
Sindh Health Sector Strategy

Annexure

2012–2020



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Annexure

Annex 1

LIST OF STAKEHOLDERS

Department of Health

Sr. #	Name	Designation	Department
1.	Dr. Sagheer Ahmed	Hon. Minister Health	Department of Health Government of Sindh
2.	Mr. Hashim Raza Zaidi	Secretary	Department of Health Government of Sindh
3.	Dr. Hafeez ul Haq Memon	Director General Health Services	Department of Health
4.	Dr. Suresh Kumar	Special Secretary Public Health	Department of Health
5.	Ms. Kiran Nauman	Additional Secretary	Department of Health
6.	Dr. Khalid Sheikh	Additional Secretary	Department of Health
7.	Dr. Sabir Ali Memon	Additional Secretary	Procurement, Monitoring & Evaluation
8.	Dr. Saeed Qureshi	Medical Superintendent	Civil Hospital Karachi
9.	Dr. Rahim Bux Bhatti	Director	GIMS, Khairpur
10.	Mr. Saleem Basharat	Secretary, Quality Control Board	Department of Health
11.	Mr. Qaiser Muhammad	Chief Drug Inspector	Department of Health
12.	Dr. Sahib Jan Bader	Provincial Director	MNCH Program
13.	Dr. Mazhar Ali Khamisani	Project Director	EPI
14.	Dr. Abdul Majeed Chhuto	Provincial Manager,	Chief Minister's Initiative for Prevention and Control of Hepatitis
15.	Dr. Zahoor Baloch	Deputy Provincial Manager,	Chief Minister's Initiative for Prevention and Control of Hepatitis
16.	Dr. Naheed Jamali	Director	Malaria Control Program

17.	Dr. Feroze Memon	Provincial Program Manager Program	National Program FP&PHC, Hyderabad
18.	Dr. Abdul Jabbar	Project Director	Sindh Aids Control Program
19.	Dr. Qamar Abbas	Deputy Program Manager	Sindh Aids Control Program
20.	Dr. Zahid Ansari	Program Manager	Sindh Blood Transfusion Authority
21.	Dr. Shakir Mustafa	Senior Coordinator	Sindh Nutrition Support program
22.	Dr. Mehmood Iqbal Memon	Ex- Provincial Coordinator	Management Information System, Hyderabad
23.	Ms. Zarina Habib	Director	Nursing Examination Board Sindh, Karachi
24.	Dr. Murad Ali Khamisani	ENT Specialist	Civil Hospital, Khairpur
25.	Dr. Durre Shahwar	Program Director	Nutrition Program
26.	Dr. Jamila Soomro	Coordinator	Health Sector Reform Unit
27.	Dr. Nisar A. Solangi	Coordinator	Health Sector Reform Unit
28.	Mr. Mohsin Sheikh	Additional Director	Planning & Development
29.	Ms. Shaista Mubarak	Additional Director & Senior Economist	Planning & Development
30.	Dr. Abdul Rashid Sheikh	Deputy Director	Planning & Development
31.	Dr. Abdul Jaleel Bhutto	EDO Health	Kashmore
32.	Dr. Khalil Katpar	EDO health	Shikarpur
33.	Dr. Sabir Memon	In charge PMI cell	Health Department Karachi
34.	Dr. A. Jabbar Shaikh	Provincial Program Manager	Sindh AIDS control Program, Karachi
35.	Ms. Sakina Yousuf	Resource Mobilization Manager	SIUT, Karachi
36.	Dr. Aijaz Gajani	Civil Surgeon	Civil Hospital, Khairpur

37.	Dr. Younis Asad Sheikh	MIS Cell	DGHSS, Hyderabad
38.	Dr. Abdullah Kamran	In-Charge LHW MIS	National Program FP&PHC, Hyderabad
39.	Dr. Ismat Ara	Provincial Program Manager / Director	Tuberculosis Control Program, Hyderabad
40.	Dr. Uzair Pirzado	UNICEF Focal Point	Sindh Nutrition Program, Karachi
41.	Mr. Adil	Provincial Master Trainer	MIS Cell, Hyderabad
42.	Mr. Mehmood	Admin Officer	Sindh Medical Faculty, Karachi

Department of Planning & Development

Sr. #	Name	Designation	Department
1.	Mr. Muhamad Ishaque Lashari	Additional Chief Secretary	Planning & Development
2.	Mr. Khalid Waheed Khan	Special Secretary	Planning & Development
3.	Dr. Fawad Shaikh	Chief Health	Planning & Development
4.	Mr. Fazal karim khatri	Director Economics Reform Unit	Finance Department
5.	Ms. Shagufta Khanum	Deputy Director	Bureau of Statistics, Planning and Development Department

UN Partners

Sr. #	Name	Designation	Department
1.	Dr. Andro Shilakadze	Chief Health	UNICEF Sindh
2.	Dr. Asif Aslam	Health Specialist	UNICEF Sindh, Karachi
3.	Dr. Shahnaz Shalwani	Representative UNFPA, Sindh	UNFPA, Karachi
4.	Dr. Shabbir Chandio	Focal Person NPPI	UNFPA, Karachi
5.	Dr. Javed Shaikh	WHO Operations Officer	Sindh, Karachi

6.	Dr. Khadim Hussain Lakhiar	Program Manager	Basic Development Needs Program, Sindh
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Private Sector

Sr. #	Name	Designation	Department
1.	Prof. Zulfiqar Bhutta	Head of Women & Child Health Division	Aga Khan University
2.	Prof. Rashid Jooma	Ex-Federal DG Health and Neurosurgeon	
3.	Prof. Sadiqua Jafarey	President	National Committee for Maternal and Neonatal Health, Karachi
4.	Dr. Iqbal Memon	Prof. Pediatrics	Formerly Civil Hospital
5.	Dr. Mirza Ali Azhar	Secretary	General Pakistan Medical Association
6.	Dr. M Ismail Memon	Joint Secretary	Pakistan Medical Association
7.	Dr. Wasim Jafri	Professor, Dean, Continuing Medical Education	Aga Khan University Hospital, Karachi
8.	Dr. Anwar Ali Siddiqui	Associate Dean, Research	Aga Khan University Hospital, Karachi
9.	Ms. Alina A. Visram	Manager	Rotary International Pakistan Polio Plus Committee
10.	Ms. Imtiaz Kamal	President	Midwifery Association of Pakistan
11.	Dr. Aziz Khan Tank	Secretary General	College of Family Medicine, Pakistan, Karachi
12.	Dr. Azra Ahsan	Secretary General	Association of Maternal, New born Health
13.	Dr. Mubina Abgotw alla	President	HOPE
14.	Mr. Aslam Farid	Focal Person	Green Star Social Marketing
15.	Dr. Saadia Pal	Member	Association of Maternal, New born Health
16.	Dr. Arnavaz Sethna	Medical Director	Lady Dufferin Hospital, Karachi
17.	Dr. Ashraf Kamaruddin	Medical Superintendent	Lady Dufferin Hospital, Karachi

18.	Dr. Fauziah Rabbani	Professor and Chair	Aga Khan University Hospital, Karachi
19.	Dr. Khawaja Tasawar Riaz	Administrator	Murshid Hospital and Health care center
20.	Dr. Nasreen Amanat	Professor/Principal	Bahria Medical College, Karachi
21.	Mr. Zulfiqar Omer Khan	Client Services Manager	IMS Health Pakistan, Karachi
22.	Mr. Ahmed Raza	Administrator	Al Mustufa Medical Center
23.	Mr. Farooq Hashmi	Sales Manager	IMS Health
24.	Mr. Haamid Jaffer	Member, Board,	Murshid Hospital and Health care center
25.	Mr. Muhammad Anwar Gopalani	Director Human Resource	Central Depository Company, Karachi
26.	Ms. Kauser Saeed Khan	Gender Specialist	Women's Action Forum
27.	Ms. Shagufta Hassan	Director Finance	Aga Khan University Hospital, Karachi,
28.	Rear Admiral (Retd.) Syed Ahmed Baqar	Chief Operating Officer	Infaq Foundation, Karachi
29.	Prof. Naeem Jaffery	Dean	Ziauddin Medical University, Karachi
30.	Dr. Samrina Hashmi,	President	PMA Sindh, Karachi
31.	Ms. Hema Mukesh	Corporate Social Responsibility Focal person	Glaxo Smith Kline (GSK) Pakistan
32.	Mr. Rashid	CEO's Office	Indus Hospital Karachi
33.	Dr. Sobhani	Board Member	Kohi Goth's Fistula Hospital, Pakistan Forum on Maternal Health
34.	Dr. Ayesha Mehnaz	Head of Pediatrics Department	Gvil Hospital Karachi
35.	Dr Qaiser Sajjad	Office Bearer	Pakistan Medical Association
36.	Dr. Tanvir Shaikh	CEO	HANDS
37.	Dr. Mhsina Bilgrami	CEO	Maries Stopes Society

References:

1. 2010 Responsiveness and Accountability in Health Sector, Pakistan. Report DFID and AusAid
2. Aaserud, M., *et al.* 2005. Translating research into policy and practice in developing countries: a case study of magnesium sulphate for pre-eclampsia. *BMC Health Serv Res.*, 5: p. 68.
3. ADB TA 4992-PAK Improving Health Service Delivery in Sindh // Support for Governance Reforms in Pakistan (Subproject: Strengthening Fiscal and Public Financial Management in Sindh): Sindh Growth & Rural Revitalization Program, 2009.
4. ADB, Progress Report on Tranche Release, Program Number: 34337, Loan Number 2047/48, July 2007, Pakistan: Sindh Devolved Social Services Program.
5. ADB. 2008. Project Number: 41641 RRP, Proposed Program Cluster and Loan for Subprogram 1 Islamic Republic of Pakistan: Punjab Millennium Development Goals Program.
6. Agha A, Amer W, Anwar E, Bashir K. Reduction of micro albuminuria by using losartan in normotensive patients with type 2 diabetes mellitus: A randomized controlled trial. *Saudi J Kidney Dis Transpl* 2009;20:429-35
7. Ahmed 2011, Express Tribune 2010
8. Alam, M.T., 1997. Therapeutics: a state of the art. *Pak J Pharm Sci.* 10(1): p. 69-78.
9. Ali M, Horikoshi Y, Situation Analysis of Health Management Information System in Pakistan. Pakistan Health Services Academy, Maternal and Child Health Project Pakistan Institute of Medical Sciences, Islamabad Pakistan *J. Med. Res.* Vol.41 No.2, 2002 Accessed on August 24, 2011 <http://www.pmr.org.pk/hmis.htm>
10. Annual Report, 2010, Violence against Women in Pakistan, Aurat Foundation
11. ARROW, (2005) Monitoring ten years of ICPD implementation: the way forward to 2015, Asian Country Report, Kuala Lumpur, Malaysia
12. Asian-Pacific Resource and Research Centre for Women (ARROW), A Framework of Indicators for Action on Women's Health Needs and Rights, 2000.
13. Azhar, S., *et al* 2009. The role of pharmacists in developing countries: the current scenario in Pakistan. *Hum Resour Health.*, 7: p. 54.
14. Babar, Z.U. and S. Jamshed, 2008. Social pharmacy strengthening clinical pharmacy: why pharmaceutical policy research is needed in Pakistan? *Pharm World Sci.*, 30(5): p. 617-9.
15. Bachani AM, Ghaffar A, Hyder AA. Burden of fall injuries in Pakistan--analysis of the National Injury Survey of Pakistan. *East Mediterr Health J.* 2011 May; 17 (5):375-81.
16. Benazir Income Support Program Benazir Income Support Program [Online] // www.bisp.gov.pk-07.20, 2011.
17. **Bhutta ZA**, Sajid Soofi, Simon Cousens, *et al*, 2011 Improvement of perinatal and newborn care in rural Pakistan through community-based strategies: a cluster-randomised effectiveness trial *The Lancet*, Vol 377, Issue 9763, Pages 403 - 412
18. **Bhutta ZA**, Sheila M Bird, *et al*, 2000 Therapeutic effects of oral zinc in acute and persistent diarrhea in children in developing countries: pooled analysis of randomized controlled trials. *American Journal of Clinical Nutrition*, Vol. 72, No. 6, 1516-1522
19. **Bhutta ZA, Yakoob MY, Lawn JE et al, 2011 Stillbirths: what difference can we make and at what cost? ; The Lancet 377(9776):1523-38**
20. Bhutta Zulfiqar A, Gressly N, Pakistan Polio Demonstration Project.
21. Bhutta, T.I. and C. Balchin, 1996. Assessing the impact of a regulatory intervention in Pakistan. *SocSci Med.*, 42(8): p. 1195-202.
22. Bloom, G., H. Standing, and R. Lloyd, 2008. Markets, information asymmetry and health care: towards new social contracts. *SocSci Med*, 66(10): p. 2076-87.
23. Bukhari SKH, J.A.R.H.Q. 2010. Jooma I R., Bile K.M, *et al*, Essential medicines management during emergencies in Pakistan. *EMHJ*, Vol. 16.

24. Butt, Z.A., *et al.* 2005. Quality of pharmacies in Pakistan: a cross-sectional survey. *Int J Qual Health Care*, 17(4): p. 307-13.
25. Cameron, A., *et al.* 2009. Medicine prices, availability, and affordability in 36 developing and middle-income countries: a secondary analysis. *Lancet*, 373(9659): p. 240-9.
26. Census 1998
27. CIET 2002, Community Information Empowerment Training
28. Clinical Nephrology, 2010 Vol. 74 – Suppl. 1/ (S142-S149)
29. Das, N. 2001 Prescribing Practices of Consultants at Karachi Pakistan.. *JPMA*.
30. Department of Health (DOH), Government of Sindh, July 2011
31. Department of Health, Government of Sindh Presentation on Health in Sindh. - Karachi
32. DFID. 2002. *Prescription, dispensing and storage practices in the provinces of NWFP, Baluchistan and Punjab in collaboration with Network for Consumer Protection*. EDSP Baseline Survey Report. 2002
33. Directory of Intermediary NGOs in Pakistan compiled by NGO Resource Center, 2000
34. DOWITES Newsletter, 2010, Vol. 2, Issue 01
35. Draft Project Proposal for the Rehabilitation of Blood Transfusion Services (BTSs) in Pakistan, Dr Nabila E. Metwalli WHO/EMRO and Dr Guy Levy BTS / Swiss Red Cross (SRC), March 2002
36. Drugs Control Organization; Ministry of Health of Pakistan. Accessed on 21-06-2011
37. EDSP. 2002. *Standard operating procedures for prescription, handling and dispensing*.
38. EMRO, WHO. 2011. *Regional Health Systems Observatory- EMRO*. World Health Organization. 2011.
39. EMRO. 2007. *Regional Health Systems Observatory- EMRO. 2007. Health Systems Profile- Pakistan*.
40. Farkhondeh, M., *et al.* 2009. Antiepileptic drugs in children in developing countries: research and treatment guideline needs. *Epilepsia*, 50(11): p. 2340-3.
41. FBR 2009-10. Federal Board of Revenue, Government of Pakistan, Annual Report 2009-10
42. FBR Communiqué ,Exemptions under Reformed GST dated October 18, 2010
43. Federal Bureau of Statistics (FBS), 2001-2003
44. Feeley *et al.*, 2009 finding middle ground: making better use of the African private health sector through more effective regulations Abt Associates Inc.
45. Fikree, F.F., A.M. Mir, and I.U. Haq, 2006. She may reach a facility but will still die! An analysis of quality of public sector maternal health services, District Multan, Pakistan. *JPak Med Assoc*, 56(4): p. 156-63.
46. Gateway to giving, Directory of 131 certified NPOs, Pakistan Center for Philanthropy 2009
47. Gazdar Haris, Causes and complication of induced abortion in Pakistan, , 2011
48. Global Gender Gap Report, World Economic Forum, Geneva, Switzerland, 2010
49. H. Jokhio & G. Pappas: Capacity of senior health managers in Pakistan: a survey of managers in public health sector. *The Internet Journal of Healthcare Administration*. 2009 Volume 6 Number 2.
50. H. Jokhio, G. Pappas & R. J. Lancashire: Health System Managerial Staffing Patterns: Public Sector Experience From Pakistan. *The Internet Journal of World Health and Societal Politics*. 2008 Volume 5 Number 1.
51. Haak, H. and M.E. Claeson, 1996. Regulatory actions to enhance appropriate drug use: the case of antidiarrhoeal drugs. *SocSci Med*, 42(7): p. 1011-9.
52. Habib, F. and L. Baig *Cost of DOTS for tuberculous patients*. *J Pak Med Assoc*, 2006. 56(5): p. 207-10.
53. Hafeez, A. and Z. Mirza, *Responses from pharmaceutical companies to doctors' requests for more drug information in Pakistan: postal survey*. *BMJ*, 1999. 319(7209): p. 547.
54. Hafeez, A., *et al.*, *Prescription and dispensing practices in public sector health facilities in Pakistan: survey report*. *J Pak Med Assoc*, 2004. 54(4): p. 187-91.
55. Haider, S. and I.H. Thaver, *Self medication or self care: implication for primary health care strategies*. *J Pak Med Assoc*, 1995. 45(11): p. 297-8.

56. Hamid, M.H., *et al.*, 2005. Acute poisoning in children. *J Coll Physicians Surg Pak.*, 15(12): p. 805-8.
57. Hashmi, S.K., *et al.* 2007. Factors associated with adherence to anti-hypertensive treatment in Pakistan. *PLoS One*, 2(3): p. e280.
58. Health and Social Work - Private Sector Hospitals, IFC/World Bank Group, 2121 Pennsylvania Avenue, NW Washington, DC 20433, USA, May 2011
59. Health management information System for First Level Care Facilities, Instruction manual for First Level Care Facility Staff. Government of Pakistan, Ministry of Health, Special Education and Social Welfare (Health Division), Islamabad. Revised 1993
60. Health Profile of Sindh by District – as on January 1, 2010, Bureau of Statistics, Planning and Development Department, Government of Sindh, Karachi
61. HEC, Higher Education Commission, publications, 2011
62. Heise, L. *et al.* Violence against Women: The Hidden Health Burden. World Bank Discussion Papers No. 155. Washington DC, 1994
63. Hongoro Charles and Kumamayake Lilani. Do they work? Regulating for-profit in Zimbabwe. Oxford University Press 2000
64. <http://womensrefugeecommission.org/docs/emoc.pdf> Accessed on 19th February 2011. 2004.
65. http://www.ispub.com/journal/the_internet_journal_of_healthcare_administration/volume_5_number_2_34/article/capacity-of-senior-health-managers-in-pakistan-a-survey-of-managers-in-public-health-sector.html
66. http://www.ispub.com/journal/the_internet_journal_of_healthcare_administration/volume_5_number_2_34/article/capacity-of-senior-health-managers-in-pakistan-a-survey-of-managers-in-public-health-sector.html
67. <http://www.karachidigest.com/articles/news/civil-hospital-karachi-first-medical-icu-set-for-inauguration>
68. <http://www.ppas-chk.org/index.html> Infaq and its benefits - the Nature of Infaq, Kamal Deen Zakat Foundation of America, July 23, 2010,
69. Imran, M., F.A. Khan, and S. Abbasi, *Standards for labelling and storage of anaesthetic medications--an audit.* J Pak Med Assoc, 2009. 59(12): p. 825-8. International, B.M., Pakistan Pharmaceuticals and Healthcare Report Q2 2011.
70. Indian Medicos February 21, 2009
71. IPN. 2006. *Counterfeit medicines in less developed countries. Problems and solutions.* International Policy Network London. Accessed on 18th February 2011.
72. Irina A. Nikolic and Harald Maikisch. HNP discussion paper 2006 Public-Private Partnerships and Collaboration in the Health Sector, An Overview with Case Studies from Recent European Experience.
73. Israr, S.M., *Is Ministry of Health fully prepared to implement an effective DOTS program in Pakistan? An operations research on TB control program in the public health sector in Sindh.* J Pak Med Assoc, 2003. 53(8): p. 324-7.
74. Jafar H. T., *et al.* Community-Based Interventions to Promote Blood Pressure Control in a Developing Country. *Ann Intern Med.* 2009; 151: 593-601.
75. Jafar TH, Levey AS, Jafary FH, White F, Gul A, Rahbar MH, *et al.* Ethnic subgroup differences in hypertension in Pakistan. *J Hypertens* 2003; 21:905-912.
76. Jafar, T.H., *et al.*, *General practitioners' approach to hypertension in urban Pakistan: disturbing trends in practice.* *Circulation*, 2005. 111(10): p. 1278-83.
77. Jafarey S.N. and R. Korejo. 1995. Social and cultural factors leading to mothers being brought dead to hospital. *International Journal of Gynecology and Obstetrics.*
78. Jamshed S, B.Z., *Generic Medicines as A Way to Improve Access and Affordability: A Proposed Framework for Pakistan.* *Journal of Clinical and Diagnostic Research.* 2009
79. Janjua, N.Z., *et al.*, *Pattern of health care utilization and determinants of care-seeking from GPs in two districts of Pakistan.* *Southeast Asian JTrop Med Public Health*, 2006. 37(6): p. 1242-53.

80. Janjua, N.Z., *Injection practices and sharp waste disposal by general practitioners of Murree, Pakistan*. JPak Med Assoc, 2003. 53(3): p. 107-11.
81. Janjua, N.Z., M.I. Khan, and B. Mahmood, *Sharp injuries and their determinants among health care workers at first-level care facilities in Sindh Province, Pakistan*. Trop Med Int Health. 15(10): p. 1244-51.
82. Kadir, M.M., et al., *Out-of-pocket expenses borne by the users of obstetric services at government hospitals in Karachi, Pakistan*. JPak Med Assoc, 2000. 50(12): p. 412-5.
83. Khan, J., et al., *Tuberculosis diagnosis and treatment practices of private physicians in Karachi, Pakistan*. East Mediter Health J, 2003. 9(4): p. 769-75.
84. Khowaja, L.A., A.K. Khuwaja, and P. Cosgrove, *Cost of diabetes care in out-patient clinics of Karachi, Pakistan*. BMC Health Serv Res, 2007. 7: p. 189.
85. Kumaranayake et al. How do countries regulate the health sector? Evidence from Tanzania and Zimbabwe. Health policy and planning 15 (4) 357-367
86. Kumarnayake Lilani ,et.al How do countries Regulate Health sector? Evidence from Tanzania and Zimbabwe.Oxford University Press 2000
87. Lagomarsino, Gina, Stefan Nachuk, and Sapna Singh Kundra. 2009. *Public stewardship of private providers in mixed health systems: Synthesis report from the Rockefeller Foundation—sponsored initiative on the role of the private sector in health systems*. Washington, DC: Results for Development Institute
88. Laing R., *Improving Access to Child Health Medicines Review and Discussion Paper prepared for WHO Regional and Country Child Health Advisers Geneva*. 2002.
89. LDH Administrative Office, July 2011
90. Leslie, T., et al., *Epidemic of Plasmodium falciparum malaria involving substandard antimalarial drugs, Pakistan, 2003*.Emerg Infect Dis, 2009. 15(11): p. 1753-9.
91. Liaquat A Khowaja, Ali K Khuwaja, Peter Cosgrove, Cost of diabetescare in out-patient clinics of Karachi, Pakistan. BMC Health Services Research 2007, 7:189
92. List of Pakistan Nursing Council (PNC) Recognized Nursing Colleges, 2010
93. Loevinsohn, B., et al. 2009. Contracting-in management to strengthen publicly financed primary health services—the experience of Punjab, *Pakistan.Health Policy*., 91(1): p. 17-23.
94. Mehtab.S Karim 2011, Population strategies in Sindh, under the 18th Amendment
95. Mendis, S., et al., 2005. WHO study on Prevention of Recurrences of Myocardial Infarction and Stroke (WHO-PREMISE).*Bull World Health Organ*, 83(11): p. 820-9.
96. Mendis, S., et al., 2007. The availability and affordability of selected essential medicines for chronic diseases in six low- and middle-income countries.*Bull World Health Organ*, 85(4): p. 279-88.
97. Meyer, J. 2004. *Emergency Obstetric Care: Critical Need among Populations Affected by Conflict*. Reproductive Health Response in Conflict Consortium.
98. MICS Multiple Indicator Cluster Survey, 2003-04
99. Ministry of Health, Government of Pakistan, 2005
100. Mirza& Jenkins 2004 .Risk Factors, prevalence and treatment of anxiety and depressive disorders in Pakistan: systematic review. BMJ 2004;328
101. MOF. 2008. *Pakistan Economic Survey 2007-08*. Ministry of Finance, Government of Pakistan. 2008.
102. MOH, Ministry of Health, 2009
103. MOH. 1967. *Pharmacy Act 1967*. Ministry of Health. Government of Pakistan, <http://www.dcomoh.gov.pk/regulations/pharmacyact1967.php>. Accessed on 18th February 2011.
104. MOH. 1976. *Drugs (Licensing, Registering and Advertising) Rules,1976*.Ministry of Health, Government of Pakistan. <http://www.dcomoh.gov.pk/regulations/drugrules2.php>. Accessed on: 18th February 2011.

105. MOH. 1976. *The Drugs (Appellate Board) Rules, 1976*, Ministry of Health, Government of Pakistan. <http://www.dcomoh.gov.pk/regulations/drugrules3.php>. Accessed on 18th February 2010.
106. MOH. 1976. *The Drugs (Imports & Exports) Rules, 1976*. Ministry of Health, Government of Pakistan. <http://www.dcomoh.gov.pk/regulations/drugrules6.php>. Accessed on 18th February 2011.
107. MOH. 1978. *Drugs (Specifications) Rules, 1978*. Ministry of Health, Government of Pakistan. <http://www.dcomoh.gov.pk/regulations/drugrules7.php>. Accessed on 18th February. 2011.
108. MOH. 1978. *The Drugs (Research) Rules, 1978*. Ministry of Health. Government of Pakistan. <http://www.dcomoh.gov.pk/regulations/drugrules4.php>. Accessed on: 18th February 2011.
109. MOH. 1986. *The Drugs (Labeling and Packing) Rules, 1986*. Ministry of Health, Government of Pakistan. <http://www.dcomoh.gov.pk/regulations/drugrules1.php>. Accessed on: 18th February 2011.
110. MOH. 2003. *National Drug Policy*. Ministry of Health, Government of Pakistan, Islamabad. <http://www.health.gov.pk/>, Accessed on 18th February 2011.
111. MOH. 2004. *Forging Alliance for Health with Legislators*. "Promoting people's access to health through improved access to Primary Healthcare". Ministry of Health, Government of Pakistan.
112. MOH. 2009. *National Health Policy, Final Draft*. Ministry of Health. Government of Pakistan, http://bravo.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/legaldocument/wcms_117438.pdf, Access date: 18th February, 2011, in 2009.
113. MOH. 2009. *Pakistan Pharmacy Council Act, 2009*. Ministry of Health. Government of Pakistan. http://www.na.gov.pk/private_bills/pvt_bill2009/pakistan_pharmacy_council_act2009_300609.pdf. Accessed on: 18th February 2010.
114. MOH. 2010. *Draft Vitamin Policy 2010*. Ministry of Health, Government of Pakistan, Islamabad, http://202.83.164.27/wps/portal/Moh!/ut/p/c0/04_SB8K8xLLM9MSSzPy8xBz9CP0os_hQN68AZ3dnIwN_Qz8DAyPXQGczU08jA29nM_2CbEdFAHXcy38!/?WCM_GLOBAL_CONTEXT=/wps/wcm/connect/MohCL/ministry/news/draft-vitamin+policy+2010+123. Accessed on 18th Feb 2011.
115. MOH. 2010. *Pakistan Medical and Dental Council (Physician-Pharmaceutical Industry Relationship Ethical Standards), Regulations 2010*. Ministry of Health, Government of Pakistan http://202.83.164.27/wps/portal/Moh!/ut/p/c0/04_SB8K8xLLM9MSSzPy8xBz9CP0os_hQN68AZ3dnIwN_Qz8DAyPXQGczU08jA29nM_2CbEdFAHXcy38!/?WCM_GLOBAL_CONTEXT=/wps/wcm/connect/MohCL/ministry/news/pharma+physician+relation+guidelines, Accessed on 18th Feb 2011.
116. MOH. 2010. *Pharmaceutical Country Profile. Pakistan*. Ministry of Health, Government of Pakistan 2010.
117. MOH. 2010. *The Drugs (Bio-Study) Rules, Government of Pakistan*, Ministry of Health, Government of Pakistan, Islamabad. Accessed online at <http://202.83.164.27/wps/portal/Moh!/ut/p/c1/04>. Accessed on 12th Feb 2011.
118. MOH. 2011. Ministry of Health of Pakistan, Islamabad. Accessed on 20th June 2011 <http://202.83.164.26/wps/portal/Moh>. 2011 [cited; Available from: <http://202.83.164.26/wps/portal/Moh>.
119. MOH. 2007. *National Essential Medicine List of Pakistan*. Ministry of Health. Government of Pakistan. 2007. <http://apps.who.int/medicinedocs/documents/s17119e/s17119e.pdf>. Accessed on 18th February, 2011.
120. Molyneux, Maxine 'Mobilization without Emancipation? Women's Interests, States and Revolution in Nicaragua'; *Feminist Studies II*, 1985.
121. Morris, J. and Stevens, P, 2006. Counterfeit medicines in less developed countries: Problems

122. Muhammad Suleman Qazi MS, Ali M, Pakistan's Health Management Information System: Health Managers' perspectives. Accessed on August 30, 2011
http://jpma.org.pk/full_article_text.php?article_id=1590
123. Nadia Navivala, Harnessing local capacity in Pakistan, Harvard Kennedy School, Policy Analysis Report, Spring 2010
124. Najmi, M.H., et al., 1998. Prescribing practices: an overview of three teaching hospitals in Pakistan. *J Pak Med Assoc*, 48(3): p. 73-7.
125. National Commission on the Status of Women (NCSW) and Asian Development Bank (ADB), GENDER & GOVERNANCE STUDY – SINDH, October – November 2001
126. National Commission on the Status of Women (NCSW) and Asian Development Bank (ADB), 2002, An inquiry into the status of women in public sector organization
127. NCD 2010, Capitalizing on the Health Transition: Tackling Non-communicable Diseases in South Asia, Nov 2010.
128. Network for Consumer Protection. 2006. Prices, availability and affordability of medicines in Pakistan.
129. NHA 2005-2009. NHA, Pakistan: Altering household cost-benefit decisions about immunization, 2005-2009.
130. NHA. 2008. National health accounts: country information Pakistan. , 2008.
131. NHA. 2009. National Health Accounts for Pakistan, Islamabad. 2009.
132. NHSP, National Health Survey of Pakistan 1990-94
133. Nishtar S. 2010. Choked pipes Oxford University Press. 2010.
134. Nishtar S. Corruption in the health sector in Pakistan 2007
135. Nishtar, Dr. Sania Health and the 18th Amendment: Retaining national functions in devolution [Report]. - Islamabad: Heartfile, 2010.
136. Nishtar, S., 2006. Pharmaceuticals--strategic considerations in health reforms in Pakistan. *J Pak Med Assoc*, 56(12 Suppl 4): p. S100-11.
137. Nishtar, S., 2006. The Gateway Paper--health service delivery outside of the public sector in Pakistan. *J Pak Med Assoc*, 56(12 Suppl 4): p. S66-77.
138. Nishtar, Sania Problem with BISP Health Insurance [Online] // Sani Nishtar. - 2010. - October 19, 2011. - http://www.sanianishtar.info/pdfs/81_BISP.pdf.
139. Nizami, S.Q., I.A. Khan, and Z.A. Bhutta, 1996 Drug prescribing practices of general practitioners and paediatricians for childhood diarrhoea in Karachi, Pakistan. *SocSci Med.*, 42(8): p. 1133-9.
140. NNS National Nutrition Survey, 1985-87, 2001-02, 2011
141. NO.PAS/LEGIS-B-6/2005. The Gambat Institute of Medical Sciences Bill, 2005. Available at <http://www.pas.gov.pk/uploads/acts/Sindh%20Act%20No.V%20of%202006.pdf>.
142. NPPI, Annual Program Progress Report, 2009, Unicef
143. NPPI. 2009. NPPI Baseline survey of key indicators in Sindh Norway-Pakistan Partnership Initiative, Government of Sindh, 2009.
144. NPPI-FFS 2009. Report on Result Based Financial Mechanisms for Improving Maternal, Newborn and Child Health Outputs: Feasibility Study for 10 NPPI Districts: Department of Health Sindh, National MNCH Programme, One UN and Aga Khan University, May 2009
145. Obaid, A., 2009. Quality of ceftriaxone in Pakistan: reality and resonance. *Pak J Pharm Sci*, 22(2): p. 220-9.
146. Office of Project Director EPI Sindh, October 27, 2011
147. Office of the Medical Superintendent, Civil Hospital, Karachi, September 2011
148. Owais, A., et al. 2011. Does improving maternal knowledge of vaccines impact infant immunization rates? A community based randomized-controlled trial in Karachi, Pakistan; *BMC Public Health* 2011, 11:239
149. Pakistan Country Profile, WHO 2006-07

150. Pakistan: Medicine Prices, Availability, affordability & price components, WHO/HAI Report 2008
151. Parakh P.P.; Khwaja H.A.; et al. 2001 Ambient air quality of two metropolitan cities of Pakistan and its health implications. *Atmospheric Environment*, Vol 35, Number 34, pp. 5971-5978 (8)
152. Patel, M.J., et al. 2008. Drug overdose: a wakeup call! Experience at a tertiary care centre in Karachi, Pakistan. *J Pak Med Assoc*, 58(6): p. 298-301.
153. PDHS, Pakistan Demographic Health Survey 1990-91, 2006-07
154. PFFPS, Pakistan Fertility and Family Planning Survey 1996-97
155. PHC Clerkship
156. PIHS, Pakistan Integrated Household Survey, 1998-99, 2001
157. PMDC Ordinance 1962. Available at <http://www.pmdc.org.pk/AboutUs/tabid/72/Default.aspx>. Accessed on 20th June 2011.
158. Population Council Pakistan, 2004
159. PPHI, Third Party Evaluation 2010
160. PPMA. 2007. Available at <http://www.ppma.org.pk/PPMAIndustry.aspx>.
161. PRB. 2010. World Population Report. Population Reference Bureau. 2010. Washington DC
162. PRHFPS, Pakistan Reproductive Health and Family Planning Survey 2000
163. Promoting Philanthropy, Annual Report, Pakistan Center for Philanthropy, 2009
164. Provincial Health Accounts, Federal Bureau of Statistics
165. Provincial Program Office, National Program for Family Planning & Primary Healthcare, Hyderabad, Sindh
166. Provincial Support Unit, People's Primary Healthcare Initiative, www.pphisindh.com
167. PSLM, Pakistan Social and Living Standards Measurement Survey 2004-5, 2006-07, 2009-10 & 2010-11
168. Public Private Partnerships in Sindh, Briefing Document, Finance Department, Government of Sindh, 2008
169. Qazi MS, Ali M, Pakistan's Health Management Information System: Health Managers' perspectives. Accessed on August 30, 2011
http://jpma.org.pk/full_article_text.php?article_id=1590
170. Qazi, S.A., G.N. Rehman, and M.A. Khan, 1996. Standard management of acute respiratory infections in a children's hospital in Pakistan: impact on antibiotic use and case fatality. *Bull World Health Organ*, 74(5): p. 501-7.
171. Qidwai, W., et al. 2006. Private drug sellers' education in improving prescribing practices. *J Coll Physicians Surg Pak.*, 16(12): p. 743-6.
172. Quantitative Survey Report 2008
173. Qureshi, N.N., et al. 2007. Effect of general practitioner education on adherence to antihypertensive drugs: cluster randomised controlled trial. *BMJ*, 335(7628): p. 1030.
174. Raman A Venkat Dr. and Björkman James Warner Prof. Public/Private Partnership in Health Care Services in India
175. Report of an international workshop on, "Management Information Systems and Microcomputers in Primary Health Care" organized and sponsored by The Aga Khan foundation, The Aga Khan University and the National School of Public Health, Ministry of Health, Portugal, held at Lisbon, Portugal in November 1987.
176. Rohra, D.K., et al. 2006. Critical evaluation of the claims made by pharmaceutical companies in drug promotional material in Pakistan. *J Pharm PharmSci*, 9(1): p. 50-9.
177. Rohra, D.K., et al. 2008 Drug-prescribing patterns during pregnancy in the tertiary care hospitals of Pakistan: a cross sectional study. *BMC Pregnancy Childbirth*. 8: p. 24.
178. Samad, L. 2001. SIGN Rapid Assessment Survey Northern Areas, Pakistan
179. Sameen Siddiqi, Tayyeb I. Masud, Sania Nishtar, David H. Peter, Belgacem Sabri, Khalil M. Bile, Mohamad A. Jama Framework for assessing governance of the health system in developing

- countries: Gateway to good governance [Article] // Health Policy . - [s.l.] : ELSEVIER, 2009 (13-15).
180. Shah, S.A., et al. 2005. Antiretroviral drugs obtained without prescription for treatment of HIV/AIDS in Pakistan: patient mismanagement as a serious threat for drug resistance. *J Coll Physicians Surg Pak*, 15(6): p. 378.
 181. Shah, S.K., et al. 2003. Do private doctors follow national guidelines for managing pulmonary tuberculosis in Pakistan? *East Mediter Health J*. 9(4): p. 776-88.
 182. Shaikh, B.T. and J. Hatcher, 2005. Complementary and Alternative Medicine in Pakistan: Prospects and Limitations. *Evid Based Complement Alternat Med*, 2(2): p. 139-142.
 183. Shehzadi, R., et al. 2005. Knowledge regarding management of tuberculosis among general practitioners in northern areas of Pakistan. *J Pak Med Assoc*, 55(4): p. 174-6.
 184. Siddiqi, S., et al., 2002. Prescription practices of public and private health care providers in Attock District of Pakistan. *Int J Health Plann Manage*, 17(1): p. 23-40.
 185. Siddiqi, S., et al., 2007. Impact of antibiotic restriction on broad spectrum antibiotic usage in the ICU of a developing country. *J Pak Med Assoc*, 57(10): p. 484-7.
 186. Sims, J. and Butter, M. (2002) *Health and environment: moving beyond conventional paradigms. Engendering Health Equity: A review of research and policy* Cambridge, MIT Press
 187. Sindh AIDS Control Program
 188. Sindh AIDS Control Programme. Department of Health
 189. Sindh Development Review 2008-09, P&DD
 190. Sindh Local Government Ordinance, 2001
 191. Sindh Nursing Examination Board, Karachi
 192. Soofi Sajid, et al. *Effectiveness of community case management of severe pneumonia with oral amoxicillin in children aged 2-59 months in Matiari district, rural Pakistan: a cluster randomized controlled trial* 2012 (11) *The Lancet*
 193. Staines A, Hanif S, Ahmed S, McKinney PA, Shera S, Bodansky HJ. Incidence of insulin dependent diabetes mellitus in Karachi, Pakistan. *Arch Dis Child* 1997; 76:121-3.
 194. Standards and Guidelines for Blood Transfusion Services (BTS), Ministry of Health, Government of Pakistan, 1999
 195. Sturm, A.W., et al., 1997 Over-the-counter availability of antimicrobial agents, self-medication and patterns of resistance in Karachi, Pakistan. *J Antimicrob Chemother.*, 39(4): p. 543-7.
 196. Sturm 1997. Sturm, A.W., et al., 1997 Over-the-counter availability of antimicrobial agents, self-medication and patterns of resistance in Karachi, Pakistan. *J Antimicrob Chemother.* 39(4): p. 543-7.
 197. Thanenthiran, S; Racherla S.J. (2009). ***Reclaiming & Redefining Rights – ICPD+15: Status of Sexual and Reproductive Health and Rights in Asia***. Kuala Lumpur, Malaysia: The Asian-Pacific Resource & Research Centre for Women (ARROW).
 198. Thaver & Haider 1995; Self medication or self care: implication for primary health care strategies. *J Pak Med Assoc*, 45(11): p. 297-8.
 199. Thaver, I.H., et al. 1998. Private practitioners in the slums of Karachi: what quality of care do they offer? *Soc Sci Med*, 46(11): p. 1441-9.
 200. The Drugs (Federal Inspectors, Federal Drug Laboratory & Federal Government Analysts) Rules, 1976. *Ministry of Health, Government of Pakistan*.
<http://www.dcomoh.gov.pk/regulations/drugrules5.php> Accessed on: 18th February 2011.
 201. The gazette of Pakistan, Extraordinary, Part II. Statutory Notifications (S.R.O) Securities and Exchange Commission of Pakistan, NOTIFICATION, Islamabad, the November 16, 2009
 202. The Global Gender Gap Report, 2010, World Economic Forum, Geneva Switzerland
 203. Times, D. 2005. Quacks spreading AIDS and hepatitis: experts in Daily Times. 2005.
 204. TRF, 2011, National Maternal Newborn and Child Health Programme. Sindh
 205. TRF, 2012 Health Budget Expenditure Analysis. Health Department Government of Sindh
 206. TRF/SOSEC/ HLSP. 2010. Third-Party Evaluation of the PPHI in Pakistan

207. Tuberculosis Control Program 2009
208. UNIFEM; Focusing on Women –UNIFEM’s experiences in mainstreaming, 1993
209. Updated List 2011 of Government and Private Hospitals Recognized for House Job by Pakistan Medical & Dental Council PMDC (PM&DC) Islamabad, Government of Pakistan (Updated on July 06, 2011) <http://www.pakmed.net>
210. Washington, DC 20433, USA, May 2011
211. WHO (2002a) Dr Mubina Agboatwalla, Gender and Tuberculosis. Department of Gender and Women’s Health, Geneva, Switzerland
212. WHO (2005a) WHA Multi-country study on women's health and domestic violence - initial results on prevalence, health outcomes and women's responses. Geneva, Switzerland
213. WHO Sub Office – Sindh, Karachi, September, 2011
214. WHO, Desk Guide for Doctors. National TB Control Programme Pakistan
215. WHO, H.A.I. 2008. Medicine prices, availability, affordability and price components, A synthesis report of medicine. Price surveys undertaken in selected countries of the WHO Eastern Mediterranean Region. World Health Organization. 2008.
216. WHO, Pakistan Country Profile 2006-07
217. WHO, Regional Office for Eastern Mediterranean Technical discussion on Medicine prices and access to medicines in the Eastern Mediterranean Region. WHO Regional Office for the Eastern Mediterranean 2007. Accessed on 17th February 2010.
218. WHO. 2007. Regional Office for Eastern Mediterranean Technical discussion on Medicine prices and access to medicines in the Eastern Mediterranean Region. World Health Organization. Regional Office for the Eastern Mediterranean. Accessed on 17th February 2010.
219. WHO. 2003. An Analysis of Essential Drugs, Contraceptives and Vaccines at Government Health Facilities. World Health Organization Islamabad.
220. WHO. 2004. National Action Plan for Prevention and Control of Non-Communicable Diseases and Health Promotion in Pakistan. A Public private partnership in health. 2004. World Health Organization,
221. WHO. 2004. The World Medicines Situation. World Health Organization,
222. WHO-EMRO, 2011. Regional Health Systems Observatory- EMRO. World Health Organization. 2011. Accessed online at gis.emro.who.int/healthsystemobservatory/main/Forms/main.aspx. Accessed online on May 2nd, 2011.
223. WHO-EMRO. 2000. The Work of WHO in the Eastern Mediterranean Region, Annual Report of the Regional Director, 1 January - 31 December 2000. World Health Organization,
224. World Bank - Sindh Policy Note 2003, 2005, 2007
225. World Bank Report on Non Communicable Diseases, 2010
226. World Bank, Pakistan Country Gender Assessment, 2005
227. World Bank, South Asia Region, Sindh Health Policy Note, 2005
228. World Bank. 2005. Sindh: Health Policy Note. World Bank. Islamabad.
229. World Bank. 2008. Country data, Pakistan. World Bank Washington.
230. World Bank. 2005. *North West Frontier Province Economic Report*.
231. World Bank. 2007. Health and Population Policy Note for Pakistan. World Bank South Asia Region.
232. World Bank. 2008. Evaluation of quality of care in public sector in Sindh, Pakistan / Islamabad Report, 2008.
233. World Bank. 2008. Health Policy Note, Northern Areas. World Bank South Asia Region.
234. World Bank. 2010. Delivering Better Health Services to Pakistan's poor.
235. Zafar Fatmi, Wilbur C Hadden et al, 2007, Incidence, patterns and severity of reported unintentional injuries in Pakistan for persons five years and older: results of the National Health Survey of Pakistan 1990–94. *BMC Public Health* 7: 152

236. Zafar, S.N., et al. 2008. Prescription of medicines by medical students of Karachi, Pakistan: a cross-sectional study. *BMC Public Health*, 8: p. 162.
237. Zafar, S.N., et al. 2008. Self-medication amongst university students of Karachi: prevalence, knowledge and attitudes. *J Pak Med Assoc*, 58(4): p. 214-7.
238. Zaidi et al 2010. Financial Barriers to MNCH: New Evidence from rural Sindh, Presented at National MNCH conference, health Services Academy, December 2010, Islamabad.
239. Zaidi S et al. 2008. Utilization and Expenditure on Ambulatory Care for Hypertension Control Findings from Low Income Urban Population. Presented at Health Sciences Research Assembly, Aga Khan University December 2008, Karachi.

District Statistics

Table 1: ORS Use in Child Diarrhea

Districts	Diarrhea cases where ORS was given
Badin	86
Dadu	91
Ghotki	96
Hyderabad	92
Jacobabad	98
Jamshoro	90
Karachi	95
Kashmore	100
Khairpur	99
Larkana	92
MirpurKhas	82
NausheroFeroze	92
Nawab Shah	90
Sanghar	77
KamberShahdadKot	99
Shikarpur	92
Sukkur	94
Tharparkar	91
Thatta	85
Umerkot	90
Tando Allah Yar	93
TandoMuhd Khan	92
Matiani	84

Source: PSLM 2011

Table 2: District Wise Vaccine Coverage:

Districts	BCG	Measles
Badin	67	64
Dadu	96	96
Ghotki	76	65
Hyderabad	87	78
Jacobabad	62	57
Jamshoro	92	91
Karachi	97	92
Kashmore	71	76
Khairpur	77	74
Larkana	91	86
MirpurKhas	81	68
NausheroFeroze	75	62
Nawab Shah	84	70
Sanghar	83	60
KamberShahdadKot	88	83
Shikarpur	79	79
Sukkur	80	78
Tharparkar	71	62
Thatta	68	64
Umerkot	89	87
Matiari	84	81
Tando Allah Yar	67	67
Tando Muhammad Khan	43	43

Source: PSLM 2011

Table 3: Maternal health indicators

Districts	Tetanus toxoid during pregnancy	Post-Natal checkup	Pre-Natal checkup	Institutional Delivery
Badin	47	32	47	36
Dadu	56	45	66	23
Ghotki	29	15	48	29
Hyderabad	79	60	85	74
Jacobabad	48	16	56	17
Jamshoro	81	26	60	30
Karachi	94	36	93	86
Kashmore	54	16	49	33
Khairpur	41	25	50	27
Larkana	57	61	53	29
MirpurKhas	46	48	48	51
NausheroFeroze	48	40	56	43
Nawab Shah	50	24	49	39
Sanghar	34	29	55	38
KamberShahdadKot	51	47	42	29
Shikarpur	48	22	49	25
Sukkur	55	25	77	48
Thaparkar	25	25	45	13
Thatta	51	6	65	26
Umerkot	48	61	40	40
Tando Allah Yar	32	31	39	36
TandoMuhd Khan	30	36	29	34
Matiali	74	36	80	48

Source: PSLM 2011

Table 4: Prenatal Consultation at Govt. Facilities*Source: PSLM 2011*

Districts	Govt. Hospital/RHC/BHU
Badin	17
Dadu	31
Ghotki	16
Hyderabad	24
Jacobabad	30
Jamshoro	50
Karachi	21
Kashmore	19
Khairpur	30
Lakana	46
MirpurKhas	20
NausheroFeroze	28
Nawab Shah	47
Sanghar	31
KamberShahdadKot	52
Shikarpur	39
Sukkur	26
Tharparkar	44
Thatta	27
Umerkot	19
Tando Allah Yar	25
Tando Muhammad Khan	27
Matiari	30

Table 5: Deliveries at Government Hospital

Districts	Govt. Hospital
Badin	8
Dadu	5
Ghotki	2
Hyderabad	20
Jacobabad	4
Jamshoro	9
Karachi	21
Kashmore	1
Khairpur	4
Larkana	8
MirpurKhas	24
NausheroFeroze	3
Nawab Shah	13
Sanghar	12
KamberShahdadKot	13
Shikarpur	5
Sukkur	10
Tharparkar	4
Thatta	13
Umerkot	24
Tando Allah Yar	6
TandoMuhd Khan	10

Source PSLM: 2011

Table 6: Postnatal Consultation at Govt. Facilities

Districts	Public Disp/ Hosp/RHC/BHU
Badin	7
Dadu	12
Ghotki	7
Hyderabad	20
Jacobabad	26
Jamshoro	16
Karachi	14
Kashmore	0
Khairpur	15
Larkana	25
MirpurKhas	21
NausheroFeroze	10
Nawab Shah	30
Sanghar	18
KamberShahdadKot	32
Shikarpur	17
Sukkur	13
Tharparkar	12
Thatta	56
Umerkot	26
Tando Allah Yar	17
TandoMuhd Khan	09
Matiari	34

Source PSLM: 2011

Table 7: Household Satisfaction by facilities & services

Districts	Basic Health Unit	Family Planning
Badin	21.32	3.99
Dadu	21.49	49.19
Ghotki	58.45	17.43
Hyderabad	15.72	11.55
Jacobabad	59.61	11.45
Jamshoro	25.92	20.67
Karachi	15.50	5.50
Kashmore	59.13	12.10
Khairpur	65.95	27.70
Larkana	49.09	11.78
MirpurKhas	37.20	2.11
NausheroFeroze	31.25	19.36
Nawab Shah	24.19	6.88
Sanghar	43.91	9.89
KamberShahdadKot	60.97	2.27
Shikarpur	46.07	20.37
Sukkur	45.83	14.02
Tharparkar	20	0.66
Thatta	20.07	0.35
Umekot	31.43	1.72
Tando Allah Yar	19.83	1.82
Tando Muhammad Khan	17.83	2.74
Matiari	33.42	10.71

Source PSLM: 2011

Table 8: Household's consultation in past 2 weeks by type of health provider consulted

Districts	Private	Public	Chemist/ Pharmacy	Traditional
Badin	77.34	22.01	0.00	0.39
Dadu	74.75	24.39	0.00	0.86
Ghotki	81.33	16.43	0.00	2.24
Hyderabad	85.59	14.07	0.00	0.35
Jacobabad	83.05	16.33	0.62	0.00
Jamshoro	70.62	28.25	0.48	0.62
Karachi	89.00	6.52	0.30	4.19
Kashmore	85.18	12.85	0.00	1.97
Khairpur	59.89	38.57	0.00	1.55
Larkana	69.54	27.12	0.00	3.14
MirpurKhas	63.67	35.01	0.00	1.23
NausheroFeroze	83.85	14.89	0.59	0.67
Nawab Shah	73.84	25.83	0.00	0.00
Sanghar	50.80	48.19	0.38	0.64
KamberShahdadKot	75.14	24.02	0.00	0.84
Shikapur	73.98	24.69	0.00	1.34
Sukkur	81.48	17.82	0.00	0.71
Tharparkar	39.00	59.63	0.00	0.48
Thatta	71.65	17.11	1.34	9.63
Tando Allah Yar	73.95	20.82	0.00	1.57
TandoMuhd Khan	79.70	20.30	0.00	0.00
Matia	71.91	27.85	0.00	0.24

Source: PSLM 2011

Table 9: Type of Govt. Health Facilities in Karachi

Town	Type of Health Facility in Karachi																				Total			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T		U	V	W
Keamari	3					5	3	1	2		5		1											20
SITE	1						5	2				1												9
Baldia							2		1			1												4
Orangi						1	5	1		2	1	1												11
Lyari	1						6	5															1	13
Sadder	2						5	2									2	4						15
Jamshed	1						4	2			1	3	2	1						1				15
Gulshan-e-Iqbal	3					3		1			1	1									1			10
Shah Faisal	2						1	1			1				1				1					7
Landhi	1					2	7	4		1	4								2		1			18
Korangi	5							1													3	1		14
New Karachi		1					3			1	1				1				1					7
Liaquatabad	2						7	1					1				1				1	1	1	16
Gulberg							2	1											1					4
N. Nazimabad				1			1																	2
Malir	3						1	4			1													9
Bin Qasim	8	1				28	2	1	1		4		1											46
Gadap	4					33			3		10		3		1		1							55
Total	36	2	0	1	0	72	54	27	7	4	29	7	8	3	1	2	7	5	1	6	2	1	0	275

A=Sindh Government Dispensary (City District Government, Karachi CDGK), B=Sindh Government Hospital (CDGK), C=Sindh Government Hospital (Gov. of Sindh) D= Sindh Government Children Hospital, E= Sindh Government (SG), Dispensary F=District Council Dispensary* G=District Municipal Corporation (DMC*) Dispensary, H= DMC Maternity Home, I=RHC, J=Urban Health Center, K=BHU, L=Urban Health Unit, M=Mother & Child Health (MCH) Center, Sindh Government, N=MCH Center DMC, O=SG Maternity Home, P=Karachi Municipal Corporation (KMC*) Maternity Home, Q=KMC Hospital R=CDGK Hospital, S=Dental Clinic, T=Unani Shifa Khana, U=Homeopathic Dispensary, V=KMC Homeopathic Hospital, W=Federal Government
*Old Titles Retained

Summary of activities of key NGOs in Sindh

Green star Social Marketing Pakistan (GSMP) established by Population Services International (PSI) in 1991 provides approximately 30% of all modern contraceptives (Figure 3.4), i.e. 1 of 3 couples in Pakistan use GSMP services. At the end of the fiscal year 2005-06, more than 16000 private health care providers including general practitioners (GPs) and pharmacists were registered on GSMP providers' network

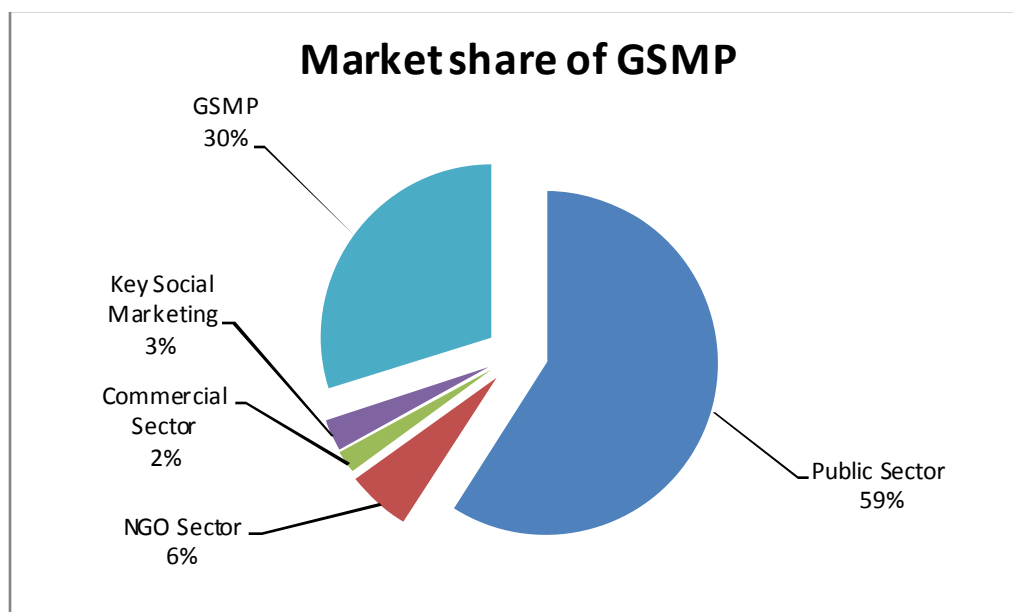


Figure 2.1: Market share of GSMP

Marie Stopes Society (MSS) Pakistan, operational from Karachi since 1990, has a network of 90 centers all over Pakistan offering a comprehensive package of reproductive health services (Table 3.3). The organization received the PCP certification in 2007 based on an extensive evaluation on three parameters, viz. internal governance, financial management and service delivery. With a team of dedicated professionals, MSS is geared to grow as one of the leading and enduring contributors towards the improved sexual reproductive health (SRH) needs of people in Pakistan.

Since 2009, the MSS' 24/7 call center and the MSS client informational management system is functioning in district Sukkur, the district government, MSS, OMV and Shell have tri-partite agreement for service delivery. MSS received the Infection Prevention (IP) award based on audit conducted by the Australia Program. Between June 2011-May 2013, post abortion care (PAC) services have been launched in the province, similarly during September 2010- May 2013, interventions for promoting healthy timing and spacing of pregnancies in predominantly rural and under-served communities have been made available in Sindh the districts selected for the intervention include Nawabshah and NausheroFeroze.

Table 2.1 Marie Stopes Society (MSS) Pakistan – at a glance

Date established	1990
Services offered	Family planning; health screening; HIV/STIs; maternal health; primary health care; post abortion care; social marketing; young people; advocacy
Number of centers in Pakistan	90
Number of centers in Sindh	1/ district/town Karachi centers have achieved ISO-9001-2000 certification
Outreach / mobile services	Provided
Social marketing products & brands	Condoms: Excite, Xtacy Pregnancy test: Xact

Source: www.mssp.org

Layton Rahmatulla Benevolent Trust (LRBT) and ISRA blindness control program have carved out a niche in the field of ophthalmology. LRBT has a national presence, through its 16 hospitals and 41 secondary and primary clinics free eye care is provided to 36% of all eye patients, performing 27.4% eye surgeries and 32% of all pediatric eye surgeries in the country¹ (LRBT 2011). Since its inception 25 years ago, out of over 20 Million OPD consultations, 9.5 Million and over 2 million major and minor surgeries approximately 50% were conducted in Sindh. ISRA is a joint venture of ISRA Foundation (IF) Pakistan and Al-Baser International (AB Saudi Arabia), the later provides finances; while IF is responsible for human resources and service delivery. The collaboration has resulted in 114, 382 ophthalmic surgeries in several African and Asian countries, with a base in Pakistan (Al Ibrahim Hospital 2011). For performance volumes of LRBT and ISRA in Sindh see Table 3.4.

Table 2.2: Major Ophthalmological Care Provider NGOs -Sindh

LRBT		ISRA	
Founded in	1986	Founded in	1990
Services	No. and Locations	Services	No. and Locations
Tertiary Care Hospital	1 in Karachi	Tertiary Care Hospital	1 in Karachi
Secondary Care Hospital	3 in Tando Bago, Rashidabad and Gambat	Secondary Care Hospital	2 in Kunri and Kandiaro
Primary Care Outreach Clinics	19 : Karachi (Rexer Line, Shershah, Shireen Jinnah Colony, Cattle Colony, Landhi, Behbud Eye Care Center, Hamdard University, Northern Bypass, Jinnah Foundation, Infaq Foundation, Surjani Town) Gharo, Garho, Mithi Diplo, Chachro Islam Kot, Sajawal	Primary Care Outreach Clinics	Monghopir and Kathore villages of Karachi

	Sobhodero, Tando Adam		
Year 1986- 2011 (March) OPD Consultations Performance in Sindh	Karachi:3897954 Rashidabad: 1176360 Tando Bago: 1344028 Gambat: 1095265	Year 2010-11 OPD Performance in Sindh	Karachi: 110801, Kandiaro: 6652, Kuni: 6695 Karachi: 7456
Year 2010-11 surgeries in Sindh		Year 2010-11 Surgeries conducted in Sindh	Kandiaro: 422 Kuni: 333

Sources: LRBT, i-care, News letter No 104, 1st quarter 2011 and AlIbrahim Hospital< Karachi Performance Report 2010-2011

Association for mothers and newborns (AMAN), Pakistan National Forum on Women’s Health (PNFOWH), National Committee on Maternal and Neonatal Health (NCMNH), Midwifery Association of Pakistan (MAP) and SHIRKATGAH have shown demonstrated leadership in advocacy and capacity building for MDG 5.

Association for mothers and newborns (AMAN) founded in 2007, registered under societies act XXI of 1860. The organization in collaboration with technical assistance for midwifery information and logistics (TACMIL) project of USAID conducted dissemination workshops on Pakistan Demographic Health Survey (PDHS) 2006-07 findings on maternal and newborn components of the survey report. In 2009-10, in collaboration with venture strategies innovations (VSI) undertook dissemination workshops on usage of Misprostol (ST MOM) used for community level use for prevention of post partum hemorrhage (PPH) for district sales officers of Zafa pharmaceutical company – the distributors of STMOM. On abortion and related sexual and reproductive health issues has been conducting values clarifications and attitude transformation (VCAT) workshops jointly with IPAS. Between 2010-11 AMAN in collaboration with Rotary’s JANUM Project conducted a series of emergency obstetrics and neonatal care (EmONC) workshops for medical officers and midwives of Karachi and rural Sindh.

Pakistan National Forum on Women’s Health (PNFOWH): Founded in 1997, PNFOWH currently provides free repair/treatment of obstetric fistula in its seven regional centers established in major cities of the country. In order to take the services of PNFOWH to the rural areas plans are underway to train health professionals on prevention and treatment of the condition. An estimated, 4,000 – 6,000 new cases of obstetric fistula occur every year in the country. Obstetric fistula is a significant public health problem in Pakistan, particularly effecting women living in rural and remote areas. Given the stigma and shame attached to this condition, most of these women remain hidden and untreated.

National Committee on Maternal and Neonatal Health (NCMNH) formed in 1994 on the instructions of Benazir Bhutto in her second term as prime minister. NCMNH was mandated to analyze the extent of maternal mortality and morbidity in the country and develop practical approaches for lowering the rates of maternal deaths. NCMNH has been successful in creating policy level awareness among the bureaucrats and political personalities on the importance of

women's reproductive health in Pakistan. Currently the committee focuses its emphasis on unsafe abortions, working in partnership with IPAS to decrease death and injury from unsafe abortions in Pakistan. During 2007-2010 worked on Manual Vacuum Aspiration (MVA) and Medication Approaches (MA) to post abortion care (PAC) in Sindh. Currently NCMNH is continuing with capacity building for PAC in Sindh and Punjab i.e. improving access quality of PAC by training of potential care providers.

Midwifery Association of Pakistan (MAP) was established in 2005 **registered under societies act XXI of 1860**. MAP is a Pakistan chapter of international confederation of midwives (ICM), currently has over 350 active members, including nurse-midwives, midwives and lady health visitors. The mission of the association is largely to pursue the cause of recognition of midwives as qualified professionals for birth attendance and development of their career structure in both public and private sectors. The organization assists the government in developing human resource development plans for the training and utilization of midwives, also working to improve the standards of midwifery education, both in the public and private sectors. During 2005-2009, MAP initiated training of skilled birth attendants (SBAs) in active management of third stage labor (AMTSL) in Karachi and Lahore, worked on TACMIL/USAID team for training of SBAs and midwifery tutors. For safe delivery practice training of traditional birth attendants (TBAs), the organization provides technical support to concern for children (CFC) of Glaxo Smith Kline, PPL, Rotary's JANUM project and Green Star social marketing.

SHIRKATGAH- Women's Resource Center, established in 1975, addressing MDGs 3 and 5 and through publications and media call on policy and decision makers to take responsibility for curbing gender based violence and improving the health status of Pakistan's women. Its area of operation is all over Pakistan and in Sindh based in Karachi. Among its major publications under Women, Reproductive Health and Rights include (Shirkatgah 2010) Beijing 10 years on (2005); MDGs – expanding the agenda (2005); Why the hudood ordinance must be repealed (2004); women agenda in the UN (2004); Imagined Citizenship -Women, State and Politics (2002); don't let them get away with murder (registering cases with police in honor killings) (2002); ICPD – ten years on Pakistan Report (2005);Discriminatory Customary practices Against Women (1993), Women and Sustainable Development: Intergenerational Transfer of knowledge and reproductive health in rural and urban areas (1992.)

Health and nutrition development society (HANDS), health oriented preventive education (HOPE) have a varied and broad reach within the province with varying capacities and abilities to manage programs/projects in various districts.

Health and Nutrition Development Society (HANDS) working since 1979, registered in 1993, under the societies' act of XXI 1860, currently providing health services to over 600,000 people in 400 villages of the province. In 1999 signed an MOU with then District Council Karachi (DCK) and made a DCK facility at Jamkanda, Malir fully functional. Currently it is a 30 bed secondary care hospital serving 70 villages of rural Karachi, approximately 300000 people annually. In 2002, the organization established two Community Midwifery (CMW) schools, one each in Karachi and Hala, District Matiari. Both recognized by Pakistan Nursing Council. HANDS has expanded services in partnerships with Rural Support Program Network (RSPN),

National Rural Support Program (NRSP) , Sindh Rural Support Organization (SRSO), Thardeep Rural Development Program (TRDP), Sindh Graduate Association (SGA) in districts Thatta, Sukkur, Umerkot and Sanghar respectively. In year ending June 30, 2010, the organization's audit report shows total annual expenditure for the financial year amounting to Rs. 356,076, 599 (Tanzeem & Company 2010)

The Division of Women and Child Health, Aga Khan University: This is a conglomeration of the Pediatrics and Obstetrics & Gynecology Department of Aga Khan University and conducts community-based, high impact research projects at urban, peri-urban in Karachi and rural sites of Matiari, Hala and Naushero Feroze. The Division has estimated population coverage of more than a million people mostly residing in rural areas. Key activities include surveillance of childhood illnesses (diarrhea, ARI's and neonatal infections) in children under age of 5 yrs, ascertaining the effectiveness childhood vaccines in rural community, evaluations of the impact of micronutrients on growth, intestinal micro flora and diarrheal disease, delivery of community based intervention packages to reduce neonatal deaths due to birth asphyxia, low birth and neonatal sepsis, delivery of a 'Early Child Psycho-social Stimulation and Care for Development Programme' in low income settings, and training of master trainers, TBA's and LHW's for delivery of community based low cost interventions related to maternal and child health.

Health Oriented Preventive Education (HOPE) established in 1997, currently has a network of 52 health facilities in various parts of Pakistan, there are two 20 bed hospitals, one each in Karachi and Thatta. Approximately 50,000 people are treated annually. The organization is also administering nutrition support programs in Karachi, Thatta, Dadu and Shahdadt. For flood relief during 2010 and 2011 nationwide, 35,000 IDPs were provided medical treatments, 12,250 people distributed food and shelter ration. HOPE in partnerships with the Center for Disease Control (CDC), WHO, UNICEF among others has conducted operational researches on hand washing, safe water, safe injections, poliomyelitis - affected children's rehabilitation, a collaborative study with WHO (EMRO) and TB Control Program GOS on gender differentials of tuberculosis, prevalence of measles antibodies in vaccinated and unvaccinated children at CHK, tested the efficacy of combined OPV and IPV schedules in Karachi in collaboration with AKUH and Institute Meraux and Pasteur Institute.

Health and Nutrition Development Society (HANDS): In Dadu district HANDS developed a pilot voucher scheme named NARI (TACMIL 2010) (woman in Sindhi) that could be used in both public and private health facilities for maternal health services. Both public and private providers served the voucher holders on the basis of pre-determined services packages. Considerable improvements were evidenced in public health facilities for attracting voucher holders. HANDS acted as voucher management authority based on pre defined criteria for eligibility. Since its inception in November 2008, the NARI program has helped 302 pregnant women and 74 infants from around Dadu district get critical medical care that they otherwise would not have been able to access.

The Takhleeq Foundation (TF) conducts social mobilization and awareness-raising campaigns that include interactive theater, and development and dissemination of IEC materials and audio/video public messages. TF implemented BAAKH project (ibid) (ray of hope in Sindhi) to build TBAs' and LHWs' skills and knowledge in reproductive health and safe motherhood .in

Taluka Khangareh wherein communities were educated and empowered to access maternal and child health care. Evidence based delivery practices were developed for women, TF held meetings and training sessions with TBAs and community health workers. These trainings focused on pre- and post-delivery care and introduced safe delivery kits for the TBAs. TF has its presence in Thatta, Hyderabad, Mirpurkhas, Sanghar, Nawabshah, Naushehro Feroze, Larkana, Ghotki, Kamber, Shahdadtal and Jacobabad districts of the province. TF was established in 1999 and registered under the Societies Registration Act XXI of 1860 in Karachi.

Leadership for Environment and Development (LEAD): worked in Sukkur and Ghotki districts to strengthen health systems through capacity building of Health Management Committees at district, taluka and UC levels (ibid), improving referral mechanisms and awareness. Also, forming Community Support Groups (CSGs) and Health Watch Networks to increase accountability and improving services, strengthening public private partnership through activation of CCBs, linkage development of communities and health service providers, developing capacity of stakeholders and mobilizing the communities for improving referral mechanism to reduce first third delays at the time of delivery and malnourishment of child bearing age women. LEAD focused its attention on the missing links between the district health committees at the BHU and the PPHI. LEAD model for community empowerment is largely strengthening of community health committees and community groups to make them effective bodies for improving health service delivery in their catchments areas.

NGOs – rehabilitation centers.

The National Survey on Drug Abuse in Pakistan in 1993 estimated 2.7 million users of narcotics and psychotropic substances in the country. The most common drug in use is Heroin, estimated to be used by 1.52 million. There is also an upward trend towards injection drug use (IDU) among addicts (Harm Reduct.J. 2007). According to the Narcotic Control Division of Pakistan, 97% of the addicts are men and 72% of them are younger than 35 years, 600,000 heroin addicts live in Karachi.

Marie Adelaide Rehabilitation Program (MARP) has been serving in rural Sindh since last 20 years. The House of Hope – the center for rehabilitation of IDUs situated in Umeed Goth, Sinjhor, district Sanghar was established with support of United Nations Office for Drug Control and Crime Prevention (UNODC) and since 2003 served as surveillance center for Sindh AIDS Control Program (SACP) to assess high risk behaviors and prevalence of HIV, hepatitis B and C and syphilis among registered IDUs of MARP-needle exchange program.

The 2004-05 estimates showed 26.3% IDUs to be HIV positive in Karachi. In 2002 a mapping exercise was conducted by UNAIDS and UNODC, an area near Bums Road in Karachi was identified as having a large number of drug addicts. MARP provides to these IDUs, a syringe exchange program, free condoms provision, treatment of sexually transmitted infections (STI), abscess dressing, out- patient clinic, bathing facilities, counseling and health education services are provided to the IDUs. In 2004 a total of 1064 IDUs were registered and 58,145 new syringes were distributed in exchange for 56,846 used syringes. Moreover 7815 antiseptic dressings were performed, 13,715 condoms distributed free of cost, screening for HIV and hepatitis B and C was performed free of cost through the referral laboratory of SACP.

Pakistan Society is currently working not only with IDUs but also with female sex workers (FSWs), male having sex with male (including transgender) and people living with HIV/AIDS (PLHIV). The NGO has also been working for the prevention of infectious diseases such as hepatitis, tuberculosis and malaria since 1994. Pakistan Society, registered under Voluntary Agencies (Registration and Control) Ordinance 1961 by the Directorate of Social Welfare, Govt. of Sindh Pakistan in 1988 (**Pakistan society**). Pakistan Society is the trail blazer in Sindh for initiating HIV/AIDS prevention program for IDUs in 2000 at Karachi followed by Hyderabad in 2005 and in Larkana in 2006. PS provides monitoring of IDUs in the project area, implementation of appropriate BCC strategies, provision of harm reduction activities and referral services, provision of PHC services and treatment of syndrome based STIs, provision of condoms; education and access to accessible and appropriate STI services as well as access to volunteer counseling and testing services. The services also include facilitating access to ARV treatment compliance, prevention, care and support of people living with HIV/AIDS (PLHIV) since 2004

Promise House is the shelter home for volatile substance abusing street children established by Pakistan Society, the only need-based and context oriented shelter home / residential facility for young street solvent abusers in Karachi. The “Promise House” is the rehabilitation center of runaway, abandoned, unprivileged homeless children, abused or rejected by dysfunctional and poverty ridden families. The children are fed, clothed, provided diagnostic and medical treatment, counseling, detoxification, non-formal educational and

Karwan-E-Hayat (KEH) operates an outpatient facility and a Psychiatric Care and Rehabilitation Center in Karachi. It is the only non-governmental organization on mental health. Established in 1983, focuses on prevention, assessment, treatment and rehabilitation of psychologically distressed persons. At the outpatient facility 500 patients receive free psychiatric consultation and medicines every month. The recently established psychiatric care and rehabilitation Center at Keamari has provisions for indoor services. KEH has a team of well trained and dedicated psychiatrists, psychologists and paramedical staff.

Karwan-e-Hayat has been awarded PCP certification with 92% scores in financial management and 78.8% in overall assessment of the organization – an evidence of organizational best practices, standards, procedures and program delivery systems being applied.

Azad Foundation (AF): Registered in 1998 as a child development NGO, currently works in collaboration with UNICEF and Social Welfare Department Govt. of Sindh for rehabilitation of street children. In 2001 conducted a landmark research study on street children of Karachi.

Currently under DOST project (2005-2011) two day care centers have been established in Karachi. A night stay center DEHLEEZ has been set up in collaboration with city district government Karachi (CDGK). Over 6000 street children have provided medical care in last five years. AF adopts the following strategies sequentially viz. identification, prevention, protection, rehabilitation and reintegration. The outreach workers of AF approach the street children at various satellite points including entry/exit points of the city, counseled to visit the rehabilitation centers where a variety of services provided including IEC on HIV/AIDS

Monitoring Information System

A brief tabulated comparison of selected MIS variables.

Variable	DHIS	TB_DOTS	Malaria	AIDS	Hepatitis	NP_FP&PHC
Demography	√	X	X	X	X	√
Health Facility utilization	√	X	X	X	X	X
Indoor Admissions	√	X	X	X	X	√
Surgeries performed	√	X	X	X	X	X
Human Resource Data (Facility based)	√	X	X	X	X	X
Reporting Common Ailments	√	X	X	X	X	X
Ante Natal Care	√	X	X	X	X	√
Immunization Coverage	√	X	X	X	X	√
Family Planning	√	X	X	X	X	√
Maternal & Newborn Health	√	X	X	X	X	√
TB_DOTS cases missing > 1 week	√	√	X	X	X	X
Treatment follow up & Outcome of TB Patients	√	√	X	X	X	X
Contact Screening for TB	√	√	X	X	X	X
Slides for Malaria Examined and Positive Cases	√	X	√	X	X	X
Hepatitis B +ve	√	X	X	X	√	X
Type of Treatment & Outcome	X	X	X	X	√	X
Hepatitis C +ve	√	X	X	X	√	X
Type of Treatment & Outcome	X	X	X	X	√	X
HIV +ve	√	X	X	√	X	X
Type of Treatment & Outcome	X	X	X	√	X	X
Information about “Program Specific” Consumables	X	√	√	√	√	X
Medicine Stocks for common ailments	√	X	X	X	X	√
Fiscal Information about Health Facility	√	X	X	X	X	X

National Program for PHC & FP

1. Area Map
2. Family Register
3. Community Chart
4. Register for Curative Care and Family Planning
5. Referral slip
6. Diary for LHW
7. Growth Chart for Mother and Child
8. LHW's Monthly Report
9. Health Center's Monthly Report

TB-DOTS

1. TB 01: Patient treatment card.
2. TB 02: Patient treatments card.
3. TB 03: Tuberculosis register.
4. TB 04: Laboratory register.
5. TB 05: Request for Sputum Microscopy Examination.

6. TB 06:
7. TB 07: Quarterly Report on TB Case Registration.
8. TB 08: Quarterly Report on Sputum Results Conversion After 2 and / or 3 Months Treatment of Tuberculosis Patients Registered 3 to 6 Months Earlier.
9. TB 09: Quarterly Report on Results of Treatment of Tuberculosis Patients Registered 12 – 15 Months Earlier.
10. TB 10: Tuberculosis Treatment Referral / Transfer

Malaria

1. FM-1: Malaria Case Register.
2. FM-2: Facility Monthly Reporting Form.
3. FM-3: District Monthly Malaria Reporting Form.
4. FM-4: Province Monthly Malaria Reporting Form.

Public Private Partnerships: Case Study of Civil Hospital Karachi (CHK)

An expenditure analysis for the year 2001 for CHK shows that during the year, the private sector contributed Rs 202.61 Million to various departments of the hospital, while the GoS budget for CHK for the year was Rs 86.79 Million (archives.dawn.com/2003). Approximately with every rupee the GoS spent, 2.33 rupees were contributed by the private sector. The prominent donors to CHK include the Karachi Chamber of Commerce and Industry (KCCI), the DOWITES – Dow medical college alumni associations and various commercial banks and multi - national companies (MNCs). In addition hospital based patient welfare associations and non- profit organizations teamed up as friends to various department of CHK play a major role in fund raising from the private sector (Table 4.2: CHK Donors).

Table: CHK Donors & Specialty Services

Civil Hospital Karachi (CHK)			
Outpatient Department (OPD)		Indoor Departments	
Department	PPP Sponsors	Department	PPP Sponsors
Burns Center	Friends of Burns Center	Emergency Operation Theater	DOWITES 76
Pediatrics	Save Our Children	Emergency Operation Theater for Obstetrics and Gynecology Department	DOWITES 77
Blood Bank /Thalassemia Center	Patient Welfare Association (PWA)	Burns Center	Friends of Burns Center
Central Laboratory	DOWITES 83	Cardiac surgery department	Friends of Cardiac Surgery (FCS)
Radiology	DOWITES 79	Gynecology Operation Theatres	DOWITES 84
Digitalization of X-ray laboratory	DOWITES 85		
Renovation and Repair of OPD block for Hepatitis, Diabetes, and Medical OPD	Merck pharmaceutical company.	<u>Medical ICU</u>	DOWITES 82 Rs10 million + Rs40 million BY GOS
Hepatitis B and C vaccination, diagnostics and treatment	PPAS Infaq Foundation	Operation Theater Complex	DOWITES 78
<u>Radiology</u>	DOWITES 85, USD100000 PPAS Rs. 3.0 million	Operation Theater Emergency	DOWITES 83
		Pediatrics Wards	ADAMJEE FOUNDATION
		Pediatrics Surgery Ward Pediatrics Emergency Department	
		reconstruction and renovation of emergency, children, cardiology and other wards	

Source: Office of the Medical Superintendent, Civil Hospital, Karachi, September 2011

The Patients Welfare Association (PWA), an organization of students of Dow Medical College is the largest student run non-political and non-governmental organization in Pakistan. Established at CHK in 1979, the organization provides free medicines; laboratory tests and blood transfusions. Currently it is providing medicines to 200 registered TB patients and transfusing blood to more than 200 thalassemia patients twice a month. The PWA laboratory conducts on an average 250 blood tests every day. **PWA is providing mega units and manual platelets to dengue patients of CHK free of cost. Over 100 manual platelets 15 mega units of platelets are dispatched on daily basis.**

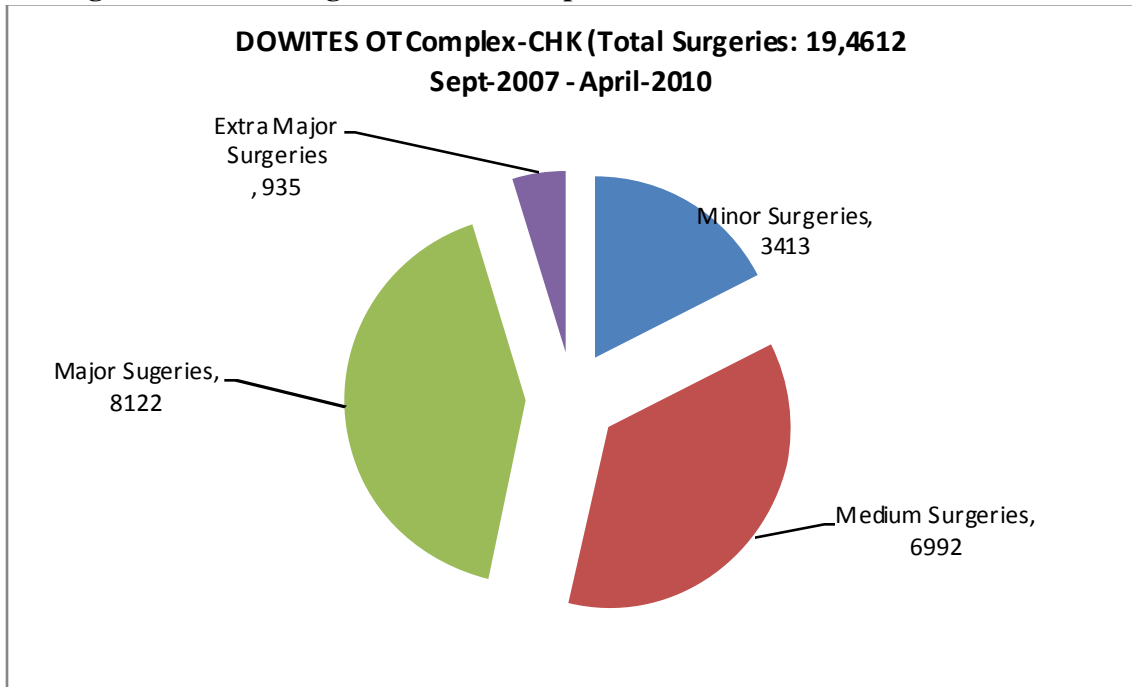
The Poor Patients Aid Society (PPAS) at CHK, established in 1985 ([ww.ppas-chk.org](http://www.ppas-chk.org)), provides free radiological investigations, averagely 250-300 ultrasound, MRI, CT scan, and laboratory tests; medicines to OPD and indoor patients; spends Rs. 3.8 Million per year on Hepatitis. B and C patients - the Infaq Foundation provides funds for vaccination and diagnostics for over 100 registered patients of Hepatitis B and C. PPAS donated Rs.102 Million for the renovation/refurbishment of CHK's Central Laboratory and provided wheel chairs to needy poor patients, the later in collaboration with Rotary District 3271.

The surgical ICU, housed in the Department of Anesthesia of CHK, started in 1991 provides free surgical ICU services, approximately 500-550 benefit per year. The Government of Sindh (GOS) invested Rs.1.5 Million, and further expenses were supplemented by philanthropists. The annual recurring cost is raised through donations and Zakat contributions from the citizens.

The cardiac surgery operation theater at CHK, commissioned in 1996, is currently the only facility in Pakistan providing free of cost cardiac surgery. Constructed at the cost of Rs.2 Million in collaboration with "Friends of Cardiac Surgery (FCS)" performed the first "Open Heart Surgery" in April 2000 and since then over 2400 open/close heart surgeries have been conducted free of cost and several hundred are on the waiting list (Appeal from Friends of Cardiac Surgery).

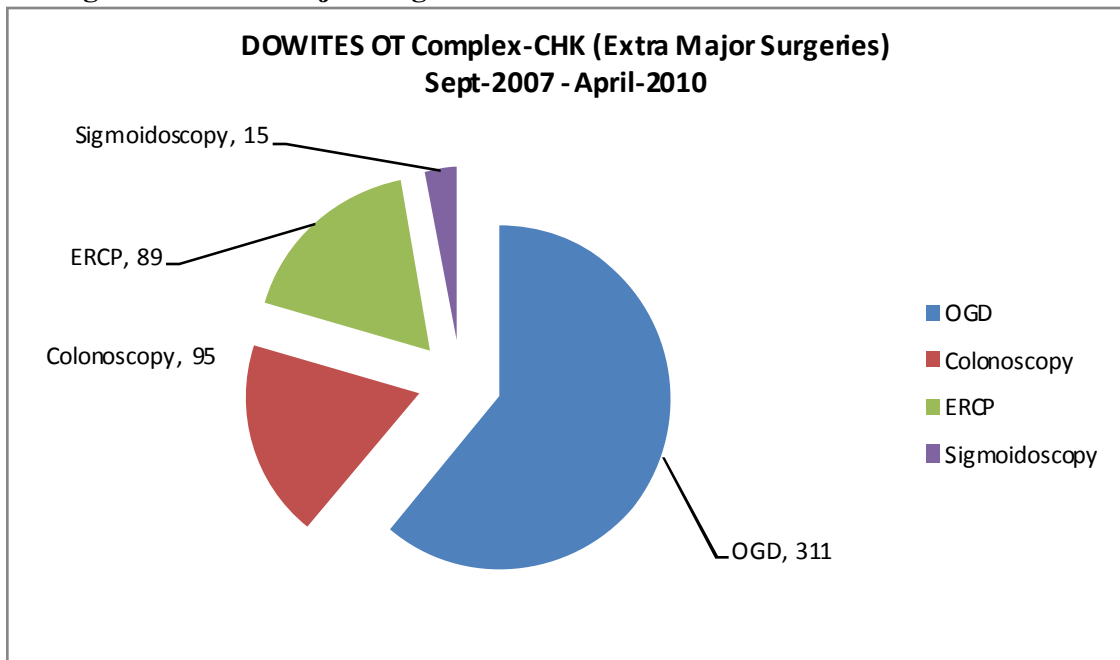
DOWITES - class of 1978 donated operation theater (OT) complex to CHK; commissioned in September 2007 and between then and April 2010 provided free of cost 19,462 major and minor surgeries (Figure 3.4) including extra major surgeries (Figure 3.5) including OGD 311, Colonoscopy 95, ERCP 89, Sigmoidoscopy 15 (DOWITES Newsletter 2010).

Figure 4.1 Total surgeries at OT Complex



Source DOWITES 78 Newsletter, Vol. 2, Issue 01-2010

Figure 4.2 Extra major surgeries



Source DOWITES 78 Newsletter, Vol. 2, Issue 01-2010

Built at an approximate cost of Rs 300 Million, the OT complex is a state-of-the-art operation theater complex. The Association of Pakistani Physicians in North America (APPNA) and Dow

alumni in England and Ireland as well as Pakistan donated generously. The estimated recurring cost for DOWITE 78 OT complex is estimated to be Rs.16-20 Million per month.

DOWITES of 1982 have provided first-ever medical intensive care unit (ICU) to CHK, commissioned in 2011, is providing free of cost ICU services. The charges of comparable ICU services in private hospitals would be Rs.10000 per day. (karachidigest.com)

The DOWITES are continuously working together to strengthen the capacity of CHK. The DOWITES of class of 1986 are pursuing to establish the neonatal intensive care unit (NICU) and the pediatric intensive care unit (PICU). A six-bed PICU will be set up at the Burns Center at a cost of Rs70Million.

DOGANA - the Dow Graduates Association in North America liaises with various DOWITE projects and raises funds for “ENDOW”- the Dow Endowment Fund Inc., a US-Based 501(c)(3) not-for-profit organization. ENDOW maintains an endowment fund, the profits of which feed into various projects at CHK. ENDOW currently holds around USD 600,000 in funds. These funds include general/endowment fund and funds for various DOWITE projects, including for the classes of 1977, 1983, 1984, 1985, 1986 and 1990. The fund raising target for 2011 is to cross USD 750,000 in total funds (dowendow).

Table 4.2: Key issues/suggested actions

Key issues	Suggested actions
PPP experiences demonstrate improvements in access, equity, quality and efficiency of services	The share of government spending vis-à-vis private contributions should be analyzed for future planning and budgeting of commensurate quality and quantity of services
PPP requires transparent financial procedures	Public view of audited accounts of PPP initiatives to ensure sustained private funding
Credibility of private contractors	Regular Monitoring and Evaluation (M&E) of contracted out services/districts

Legal Framework Governing Health, Social Protection, Corporate Social Responsibility (CSR) & Non Profit Organizations Chronology	Current initiatives	Expected outcomes from Strategic Plan 2012-2017
<p>1973: Constitution of Pakistan, Health is legally a Provincial subject</p> <p>1958: The Maternity Benefit Ordinance, Article 37 of Constitution gives reference to maternity benefits for women in employment,</p> <p>1960: Pure Food Ordinance</p> <p>1965: Provincial Employees' Social Security Ordinance (PESSI) covers injury, sickness and maternity. It is financed entirely through employers' contribution at the rate of 6% of the wages of the secured workers up to Rs. 10,000 pm.</p> <p>1976: Employees' Old Age Benefit program (EOBI) covers establishments employing 5 or more persons. All the employees irrespective of their wage are covered under the scheme The scheme is financed through employers' contribution at the rate of 5% of the minimum wages</p> <p>1976: The Drug Act</p> <p>1976: Pakistan Hotels and Restaurant Act</p> <p>1995: Consumer Protection Act</p> <p>1997: Pakistan Environmental Protection Act (PEPA), for the protection, conservation, rehabilitation and improvement of the environment, for the prevention and control of pollution, and promotion of sustainable development</p> <p>2001: Pakistan Mental Health Ordinance. Repealed the Lunacy Act of 1912. Has brought about significant changes in the law relating to mentally disordered persons with respect to their care</p>	<p>2007: The Sindh Consumers' Protection Ordinance. The Act transgresses and overlaps with other sectors. It is important to determine (if necessary propose amendment of the Act) e.g. whether "a user of a private or public facility" a consumer"</p> <p>2008: Private Hospitals, Diagnostic Auxiliaries and Health Products Regulation & Registration Bye-Laws The Karachi City District Government (CDGK) Council Resolution No: 475 dated 6/4/2009 duly approved by the City Council proposing Fee Schedule for Registration of Private Hospitals, Diagnostic Auxiliaries and Health Products.</p> <p>2009: Corporate Social Responsibility (CSR), Securities and Exchange Commission of Pakistan (SECP) Notification, November 16, 2009 S.R.O. 983(I)/2009 Every private or public limited company shall provide descriptive as well as monetary disclosures of the CSR activities undertaken by it during each financial year. CSR led health initiatives in Sindh are worthy and need further strengthening through formal MOUs with DOH.</p> <p>2010: Private Hospitals, Clinics and Other Private Healthcare Units Regulation Bill 2010 To be introduced in the National Assembly of Pakistan</p> <p>2010: The Government of Punjab's THE PUNJAB HEALTHCARE COMMISSION ACT 2010 (Act XVI of 2010) An Act to improve quality of healthcare services and ban quackery in the Punjab in all its forms and manifestations</p> <p>2011: Compulsory Immunization Bill by Pakistan Institute of Legislative Development and transparency</p>	<p>The missing links between legislations and commensurate regulatory mechanisms are filled.</p> <p>Sindh-Strategic Plan implemented on the basis of robust legislative and regulatory tools</p> <p>Provincial Assembly and Cabinet procedures notified the Strategic Plan encompassing legislations and regulations</p> <p>Standing committees on Strategic Plan notified in the Sindh Assembly</p> <p>Implementation modalities for Strategic Plan notified by the P&DD, FD & DOH</p> <p>DOH restructured to implement the Strategic Plan</p> <p>Health Legislation, Regulation and Implementation (HLRI) Department notified/established in DOH</p> <p>Note: KP has notified and functionalized its Health Regulatory Authority (HRA) & Punjab Assembly has passed "anti quackery" Bill</p>

<p>and treatment and management of their property and other related matters</p> <p>2002: Protection of Breast Feeding Act</p> <p>2002: Prohibition of smoking in public places and protection of non smokers. Amendment on ordinance on smoking 1979 (warning labels)</p> <p>2002: Safe blood transfusion Act</p> <p>2002: Amendment of drugs Act, 1976</p> <p>2002: amendment in Pakistan Nursing Council Act</p> <p>Non Profit Organizations (NPOs) regulated under::</p> <p>1860 The Societies Registration Act</p> <p>1882 Trust Act,</p> <p>1925 Cooperative Society Act</p> <p>1961 Voluntary Social Welfare Agencies Registration and Control Ordinance</p> <p>1984 The Companies Ordinance,</p> <p>2001 <u>The Income Tax Ordinance</u>. This Act sets out the tax exemptions for eligible NPOs The majority i.e. 65.4% NPOs are registered under the Societies Registration Act 1860 while 20% NPOs are not registered under any act.</p>	<p>(PILDAT) To be introduced in the National Assembly of Pakistan</p>	
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Domestic Violence Bill –Pakistan (proposed)

Pakistan's proposed bill defines domestic violence as including though not being limited to all intentional acts of gender-based or other physical or psychological abuse committed by an accused against women, children or other vulnerable persons, with whom the accused person is or has been in a domestic relationship. The bill requires that the court should set a hearing within three days of receiving a complaint and to adjudicate the case within 30 days. The bill prescribes incremental terms of imprisonment and fines for each breach of the protection order.

The bill includes protection from sexual harassment of women in public places such as markets, public transport, streets, parks, and more private settings, such as workplaces, private gatherings, and homes. The offense is recommended to be punishable by three years in prison, a rupees 500,000 rupee fine both.

The Human Rights Watch says - the bill if implemented would make Pakistan a regional leader in safeguarding women's rights.

Source: Human Rights News, January, 2010

HSS Costing - KEY Assumptions

Annex 9

1A	Strengthen district health systems starting with most under-developed districts of Sindh	<ul style="list-style-type: none"> • Av. Cost for upgrading one MSDP facility USD 23,000/- • Av. Per annum operation cost of one MSDP facility USD 15,000/- • Average upgrading cost for one EPHS center USD 360,000/- • Average per annum operating cost for one EPHS center USD 108,000/- • Cost of One transport voucher USD 8.60/- (per person per visit) (38 BHC - 2 in each district) • Number of pregnant women in 19 district = 152,000 per year • LHWs for 2 talukas per district at 50% coverage (19 districts) = 3,800 <ul style="list-style-type: none"> ✓ Total number of districts = 19 ✓ Average cost per year for implementation of Objective 1(A) USD 12,926,089 ✓ Annual Average cost per district USD 680.320/-
1B	Implement an Urban PHC system built on public private partnerships and addressing contextual needs of low income urban population	<ul style="list-style-type: none"> • Av. Cost for upgrading one franchised family practice center USD 65,000/- • Average upgrading cost for one EPHS center USD 350,000/- • Annual salary for outreach workers - one couple USD 2,000/- • Annual salary for 250 EPHS staff to be inducted USD 111/- • Health services initiated in franchised Family Practice Centers across 10 townships = 200 • Health services initiated in EPHS Centers across 10 township = 20 <ul style="list-style-type: none"> ✓ Total number of township = 10 ✓ Average cost per year for implementation of Objective 1(B) USD 21,430,556 ✓ Annual Average cost per township USD 2,143,056