Resource February 28, 2012

IMPROVING ACCESS TO HEPATITIS PREVENTION AND CARE IN SINDH PAKISTAN

Problem:

PROBLEM: National Picture Pakistan is a country of 170 million people where Viral Hepatitis has emerged as a significant public health problem. Various small research studies suggested that Viral Hepatitis in Pakistan has been on rise. Although a monovalent Hepatitis B vaccine was introduced in the National Expanded Program on Immunization since 2001 but the coverage rate was sub optimal (57.3%). (National Institute of Population Studies (NIPS) [Pakistan], 2006). A systematic review of the available literature was undertaken by the defunct Ministry of Health in 2005. The mean results of HBsAg and Anti-HCV prevalence on the basis of data aggregated from abstracts of 203 published studies was calculated which shows 2.3% and 2.5% prevalence of HBsAg and Anti-HCV in children, 2.5% and 5.2% among pregnant women, 2.6% and 5.3% in general population, 3.5% and 3.1% in army recruits, 2.4% and 3.6% in blood donors, 6.0% and 5.4% in health care workers, 13.0% and 10.3% in high risk groups, 12.3% and 12.0% in patients with provisional diagnosis of hepatitis and 25.7% and 54% in patients with chronic liver disease respectively. In current situation of preventive and control activities, it is estimated that the prevalence is tripled after every decade (Altaf Bosan, 2010). Provincial Context Other empirical evidence suggested that disease spread in Sindh is high due to e.g. (a) highest rate of unsafe injection delivery in the region (Janjua NZ, 2005) (b) lowest level of knowledge amongst female population about 03 established modes of disease spread (NIPS Survey 2003) ? Used Syringes 9.84% ? Used Blades 1.09% ? Through Blood 4.37% Implication of this data is that 90% of the female population in Sindh does not know Hepatitis is spread by used unsafe syringes in a situation where every person is receiving at least 13 injections in a year and 7 times it is unsterile. Due to this rampant spread of disease a huge number of chronic liver disease were present in the population. Only a fraction of these has access to hepatitis care services prior to the launching of program, as only few (9) specialized centers in the country were providing the treatment (interferon ?) with no diagnostic services. A huge market failure existed for these patients as not all had the access to the social safety net (Pakistan Baitul Maal) providing drugs. Hepatitis B vaccine for adults could only be purchased by out of pocket expenditure.

Intervention:

INTERVENTION

© 2020 University Research Co., LLC, All Rights Reserved

These preliminary results of the review stated above initiated the launching of a "**National Program for the Prevention and Control of Hepatitis**" in August 2005. The program was approved at the highest forum of country to have following interventions / components for implementation;

Hepatitis B Vaccination for High Risk Groups

Safety of blood and blood products against hepatitis

Safety of injection delivery, invasive medical devises & proper hospital waste management

Capacity building of health care providers for the prevention and control of hepatitis

Behavior Change Communication

Surveillance and Diagnostic Lab services for Viral Hepatitis and Epidemic Response

Establishment of Water Purification Plants

Operational Research Including M&E

Treatment Interventions at teaching and district headquarter hospitals

Formation of Program Implementation Units at Federal and provincial level with aims of technical assistance at all tiers of health sector.

Consequent upon launching of the program at national level, a provincial implementation unit was set up in five months' time.

The program's design in field had an overall emphasis on;

Passive laboratory (sentinel) based surveillance system of chronic Hepatitis B and C.

Vaccination of Hepatitis B to high-risk groups

Treatment Interventions at teaching and district headquarter hospitals

© 2020 University Research Co., LLC, All Rights Reserved

Installation of autoclaves, water purification plants and hospital waste incinerators.

At district level the portal of entry was the District Headquarter Hospital (DHQ) declared as sentinel site having all the above facilities under one roof.

Phase 1 (2006)	Phase 2 (2007)	Phase 3 (2008)

© 2020 University Research Co., LLC, All Rights Reserved

Nawabshah		Saudabad Hospital, Karachi
	Civil Hospital Thatta	
Chandka Medical College Hospital		
Larkano		
	Civil Hospital Naushahroferoze	New Karachi Hospital
Civil Hospital Jacobabad		
	Civil Hospital Shikarpur	

© 2020 University Research Co., LLC, All Rights Reserved

Civil Hospital Badin	Civil Hospital Sanghar	Paretabad Hospital, Hyderabad
Civil Hospital Mithi	District Headquarter Hospital Tando Allahyar	Shah Bhitai Hospital, Hyderabad
Civil Hospital Dadu		Qasimabad Hospital, , Hyderabad

© 2020 University Research Co., LLC, All Rights Reserved

Civil Hospital Khairpur	District Headquarter Hospital Umerkot	District Headquarter Hospital Kamber,
Civil Hospital Sukkur		District Headquarter Hospital Tando Mohammed Khan

© 2020 University Research Co., LLC, All Rights Reserved

DHQ Hospital Mirpurkhas		DHQ Hospital Hala, Matiari
DHQ Hospital Kotri		District Headquarter Hospital Kandhkot,

COMPONENT WISE PERFORMANCE OF PROGRAM IN SINDH

© 2020 University Research Co., LLC, All Rights Reserved

The component wise performance of the Program is as follows;

HEPATITIS B VACCINATION:

PM's Program on Hepatitis envisaged the interruption of Hepatitis B virus transmission by enhanced vaccination in the high-risk groups. The high-risk groups identified in the project PC-1 are as under;

High-Risk Groups identified in the Program

Health Care Workers	**Prison Inmates**
Family Members of the Health Care Workers	Patients on long term renal dialysis
Thallasemics and Hemophiliacs	Hepatitis C patients negative for Hepatitis B
Intravenous Drug Users	Mentally Retarded Persons
Other high-risk people screened in the high-prevalent areas	

© 2020 University Research Co., LLC, All Rights Reserved

COMPARATIVE STATEMENT OF HEPATITIS B VACCINATION IN SINDH

Hepatitis B Vaccine Coverage of Various High-Risk Groups from 2006-2008

District	Health Care Workers	Prison Inmates	Hepatitis C Pts.	Hemophiliacs / Thallasemics / Dialysis Pts.	Injection Drug Users	Others
Larkana	1224	1281	684	0	0	7557
Nawabshah	537	208	500	118	0	1050

© 2020 University Research Co., LLC, All Rights Reserved

Shikarpur	150	758	300	56	0	1300
Jacobabad	222	460	200	0	0	533
Mirpurkhas	500	292	300	10	0	300
Umerkot	366	0	150	0	0	8750
Thatta	550	0	161	0	0	0
Badin	110	315	250	237	0	2088

© 2020 University Research Co., LLC, All Rights Reserved

Kamber	1836	35	0	0	0	6119
Mithi	80	0	340	0	0	150
Hyderabad	96	3439	0	251	0	291
Jamshoro	150	0	810	5	0	1140
Karachi	874	9218	650	1331	0	0
Sanghar	73	359	75	0	0	2050

© 2020 University Research Co., LLC, All Rights Reserved

N.feroze	0	0	110	0	0	1000
Khairpur	10	904	259	0	0	150
Ghotki	25	0	50	0	0	120
Sukkur	10	2542	250	250	0	100
Tando Allahyar	100	0	294	0	0	500
T.M.Khan	275	0	0	0	0	0

© 2020 University Research Co., LLC, All Rights Reserved

Dadu	91	512	350	0	0	1200
TOTAL	7279	20323	5733	2258	0	34398

VACCINATION OF PRIMARY SCHOOL GOING CHILDREN:

In addition to the numbers vaccinated above; some special initiatives were undertaken to vaccinate the primary school going children against Hepatitis B. The activity was implemented by the respective District Governments, vaccine and syringes were being provided by the Expanded Program on Immunization. Prime Minister’s Program for Prevention and Control of Hepatitis Sindh took a natural role of leading the initiative and coordinating the activity. The details of the drive are as under:

Hepatitis B Vaccine Coverage of Primary School Going Children

District	Children Vaccinated	Remarks

© 2020 University Research Co., LLC, All Rights Reserved

Kamber	98000	operational support from district governments. Nawabshah was
Mirpurkhas	1,27,000	provided exclusive financing for the activity from SDSSP.
Hyderabad Larkana	10000 1,197130	The vaccination campaigns were
Benazirabad (Nawabshah)	1,16,000	conducted utilizing the
Thatta	92,000	
Shikarpur	30000	

© 2020 University Research Co., LLC, All Rights Reserved

HEPATITIS DELTA AT KAMBER AND LARKANA:

Due to the ongoing spread of Hepatitis Delta at district Kamber and Larkana, a special initiative of vaccinating the general population near to their doorsteps was launched. Ring Vaccination methodology was adopted and from September 2007 onwards in which the adult Hepatitis B Vaccine is made available at all EPI centers in the district and vaccine was administered to general population. The impact of initiative was never fully evaluated. However it is assumed that vaccination of large number of people may have slowed down the virus transmission if not interrupted it.

DISTRIBUTION OF VACCINE IN FY 2009-2010

Sindh PIU received 2nd consignment of its share in vaccine in July 2009. It is still in process of being distributed and reports are being collected. The distribution details of the vaccine received during financial year 2009-2010 is as under:

Distribution of Hepatitis B Vaccine in 2009-10

Health Institute	Hepatitis B Vaccine Supplied
Civil Hospital Jacobabad	9000 Vials
Chandka Medical College Hospital Larkano	1000 Vials

© 2020 University Research Co., LLC, All Rights Reserved

The Health Foundation Karachi	15,000 Vials
Executive District Officer (Health) Naushahroferoze	15,000 Vials
People’s Medical College Hospital Benazirabad	5,000 Vials
Fatimid Foundation Hyderabad	500 Vials
Dow University of Health Sciences, Karachi	7622 Vials

© 2020 University Research Co., LLC, All Rights Reserved

Services Hospital Hyderabad	500 Vials
Principal Public Health School Hyderabad	663 Vials
HC Charitable Hospital, Karachi	300 Vials
Taluka Hospital Mehar, Dadu	3300 Vials
Liaquat University of Medical and Health Sciences Jamshoro	500 Vials

© 2020 University Research Co., LLC, All Rights Reserved

Executive District Officer (Health) Matiari	15,000 Vials
Tahafuz-e-Sehat (NGO) Hyderabad	900 Vials
Sukkur Blood & Drug Donating Society, Sukkur	4500 Vials
Director General Population Welfare Department	50 Vials
Executive District Officer (Health) Dadu	50,000 Vials
Executive District Officer (Health) Sukkur	100,000 Vials

© 2020 University Research Co., LLC, All Rights Reserved

Executive District Officer (Health) Benazirabad	107500 Vials
PMRC Karachi	10,000 Vials
Principal Chandka Medical College Larkana	6,000 Vials
Executive District Officer (Health) Shikarpur	20,000 Vials

SAFETY OF INJECTIONS AND MEDICAL DEVICES

The category wise targets and achievements are as follows:

Targets and Achievements in Safety of Injections and Medical Devices

Category	Targets	Recipient Hospital	Achievemen

© 2020 University Research Co., LLC, All Rights Reserved

		DHQ Hospital	
Safe Injection Delivery	Provision of needle cutters and injections to sentinel sites as per demand	All sentinel sites in Sindh	40 needle cu syringes dist sites.
	08 sentinel sites to be equipped with autoclaves	Badin, Dadu, Tharparker, PMC Nawabshah, Khairpur, GMCH	08 are instal

© 2020 University Research Co., LLC, All Rights Reserved

Sukkur, THQH Kotri, Tando

Allahyar

Autoclaves

During project life Sindh PIU provided 2.0 Million Auto Disable Syringes to various hospitals for non-immunization use. These were distributed to various sentinel sites as per following demand

Table 17: Supply details of Auto-Disable Syringes to various institutes in province

Name of Institute	**Syringes Provided**
Civil Hospital Karachi	66,400
Executive District Officer (Health) Benazirabad	150,000

© 2020 University Research Co., LLC, All Rights Reserved

Executive District Officer (Health) Umerkot	100,000
Executive District Officer (Health) Naushahroferoze	150,000
Sindh Government Hospital Shah Bhitai Hyderabad	75,000
Sindh Government Hospital Kohsar Hyderabad	50,000
Sindh Government Hospital Qasimabad	25,000

© 2020 University Research Co., LLC, All Rights Reserved

Sindh Government Hospital Saudabad Karachi	50,000
Pakistan Medical & Research Council Karachi	50,000
District Headquarter Hospital T.M. Khan	50,000
Civil Hospital Thatta	75000
RBUT Civil Hospital Shikarpur	75000
Taluka Hospital Kotri District Jamshoro	75000

© 2020 University Research Co., LLC, All Rights Reserved

Executive District Officer (Health) Matiari	7500
Executive District Officer (Health) Jacobabad	100,000
Executive District Officer (Health) Shikarpur	50,000

HOSPITAL WASTE MANAGEMENT SYSTEM

This component may be called as the Achilles' heel of the program. The program envisaged installing a 50 Liters / hour capacity, double burner incinerator with scrubber. The technical specifications of the equipment are given as annexure. The equipment was planned to be installed all District Headquarter Hospitals and those teaching hospitals, where there is no incinerator. These centers were to be linked with clusters of geographically surrounding health facilities where infectious hospital waste is generated. The hospital waste vehicles would transport the waste from clustering hospitals to the main site of burning. To aid in the incineration consumable items like (1) Long Rubber Boots (2) Yellow Polythene Bags (3) Wheel Barrows (4) Three Colored Baskets were supplied. Government of Sindh nominated (08) hospitals as recipients of system at the outset. The details are as under;

Status of Incinerators and supplies made to hospitals

District Headquarter Hospital	Incinerator**Status**	Yellow	Color	800 CC vehicle	R

© 2020 University Research Co., LLC, All Rights Reserved

		Bags	Baskets		

© 2020 University Research Co., LLC, All Rights Reserved

Dadu	Functional	1000	90	1
Sanghar	Functional	1000	90	1
Tando Allahyar	Functional	1000	90	1
Khuda Ki Basti, Jamshoro	Functional	1000	90	1
Badin	Functional	1000	90	1
Khairpur	Not Functional	1000	90	1

(3) No

of Na

Th

Re

non-fu

(1) Ger

© 2020 University Research Co., LLC, All Rights Reserved

GMMC Hospital Sukkur		1000	90	1	
Tharparker at Mithi		1000	90	00	

ESTABLISHMENT OF WATER PURIFICATION PLANT

09 water purification plants are established at the DHQ level hospitals as under:

Table 19: List of Hospitals where plants are installed

Civil Hospital Jacobabad	**Civil Hospital Dadu**
Civil Hospital Khairpur	Civil Hospital Naushahroferoze

© 2020 University Research Co., LLC, All Rights Reserved

Civil Hospital Badin	PMC Hospital Benazirabad
GMC Hospital Sukkur	THQ Hospital Kotri, Jamshoro
Civil Hospital Tharparker at Mithi	

ADVOCACY AND SOCIAL MOBILIZATION

Advocacy and social mobilization was a neglected component in the project life, it would have been the otherwise. The lacunas were addressed as a stronger provincial project in 2009.

Capacity Building of Health Care Providers:

The training guidelines of the program were finalized in January 2009. A training of provincial master trainers was conducted at Islamabad where 10 master trainers from the province were trained. The first formal training of the health care providers in Sindh province was undertaken in May 2009 by the Chief Minister's Initiative for Hepatitis Free Sindh. In October 2009 World Health Organization supported the training of 60 Medical Officers and Senior Medical Officers from 10 districts of North Sindh at Sukkur.

SURVEILLANCE AND LABORATORY DIAGNOSTIC SERVICES:

By supplying the laboratory equipments for Viral Hepatitis diagnostics, program has not only enhanced the district headquarter hospitals' capacity but also upgraded these facilities for the registration with Sindh Blood Transfusion Authority. One of the major impediments in the registration was availability of ELISA Micro plate Reader. A standard set of equipments provided by the program in this component is given in table below;

© 2020 University Research Co., LLC, All Rights Reserved

Table 21: Standard Set of equipments supplied to sentinel sites in Sindh

Micro plate Reader and Washer	Pipette Adjustable Volume (5 sizes)
Chemistry Analyzer & Vortex Mixer	Pipette Multi-Channel (2 sizes)
Laboratory Centrifuge & Incubator Shaker	Yellow Tips , Blue Tips & Torpedoes
Water bath	Incubator and Hot Air Oven
Laboratory Refrigerator	Blood Collection Tubes ,Gloves & Beakers

© 2020 University Research Co., LLC, All Rights Reserved

P-IV Computers and dot-matrix printers	Pipette AID, Pipette Stand, Disposable Pasteur Pipette

Distribution Details of Hepatitis ELISA Kits in 2008-2009

Name of Recipient Institute	Distributed
EDO(Health) Kamber	10
Civil Hospital Karachi	65
Civil Hospital Dadu	15

© 2020 University Research Co., LLC, All Rights Reserved

Civil Hospital Thatta	10
Civil Hospital Tando Allahyar	10
Taluka Hospital Kotri	20
Civil Hospital Mirpurkhas	10
Civil Hospital Mithi	15
Civil Hospital Sanghar	10

© 2020 University Research Co., LLC, All Rights Reserved

DHQH Tando Mohd. Khan	10
DHQ Hospital Umerkot	10
SGH Shah Bhitai Hyderabad	05
SGH Qasimabad Hyderabad	07
SGH Saudabad Karachi	15
Abbasi Shaheed Hospital	10

© 2020 University Research Co., LLC, All Rights Reserved

SGH New Karachi	08
Liaquat University Hospital	05
Name of Recipient Institute	Distributed
Civil Hospital Sukkur	40
Civil Hospital Khairpur	35
Civil Hospital Naushahroferoze	15

© 2020 University Research Co., LLC, All Rights Reserved

Civil Hospital Mirpur Mathelo	10
RBUT Hospital Shikarpur	30
CMC Hospital Larkano	20
DHQ Hospital Kamber	10
Civil Hospital Jacobabad	35
DHQ Hospital Kandhkot	10

© 2020 University Research Co., LLC, All Rights Reserved

PMCH Benazirabad	20
EDO(H) Shikarpur	30
SGH Paretabad Hyderabad	08
EDO (H) Karachi	35
EDO (H) Thatta	20
Lyari General Hospital Karachi	10

© 2020 University Research Co., LLC, All Rights Reserved

SGH Qatar Hospital	05
Taluka Hospital Hala	35

© 2020 University Research Co., LLC, All Rights Reserved

A summary of screening statistics from September 2006 to June 2007 are as follows;

S.No	Sentinel Site	Screening Done								Results
						Hepatitis B reactive				
		Health Care	General P opulation	High Risk Groups	Total	Health Care	General P opulation	High Risk Groups	Total	Healt Care

© 2020 University Research Co., LLC, All Rights Reserved

		Workers				Workers		Worke
1	JPMC Kcy	1641	1227	0**2868**	26	48	0**74**	
2	CMCH	1562	4466	450**6478**	81	801	47**929**	
	LRK							
3	PMCH	587	992	0**1579**	39	228	0**267**	
	NWB							
4	GMCH	344	2116	0**2460**	20	528	0**548**	

© 2020 University Research Co., LLC, All Rights Reserved

	Sukkur									
5	CH Badin	1763	1635	389	**3787**	138	260	85	**483**	
6	CH MPK	1432	2976	1364	**5772**	105	393	170	**668**	1
	Outreach camps		2642	0	**2642**	0	268	0	**268**	
7	CH Mithi	278	669	48	**995**	18	185	12	**215**	
8	CH Dadu	713	1692	11	**2416**	100	389	0	**489**	

© 2020 University Research Co., LLC, All Rights Reserved

9	CH KHP	815	2733	719**4267**	105	745	12**862**
10	Tando Allahyar	180	6	0**186**	16	2	0**18**
11	CHK	1051	871	0**1922**	18	21	0**39**
12	CH JCD	222	3898	25**4145**	5	507	25**537**
13	THQ Kotri	657	2430	0**3087**	157	481	0**638**

© 2020 University Research Co., LLC, All Rights Reserved

14	Umerkot	425	3084	37	**3546**	11	99	1	**111**	
	Outreach camp		1467	0	1467	0	61	0	**61**	
15	Shikarpur	102	560	248	910	2	168	32	**202**	
16	Sanghar	25	2132	0	2157	10	569	0	**579**	
	GRAND TOTAL	**11670**	**35596**	**3291**	**50557**	**851**	**5753**	**384**	**6409**	**713**
	Dual Infec	454								

© 2020 University Research Co., LLC, All Rights Reserved

tion

Screening of Prison Inmates

During the project life Supreme Court of Pakistan ordered for the screening of prison inmates and providing treatment to patients. Almost 8000 prison inmates were screened, which to date remains the largest Hepatitis C seroprevalence survey amongst the prison inmates population. The results subsequently were published in an indexed journal in 2010. Copy of the paper is attached.

PCR Test

The program when designed at the Federal level could not envisage the provisions of PCR test. Contracting methodology was adopted for the services. The research and teaching institutes were having the PCR machines which were not used for the general public. The project engaged the academia in a manner where PCR services were opened for the general public on a no profit no loss basis and it was outsourced. At that time this mechanism was an innovation hitherto unheard of in Health Department. Before that all the patients were bearing the expenditure out of pocket.

TREATMENT FACILITIES AT DISTRICT AND TEACHING HOSPITALS:

Program envisaged provision of treatment to deserving and poor patients, however this component over shadowed all other interventions. The latent demand for Hepatitis C and B in the community became evident after the initial supply of Injection Interferon in June 2006. The demand supply mismatch was enormous. The treatment component of the program was actualized through the Viral Hepatitis Control Committees notified at each hospital.

Table 26: Distribution Details of Treatment during 2006-2007

© 2020 University Research Co., LLC, All Rights Reserved

S. No	Name of Sentinel Site	Injection Interferon	Capsule Ribavirin	Tablet Lamividine
1	C.M.C Hospital Larkana	46686	349920	20075
2	Civil Hospital Sukkur	16632	124740	20075
3	PMC Hospital Benazirabad	23400	175500	18250

© 2020 University Research Co., LLC, All Rights Reserved

4	J.P.M.C Karachi	3600	27000	0
5	Civil Hospital Jacobabad	23760	178200	3980
6	Civil Hospital Shikarpur	3600	27000	7300
7	Civil Hospital Dadu	19872	149040	10950
8	Civil Hospital Mirpur	3600	27000	0

© 2020 University Research Co., LLC, All Rights Reserved

	Mathelo			
9	Civil Hospital Khairpur	18648	139860	29050
10	Civil Hospital Naushahroferoze	3600	27000	5420
11	Civil Hospital Sanghar	3600	27000	5400

© 2020 University Research Co., LLC, All Rights Reserved

12	Civil Hospital Mirpurkhas	19800	148500	10220
13	Taluka Hospital Kotri, District Jamshoro	30600	229500	14600
14	Civil Hospital Thatta	3600	27000	3650
15	Civil Hospital Badin	13320	99900	5425

© 2020 University Research Co., LLC, All Rights Reserved

16	Civil Hospital Mithi	15528	116100	1795
17	Civil Hospital Tando Allahyar	17424	115020	1825
18	S.G.H Qasimabad Hyderabad	0	0	1095
19	District Headquarter Hospital Umerkot	3600	27000	0

© 2020 University Research Co., LLC, All Rights Reserved

Distribution Details of Treatment during 2008-2009

S. No	**Name of Sentinel Site / Recipient**	**Injection Interferon**	**Ribavi**
1	Civil Hospital Sanghar	1440	
2	SGH Qasimabad Hyderabad	1800	
3	Civil Hospital Badin	1440	
4	Civil Hospital Thatta	1440	

© 2020 University Research Co., LLC, All Rights Reserved

5	Civil Hospital Naushahroferoze	2520	
6	GMC Hospital Sukkur	1440	
7	Civil Hospital Jacobabad	1080	
8	Balochistan PIU	1440	
9	SGH Paretabad Hyderabad	528	

© 2020 University Research Co., LLC, All Rights Reserved

Distribution Details of Treatment during 2009-2010

S. No	Name of Sentinel Site / Recipient	Injection Interferon	Ribavi
1	PMCH Shaheed Benazirabad	21800	
2	Executive District Officer (Health) Kamber	20000	
3	Chandka Medical College Hospital Larkana	8136	

© 2020 University Research Co., LLC, All Rights Reserved

4	Civil Surgeon Civil Hospital Naushahroferoze	10800	
5	Medical Superintendent RBUT Shikarpur	6656	
6	Civil Surgeon Civil Hospital Mir Mathelo	10800	
7	Medical Superintendent Shah Bhitai Hospital Hyderabad	10800	

© 2020 University Research Co., LLC, All Rights Reserved

8	Executive District Officer (Health) Matiari	7200	
9	Medical Superintendent DHQH Tando Mohammed Khan	7200	
10	Sindh Government Hospital Paretabad	5040	
11	Medical Superintendent Khairpur	14400	

© 2020 University Research Co., LLC, All Rights Reserved

12	Civil Hospital Tando Allahyar	1440	
13	Sindh Government Hospital Qasimabad Hyderabad	1440	

For Hepatitis C the End Treatment response was a major indicator and for Hepatitis B sero-negative state was taken as an indicator. End Treatment Response rate is as follows:

End Treatment Response for the year 2006-2008

Sentinel Site	End Treatment Response	

© 2020 University Research Co., LLC, All Rights Reserved

	Not Detected	Detected
Civil Hospital Jacobabad	Virus 100	Virus 31
Civil Hospital Mirpurkhas	175	25
RBUT Hospital Shikarpur	47	3
Civil Hospital Tando Allahyar	13	16
Civil Hospital Mirpur Mathelo	45	5

© 2020 University Research Co., LLC, All Rights Reserved

Civil Hospital Sanghar	26	Nil
Civil Hospital Thatta	27	25
Civil Hospital Dadu	79	9
GMC Hospital Sukkur	101	19
Civil Hospital Badin	102	26
DHQ Hospital Umerkot	24	6

© 2020 University Research Co., LLC, All Rights Reserved

NMC Hospital Nawabshah	97	12
Civil Hospital Khairpur Mir's	176	04
Taluka Hospital Kotri	226	31
Civil Hospital Mithi	NA	10

DESIGNING THE PROVINCIAL AND DISTRICT INITIATIVES FOR HEPATITIS IN SINDH:

The PC-1 of the Prime Minister's Program for Prevention and Control of Hepatitis alluded to a separate Provincial Hepatitis Programs from the 3rd year of the program implementation. Sindh took the lead in designing the provincial version of the National Hepatitis Program. It is pertinent to mention the factors affecting the design and launch of a provincial hepatitis program before any other province in country.

Political Will

The project was successful in generating a goodwill among the decision makers due to its performance from 2006-2009. Hence a public funded scheme was prepared and financed upto a

© 2020 University Research Co., LLC, All Rights Reserved

scale which had no precedence in the province.

Demand and Supply Mismatch:

As described earlier a huge demand for hepatitis C treatment was lying latent in the community which surfaced itself after the launch of program. It was not possible for the program to cater to even 50% of the needs, e.g. in 2007, on an average more than 500 patients were booked for treatment at every one of 19 sentinel sites at some sites like Larkana and Karachi the figure rose up to thousands. This phenomenon put the Sindh PIU, Federal PIU and Government of Sindh in an obligation to deliver the public from this problem. Moreover Honorable High Court of Sindh gave a decision to screen all prisoners and provide treatment to the diseased. In this connection Provincial Coordinator appeared in the High Court of Sindh for 03 times along with Director General Health Services Sindh. The public discomfort was also voiced from time to time by the elected representatives in the National Assembly and Senate of Pakistan adding onto the pressure on Sindh PIU and Government of Sindh. All these factors demanded an innovative approach to the program.

Financing from District Government

Sindh floated the idea of district project of the Hepatitis Program and actively lobbied and pursued the idea with all District Nazims (Governors) from July 2007 onwards. Prototype letters describing the inputs of Prime Minister’s Program for Prevention and Control of Hepatitis in the district was sent to all Nazims. The effort was carried on for 02 years and by the end of 2nd year 20 out of 23 districts had allocated a cumulative sum of 350 million Rs in program interventions. Districts like Dadu / Umerkot / Jacobabad were supported in developing their independent PC-1s. The allocations were mainly utilized for purchase of injection interferon while some of the districts also managed the diagnostic services mainly the ICT Kits and PCR.

In table below the financial allocations from the various District Governments in year 2007-2008 are given;

Details of financial allocations from the District Governments

S. No	District Government	Financial allocation in FY 2007-08	Finances allocation in FY 2008-09	Remarks

© 2020 University Research Co., LLC, All Rights Reserved

				District Nazim
1. / 2.	Hyderabad / Dadu	10 Million Rs / 7.5 Million Rs	20 Million Rs / 15 Million Rs	Grant in aid from / A separate PC-1 is prepared
3.	Jamshoro	25 Million Rs	40 Million Rs.	Grant in aid from District Nazim
4.	Tharparker	A PC-1 of 10 Million was approved and 50% are released each year		

© 2020 University Research Co., LLC, All Rights Reserved

5.	Umerkot	4.0 Million	0	
6.	Mirpurkhas	20 Million	20 Million Rs	Grant in aid from District Nazim
7.	Tando Allahyar	6.4 Million Rs	20 Million Rs	Grant in aid from District Nazim
8.	Sukkur	0	10 Million	Grant in aid from District Nazim

© 2020 University Research Co., LLC, All Rights Reserved

9.	Shikarpur	2.5 Million Rs.	2.5 Million Rs.	Another 60 Million is demanded
10.	Kamber	0.5 Million Rs	25 Million Rs	Grant in aid from District Nazim
11.	Jacobabad	2.2 Million Rs	3.0 Million Rs	Grant in aid from District Nazim
12.	Naushahroferoze	2.26 Million Rs	10 Million Rs	A PC-1 is in making

© 2020 University Research Co., LLC, All Rights Reserved

S. No	District Government	Financial allocation in FY 2007-08	Finances allocation in FY 2008-09	Remarks
13.	Khairpur Mir’s	0	16 Million Rs	Financed by a CCB
14.	Matiari	0	5 Million Rs	Grant in aid from District Nazim
15.	Kashmore	0	5 Million Rs.	Grant in aid from District Nazim

© 2020 University Research Co., LLC, All Rights Reserved

16.	Larkano	1.7 Million Rs	12 Million Rs	Special Grant from Finance Department
17.	Nawabshah	2.0 Million Rs	10 Million	Special Grant from Finance Department
18.	Thatta	1.87 Million Rs	0	

© 2020 University Research Co., LLC, All Rights Reserved

				SDSSP.
19. 20.	Sanghar Badin	0	7 Million Rs 20 Million Rs	Source of funding is Savings from SDSSP.
	TOTAL	95.93 Million	227.5 Million	

The initiative from these district governments created a sense of relief to patient population in these districts. The benefit incidence analysis of the effort has yet to be determined. However the provincial level institutes were lacking in this initiative which had to be dealt by a provincial scheme.

Provincial Hepatitis Control Program

In 2007 a small scheme of complimentary support to the Prime Minister’s Program for Prevention and Control of Hepatitis in Sindh was sent to Planning and Development Department at the cost of 5.0 Million Rupees. In a follow-up meeting it was decided by the P&D department that a complete and holistic scheme would be launched. Responsibility for developing a PC-1 was entrusted upon Sindh PIU.

The idea of holistic scheme took shape because of following reasons;

© 2020 University Research Co., LLC, All Rights Reserved

1.

High Court of Sindh was constantly pushing the health department for screening and providing treatment to diseased prisoners at all prisons. Responding to the decisions an amount of 150 million was allocated for the purpose in May 2008. The sum could not be utilized due to delayed release.

2.

An obligation on part of provincial tier of government to allocate finances when compared with the fact that federal and district governments had allocated resources towards hepatitis.

3.

Multiple organizations and districts were approaching Finance and Planning & Development Department with proposals for allocation towards Hepatitis. Government amalgamated all proposals under one ambit of provincial hepatitis control program.

From March 2008 to July 2008 Provincial PIU Sindh leading a core team of Hepatologists, Pathologists, Public Health Specialists and Planning & Development Department team, a PC-1 worth 2.35 Billion was prepared and it was approved in August 2008 for three years. The scheme was coined as “Chief Minister’s Initiative for Hepatitis Free Sindh”. In essence the project is an up scaled version and replica of interventions of Prime Minister’s Program on Hepatitis. The objectives are:

Preventing the acute infections

Addressing the chronic infections

Raising the public awareness

Changing the policy environment

Health System Strengthening

Under every objective a set of sub-objectives and activities are developed. The project has a detailed and elaborate logical framework for monitoring and evaluation. A copy of the project in winzip form is attached.

Results:

The program was started in 2005 as a Federal initiative and it was evaluated by WHO and Pakistan Medical Research Council in 2009. It was observed that program reached out to the population groups it intended and as it was

output oriented project a list of activities was matched with one intended.

© 2020 University Research Co., LLC, All Rights Reserved

There were some problem noted in the selection criteria of patients where a small fraction were selected against the medical criteria, which has more to do with patients' political influence rather than systes weakness.

Lessons:

The project design and interventions makes it a unique project in the developing country setting which has not only provided increased access to services for a neglected yet substantial set of patients. The federal arm of the project

was substantially augmented by the provincial government and its scope was increased many times.

The main lessons of the project was only a system wide approach is successful in implementing National Programs and all the collaborating partners if properly approached can turn a project into success.

However more important was the involvement of governments in markets. Before the launch of project Inj Interferon was being sold at exorbitant price and due to government intervention the price reduced 70%.

Sero positivity of Hepatitis C in the prison inmates of Pakistan [1]

Official Project Document of the Sindh Government [2]
Financial Description of the project [3]
Non-Communicable Diseases [4]
Research and Evaluation [5]
Countries: Asia [6]
Pakistan [7]
Report Author(s): Z.A.Gorar, A.Beg, Z. Baloch, R.Kumar
Organization(s): Health Services Academy Islamabad
ASSIST publication: no

Chronic conditions [8]
Documentation/data collection [9]
Equipment/supplies [10]
Financial management [11]
Gender [12]

© 2020 University Research Co., LLC, All Rights Reserved

Immunization [13]
Infectious diseases [14]
Policy [15]
Program design [16]
Program evaluation [17]
Program management [18]
Referral systems [19]
Scaling up [20]
Service integration [21]
Sustainability [22]

Improvement Story [23]

English [24]

The USAID ASSIST Knowledge Portal is made possible by the generous support of the American people through the U.S. Agency for International Development and its Bureau for Global Health, Office of Health Systems. The information provided on this web portal is not official U.S. Government information and does not represent the views or positions of USAID or the U.S. Government. The USAID ASSIST Project is managed by University Research Co., LLC under Cooperative Agreement Number AID-OAA-A-12-00101.

*/

Source URL: https://www.usaidassist.org/resources/improving-access-hepatitis-prevention-and-care-sindh-pakistan

Links
[1] http://jpma.org.pk/full_article_text.php?article_id=2107
[2] https://www.usaidassist.org/sites/default/files/revised-pc-1.doc
[3] https://www.usaidassist.org/sites/default/files/annex-9.xls
[4] https://www.usaidassist.org/topics/non-communicable-diseases
[5] https://www.usaidassist.org/topics/research-and-evaluation
[6] https://www.usaidassist.org/countries/asia
[7] https://www.usaidassist.org/countries/pakistan
[8] https://www.usaidassist.org/tags/chronic-conditions
[9] https://www.usaidassist.org/tags/documentationdata-collection
[10] https://www.usaidassist.org/tags/equipmentsupplies
[11] https://www.usaidassist.org/tags/financial-management
[12] https://www.usaidassist.org/tags/gender
[13] https://www.usaidassist.org/tags/immunization
[14] https://www.usaidassist.org/tags/infectious-diseases
[15] https://www.usaidassist.org/tags/policy
[16] https://www.usaidassist.org/tags/program-design
[17] https://www.usaidassist.org/tags/program-evaluation

© 2020 University Research Co., LLC, All Rights Reserved

[18] https://www.usaidassist.org/tags/program-management
[19] https://www.usaidassist.org/tags/referral-systems
[20] https://www.usaidassist.org/tags/scaling
[21] https://www.usaidassist.org/tags/service-integration
[22] https://www.usaidassist.org/tags/sustainability
[23] https://www.usaidassist.org/resource-type/improvement-story
[24] https://www.usaidassist.org/language/english

© 2020 University Research Co., LLC, All Rights Reserved