTRODUCTION

Health is an important aspect of human life. In general terms, better health status of individuals reflects reduced illnesses, low level of morbidity, and less burden of disease in a given population. It is widely recognised that improved health not only lowers mortality, morbidity and level of fertility, but also contributes to increased productivity and regular school attendance of children as a result of fewer work days lost due to illness, which in turn have implications for economic and social well-being of the population at large. Hence investing in health is vital for promoting human resource development and economic growth in a country [World Bank (1993)].

A view of Pakistan's health profile indicates that the sector has expanded considerably in terms of physical infrastructure and its manpower in both the public and private sector. This has contributed to some improvement in selected health status indicators over the years. However, the public health care delivery system has been inadequate in meeting the needs of the fast growing population and in filtering down its benefits to the grass-root level. As such, Pakistan still has one of the highest rates of infant and child mortality, total fertility and maternal mortality when compared with many other countries in the Asian region [UNDP (2000)]. Due to low priority given to social sector development in the past and low budgetary allocations made to the health sector, the evidence shows that mortality and morbidity indices have not reduced to the desired level and large gaps remain in the quality of care indicators, especially in rural areas [Federal Bureau of Statistics (2000)].

High levels of infant and child mortality and fertility in Pakistan point towards the fact that health and illness problems are severe for young children and mothers.

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Moreover, the adverse effects of ill health may hit poor people the hardest way mainly because they are ill more often and partly because they have limited economic and human resources to cushion their risks of illnesses and bear high costs of treatment. Research evidence suggests that difficult access to health facilities is critical in keeping the utilisation of services low. Poor families with their economic and social constraints in accessing health care services tend to resort to traditional healers and *Hakeems* in nearby locations in villages, and a substantial proportion of population (46 percent) report as not using any health facility at all [National Institute of Population Studies (1998)]. Because of long distance and difficult access to services, especially in rural areas, a large part of expenditure on health goes to travel or transport costs [World Bank (1995)]. With the recent evidence of rising proportion of poor people in the country, it is likely that the detrimental effects of poor health and illness on individuals and households may aggravate if specific plans and actions are not executed to increase access to health care services at much lower costs for the poor sections of population.

Besides access and equity issues that affect the health-seeking behaviour of population, there are limitations regarding the availability of health-related statistics in Pakistan. Data available from public or privately run health institutions are either incomplete or not reliable which limits the possibility of accurately assessing the morbidity or mortality situation among different subgroups of population. Alternatively, a number of health and demographic surveys provide detailed information on health and illness status of household population that permits the estimation of selected health related indicators in relation to background characteristics of household members. In this regard, the 1986 and 1994 National Health Surveys (NHS) are useful sources of information on mortality, morbidity and utilisation of health services in relation to costs of treatment and other factors. Other household surveys such as 1990-91 Pakistan Demographic and Health Survey (PDHS); 2000-01 Pakistan Reproductive Health and Family Planning Survey (PRHFPS) and various rounds of Pakistan Integrated Household Survey (PIHS) include specific questions on child mortality, diarrhoeal morbidity, immunisation as well as fertility and health seeking behaviour of respondent population.

Based on these data, few studies have been done to assess infant/child mortality and its correlates [Sathar (1994); Mahmood and Kiani (1994); Ahmed (1992)], while some others focus on the gender related aspects of child health status and utilisation of health care services [Sathar (1987); Mahmood and Mahmood (1995); Ali (2000)], with little information on the illness pattern and health seeking behaviour of population—a gap which this study addresses. Since there has been scanty information available on population based morbidity data, a very limited research has been on the incidence and prevalence of various types of diseases and the utilisation of health services [Karim (1989)]. The synergy between exposure to disease, morbidity incidence malnutrition and high risks of deaths is well

documented in the literature and suggests a further exploration of the issue [United Nations (1998)].

With more recent information available on illness status of population and the related behaviour, this paper aims to examine the prevalence and incidence of disease among different sub-groups of population and see what type of diseases are more common among children, adults and older population. Of particular interest is an examination of health seeking behaviour of persons reported ill in terms of utilisation of health care services, costs of treatment and income level of the household which has great policy significance in the context of Pakistan's social development.

DATA SOURCE AND METHODS

The analysis in this study is based on the data of the Pakistan Socio-economic Survey (PSES) Round-2. The survey is nationally representative carried out in the year 2001 in whole of Pakistan except Federally Administered Tribal Areas (FATA), Federally Administered Northern Areas (FANA), military restricted areas and district of Kohistan, Chitral and Malakand. The population of these excluded areas is around 3 percent of the population of Pakistan. The sampling frame in the rural areas constitutes of all the villages denoted as Primary Sampling Units (PSUs). The large villages are subdivided into more than one PSUs. The urban areas are divided into Enumerative Blocks and each block constitutes on average, 250 households.

It may be mentioned here that PSES Round-2 has been carried out in the same households visited two years earlier in the PSES Round-1. The total size of the households visited in PSES Round-1 was 3564. Since PSES Round-1 survey was based on the sampling frame of 1981, another 1170 households were added in the sample of PSES Round-2 to make it representative of 2001 population at national and urban-rural level. Altogether, in the PSES Round-2, 4021 households were surveyed of which 2577 were rural and 1444 urban households. The attrition rate in the panel households was about 20 percent.

Each survey team consisted of male and female interviewers headed by a supervisor from amongst the staff member of PIDE. Two separate questionnaires—one for male and the other for female interviewers—were administered to each household. The section on health was included in the female questionnaire to elicit detailed information on illness status and related behaviour for each member of household including children and adults under the consideration that a woman interviewer would have an easy access to female respondents in house who are available at home due to their less participation in work outside home, and being caretakers of the family, they usually attend to the sick members of the household and thus would be in a better position to report about the sickness status of all household members. The information available from this survey thus provides the

possibility of assessing disease incidence, its nature, duration and services utilised for treatment of a specific disease.

The methods used to assess the disease prevalence, its patterns by age and sex, and the service facilities visited for treatment are the simple percentage responses to the questions being asked. These proportions give useful insights into the variations and differentials for each issue examined in the study.

RESULTS AND DISCUSSION

The definition of illness, its reference period and the type of questions asked may vary from one survey to another, and the perceptions of respondents about the questions on illness may introduce reporting biases, thereby limiting the possibility of directly comparing the estimates from different sources. Ignoring these data limitations, some of the preliminary findings of the 2001 SES survey on illness status of population are presented and discussed below in relation to selected background information.

Disease Incidence and Prevalence

Based on the findings of 2001 Socio-economic Survey, data about 12 percent of population is reported ill during the past two weeks preceding the survey and this proportion is 10.5 percent for males and 13.3 percent for females. This indicates that the morbidity rate comes to around 120 per 1000 population—105 for males and 133 for females. These estimates appear to be somewhat lower than those observed from other sources, but are not directly comparable due to differences in the reference period of reported illness and questions being asked. However, it would be useful to examine variations in morbidity incidence by age and sex to determine its relevance for specific health programmes for young children, adults and older population.

Age and Sex Pattern of Illness

Table 1 shows the proportion of population reported ill by age and sex. The age differentials of illness show a typical U-shape pattern for both males and females—being the highest among children under five, falling to about half of that among young population aged 5–19, and then gradually increasing afterwards until reaching fairly high levels at older ages of 60 and above. These differentials coincide with the age pattern of mortality in many developing countries including Pakistan that shows higher exposure to illness and risks of deaths among younger children between ages 0–4 years, and among the aged people.

Table 1

Proportion of Population Reported Ill by Broad Age Group and Sex: 2000-01

Age Groups	Male	Female	Both Sexes
0-4	18.5	16.0	17.4
5-9	9.9	9.2	9.6
10-19	7.8	9.1	8.4
20-59	8.9	15.3	12.0
60+	18.5	10.1	14.4
All	10.5	13.3	11.8
Total (N)	(15,786)	(14,870)	(30,656)

Source: Original data file of *Pakistan Socio-economic Survey 2001 Round-2*.

It may be noted from Table 1 that male children under 10 years of age show higher morbidity prevalence than their female counterparts, which is also reflected in higher mortality among males than females infants in Pakistan [Sathar (1994); Ali (2000)]. However, the possibility of reporting bias can not be ruled out given the values of gender preference in Pakistan. In this context, parents may more readily identify a sick male child or emphasise his illness than a female child, resulting in higher morbidity reported for male children. This pattern has been observed in earlier studies also [Karim (1989); Ali (2000)] and need to be probed further for the underlying causes of sex differentials in incidence of disease among children.

Table 1 further shows that females in the childbearing and post-menopausal ages (20-59 years) show higher morbidity prevalence than males (15.3 percent vs. 8.9 percent, respectively). The greater exposure to illness among females of this age group is reflective of their poor health status that may be a consequence of successive child births and under-nourishment arising from frequent pregnancies. Older men aged 60 years and above however, have higher illnesses reported than their female counterparts (18.5 percent vs. 10.1 percent, respectively). The available literature suggests that males in old ages are more prone to degenerative diseases such as circulatory or heart related diseases. This may be due to the post-retirement inactivity or other related stresses which needs to be examined further in terms of the type of disease prevalence and its related causes.

Type of Illness and the Disease Pattern

Table 2 shows the percentage distribution of population ill by type of disease among broad age groups for both males and females. Of those reported ill, the largest proportion suffered from fever including malaria (30.2 percent) followed by viral diseases and intestinal infections including diarrhoea (20 percent) and respiratory tract infections (13.2 percent). Fever and malaria and viral diseases seem to be more common relatively among younger age groups, whereas respiratory tract infections

Table 2

Percentage Distribution of Population Ill by Type of Illness Age and Sex

Type of Diseases*	Age Group					All Ages
	< 5	5-9	10-19	20-59	60+	
Respiratory Tract						
Male	17.5	17.3	8.8	13.3	18.6	14.5
Female	18.3	15.1	7.6	10.7	14.6	12.1
Both Sexes	17.9	16.3	8.2	11.7	16.7	13.2
Intestinal Infections						
Male	18.4	4.3	6.3	3.7	2.9	7.1
Female	19.0	7.3	7.9	3.3	4.5	6.8
Both Sexes	18.7	5.7	7.1	3.5	3.7	7.0
Circulatory Diseases						
Male	1.5	3.0	3.8	6.8	9.0	4.8
Female	1.1	2.4	3.1	9.6	13.1	7.0
Both Sexes	1.3	2.8	3.4	8.4	11.5	6.0
Tuberculosis						
Male	1.2	–	1.6	2.8	4.3	2.1
Female	2.0	2.0	1.4	3.5	4.5	2.6
Both Sexes	0.7	0.9	1.5	3.3	4.4	2.3
Viral Diseases						
Male	16.6	20.8	18.6	10.7	7.6	14.4
Female	15.3	16.1	15.7	10.2	3.0	11.8
Both Sexes	16.0	18.6	17.1	10.4	5.4	13.0
Malaria						
Male	3.0	10.0	3.8	2.5	0.5	3.6
Female	3.7	2.9	6.7	3.1	0.5	3.6
Both Sexes	3.3	6.7	5.3	2.9	0.5	3.6
Fever						
Male	33.5	33.8	34.4	23.0	16.2	27.9
Female	34.0	35.6	31.7	21.0	14.6	25.6
Both Sexes	33.7	34.6	33.0	21.7	15.4	26.6
Ulcer and Cancer Diseases						
Male	0.9	1.3	0.5	3.7	0.5	1.8
Female	–	1.0	3.1	4.7	5.1	3.4
Both Sexes	0.5	1.1	1.9	4.3	2.7	2.7
Other Diseases						
Male	7.3	9.5	22.1	33.8	40.5	23.7
Female	8.6	17.6	22.8	34.0	38.9	27.3
Both Sexes	7.8	13.3	22.4	33.9	39.7	25.6
Total	100	100	100	100	100	100

Source: Original data file of *Pakistan Socio-economic Survey 2001 Round-2*.

- * Respiratory Infection: Asthnia, Pneumonia, Throat infections including cough.
- * Intestinal Infection: Cholera, Typhoid Fever, Dysentery, Food Poisoning Diarrhoea.
- * Circulatory Diseases: Heart Diseases, Rheumatic Fever, Blood Pressure.
- * Malaria: all types of Malaria.
- * Viral Diseases: Acute Poliomyelitis, Meosels, other viral disease like Flue etc.
- * Tuberculosis: All types of Tuberculosis.
- * Ulcers and Cancer: All types (malignant or non-malignant) of ulcers and cancers.
- * Fever: Includes fevers due to unspecified diseases.
- * Others: Includes Diabetese, Allergy, Kidney problems Burn/injury etc.

and circulatory diseases are more frequent among older population. Also a significant proportion of older population (40 percent) is reported as suffering from such other diseases as diabetes, allergies, kidney problems, injury, etc. Fever has been reported as a form of illness by a significant proportion of population in all age groups, especially among those of ages 19 and below (nearly 34 percent). This may be due to respondent's perceptions of fever as illness without being diagnosed as a particular type of disease that has symptoms of fever. However, it appears that younger children are reported ill mostly due to fever which needs to be probed further.

Furthermore, Table 2 does not show many major differentials in illness status between males and females except for respiratory tract infections where males in older ages (60 and above) show higher incidence than females, and for cancer and ulcers where older females have reported higher incidence than males. This suggests that gender is not a major issue in morbidity incidence, especially among younger age groups of 19 and below. However, sex differentials in disease incidence become more apparent among relatively older population.

Duration of illness is another dimension reflecting the nature and intensity of the disease. Table 3 shows the percentage distribution of population reported ill by duration of illness. In all, about 25 percent of people remain ill for more than 16 days compared with 30.6 percent for less than 5 days, 25.7 percent for 6–10 days and 18.9 percent for 11–15 days. This indicates that about one-fourth of population has serious illnesses of longer duration, while the rest remain sick for duration of one or two weeks. As expected, fever, malaria, viral diseases and intestinal infections including diarrhoea and water borne diseases are reported by most people as lasting

Table 3

*Percentage Distribution of Population Reported Ill by
Duration of Illness (in Days)*

Type of Diseases	Duration of Illness				All	(N)
	Less than 5 days	6–10 days	11–15 days	16+ days		
Respiratory Tract Infection	24.5	28.5	20.3	26.6	100.0	(477)
Intestinal Infection	36.1	31.3	16.7	15.9	100.0	(252)
Circulatory Diseases	16.3	17.2	18.5	47.0	100.0	(217)
Tuberculosis	3.6	2.4	21.7	72.3	100.0	(85)
Viral Diseases	46.9	33.5	12.8	6.8	100.0	(470)
Malaria	29.2	36.9	20.0	13.8	100.0	(130)
Fever	50.7	33.0	12.1	4.2	100.0	(965)
Ulcer/Cancer Diseases (Malignant and Non-malignant)	7.2	21.6	26.8	44.3	100.0	(97)
Others	11.3	13.9	27.6	47.1	100.0	(929)
All	30.6	25.7	18.9	24.8	100.0	(3622)

for one or two weeks (upto 5 and 15 days), whereas proportions reporting circulatory diseases, tuberculosis, cancer and others are mostly concentrated in longer duration of more than two weeks. The respiratory tract infections are nearly equally spread among all duration indicating that such diseases are reported to last for less than 5 days among 24.5 percent of ill persons, compared with 20.3 percent for duration of 11–15 days and 26.6 percent for more than 16 days. However, the impacts and severity of these illnesses remain to be assessed, especially for younger and growing population.

Utilisation of Health Care Services and Health-seeking Behaviour

Health care facilities in Pakistan are largely confined to urban areas and service delivery is of varying quality and curative in nature. With the expansion in physical infrastructure of health sector, the number of service providers staff has also increased significantly. Precise estimates of the number of health personnel in each cadre are difficult to obtain because of their varied distribution in the public and private sector, and inadequate registration of health manpower. However, estimates documented in the Five Year Plans and Ministry of Health departments indicate marked increase in health personnel serving at various levels in the public sector, and it is estimated that the number engaged in private sector is larger than the public sector [*Economic Survey* (2001-02)]. The categories of service providers working privately in cities, small towns and rural areas include doctors/general practitioners; nurses, medical specialists, Hakeems and Homeopaths, paramedics and untrained providers who are catering to the health care needs of people. Among other paramedics and auxiliary health workers, Lady Health Visitors (LHVs), Midwives, and Community Health Workers, both in the public and private sector, are important source of seeking health services at the gross-root level. Given the uneven distribution of health care facilities and its manpower in urban and rural areas and the easy accessibility of urban population to government as well as private health facilities, it seems important to examine what service facilities people use for treatment of their illnesses.

Table 4 presents the percentage distribution of population reported ill by type of disease and the health personnel visited for treatment. It is clearly evident from the table that majority of those reported ill seek services from private doctors/clinics (57 percent) Government hospital's services and utilised by 26 percent and hakeem/homeopaths 13.7 percent. Only a very small proportion of population has reported visiting community health workers, LHVs (0.7 percent) and faith healers (2.4 percent). This is contrary to the general contention that people prefer to resort to traditional faith healers, especially in rural areas. It also points towards the less effective role of community health workers who are recruited in large numbers under the Ministry of Health (MoH) programme to provide primary health care services at gross-root level. The results indicate that 50–60 percent of sick people go to private

Table 4
*Percentage Distribution of Population Reported Ill by Type of Disease
 and the Health Personnel Visited for Treatment*

Type of Diseases	Medical Personnel Visited					Total
	Govt. Hospital/Dispensary	Private Doctor	Hakeem/Homeo/Compounder/Chemist	Community Health Worker/LHV	Faith Healers and Others	
Respiratory Tract	27.5	63.8	16.9	0.9	0.9	100.0
Intestinal Infection	33.6	46.2	16.1	0.9	1.8	100.0
Circulatory Disease	28.7	59.1	10.5	0.6	1.2	100.0
Tuberculosis	37.3	58.2	3.0	–	1.5	100.0
Viral Diseases	24.0	60.3	12.2	1.1	2.3	100.0
Malaria	41.3	39.4	17.4	0.9	0.9	100.0
Fever	20.3	59.8	16.7	0.3	2.9	100.0
Cancer/Ulcers	21.8	63.2	11.5	–	3.4	100.0
Others	26.8	59.4	10.1	0.6	3.1	100.0
All	26.2	57.1	13.7	0.7	2.4	100.0

Source: Original data file, PSES-2001 Round-2.

doctors/clinics for treatment of various illnesses in both urban and rural areas, and this percentage is the highest for most common diseases such as fever, viral and circulatory diseases as well as cancer and related illness. These results reinforce the findings from earlier studies that people have increasingly shown the preference to go to private doctors/health services because of poor quality of care and absence of doctor and paramedic staff in public health facilities.

Findings from the present survey show that the proportions visiting government health facilities range between 20–30 percent in case of most diseases. However, this percentage is the highest in case of malaria (41 percent), tuberculosis (37 percent) and intestinal infections (34 percent). About 10–17 percent report seeking treatment from traditional healers, hakeems/homeopaths for all types of diseases except for T.B. for which special hospitals and centres are available in the public sector.

Costs of Treatment

The utilisation of health services and preference of people to use certain facilities are not only determined by the easy accessibility and good quality of services, the economic level of the household and costs of treatment appear to be equally important factors. Table 5 shows the pattern and type of health services utilised by level of expenses incurred on the treatment during the past two weeks of illness reported. The results show a clear positive association between costs of treatment and type of facility visited. A majority of ill persons with total expenses upto Rs 500 or more have visited private doctors (about 70 percent). This is as

Table 5

Percentage Distribution of Population Reported Ill by Total Expenses Incurred on Treatment (Including Transportation) and Facility Utilised

Total Expenses in Rs	Siana/Faith Healers and Others	Hakim/Homeopaths, Compounder and Chemist	Community Health Worker LHV, etc.	Govt. Hospital/Dispensary	Private Doctors	Total	(N)
< 25	5.2	20.4	1.5	33.5	39.4	100.0	(343)
26–50	5.8	26.0	0.8	20.8	46.8	100.0	(400)
51–100	2.0	16.3	0.7	26.9	54.1	100.0	(449)
101–200	1.1	13.5	0.9	26.6	57.9	100.0	(451)
201–500	0.6	6.0	0.3	24.6	68.4	100.0	(621)
501–1000	1.6	6.1	0.4	21.1	70.9	100.0	(247)
1000+	0.5	3.6	0.5	31.3	64.1	100.0	(195)
All	2.4	13.6	0.7	26.1	57.3	100.0	(270)

Source: Original data file PSES-2001 Round-2.

expected because these service outlets mostly cater to the needs of rich class or those with greater ability to pay. For those incurring expenses less than Rs 100 mostly prefer to go to government hospital/dispensaries or hakeems/homeopaths, while those spending money between Rs 100–200 or the middle range expenses either visit the private doctor (58 percent), government facility (27 percent) or hakeem/homeopath (14 percent).

Table 5 also reveals that the costs of treatment in Pakistan are quite low. Treatment at government run facilities are either free or highly subsidised, yet only a limited proportion of ill persons prefer to seek treatment from such facilities. A majority of those seeking treatment from private facilities bear the expenses by themselves. Research evidence suggests that people prefer to go to private facilities despite the fact that public health facilities have increased over time and are heavily subsidised [PMRC (1993)]. The main reasons for not visiting a government health facility, especially among rural population, include a place too far away, absence of doctor and paramedic staff, shortage of medicines and poor quality of care which keep people away from using these services [PIHS (2000)].

As the majority of sick people prefer to go to private doctor or clinics, it would be worthwhile to examine what financial sources are used to incur expenditure on health. Table 6 shows the percentage distribution of population by the source of finance for treatment of a particular type of illness. The results indicate that majority of people (74.5 percent) use their personal savings for treatment and this percentage is the highest in case of fever, intestinal and respiratory tract infections—the most common illnesses prevalent among people. However, a substantial proportion (15.8 percent) also relies on unsecured loans and assistance from others (7 percent). It may be noted from Table 6 that for long duration diseases such as T.B., cancer/ulcers and circulatory diseases, the percentages using finances from unsecured loans and assistance from others are high as its treatment may require expenses beyond the personal savings of people. The proportion relying on sale of

Table 6

*Percentage Distribution of Population Reported Ill by Source of Finance
for Treatment and Type of Diseases*

Type of Diseases	Source of Finance for Treatment						Total (N)
	Personal Saving	Sale of Assets	Unsecured Loans	Mortgage of Land/Assets	Assistance	Others	
Respiratory Tract	74.2	0.6	15.6	0.3	8.4	0.9	100.0
Intestinal Infection	78.2	0.5	17.3	–	3.6	0.5	100.0
Circulatory Diseases	65.3	–	22.9	1.8	8.8	1.2	100.0
T.B.	58.5	1.5	23.1	4.6	12.3	–	100.0
Viral Diseases	66.1	1.8	21.1	–	10.1	0.9	100.0
Fever	81.7	0.9	10.2	0.7	5.2	1.3	100.0
Cancer/Ulcers (Malignant and Non-malignant)	63.5	1.2	27.1	–	7.1	1.2	100.0
Others	70.5	2.0	17.9	0.3	8.2	1.1	100.0
All (N)	74.5	1.0	15.8	0.5	7.1	1.0	100.0

Source: Original data file PSES-2—1, Round-2

assets or mortgage of land as source of finance for treatment of illness is not more than one percent.

The survey data also show that a substantial proportion of population does not seek treatment for illness due to various reasons. For example, more than one-fifth of sick people (22.8 percent) do not visit any facility and this percentage is 22 for males and 23.4 for females. This reveals that a majority of sick people (77 percent) choose to seek treatment and the remaining give a number of reasons for not being able to utilise any health care services. Table 7 shows the percentage distribution of sick persons by reasons for not visiting health facility. As the table shows, financial constraint is the major reason reported for not seeking treatment as 44.4 percent of sick population have cited ‘no money’ for not using any health facility. This situation

Table 7

*Percentage Distribution of Population Reported Ill by Reasons for Not Seeking
Treatment/Hospital Facility and Type of Diseases*

Type of Diseases	Reasons for Not Seeking Treatment					Total
	No Need	No Money	No Health Facility	Can't Go Alone	Others	
Respiratory Tract	39.7	37.4	11.8	1.5	9.6	100.0
Intestinal Infections	16.6	43.3	10.0	–	30.0	100.0
Circulatory Diseases	15.2	67.4	2.2	2.2	13.0	100.0
T. B.	5.9	70.6	–	–	23.5	100.0
Viral Diseases	54.8	25.2	10.8	0.5	6.7	100.0
Malaria	21.1	47.4	15.8	–	15.8	100.0
Fever	29.0	47.2	8.8	2.1	12.9	100.0
Cancer/Ulcers (Malignant and Non-malignant)	37.5	50.0	–	12.5	–	100.0
Others	21.7	57.1	6.4	1.5	13.3	100.0
All (N)	33.2	44.4	8.7	1.4	12.3	100.0

Source: Original data file PSES-2—1, Round-2.

appears to concur with the evidence of rising levels of poverty in Pakistan, where about 35 percent of urban and 40 percent of rural population is estimated to live below the poverty line [Arif (2000)].

Moreover, about 33 percent did not feel the need to seek treatment of their illness and this percentage is 39.7 for respiratory tract infections, 54.8 for viral diseases, 29 for fever, 21 for malaria and 37.5 for cancer/ulcers. This indicates that in spite of the severity and seriousness of the reported disease, a substantial proportion has shown apathy towards seeking treatment for illness. This also points towards the normative behaviour and perceptions of people towards health care who do not feel the need to visit any health facility unless they become dysfunctional or unable to perform work or their duties—a behaviour typical of people in traditional societies or less developed countries like Pakistan. However, the underlying causes of such attitude described as ‘no need for visiting any facility for treatment’ should be examined further in terms of the severity of the disease and background characteristics of ill persons.

CONCLUSIONS

This study examined the disease incidence among different sub-groups of population based on the data from the 2001 Pakistan Socio-economic Survey. Some specific conclusions of the study are the following.

About 12 percent of the population is reported ill during the past two weeks preceding the survey and the incidence is higher among females (13.3 percent) than males (10.5 percent). The pattern of illness varies by age with younger children 0-4 years and older population 60+ exhibiting higher rates of morbidity. Males as children under 10 years of age and older adults have shown higher disease incidence than their female counterparts.

Most of those reported ill among younger population suffer from diseases that are preventable with better health care and hygiene, whereas older population suffers mostly from degenerative diseases such as circulatory, diabetes, kidney problems, injury, etc. The most common illness reported among children are fever, intestinal infections including diarrhea and viral diseases. In terms of the utilisation of health facilities, there is heavy reliance on the private sector followed by the government health facilities. A majority of those seeking treatment from private facilities bear the expenses from their personal savings and this proportion is the highest for expenses of Rs 1000 or more, whereas those with lower costs of treatment of Rs 100 or less, mostly go to government hospitals or hakeems/homeopaths.

About 23 percent of those reported ill do not seek any health services with the two major reasons cited as ‘no money’ (44 percent) and ‘no need’ (33 percent) to visit a facility. This suggests that it is not merely the access or availability of services that affect people’s health seeking behaviour, it is more due to poverty and apathy or casual attitude towards health that restrain them from visiting any health facility.

Poverty closely associated with low levels of literacy, poor sanitation, and lack of awareness about the benefits of being healthy contribute towards non-use of health care services even in case of suffering from some type of illness. This suggests that health care related programmes must be an important component of the Poverty Reduction Strategy of the country.

Thus, to improve the morbidity status of population in Pakistan, concerted efforts are needed to promote appropriate prevention and curative health care programmes for all sub-groups of population in general, and for the poor and under privilege people, in particular. In this context, the provision of primary health care through community health workers at the grass-root level merits special mention as it needs to be strengthened for attaining positive outcomes.

REFERENCES

- Ahmed, Tauseef (1992) Factors Associated and Child Mortality in Pakistan and Implications for the National Health Programmes. *Asian and Pacific Population Forum* 6:2 Summer, Honolulu, Hawaii: East-West Center.
- Ali, Mubashir, S. (2000) Gender and Health Care Utilisation in Pakistan. *The Pakistan Development Review* 33:4, 759–771.
- Arif, G. M. (2001) Measuring Poverty in Pakistan: A Critical Review of Recent Poverty Line. Pakistan Institute Development Economics, Islamabad.
- Federal Bureau of Statistics (2000) Pakistan Integrated Household Survey, 1998-99. Round-3. Government of Pakistan, Islamabad.
- Karim, Mehtab. S. (1989) Disease Patterns, Health Services Utilisation and Cost of Treatment in Pakistan. *The Pakistan Development Review*
- Mahmood, N., and M. A. Mahmood (1995) Gender Difference in Child Health Care Practice: Evidence from the Pakistan Demographic and Health Survey. *The Pakistan Development Review* 34:4, 605–707.
- Mahmood, N., and M. Framurz Kiani (1994) Health Care Determinants of Child Survival in Pakistan. *The Pakistan Development Review* 33:4, 758–771.
- National Institute of Population Studies (1998) Pakistan Fertility and Family Planning Survey. Islamabad.
- Sathar, Zeba A. (1987) Seeking Explanation for High Level of Infant Mortality in Pakistan. *The Pakistan Development Review* 26:1, 58–70.
- Sathar, Zeba A. (1994) Infant Mortality in Pakistan: Uneven Risks in Urban and Rural Areas? Paper presented at Agha Khan Workshop on Maternal and Infant Mortality Policies and Interventions, Karachi, Feb. 7–9.
- UNDP (2000) *Human Development Report*. New York: Oxford University Press.
- United Nations (1998) Too Young to Die: Genes or Gender? Department of Economic and Social Affairs. Population Division, New York.
- World Bank (1993) *World Development Report 1993*. Oxford University Press.
- World Bank (1995) *Poverty Profile for Pakistan*. Washington, D.C.