

Examining the Trends in Quality of Care for U5 Children in Afghanistan: 2004-2006

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Dismal Health Profile...



In 2001, Afghanistan had a dismal health profile ranking 4th in child mortality and 2nd in Maternal Mortality

IMR 165 (129 in 2006,AHS)
U5MR 257 (191 in 2006,AHS)
MMR 1900
Life Expectancy 46y



Access to safe water 23%
Adequate sanitation 12%
7M Vulnerable to hunger/famine
Diarrhea – 46% of deaths



Health Infrastructure



- Damaged health infrastructure
- Critical shortage of health personnel
 - Doctor – 6/100,000 pop
 - Midwife – 4/100,000 pop
 - Nurse – 7/100,000 pop
- Predominantly rural population (80%)
- 82% have access to basic health services
- 70% of health providers in Kabul city
- Measles immunization – 50%
- Births attended by skilled providers – 14%

“Significant donor investments for rebuilding Afghanistan”

- World Bank – 343M in grants
- USAID - 287 Health Facilities (\$4B in developmental assistance)



Performance of Delivery of the Basic Package of Health Service

National Assessment to Evaluate BPHS

Specific Objectives

- Independent assessment of MOPH and PVO performance in delivery of BPHS
- Strengthen capacity of MOPH to evaluate service delivery
- Support MOPH in assessing effectiveness of health financing mechanisms

Balanced Score Card - a framework to efficiently look at multiple domains of the health sector at a given point of time.

Domains: patients and community, staff, capacity for service provision, service provision, financial systems, overall vision



Study Design and Sample

Stratified random sampling of all BPHS health facilities



Sample (maximum of 25 facilities):

3 District Hospitals (DH)

7 Comprehensive Health Centers (CHC)

15 Basic Health Centers (BHC)

2004: 617 facilities from 33 provinces

2005: 629 facilities from 30 provinces

2006: 630 facilities from 30 provinces



Assessment Methodology

Case management observations on a systematic random sample of 5 children under five presenting on the day of visit

Exit interviews with caretakers of all children observed during case management

Random sample of 5 Health Providers to assess knowledge and work satisfaction



Profile of Assessment Sample

Profile	2004	2005	2006
<i>Type of HF</i>	617	629	630
BHC	323 (52.4)	368 (58.5)	385 (61.1)
CHC	243 (39.4)	218 (34.7)	203 (32.2)
DH	51 (8.3)	43 (6.8)	42 (6.7)
<i>Cadre of Provider</i>	1569	1458	1719
Doctor	410 (26.1)	525 (36.0)	586 (34.1)
Assistant doctor	155 (9.9)	103 (7.1)	56 (3.3)
Nurse	380 (24.2)	470 (32.2)	441 (25.7)
Other	624 (39.8)	360 (24.7)	636 (37.9)
<i>Sex of Provider</i>	1,531	1,377	1,672
Male	1137 (74.3)	938 (68.1)	1,071 (64.1)
Female	394 (25.7)	439 (31.9)	601 (35.9)

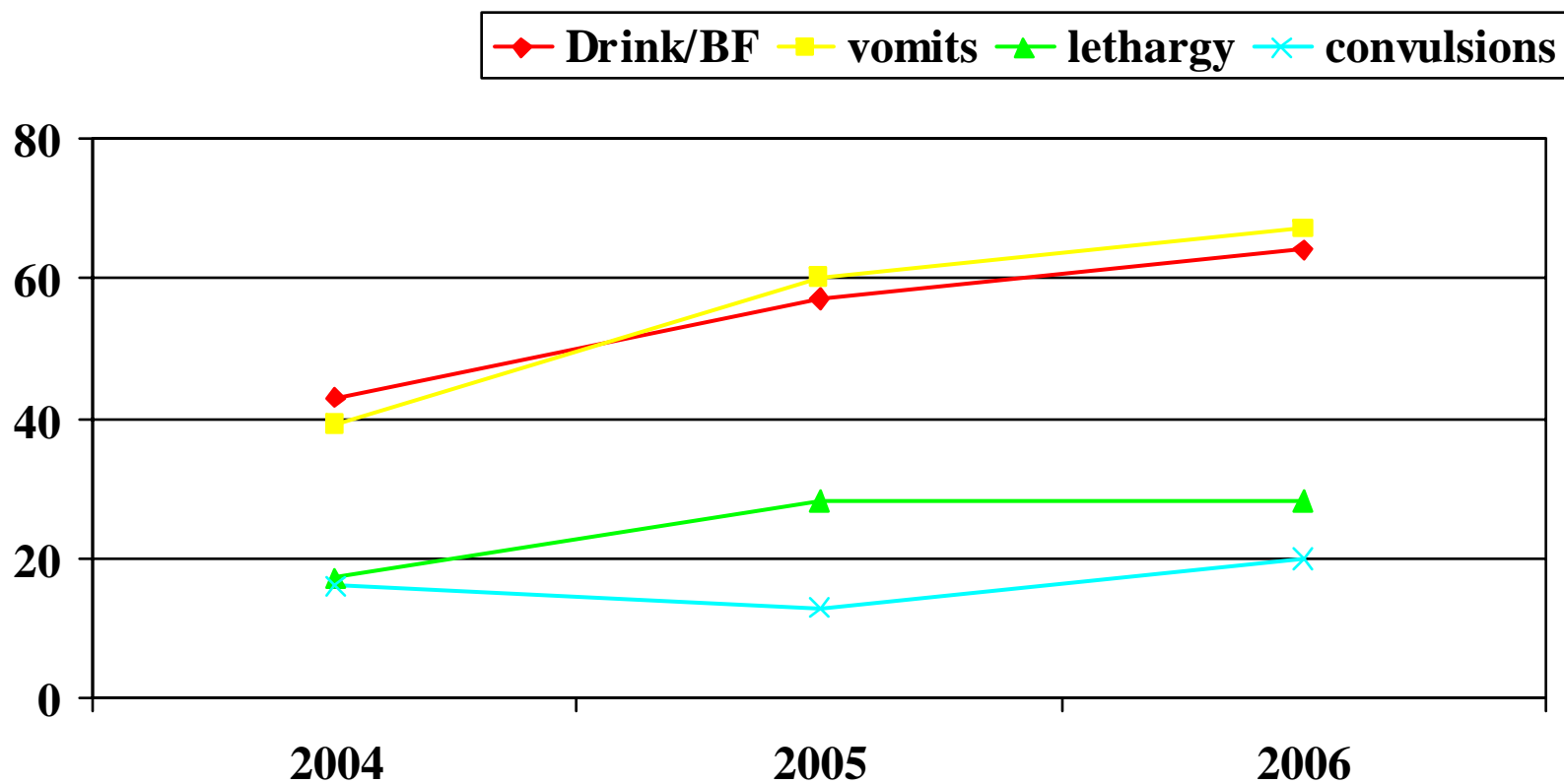


Profile of Children Observed and Presenting Symptoms

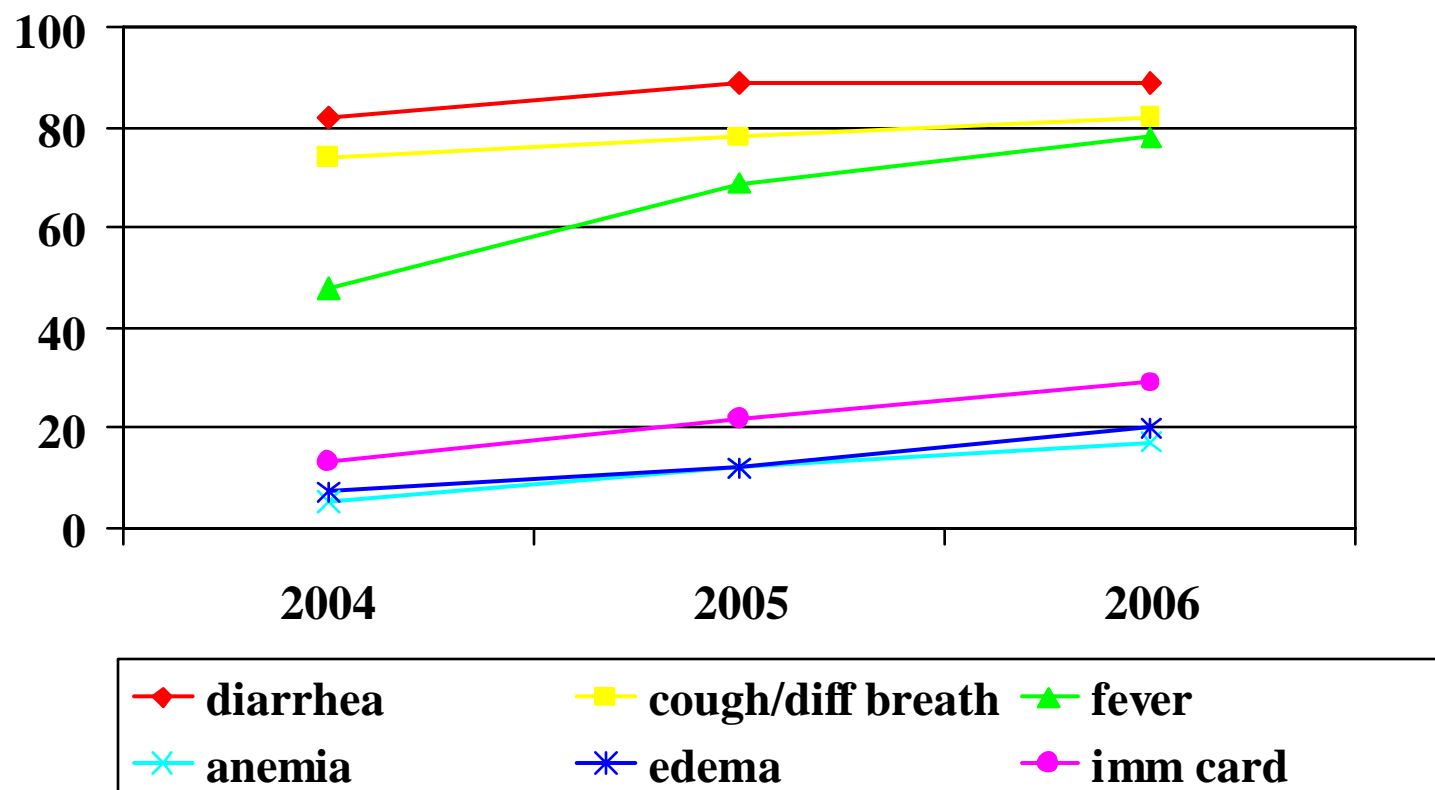
	2004 (n=2,251)	2005 (n=2,562)	2006 (n=2,669)
Child Sex			
Male	51.2	53.9	52.4
Female	48.8	46.1	47.6
Presenting Symptoms			
Diarrhea	43.5	48.3	44.6
Fever	22.6	18.5	20.1
Cough/difficulty breathing	17.1	15.4	17.0
Other	15.5	18.0	18.0



Quality of Care for Under Five Children Danger Signs (Asked/checked)



Quality of Care for Under Five Children Presenting Complaints: Asked/checked



Key Findings

Quality of Care for Under Five

<i>Counseling Factors</i>	<i>Percent Cases</i>		
	2004	2005	2006
Explained disease cause, course	30	37	48*
Explained Home care for child	61	73	76*
Explained how to administer medication	77	79	82*
Cautioned about adverse reactions	15	14	8*
Informed signs/symptoms for retuning immediately to the HF	20	32	44*



p<0.001



Key Findings

Performance by Facility Type

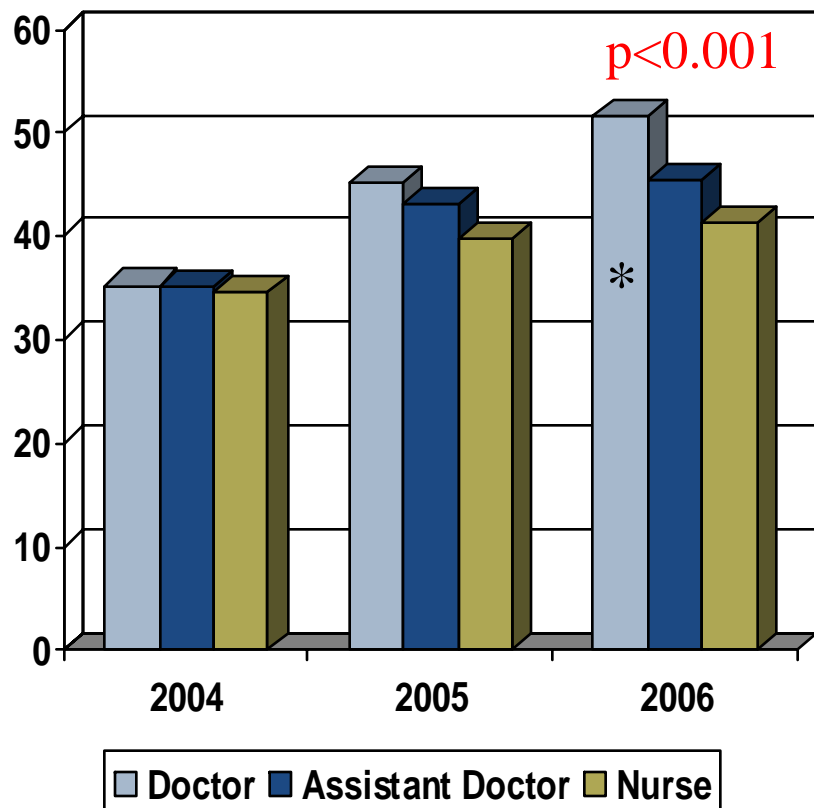
Performance Index	Year			p value (2004-06)
	2004	2005	2006	
Assessment Index	34.4	43.9	49.5	<0.001
BHC	34.6	42.7	48.8	<0.001
CHC	34.9	46.3	49.9	<0.001
DH	38.4	42.0	53.7	<0.001
Counseling Index	41.4	47	51.8	<0.001
BHC	43.2	46.0	51.6	<0.001
CHC	39.2	50.0	51.9	<0.001
DH	41.2	39.7	52.2	<0.030



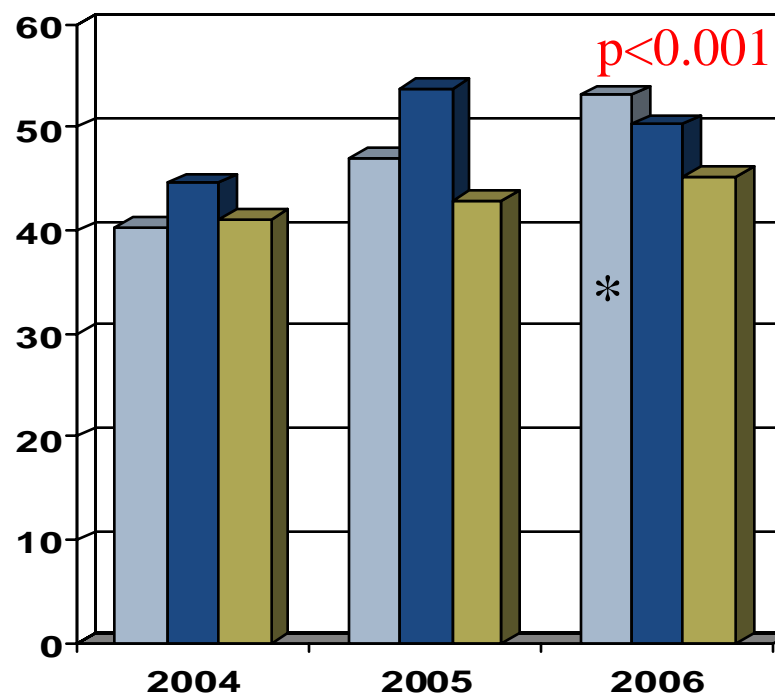
Key Findings

Performance by Provider Cadre

Assessment Index



Counseling Index



Key Findings

Performance by Provider Gender

<i>Performance Index</i>	<i>Year</i>			<i>p value (2004-06)</i>
	2004	2005	2006	
Assessment Index				
Male	35.0	43.7	49.2	<0.001
Female	34.5	46.6	54.8*	<0.001
Counseling Index				
Male	41.2	47.1	51.2	<0.001
Female	44.7	44.7	61.6*	<0.001



Key Findings

Performance by Type of Contracting

<i>Performance Index</i>	2004	2005	2006
Assessment Index			
Contract-out by MOH with performance bonus	39.1	44.9	43.8
Contract-out by 3rd party without performance bonus	26.7	35.0	48.2
Contract-out by 3rd party with technical assistance and no performance bonus	34.6	48.0	47.8
Contract-in by MOH	44.5	50.1	48.8
Others	35.8	42.5	67.8
Counseling Index			
Contract-out by MOH with performance bonus	43.7	46.0	48.2
Contract-out by 3rd party without performance bonus	31.1	34.4	50.3
Contract-out by 3rd party with technical assistance and no performance bonus	39.8	51.3	52.3
Contract-in by MOH	68.7	53.4	66.5
Others	39.6	50.4	48.6



Knowledge and Satisfaction of Providers: By Facility Type

Index	2004		2005		2006	
	M	F	M	F	M	F
Knowledge Index						
BHC	53.4	49.5	76.2	72.4	76.1	83.3
CHC	56.8	57.2	73.7	74.2	74.3	73.0
DH	56.0	50.0	73.3	72.2	70.9	73.6
Satisfaction Index						
BHC	60.5	63.4	63.9	69.0	67.8	69.8
CHC	60.6	66.9	64.5	67.3	67.6	68.2
DH	60.9	59.6	65.5	66.2	70.8	74.2



Knowledge and Satisfaction of Providers: By Cadre

Index	2004		2005		2006	
	M	F	M	F	M	F
Knowledge Index						
Doctor	60.4	59.4	77.6	74.5	76.4	75.9
Assistant Doctor	48.5	45.9	72.8	71.9	73.2	71.7
Nurse	57.7	59.3	71.3	77.8	73.5	NA
Satisfaction Index						
Doctor	61.7	65.2	63.1	65.8	67.5	68.7
Assistant Doctor	60.6	63.0	65.7	70.4	68.5	70.6
Nurse	58.2	66.2	64.1	64.9	68.5	NA



Determinants of Health Care Quality - 2006

- Type of facility
 - Hospital providers had higher compliance to assessment standards whereas CHC and BHC providers had higher compliance to counseling
- Provider cadre
 - Doctors had a higher compliance to assessment standards and doctors and assistant doctors had higher compliance to counseling than nurses
- Provider sex
 - Although there were no significant differences between male and female providers in assessment, female providers performed better in counseling
- Training in IMCI
 - Facilities with providers who had IMCI refresher training in the past year had a higher compliance to assessment and counseling standards than those facilities whose providers had not received IMCI refresher training
- Contracting Mechanism



	Benchmarks		Badakhshan			Badghis			Baghlan		
	Lower	Upper	2004	2005	2006	2004	2005	2006	2004	2005	2006
A. Patients & Community											
1 Overall Patient Satisfaction	66.4	90.9	66.4	94.2	86.8	76.9	71.3	42.7	90.9	91.9	89.2
2 Patient Perception of Quality Index	66.2	83.9	77.6	82.9	77.5	66.2	69.8	55.6	82.2	74.5	82.4
3 Written Shura-e-sehie activities in community	18.1	66.5	35.6	6.4	73.4	0.0	48.8	62.8	34.2	76.2	84.1
B. Staff											
4 Health Worker Satisfaction Index	56.1	67.9	63.5	64.8	70.6	57.6	54.7	51.5	67.9	62.4	69.0
5 Salary payments current	52.4	92.0	54.9	83.0	75.2	91.8	96.2	88.1	46.8	84.6	38.4
C. Capacity for Service Provision											
6 Equipment Functionality Index	61.3	90.0	69.6	49.5	73.3	62.2	66.4	60.8	57.5	65.6	83.9
7 Drug Availability Index	53.3	81.8	52.9	81.5	74.0	50.1	92.3	62.0	72.8	82.0	65.9
8 Family Planning Availability Index	43.4	80.3	54.2	65.5	80.2	57.9	57.3	75.8	70.4	74.5	92.0
9 Laboratory Functionality Index (Hospitals & CHCs)	5.6	31.7	31.7	32.3	38.2	3.8	25.0	18.2	15.2	36.3	43.0
10 Staffing Index – Meeting minimum staff guidelines	10.1	54.0	38.0	37.2	66.3	22.4	52.3	44.4	42.7	64.4	69.8
11 Provider Knowledge Score	44.8	62.3	48.6	67.3	61.8	41.6	66.6	56.0	49.3	68.3	72.3
12 Staff received training in last year	30.1	56.3	68.9	67.3	53.7	50.9	73.5	53.6	39.0	74.5	65.3
13 HMIS Use Index	49.6	80.7	60.9	27.6	72.0	62.7	80.2	44.8	40.0	68.7	66.9
14 Clinical Guidelines Index	22.5	51.0	18.3	40.2	48.1	25.5	59.6	39.9	29.9	48.9	78.7
15 Infrastructure Index	49.3	63.2	63.2	35.5	38.9	49.7	46.0	35.5	50.0	36.7	45.7
16 Patient Record Index	56.1	92.5	51.5	51.4	66.4	98.5	63.3	69.2	80.7	56.2	65.9
17 Facilities having TB register	8.3	26.6	32.5	38.1	46.3	27.0	58.1	71.2	16.1	13.8	54.2
D. Service Provision											
18 Patient History and Physical Exam Index	55.1	83.5	54.2	67.7	72.6	71.7	87.7	77.8	55.1	81.6	81.8
19 Patient Counseling Index	23.3	48.9	23.3	31.1	35.0	40.4	63.6	20.3	29.3	40.3	36.2
20 Proper sharps disposal	34.1	85.0	64.4	34.4	75.6	34.1	73.3	76.4	78.9	58.1	96.2
21 Average new outpatient visit per month (BHC > 750 vis	6.7	57.1	27.3	26.7	23.1	10.0	0.0	25.0	27.3	69.2	87.5
22 Time spent with patient (> 9 minutes)	3.5	31.2	21.0	12.0	23.1	30.7	4.5	4.8	1.2	4.1	1.6
23 BPHS facilities providing antenatal care	28.9	82.8	28.9	35.8	90.6	49.4	82.6	60.3	49.7	77.5	88.5
24 Delivery care according to BPHS	10.5	39.3	38.0	20.5	31.5	36.2	7.0	9.6	10.5	22.5	45.8
E. Financial Systems											
25 Facilities with user fee guidelines	80.3	100.0	94.8	84.4	70.7	95.6	100.0	22.4	95.9	91.0	87.0
26 Facilities with exemptions for poor patients	64.4	100.0	68.5	70.9	100.0	54.6	66.6	59.4	69.3	80.6	73.3
F. Overall Vision											
27 Females as % of new outpatients	46.5	59.7	46.9	52.4	54.6	45.9	54.4	54.7	56.0	58.3	61.5
28 Outpatient visit concentration index	48.0	52.7	48.9	49.0	49.8	48.8	46.3	53.6	51.9	50.8	51.7
29 Patient satisfaction concentration index	49.0	50.9	50.9	50.0	50.0	50.0	49.5	47.0	49.8	50.2	50.1
Composite Scores											
30 Upper Benchmarks Achieved	10.3	30.8	17.2	17.2	24.1	6.9	31.0	6.9	6.9	27.6	51.7
31 Lower Benchmarks Achieved	75.9	89.7	86.2	82.8	93.1	79.3	82.8	62.1	86.2	96.6	69.7
Mean scores across indicators 1 through 29	48.8	58.5	50.9	51.1	61.4	48.7	59.3	49.8	50.3	60.9	67.9

Scores Above Upper Benchmark GREEN

Scores Between Lower & Upper Benchmark YELLOW

Scores Below Lower Benchmark RED

Summary of Findings

- Evidence of investments in health sector -improved knowledge and training of providers and improved quality of care
- Although there were significant improvements in quality of care for assessment and counseling provider performance still remains sub optimal
- Compliance to assessment and counseling standards for caretakers of children under five was higher in the district hospitals than the BHC and CHC
- Significantly higher satisfaction of providers in 2005 and 2006 which can contribute to higher retention and improved quality of care
- Additional investments are needed to train more female providers and strengthen health system capacity

