

# Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers

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## Abstract

There is a growing literature on health seeking behaviours and the determinants of health services utilization especially in the context of developing countries. However, very few focused studies have been seen in Pakistan in this regard. This paper presents an extensive literature review of the situation in developing countries and relates the similar factors responsible for shaping up of a health seeking behaviour and health service utilization in Pakistan. The factors determining the health behaviours may be seen in various contexts: physical, socio-economic, cultural and political. Therefore, the utilization of a health care system, public or private, formal or non-formal, may depend on socio-demographic factors, social structures, level of education, cultural beliefs and practices, gender discrimination, status of women, economic and political systems environmental conditions, and the disease pattern and health care system itself. Policy makers need to understand the drivers of health seeking behaviour of the population in an increasingly pluralistic health care system. Also a more concerted effort is required for designing behavioural health promotion campaigns through inter-sectoral collaboration focusing more on disadvantaged segments of the population.

**Keywords:** health, health care system, health seeking behaviour, health service utilization, Pakistan

## Introduction

Strategic policy formation in all health care systems should be based on information relating to health promoting, seeking and utilization behaviour and the factors determining these behaviours. All such behaviours occur within some institutional structure such as family, community or the health care services. The factors determining the health behaviours may be seen in various contexts: physical, socio-economic, cultural and political.<sup>1</sup> Therefore, the utilization of a health care system, public or private, formal or non-formal, may depend on socio-demographic factors, social structures, level of education, cultural beliefs and practices, gender discrimination, status of women, economic and political systems environmental conditions, and the disease pattern and health care system itself.<sup>2–6</sup>

A main driver for the health seeking behaviour is the organization of the health care system. In many health care systems,

there is tension between the public and the private health sector. The private health sector tends to serve the affluent; thus the public sector resources should be freed for the poor. A dynamic cooperation, either formal or informal, between the two sectors is a must but the private sector is rarely taken into account in health planning scenarios.<sup>7,8</sup> The public and private sector may complement or substitute for each other. There are very often resource mixes with doctors working in the public sector also establishing their own private practice. Features of the service outlet and confidence in the service provider also play a major role in decision making about the choice of health facility.<sup>9–11</sup>

This paper reviews the relationship of factors affecting health seeking behaviour on use of health services in the developing world including Pakistan, encompassing public as well private sector. The health care system in Pakistan is described, and the literature reviewed from regional as well as international journals, using key words (health, health care system, health seeking behaviour, health service utilization, Pakistan) and using the structure of conceptual framework of Kroeger for assessing health-seeking behaviour.<sup>1</sup> Conclusions are drawn relating to the situation in Pakistan.

## Health care delivery system in Pakistan

The government of Pakistan spends 3.1 per cent of its GDP on economic, social and community services and 43 per cent is spent on debt servicing.<sup>12</sup> About 0.8 per cent is spent on health care, which is even lower than Bangladesh (1.2 per cent) and Sri Lanka (1.4 per cent).<sup>13</sup> However, the health status of the population has improved over the past three decades,<sup>14</sup> the rate of immunization of children has more than doubled, and the knowledge of family planning has increased remarkably and is almost universal. For over half the population (66 per cent) living in the

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rural part of the country,<sup>15</sup> poverty coupled with illiteracy, the low status of women and inadequate water and sanitation facilities have had a deep impact on health indicators.<sup>16</sup> Beside limited knowledge of illness and wellness, cultural prescriptions,<sup>17</sup> perceptions of a health service and provider and social barriers, cost has been a major barrier to the provision of an effective health service.<sup>18</sup> This has affected the physical and financial accessibility of the health services.

The health care system in Pakistan comprises the public as well as private health facilities. In the public sector, under the Devolution Plan of the Government of Pakistan in 2000,<sup>19</sup> the districts have been given comprehensive administrative as well as financial autonomy in almost all sectors, including health. The districts are now responsible for developing their own strategies, programmes and interventions based on their locally generated data and needs identified. Following the principles of Alma Alta, the public health care system is primary care focused. At the community level, the Lady Health Worker (LHW) programme of the Ministry of Health, and the Village Based Family Planning Worker (VBFPW) programme of Ministry of Population Welfare of Government of Pakistan have been established. These programmes gained an international reputation due to their grass root coverage plans.<sup>20</sup> These workers are supported by an elaborate network of dispensaries and basic health units (BHU) (serving 10 000–20 000 population) and rural health centres (RHC) (serving 25 000–50 000 population). The next levels of referral are the taluka/tehsil hospital (serving 0.5–1 million population), and the tertiary level hospital (serving 1–2 million people). The nationwide network of medical services consists of 796 hospitals, 482 RHCs, 4616 BHUs and 4144 dispensaries.<sup>21</sup> However, these basic level facilities have restricted hours of operation, are often located distant from the population. Manpower is constituted of approximately 90 000 doctors, 3000 dentists, 28 000 nurses, 6000 Lady Health Visitors and 24 000 midwives. Only 25 per cent of the BHUs and RHCs have qualified female health providers.<sup>22</sup>

In private sector, there are some accredited outlets and hospitals, but also many unregulated hospitals, medical general practitioners, homeopaths, hakeems, traditional/spiritual healers, *Unani* (Greco-arab) healers, herbalists, bonesetters and quacks.<sup>23</sup> Non-governmental organizations (NGOs) are also active in the health and social sector. In urban parts of the country, some public–private partnership initiatives exist through franchising of private health outlets. These have been successful to a large extent in raising the level of awareness of positive health behaviour among the people. For instance, the increasing contraceptive prevalence rate is due to the efforts of NGO sector and the LHWs of the government.<sup>24,25</sup> Nevertheless, primary health care activities have not brought about expected improvements in health practices, especially of rural population groups. In some areas of rural Pakistan, more than 90 per cent of deliveries are performed by untrained or semi-trained *dais* or Traditional Birth Attendants (TBAs).<sup>26,27</sup> Among other diverse and multi-faceted reasons, a poorly functioning referral system may be partly to blame.<sup>28</sup>

Given the complex nature of the health care delivery system in Pakistan and the limited resources available to the health care sector, it is essential for the various sectors to plan and work together to improve the health of Pakistanis. Thus it is important to understand the health seeking behaviour of the population and the factors driving this behaviour.

## Factors affecting health seeking behaviour

A variety of factors have been identified as the leading causes of poor utilization of primary health care services: including poor socio-economic status, lack of physical accessibility, cultural beliefs and perceptions, low literacy level of the mothers and large family size. Review of the global literature suggests that these factors can be classified as cultural beliefs, socio-demographic status, women's autonomy, economic conditions, physical and financial accessibility, and disease pattern and health service issues.<sup>2–6</sup>

Each group of factors is considered separately in the following section and later discussed in the scenario of Pakistan.

### Cultural and socio-demographic factors

Cultural beliefs and practices often lead to self-care, home remedies and consultation with traditional healers in rural communities.<sup>29</sup> Advice of the elder women in the house is also very instrumental and cannot be ignored.<sup>30</sup> These factors result in delay in treatment seeking and are more common amongst women, not only for their own health but especially for children's illnesses.<sup>31–34</sup> Family size and parity, educational status and occupation of the head of the family are also associated with health seeking behaviour besides age, gender and marital status.<sup>29,35–37</sup> However, cultural practices and beliefs have been prevalent regardless of age, socio-economic status of the family and level of education.<sup>38–40</sup> They also affect awareness and recognition of severity of illness, gender, availability of service and acceptability of service.<sup>41</sup> Gender disparity has affected the health of the women in Pakistan too by putting an un-rewarded reproductive burden on them, resulting in early and excessive child-bearing. This has led to 'a normal maternity' being lumped with diseases and health problems. Throughout the life cycle, gender discrimination in child rearing, nutrition, health care seeking, education and general care make a woman highly vulnerable and disadvantaged.<sup>17,18,42</sup> At times, religious misinterpretations have endorsed her inferior status. For her, limited access to the outer world has been culturally entrenched in the society, and for the unmarried, the situation has been even worse,<sup>4,6</sup> even if it is a matter of consulting a physician in emergency.<sup>39,43</sup>

### Women's autonomy

Men play a paramount role in determining the health needs of a woman. Since men are decision makers and in control of all the resources, they decide when and where woman should seek health care.<sup>44</sup> Women suffering from an illness report less frequently for health care seeking as compared to men.<sup>45</sup> The low

status of women prevents them from recognizing and voicing their concerns about health needs. Women are usually not allowed to visit a health facility or health care provider alone or to make the decision to spend money on health care. Thus women generally cannot access health care in emergency situations.<sup>3-5</sup> This certainly has severe repercussions on health in particular and self-respect in general of the women and their children. Despite the fact that women are often the primary care givers in the family, they have been deprived of the basic health information and holistic health services.<sup>44</sup> In Pakistan, having a subjugated position in the family, women and children need to seek the permission of head of the household or the men in the family to go to health services.<sup>4,43,46</sup> Women are socially dependent on men and lack of economic control reinforces her dependency.<sup>17</sup> The community and the family as institutions have always undermined her prestige and recognition in the household care. The prevailing system of values preserves the segregation of sexes and confinement of the women to her home.<sup>6,47</sup> Education of women can bring respect, social liberty and decision making authority in household chores.

### **Economic factors**

The economic polarization within the society and lack of social security system make the poor more vulnerable in terms of affordability and choice of health provider.<sup>29,48</sup> Poverty not only excludes people from the benefits of health care system but also restricts them from participating in decisions that affect their health, resulting in greater health inequalities. Possession of household items, cattle, agricultural land and type of residence signify not only the socio-economic status but also give a picture of livelihood of a family.<sup>38</sup> In most of the developing countries of south Asia region, it has been observed that magnitude of household out of pocket expenditure on health is at times as high as 80 per cent of the total amount spent on health care per annum.<sup>49</sup> Economic ability to utilize health services has not been very different in Pakistan. For health expenditure in Pakistan, 76 per cent goes out of pocket.<sup>50</sup> This factor also determines the ability of a person or a family as a whole to satisfy their need(s) for health care. Cost has undoubtedly been a major barrier in seeking appropriate health care in Pakistan.<sup>4,6,27</sup> Not only the consultation fee or the expenditure incurred on medicines count but also the fare spent to reach the facility and hence the total amount spent for treatment turns out to be cumbersome. Consequently, household economics limit the choice and opportunity of health seeking.<sup>16,17</sup>

### **Physical accessibility**

Access to a primary health care facility is projected as a basic social right.<sup>51</sup> Dissatisfaction with primary care services in either sector leads many people to health care shop<sup>52</sup> or to jump to higher level hospitals for primary care,<sup>53</sup> leading to considerable inefficiency and loss of control over efficacy and quality of services.<sup>54,55</sup> In developing countries including Pakistan, the effect of distance on service use becomes stronger when combined

with the dearth of transportation and with poor roads, which contributes towards increase costs of visits.<sup>22,56,57</sup> Availability of the transport, physical distance of the facility and time taken to reach the facility undoubtedly influence the health seeking behaviour and health services utilization.<sup>4,6,18,27,58</sup> The distance separating patients and clients from the nearest health facility has been remarked as an important barrier to use, particularly in rural areas.<sup>59</sup> The long distance has even been a disincentive to seek care especially in case of women who would need somebody to accompany. As a result, the factor of distance gets strongly adhered to other factors such as availability of transport, total cost of one round trip and women's restricted mobility.

### **Health services and disease pattern**

The under-utilization of the health services in public sector has been almost a universal phenomenon in developing countries. On the other hand, the private sector has flourished everywhere because it focuses mainly on 'public health goods' such as antenatal care, immunization, family planning services, treatment for tuberculosis, malaria and sexually transmitted infections.<sup>60-62</sup> Still higher is the pattern of use of private sector allopathic health facilities. This high use is attributed mostly to issues of acceptability such as easy access, shorter waiting time, longer or flexible opening hours, better availability of staff and drugs, better attitude and more confidentiality in socially stigmatized diseases.<sup>63,64</sup> However, in private hospitals and outlets, the quality of services, the responsiveness and discipline of the provider has been questionable.<sup>65,66</sup> Client-perceived quality of services and confidence in the health provider affect the health service utilization.<sup>67</sup> Also whether medicine is provided by the health care facility or has to be bought from the bazaar has an effect.<sup>68</sup> In Pakistan, the public health sector by and large has been underused due to insufficient focus on prevention and promotion of health, excessive centralization of management, political interference, lack of openness, weak human resource development, lack of integration, and lack of healthy public policy.<sup>69,70</sup> The low use of MCH centres, dispensaries and BHUs in Pakistan is discouraging. It may be due to lack of health education, non-availability of drugs and low literacy rate in rural areas.<sup>59</sup> The communication factor also creates a barrier due to differences of language or cultural gaps and it can also affect the choice of a specific health provider or otherwise.<sup>71</sup> The type of symptoms experienced for the illness and the number of days of illness are major determinants of health seeking behaviour and choice of care provider. In case of a mild single symptom such as fever, home remedies or folk prescriptions are used, whereas with multiple symptoms and longer period of illness, biomedical health provider is more likely to be consulted.<sup>10,26</sup> Traditional beliefs tend to be intertwined with peculiarities of the illness itself and a variety of circumstantial and social factors. This complexity is reflected in the health seeking behaviour, including the use of home-prescriptions, delay in seeking bio-medical treatment and non-compliance with treatment and with referral advice. The attitude of the health provider

and patient satisfaction with the treatment play a role in health seeking behaviour.<sup>6,9-11</sup>

## Conclusion

To develop rational policy to provide efficient, effective, acceptable, cost-effective, affordable and accessible services, we need to understand the drivers of health seeking behaviour of the population in an increasingly pluralistic health care system. This relates both to public as well as private sectors.

Raising the socio-economic status through multi-sectoral development activities such as women's micro-credit, life-skill training and non-formal education have been shown to have a positive impact on health seeking behaviour, morbidity and mortality besides the overall empowerment of women population.<sup>72,73</sup> Gender sensitive strategies and programmes need to be developed. Health providers also need to be sensitized more towards the needs of the clients especially the women to improve interpersonal communication.<sup>72</sup> Although there is a fairly large infrastructure of formal and orthodox institutions for health provision, the quality needs to be improved. Moreover, it is strongly desirable to further nurture critical, creative and reflective thinking to reorient our health system. Health care providers need to be more compassionate and caring to the needs of the people they serve. They should possess integrity, creativity and sensitivity and be the role model within health care system and in communities.

People marked with debt, dependence and disease are those who deserve more universal support to achieve quality of life, health and well being in order to be able to compare themselves with the rest of the world. Introducing a 'self care system' in the community which includes early detection of danger signs in diarrhoea, malaria, pneumonia and issues like family planning and personal hygiene could form a package of health education for any community setting.<sup>74,75</sup> This should address the problem of self-medication to some extent. Patient education regarding drug use and its hazards has also been advocated since long ago.<sup>76</sup> Public health awareness programs should be organized for mothers as components of public health efforts intended to help mothers understand the disease process and difference between favourable and unfavourable health practices. This would enhance the mothers' understanding of disease process and importance of preventive measures for a better family health.

With this complex and pervasive picture of health system utilization and health seeking behaviour in Pakistan, it is highly desirable to reduce the polarization in health system use by introducing more client centred approach, employing more female health workers, supportive and improved working and living conditions of health personnel, and a convivial ambiance at health service outlets.<sup>47</sup> Extra financial incentives offered to public sector staff not only will help in retaining them but will also motivate them to deliver quality services.<sup>70</sup> State regulatory mechanisms and continuing education and training for the

providers seem imperative.<sup>71,77</sup> A comprehensive health care system has to focus on the 66 per cent of rural people who are the poorest of the poor and who become visible only when programmes are signed with international donors. A more coordinated effort in designing behavioural health promotion campaigns through inter-sectoral collaboration<sup>78</sup> focusing more on disadvantaged segments of the population (i.e. women, children and elderly would be step towards improvement). *If a health service is to work, it must start from what users need.*

This paper has described the general situation vis-à-vis health seeking behaviour and health service utilization in developing countries, presenting a special accent on Pakistan. With the advent of decentralization in Pakistan,<sup>19</sup> policy is formulated at the district level. Therefore, policy makers must understand health behaviours and health care use at the district level, and give enough credence to these facts so that policies could be designed appropriately. In-depth research is imperative to visualize the real picture of the habits and practices of the people of our region. More challenging would be translating the research into policy and action. Such research will definitely have an impact on the direction or implementation of currently launched health reforms in Pakistan. It will rationally inform the decision makers in government and private sector about the re-structuring of the administration and re-designing the interventions. Such research could also be instrumental in identifying the possible avenues of partnership and collaboration to strengthen the entire health system.

## References

- 1 Kroeger A. Anthropological and socio-medical health care research in developing countries. *Soc Sci Med* 1983; **17**: 147-161.
- 2 Katung PY. Socio-economic factors responsible for poor utilization of PHC services in rural community in Nigeria. *Niger J Med* 2001; **10**: 28-29.
- 3 Navaneetham K, Dharmalingam A. Utilization of maternal health care services in Southern India. *Soc Sci Med* 2002; **55**: 1849-1869.
- 4 Fatimi Z, Avan I. Demographic, Socio-economic and Environmental determinants of utilization of antenatal care in rural setting of Sindh, Pakistan. *J Pak Med Assoc* 2002; **52**: 138-142.
- 5 Uchudi JM. Covariates of child mortality in Malawi: does the health seeking behavior of the mother matter? *J Biosoc Sci* 2001; **33**: 33-54.
- 6 Stephenson R, Hennink M. Barriers to family planning service use among the urban poor in Pakistan. *Asia Pac Popul J* 2004; **19**: 5-26.
- 7 Hanson K, Berman P. Private health care provision in developing countries: a preliminary analysis of levels and composition. *Health Policy Plan* 1998; **13**: 195-211.
- 8 Giusti D, Criel B, De Bethune X. Viewpoint: Public vs. private health care delivery: beyond the slogans. *Health Policy Plan* 1997; **12**: 193-198.
- 9 Newman R *et al.* Satisfaction with outpatient health care services in Manica Province, Mozambique. *Health Policy Plan* 1998; **13**: 174-180.
- 10 Sadiq H, Muyneck AD. Health care seeking behavior of pulmonary tuberculosis patients visiting Rawalpindi. *J Pak Med Assoc* 2002; **51**: 10-16.

- 11 Ndyomugenyi R, Neema S, Magnussen P. The use of formal and informal services for antenatal care and malaria treatment in rural Uganda. *Health Policy Plan* 1998; **13**: 94–102.
- 12 Government of Pakistan. Ministry of Finance. *Budget 2001–2002*. Finance Division, 2000.
- 13 World Bank. 1998/99 World Development Report. *Knowledge for development*. Washington DC, 1998/99.
- 14 World Bank. *Raising a healthier population*. South Asia Brief. Washington DC, 1998.
- 15 Population Reference Bureau. *2003 Population data sheet*. Washington DC: PRB, 2003.
- 16 World Bank. Pakistan Poverty Assessment. *Poverty in Pakistan: vulnerabilities, social gaps, and rural dynamics*. Poverty Reduction and Economic Management Sector Unit South Asia Region, 2002.
- 17 Hunte P, Sultana F. Health seeking behavior and the meaning of medications in Balochistan, Pakistan. *Soc Sci Med* 1992; **34**: 1385–1397.
- 18 Karim MS. *Socio-economic, demographic and health situation in Thatta District*. Karachi: Department of Community Health Sciences, Aga Khan University, 1987.
- 19 Government of Pakistan. *Local government plan 2000*. National Reconstruction Bureau. Chief Executive Secretariat. Islamabad, 2000.
- 20 Government of Pakistan. Ministry of Health & Ministry of Population Welfare. *Prime Minister's programme for family planning & primary health care*. Islamabad, 1993.
- 21 Government of Pakistan. Ministry of Health. *An overview of the health sector: the way forward*. Islamabad: Multi Donor Support Unit, 2001.
- 22 Islam A, Tahir MZ. Health sector reform in South Asia: new challenges and constraints. *Health Policy* 2002; **60**: 151–169.
- 23 Karim MS, Mahmood MA. *Health systems in Pakistan: a descriptive analysis*. Karachi: Department of Community Health Sciences, Aga Khan University, 1999.
- 24 National Institute of Population Studies. *Pakistan reproductive health and family planning survey 2000–2001*. Islamabad, 2001.
- 25 Oxford Policy Management. *Lady health worker programme. External evaluation of the national programme for family planning and primary health care*. Islamabad, 2002.
- 26 Islam A, Aman F. Role of traditional birth attendants in improving reproductive health: lessons from the Family Health Project, Sindh. *J Pak Med Assoc* 2001; **51**: 218.
- 27 Government of Pakistan. *Utilization of rural basic health services in Pakistan*. Report of Evaluation Study. Islamabad: Ministry of Health and WHO, 1993.
- 28 Siddiqui S *et al*. The effectiveness of patient referral system. *Health Policy Plan* 2001; **16**: 193–198.
- 29 Nyamongo IK. Health care switching behavior of malaria patients in a Kenyan rural community. *Soc Sci Med* 2002; **54**: 377–386.
- 30 Delgado E, Sorenson SC, Van der Stuyft P. Health seeking behaviour and self assessment for common childhood symptoms in rural Guatemala. *Ann Soc Belg Med Trop* 1994; **74**: 161–168.
- 31 Nakagawa YM *et al*. Gender difference in delays to diagnosis and health care seeking behavior in a rural area of Nepal. *Int J Tuberc Lung Dis* 2001; **5**: 24–31.
- 32 de Zoysa I *et al*. Perceptions of childhood diarrhea and its treatment in rural Zimbabwe. *Soc Sci Med* 1984; **19**: 727–734.
- 33 McNee A *et al*. Responding to cough: Boholano illness classification and resort to care in response to childhood ARI. *Soc Sci Med* 1995; **40**: 1279–1289.
- 34 Kaona FAD, Siziya S, Mushanga M. The problems of a social survey in epidemiology: an experience from a Zambian rural community. *Afr J Med Sci* 1990; **19**: 219–224.
- 35 Yip WC, Wang H, Liu Y. Determinants of choice of medical provider: a case study in rural China. *Health Policy Plan* 1998; **13**: 311–322.
- 36 Thorson A, Hoa NP, Long NH. Health seeking behavior of individuals with a cough of more than 3 weeks. *Lancet* 2000; **356**: 1823–1824.
- 37 Goldman N, Heuveline P. Health seeking behavior for child illness in Guatemala. *Trop Med Int Health* 2000; **5**: 145–155.
- 38 Geissler PW *et al*. Children and medicines: self treatment of common illnesses among Luo schoolchildren in western Kenya. *Soc Sci Med* 2000; **50**: 1771–1783.
- 39 Stuyft PV, Sorenson SC, Delgado E, Bocaletti E. Health seeking behavior for child illness in rural Guatemala. *Trop Med Int Health* 1996; **1**: 161–170.
- 40 Perez-Cuevas R *et al*. Mother's health seeking behavior in acute diarrhea in Tlaxcala, Mexico. *J Diarrhoeal Dis Res* 1996; **14**: 260–268.
- 41 Aday LA, Anderson R. A framework for the study of access to medical care. *Hlth Serv Res* 1974; **9**: 208–220.
- 42 Hasan D, Khanum A. Health care utilization during terminal child illness in squatter settlements of Karachi. *J Pak Med Assoc*. 2000; **50**(12): 405–9.
- 43 Alix-Dancer P. Access to health care in developing countries. In: *Developing countries, society and technology*. Stockholm: Royal Institute of Technology (KTH), 2003.
- 44 Rani M, Bonu S. Rural Indian women's care seeking behavior and choice of provider for gynecological symptoms. *Stud Fam Plann* 2003; **34**: 173–185.
- 45 Ahmed SM, Adams AM, Chowdhury M, Bhuiya A. Gender, socio-economic development and health seeking behavior in Bangladesh. *Soc Sci Med* 2000; **51**: 361–371.
- 46 Tinker AG. *Improving women's health in Pakistan*. Health, nutrition and population working paper series. Human Development Network, World Bank, 1998.
- 47 Mumtaz Z, Salway S, Waseem M, Umer N. Gender-based barriers to Primary health care provision in Pakistan: the experience of female providers. *Health Policy Plan* 2003; **18**: 261–269.
- 48 Asenso-Okyere WK *et al*. Cost recovery in Ghana: are there any changes in health care seeking behaviour? *Health Policy Plan* 1998; **13**: 181–188.
- 49 Ha NT, Berman P, Larsen U. Household utilization and expenditure on private and public health services in Vietnam. *Health Policy Plan* 2002; **17**: 61–70.
- 50 World Health Organization. *World Health report 2000. Health systems: improving performance*. Geneva, 2000.
- 51 United Nations. *Elements for a Draft Declaration on Human Rights and Health Practice*. Geneva, 2001
- 52 Uzma A, Underwood P, Atkinson D, Thackrah R. Postpartum health in a Dhaka slum. *Soc Sci Med* 1999; **48**: 313–320.
- 53 Atkinson S *et al*. The referral process and urban health care in sub-Saharan Africa: the case of Lusaka, Zambia. *Soc Sci Med* 1999; **49**: 27–38.

- 54 Daniels N *et al.* Benchmarks of fairness for health care reform: a policy tool for developing countries. *Bull World Health Org* 2000; **78**: 740–750.
- 55 Campbell M, Sham ZA. Sudan: Situational analysis of maternal health in Bara district, North Kordofan. *World Hlth Stat Q* 1995; **48**: 60–66.
- 56 Noorali R, Stephen L, Rahber MH. Does use of government service depend on distance from the health facility? *Health Policy Plan* 1999; **14**: 191–197.
- 57 Bhuiya A, Bhuiya I, Chowdhury M. factors affecting acceptance of immunization among children in rural Bangladesh. *Health Policy Plan* 1995; **10**: 304–312.
- 58 Moazam F, Lakahani M. Ethical dilemmas of health care in the developing nations. *J Pediatr Surg* 1990; **25**: 438–441.
- 59 Government of Pakistan. *Utilization of public health facilities in Pakistan*. Islamabad: National Health Management Information System, 2000.
- 60 Berman P, Rose L. The role of private sector in MCH and family planning services in developing countries. *Health Policy Plan* 1996; **11**: 142–155.
- 61 Zwi AB. Private health care in developing countries. *Br Med J* 2001; **323**: 464–466.
- 62 Bannette S *et al.* Carrot and stick: state mechanisms to influence private provider behavior. *Health Policy Plan* 1994; **9**: 1–13.
- 63 Aljunid S, Zwi AB. Differences in public and private health services in a rural district of Malaysia. *Med J Malay* 1996; **51**: 426–435.
- 64 Bhattia JC, Cleland J. Health care seeking and expenditure by young Indian mothers in the public and private sectors. *Health Policy Plan* 2001; **16**: 55–61.
- 65 Andaleeb SS. Public and private hospitals in Bangladesh: service quality and predictors of hospital choice. *Health Policy Plan* 2000; **15**: 95–102.
- 66 Meng Q, Liu X, Shi J. Comparing the services and quality of private and public clinics in rural China. *Health Policy Plan* 2000; **15**: 349–356.
- 67 Duong DV, Binns CW, Lee AH. Utilization of delivery services at the primary health care level in rural Vietnam. *Soc Sci Med* 2004; **59**(12): 2585–2595.
- 68 Mondal SK. Utilization of antenatal care services in Rajasthan: observations from NFHS. *J Fam Welf* 1997; **43**: 28–33.
- 69 World Bank. *Towards a health sector strategy*. Washington DC: Health, Nutrition and Population Unit, South Asia Region, 1997.
- 70 Khan A. Policy making in Pakistan's population programme. *Health Policy Plan* 1996; **11**: 30–51.
- 71 Aga Khan University. *Health workers for change. A manual to improve quality of care—from Africa to Pakistan*. UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases. Karachi: Department of Community Health Sciences, 2003.
- 72 Ahmed SM, Adams AM, Chowdhury M, Bhuiya A. Changing health seeking behavior in Matlab: do development interventions matter? *Health Policy Plan* 2003; **18**: 306–315.
- 73 Stephenson R, Tsui AO. Contextual influences on reproductive health service use in Uttar Pradesh, India. *Stud Fam Plann* 2002; **33**: 309–320.
- 74 Haider S, Thaver I. Self medication or self care: implications for primary health care strategies. *J Pak Med Assoc* 1995; **45**: 297–298.
- 75 D'Souza RM. Role of health seeking behaviour in child mortality in the slums of Karachi, Pakistan. *J Biosoc Sci* 2003; **35**: 131–144.
- 76 Thaver I, Harpham T, McPake B, Garner P. Private practitioners in the slums of Karachi: what quality of care do they offer? *Soc Sci Med* 1998; **46**: 1441–1449.
- 77 Garner P, Thaver I. Urban slums and primary health care: the private doctor's role. *Br Med J* 1993; **306**: 667–668.
- 78 Oldenburg BF, McGuffog ID, Turrel G. Making a difference to the socioeconomic determinants of health: Policy responses and intervention options. *Asia Pac J Public Health* 2000; **12** (Suppl): S51–S54.