Health and Family Planning in Pakistan by Income and Regional Population Groups

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INTRODUCTION

The Millennium Development Goals (MDG) set clear targets for reducing hunger, disease, illiteracy and environment degradation and discrimination against women by 2015. International development community has adopted health and family planning as a central goal. The MDGs provide a commonly agreed framework to launch focused efforts to improve the health situation of the poor by increasing their access to health facilities in order to lift people out of poverty or protect them from catastrophic health expenditures.

Poverty reduction needs growth, usually measured by an increase of GDP, but despite considerable discussions, "pro-poor growth" is still not clearly defined. In general, for growth to become more "pro-poor", it needs a dual character. It needs to be rapid enough to significantly improve the "absolute" condition of the poor. And to have the maximum impact, it should improve the "relative" position of the poor - preferably by achieving greater equity already at the start of the growth process or by decreasing inequality during the process. Therefore it is necessary to find appropriate measures for the distribution of growth or the improvement of health and family planning indicators among different population groups.

Poverty is still an important issue for Pakistan. The aim of this paper is to ascertain information and differences of opportunities for health as well as the availability of health facilities and information on family planning between different groups. These groups can be classified according to their prosperity, sex or regional distribution. The results presented in this article are the basis for further analyses of inclusive growth in Pakistan. Inclusive growth is dealing with the distribution of growth between different income groups. Here, we show the opportunities of different population groups to keep themselves healthy and to use methods of family planning. Family planning can be a basis for the Pakistani society to control its population and increase the personal welfare of each individual in a household as well.

Chapter 3 gives the findings on information about hygiene, appearance of diarrhoea among children and its treatment, immunisation of children, family planning as well as expenditures on health and how these items are distributed among regions and over time.

METHODOLOGY

Basis for the examination is the micro data of Pakistan Social and Living Standard Measurement Survey (PSLM) of the enumeration years 1998-99, 2001-02 and 2005-06 (FBS, PSLM, 1999, 2002 and 2007). In these years the PSLM has been carried out along with the Household Integrated Economic Survey (HIES), which includes social as well as economic indicators related to households. The HIES is conducted as sub sample of PSLM and provides data on household income, consumption expenditure and consumption pattern at national and provincial level with urban / rural breakdown.

Information given in consumption quintiles are applied as important tool to support decision makers in more evidence based decisions due to quintiles allow a more realistic view on the real situation of the population. To get a tool to compare poorer households with richer ones a common method is to assign households to quintiles of income. With this method one can analyse whether there are significant differences regarding the access to health and related matters between poorer and richer households or not. But especially in development countries the enumerated information about income can be unreliable in example due to faulty answers given by the respondents and a high share of the informal economy. Thus, another option is to calculate quintiles of household's consumption as a proxy for income (for other options to define the socio-economic status see Lorenz; Richter, forthcoming). Here it is assumed that a higher consumption indicates more welfare than lower consumption. Therefore consumption quintiles distinguish households that experience lower welfare from those households that experience higher welfare[1]. There are different ways to define welfare. Here, welfare on the one hand is seen as the possibility to cover the basic needs of the household members and on the other hand to reach a certain living standard. In this regard a positive correlation between consumption and welfare is assumed.

The quintiles used for the following analyses are based on monthly consumption of households enumerated in PSLM on Pakistan level. Besides monthly consumption PSLM inquires also biweekly consumption of several food items as well as the yearly consumption of durable and non-durable goods and services. While biweekly covers the period of the last 14 days before the enumeration, yearly considers the last day preceding the enumeration. To get an approximate indicator for the total monthly consumption of a household the biweekly consumption is multiplied with 26 (assuming a year has 52 weeks) and then divided by 12 (assuming a year has 12 months). Subsequently, the yearly consumption is divided by 12. Both results were added to the already enumerated monthly consumption. According to the method used in the publications of PSLM the monthly consumption considers all items that were consumed by the households. Thus, the consumption contains paid as well as unpaid items. Unpaid items can be e.g. own produced food, wages and salaries in kind or some types of assistance. The unpaid and consumed goods and services are enumerated referring to the marked value in PSLM. All values are given in Pakistani Rupees (PKR).

Quintile calculations cannot be based on household consumption only, but it is a key to take also the size and composition of the household into account. With each additional member the household's needs are increasing. But the need is not proportional increasing with the household size. On the one hand expenses for rent or electricity of a four-person household are not four times higher as for a single household. On the other hand some items like food are not required in the same quantity for each household member. Children for example consume fewer calories than adult persons. Thus, beside the household consumption one has also to consider the household's composition. Calculating consumption quintiles can be done by using equivalence scales. There is a plenty of possibilities for these scales[2]. For the following analyses the modified scale of OECD is used[2]. This scale assigns the head of the household the factor 1. Each additional adult household member is considered with 0.5 and every child (household members below 18 years of age) with 0.3. Before assigning the household to a consumption quintile, the total monthly consumption is divided by the sum of these factors for adjustment. Thus, a single person household has a factor of 1. Therefore, the adjusted consumption value for a single household with a monthly total consumption of 5,000 PKR would be 5,000 PKR / 1 = 5,000 PKR. The above mentioned household with four persons and the same total monthly consumption of 5,000 PKR shall contain two adult and two minor members. Thus, the factor for adjustment would be $1 + 0.5 + 0.3 + 0.3 = 2.1$. The adjusted value for the monthly consumption would be 5,000 PKR / 2.1 ≈ 2,381 PKR. This value indicates clearly a lower level of welfare than that the single household is experiencing.

Basing on these above explained consumption quintiles the comparison of several items which are related with health and family planning in the PSLM will be conducted between poorer and richer households. The analyses are made at Pakistan level as well as urban and rural areas. Especially the questions for family planning will emphasise the gender perspective in this analysis.

Table 1: Households and persons covered in PSLM

Item	Province	Enumeration Year					
		1998-99		2001-02		2005-06	
		Urban	Rural	Urban	Rural	Urban	Rural
Households	Pakistan	5,944	10,373	5,949	10,233	6,240	9,213
	Punjab	2,602	3,791	2,599	3,796	2,790	3,892
	Sindh	1,536	2,176	1,534	2,174	1,666	2,107
	NWFP	859	1,852	857	1,842	1,049	1,901
	Balochistan	612	1,404	623	1,406	735	1,313
	Other areas	335	1,150	336	1,015	n. a.	n. a.
Persons	Pakistan	41,010	74,162	42,201	74,524	43,537	67,373
	Punjab	16,777	24,648	17,143	24,636	17,974	25,328
	Sindh	10,056	15,099	11,048	17,200	11,435	16,034
	NWFP	6,614	14,950	6,504	14,545	7,941	15,945
	Balochistan	5,077	10,933	5,056	10,488	6,187	10,066
	Other areas	2,486	8,532	2,450	7,655	n. a.	n. a.

Table 1 gives an overview about the numbers of persons and households that are considered in the used data. Beside the four provinces values for "Other areas" can be found. These areas are AJK, FATA and FANA. For these areas data was enumerated in 1998-99 and 2001-02. In the following section 3 the results for Pakistan, urban and rural areas as well as sexes consider theses areas for both years too. Due to the small sample size separate analyses for AJK, FATA and FANA will not be conducted for the concerned years. All results in the following section are basing on weighted data. The weighting factors are taken from FBS micro data, here the weights for each reported case are given.

RESULTS

Chapter 3 gives the findings on information about hygiene, appearance of diarrhoea among children,

immunisation of children, family planning and its usage, expenditures on health (3.6) and how these items are distributed among regions and over time.
Information about hygiene and clean water: An important factor to prevent and avoid diseases is hygiene. In the PSLM the households where requested if they got any information about hygiene or diseases that can be related with unclean water in the last 12 months prior the enumeration. This information includes for example hints about boiling drinking water, washing hands after using the toilet or before eating etc. In all cases the respondents were females.

Table 2 shows the distribution of households that were informed about hygiene or diseases in Pakistan as well as by urban and rural areas for the enumeration years 1998-99, 2001-02 and 2005-06.

Table 2: Households that heard any message about hygiene and clean water in the last 12 months in percent

Area	Year	Consumption quintile					Total
		1	2	3	4	5	
Pakistan	1998-99	54.4	59.3	62.2	64.8	73.6	62.4
	2001-02	68.2	72.5	75.3	77.7	79.6	74.3
	2005-06	75.1	78.4	81.1	86.6	92.4	82.9
Urban	1998-99	64.9	66.2	73.9	73.2	78.8	73.4
	2001-02	76.9	83.7	88.0	86.9	82.5	83.9
	2005-06	86.6	86.1	91.1	92.0	95.1	91.8
Rural	1998-99	52.6	57.6	58.4	60.4	66.9	58.0
	2001-02	66.5	70.1	70.8	72.9	76.0	70.4
	2005-06	73.0	76.0	76.9	83.1	87.9	78.2

Watching the percentages one can find a general improvement in information over time. While in 1998-99 around 62% of the Pakistani households were informed about hygiene and diseases, the share has increased to about 83% in 2005-06. But regarding regional aspects one can find an obvious difference

between urban and rural areas. While the percentage was circa 92% in urban areas in 2005-06 the value for rural was around 78% and thus about 14 percentage points lower. Such a clear difference can be found for all three years of enumeration.

Table 3: Households that heard any message about hygiene or diseases in the last 12 months by provinces in percent

Area	Year	Consumption quintile					Total
		1	2	3	4	5	
Punjab	1998-99	53.9	58.5	66.2	69.0	79.6	64.1
	2001-02	63.7	71.7	79.5	83.8	88.0	76.1
	2005-06	72.7	76.3	79.9	86.2	92.9	82.2
Sindh	1998-99	69.7	69.0	66.4	66.0	74.1	69.1
	2001-02	84.3	83.6	78.8	78.6	71.4	79.2
	2005-06	94.2	91.2	91.0	94.2	95.7	93.3
NWFP	1998-99	53.3	57.5	57.1	62.8	59.6	57.9
	2001-02	70.7	71.7	74.5	78.7	87.1	75.3
	2005-06	76.0	72.4	74.6	78.6	85.2	76.9
Balochistan	1998-99	37.9	58.9	40.3	44.7	48.6	46.5
	2001-02	56.4	56.1	53.9	52.6	52.8	54.3
	2005-06	40.2	63.5	76.0	86.9	88.7	62.2

Table 3 shows that there are also differences between provinces. For Sindh one can find the highest percentage (93%) of households that got information about hygiene. The lowest (62%) can be found for Balochistan. In all four Provinces the percentage has increased over time. Despite this positive development there are significant differences between the consumption quintiles which show a clear pattern and room for improvement. The higher the quintile, the higher is the share of informed households. This pattern is valid for all provinces as well as urban and rural areas in Pakistan. The difference between the lowest and the highest consumption quintile was around 17% in Pakistan 2005-06.

Table 4: Sources of information about hygiene and diseases in percent 2005-06

Source	Consumption quintile					Total
	1	2	3	4	5	
Media	20.8	30.1	38.8	45.7	60.2	40.5
Other family members	53.8	44.9	35.6	32.2	22.9	36.8
School children	5.7	5.9	6.3	5.8	3.0	5.3
Other government health facility	1.9	2.7	2.2	2.3	1.8	2.2
Lady health visitor	4.3	4.6	4.0	3.4	2.7	3.7
NGO or private health worker	1.1	1.1	2.2	1.8	2.4	1.8
Other	12.5	10.7	10.8	8.7	7.1	9.8

Analysing the percentages of households that got any information about hygiene and unclean water it is also interesting to look at the sources of this information. In case a household got any information the main sources that were reported by the households are media as well as other family members. With the consumption quintile the percentage of households that got information about hygiene from the media is rising from 21% to almost 60%. In opposite to that the share of other family members as source of information is decreasing with the quintile from 54%to only 23%. Governmental (2%) as well as non-governmental (2%) sources or lady health visitors (4%) play a subsidiary role only.

As a first result one can say that there is clear coherence between the consumption quintile and information about hygiene and diseases. Households that experience higher welfare seem to be more likely informed than households on a lower level of welfare. This pattern can be found for all provinces as well as for urban and rural areas too. Main source of information are media and family members.
Appearance of diarrhoea among children and its treatment: One consequence of insufficient hygiene or unclean water can be diseases like diarrhoea.

Insufficient hygiene can on the one hand be related with a lack of knowledge, but it can also be related with deficits regarding the infrastructure like water supply, treatment or the drainage system. In chapter 3.1 it was shown that there is a clear coherence between the consumption quintile and information about hygiene and diseases. Households belonging to higher consumption quintiles are better informed than households on a lower level of welfare. It can be assumed that there is also a positive correlation regarding water supply and the household's level of welfare. The higher the consumption quintile the better is the water supply as well as the water related infrastructure (Lorenz and Richter 2009)[2]. As a consequence of that it might be assumed that the frequency of diarrhoea is increasing with decreasing welfare.

The HIES questionnaire asks for children under five years having had diarrhoea during the last 30 days before the enumeration. Table 5 shows that there is no significant correlation between the frequency of diarrhoea and the consumption quintile. For all three years as well as urban and rural areas no clear difference between the households can be found. The values fluctuate around 12%.

Table 5: Children under 5 years that had diarrhoea in the last 30 days in percent

| Area	Year	Consumption quintile					Total
		1	2	3	4	5	
Pakistan	1998-99	13.2	12.1	11.7	11.0	12.9	12.2
	2001-02	12.2	10.9	12.6	12.4	11.1	11.9
	2005-06	13.4	11.9	13.2	11.8	10.7	12.4
Urban	1998-99	12.8	10.0	9.5	10.4	12.1	10.9
	2001-02	13.8	11.4	13.3	11.7	11.0	12.1
	2005-06	14.3	9.8	12.3	9.7	9.7	10.8
Rural	1998-99	13.3	12.6	12.3	11.2	13.6	12.6
	2001-02	11.9	10.7	12.4	12.8	11.2	11.8
	2005-06	13.3	12.6	13.5	13.1	12.0	13.0

The same unclear pattern can be found for the duration of this disease. Watching Table 6 one can see that there are no clear differences between the consumption quintiles with regard to the duration of diarrhoea. In 43% of all cases the disease ends after four days. This mode is valid for all three enumeration years. The mean of the duration can be found in Figure 1. It fluctuates between the quintiles. In 1998-99 the lowest mean duration was 6.2 days (third quintile) and the highest was 7.2 days (fifth quintile). The lowest duration in 2005-06 was 6.0 days (fourth quintile) and the highest was 7.2 days (second quintile).

Table 6: Duration of diarrhea by children under 5 years in percent 2005-06.

Duration in day	Consumption quintile					Total
	1	2	3	4	5	
1	1.9	1.9	1.7	5.2	1.8	2.4
2	8.3	8.2	7.0	10.3	12.8	8.9
3	14.7	13.4	17.0	19.1	20.6	16.4
4	17.4	14.9	14.1	13.3	17.1	15.4
5	16.4	13.4	16.8	15.9	9.4	14.9
6	11.6	6.4	12.3	6.3	2.9	8.7
7	5.8	8.0	8.4	5.1	11.9	7.5
8 and more	23.9	33.6	22.8	25.0	23.5	25.8

Fig. Average duration of diarrhea by children under five years.
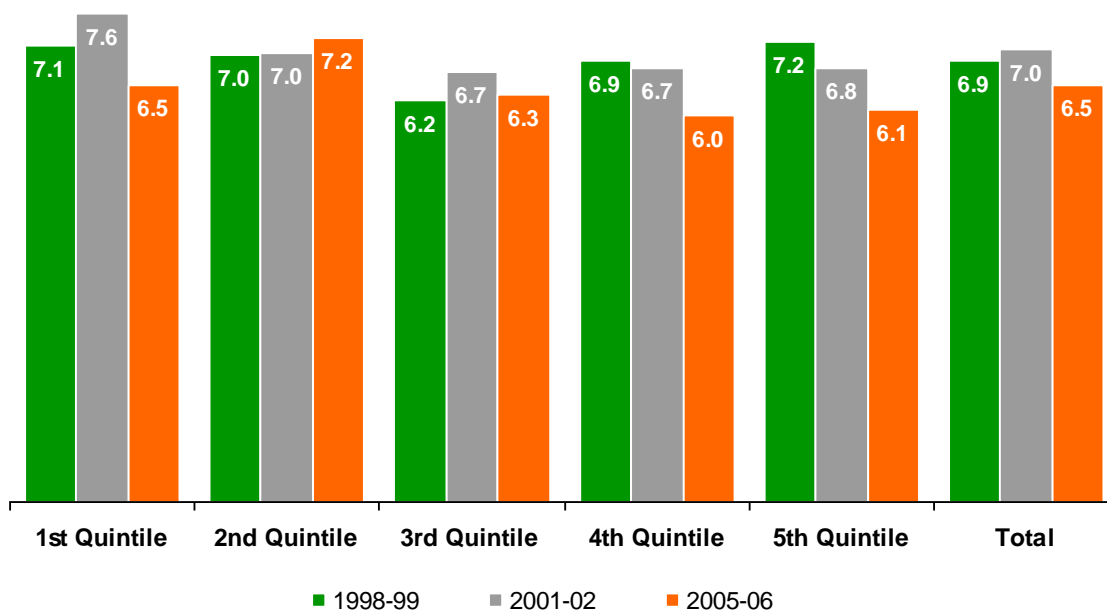
Significant differences between the consumption quintiles with regard to the frequency and the duration of diarrhoea were not found. But there are differences considering the treatment with this disease between the consumption quintiles. While in fifth quintile households about 90% in case of diarrhoea consulted someone, in first quintile it was less than 80%. This result can be found for Pakistan in all three enumeration years (see Table 7). With regard to the regional perspective one can detect also a gap between urban and rural areas. In urban areas around 91% and in rural areas about 85% consulted someone. With some small variations one can find a positive correlation between the household's welfare and the chance that someone will be consulted in case of diarrhoea.

Table 7. Consultation in case of diarrhoea (children under 5 years) in percent.

Area	Year	Consumption quintile					Total
		1	2	3	4	5	
Pakistan	1998-99	79.3	82.7	76.9	84.5	92.3	82.1
	2001-02	78.2	78.7	82.6	88.1	90.5	82.3
	2005-06	76.7	83.8	89.4	93.2	94.7	86.1
Urban	1998-99	73.2	84.0	84.8	90.5	96.2	86.9
	2001-02	83.6	75.9	90.4	91.7	91.3	87.2
	2005-06	77.1	86.9	94.9	96.5	94.3	90.9
Rural	1998-99	80.2	82.5	75.1	82.1	89.1	80.8
	2001-02	77.2	79.4	79.8	86.6	89.6	80.6
	2005-06	76.7	83.0	87.7	91.5	95.2	84.5

One question in this context is who was consulted in cases a child under 5 years of age had diarrhoea. Table 8 shows that in 60% to 72% of the cases private institutions like private dispensaries, hospital or doctors were consulted in 2005-06. Here the share of higher consumption quintiles is higher than that of lower ones. Around one quarter of the first consumption quintile visited governmental institutions. This share was 19% in the highest quintile in 2005-06. In general no clear pattern between the quintiles can be found. But there seems to be a light correlation between the quintile and the choice of an institution. With the quintile the preference for private institutions seems to increase.

Table 8: Institutions that were consulted in case of diarrhea in percent 2005-06.

Institution	Consumption quintile					Total
	1	2	3	4	5	
Private dispensary / hospital / doctor	59.7	59.5	65.5	71.5	70.2	64.6
Government dispensary / hospital/ doctor	24.6	17.9	17.0	17.2	19.2	19.4
Basic health unit	5.1	3.2	4.2	1.0	0.5	3.1
Other	10.6	19.4	13.3	10.3	10.0	12.9

Immunization: This chapter gives an overview on the immunisation of children up to five years in Pakistan. Immunisation can protect against diseases like e.g. tuberculosis, diphtheria, whooping cough, tetanus, hepatitis or polio. The following table shows the percentages of households with children less than 5 years, which have been vaccinated.

Table 9: Immunisation of children under 5 years in percent.

Area	Year	Consumption quintile					Total
		1	2	3	4	5	
Pakistan	1998-99	73.4	77.6	79.7	82.2	89.4	79.1
	2001-02	92.0	90.8	90.7	91.9	95.3	91.8
	2005-06	86.1	90.1	92.5	93.9	96.5	91.2
Urban	1998-99	78.6	84.5	88.3	90.9	94.5	88.3
	2001-02	93.4	96.1	95.1	95.5	97.6	95.8
	2005-06	92.4	89.7	91.8	95.9	97.3	94.0
Rural	1998-99	72.6	76.1	77.2	78.5	84.9	76.4
	2001-02	91.7	89.6	89.2	90.1	92.8	90.5
	2005-06	85.0	90.2	92.8	92.6	95.6	90.0

It can be seen that the overall level of immunisation is increasing from 1998-99 to 2001-02 and staying almost constant from 2001-02 to 2005-06. The percentages are slightly higher in urban areas compared to rural. In 2005-06 the immunisation level in the poorest quintile is about 10% smaller compared to highest quintile; this holds for the total and the rural figures. In urban areas the differences between the consumption quintiles are smaller.

For the validation of these figures the existence of immunization cards also has been requested in

PSLM. The answers range from about 40% of the poorest quintile to about 70% of the richest. The following table shows the most recent facility for immunisation purpose that was visited for year 2005-06.

Table 10: Facilities used for immunisation in percent 2005-06

Facility	Consumption quintile					Total
	1	2	3	4	5	
Vaccination team / campaign	73.5	67.3	64.0	58.5	51.0	63.9
Government dispensary / hospital / doctor	19.7	24.8	26.8	30.7	32.8	26.3
Private dispensary / hospital / doctor	1.0	0.9	2.1	2.8	8.8	2.7
Other	5.8	7.0	7.2	8.1	7.4	7.0

Almost 64% of the households stated that immunisations were done by vaccination teams, which have been established to support vaccination campaigns. This figure is even higher for low expenditure households (74% compared to households from highest consumption quintile with 51%). About one quarter of the households stated immunisation by government health facilities like dispensaries, governmental hospitals or doctors. With only 3% private facilities have nearly no relevance at all. But their usage is increasing with the consumption quintiles. More than 85% of all expenditure groups were able to use health facilities within a distance of 2 kilometres. Regarding the regional availability of health facilities data from the Mouza Census can be applied, which show that most types of facilities are available for about 50% of the rural population within a range of 10 kilometres (ACO, Pakistan 2008 Mouza Statistics).

The former results as well as the following demonstrate the importance of immunization campaigns and the use of vaccination teams as special health facility for this case:

Table 11: Vaccination team/campaign on used immunization facilities in percent.

Year	Consumption quintile					Total
	1	2	3	4	5	
1998-99	78.2	71.9	67.0	66.6	59.0	
2001-02	83.9	75.9	68.3	67.6	56.4	72.9
2005-06	73.5	67.3	64.0	58.5	51.0	63.9

For all three years where data is available, vaccination teams are the most important providing health facility in context with vaccinations. The higher the quintile the lower is the share. In 2005-06 only 51% used vaccination teams in the fifth quintile compared to 74% in the first consumption quintile. Evidence for the importance of vaccination teams for the immunisation of poor can also be found in Table 12.

Table 12: Reasons for not vaccinate the children percent 2005-06

Reason	Consumption quintile					Total
	1	2	3	4	5	
No team has visited	23.2	28.5	31.0	28.0	31.3	27.0
No knowledge about immunisation	34.8	13.2	13.7	4.2	6.1	20.2
Unnecessary	14.4	15.5	14.3	11.0	19.6	14.5
Facility too far away	9.4	12.1	14.2	15.2	12.3	11.8
Other	18.1	30.7	26.8	41.6	30.7	26.5

About 27% state that the absence of a vaccination team is the reason for not immunising the child. 20% have no knowledge about immunisation and 15% assume immunisation as unnecessary. For 12% the facilities are too far away.

Health expenditure: The data on health expenditures is basing on two questions. On the one hand expenditures on fees are covered, which include for example medical fees paid to doctors, specialists, hakeems, midwives etc. On the other hand expenditures on medicines and supplies are considered, like purchase of medicines, vitamins, medical apparatus etc. The following table shows for

the consumption quintiles how much was spent in the   year   before   enumeration.

Table 13: Average of total yearly consumption of health by items in PKR.

Item	Year	Consumption quintile					Total
		1	2	3	4	5	
Fees	1998-99	754.0	1,114.7	1,175.8	1,413.3	2,534.4	1,355.9
	2001-02	772.5	1,057.4	1,242.2	1,377.1	2,139.5	1,283.2
	2005-06	1,401.9	2,109.5	2,415.2	3,228.7	5,902.9	3,045.9
Medicines / supply	1998-99	688.2	979.5	1,139.0	1,547.4	2,676.1	1,356.5
	2001-02	778.6	1,083.7	1,323.3	1,559.0	2,506.1	1,406.4
	2005-06	1,228.3	1,661.4	2,057.4	2,512.0	4,018.8	2,319.2
Total	1998-99	1,442.3	2,094.2	2,314.7	2,960.7	5,210.5	2,712.3
	2001-02	1,551.0	2,141.0	2,565.5	2,936.0	4,645.6	2,689.6
	2005-06	2,630.2	3,770.9	4,472.5	5,740.7	9,921.7	5,365.1

Note: Fees include: Medical fees paid to doctors, specialists, hakeems, midwives out side hospital, including medicine etc. Hospitalization charges, including fee etc. for doctor / hakeem etc. and laboratory tests, x-Ray charges
Medicines / supply includes purchase of medicines, vitamins, medical apparatus and other equipment, supplies etc

The results show a sharp increase of health expenditure for fees as well as for medicines from 2001 to 2005; expenditures on both categories have almost doubled for all quintiles during these years. The amount which has been spent on health as share of the total expenditure is given in Table 14.

Table 14: Average share of health consumption on total monthly consumption in percent.

Area	Year	Consumption quintile					Total
		1	2	3	4	5	
Pakistan	1998-99	3.8	3.8	3.6	3.6	3.5	3.7
	2001-02	3.5	3.6	3.6	3.4	3.2	3.5
	2005-06	4.1	4.4	4.3	4.5	4.1	4.3
Urban	1998-99	2.6	3.1	3.0	2.9	2.6	2.8
	2001-02	2.7	2.8	2.9	2.8	2.8	2.8
	2005-06	3.6	3.7	3.4	3.3	3.1	3.3
Rural	1998-99	4.0	4.0	3.8	3.9	4.7	4.0
	2001-02	3.7	3.8	3.9	3.6	3.7	3.7
	2005-06	4.1	4.6	4.7	5.2	5.6	4.8

It can be seen that the share of health expenditure is increasing over time. For whole Pakistan the share of health expenditure is similar in all consumption quintiles. But, the share is higher in rural areas (4-5%) compared to urban areas (3%). Within rural areas the expenditures are highest for the fifth quintile, what might show a demand on investment in health here.

Family planning and birth control: Another aspect covered in this paper is family planning as well as knowledge and usage of birth control methods. In PSLM all currently married women between 15 and 49 years were requested whether they have ever heard about methods of birth control or not. In this context 10 options were given (given options are stated   in   Table   16).

Table 15: Currently married women between 15 and 49 years that have ever heard about a birth control method in percent

Area	Year	Consumption quintile					Total
		1	2	3	4	5	
Pakistan	1998-99	91.7	92.9	91.9	92.6	94.9	92.7
	2001-02	96.4	96.1	95.8	96.2	97.2	96.3
	2005-06	94.0	97.2	97.4	98.6	99.5	97.3

Urban	1998-99	98.3	97.8	98.4	98.2	99.1	98.5
	2001-02	98.4	99.0	98.7	99.0	99.2	98.9
	2005-06	98.4	99.0	98.8	99.5	99.4	99.2
Rural	1998-99	90.7	91.8	89.9	89.7	90.0	90.5
	2001-02	96.1	95.4	94.7	94.7	94.8	95.3
	2005-06	93.2	96.6	96.8	97.9	99.6	96.4

Table 15 shows that the Pakistani women are well informed about birth control. In all five quintiles clearly more than 90% had ever heard about one method at least. The percentages are slightly higher in urban areas compared to rural and increasing with the consumption quintiles.

In 2005-06 about 6 different methods were known in average by the requested women in Pakistan. With around 5 methods on average females from the first quintile know less than females from the fifth quintile (7 methods on average). Table 16 gives an overview about the methods known.

Table 16: Known method of birth control in percent 2005-06

Method	Consumption quintile					Total
	1	2	3	4	5	
Pill	92.9	96.5	96.7	97.9	99.2	96.6
Injectables	90.9	95.3	95.2	97.1	99.0	95.5
Female sterilization	85.2	90.5	92.4	93.9	96.1	91.6
Intrauterine device	82.2	88.7	87.6	91.4	94.5	88.9
Condom	68.0	76.8	80.8	85.7	91.1	80.4
Withdrawal	43.5	55.0	61.3	68.0	75.6	60.6
Male sterilization	47.0	54.0	59.4	64.0	72.3	59.2
Rhythm	21.3	29.1	35.9	43.7	54.1	36.6
Implant	20.0	21.4	23.3	23.9	32.7	24.1
Others	13.6	13.7	12.3	12.1	13.9	13.1

In PSLM it was requested if the married women between 15 to 49 years know at least one of 10 stated methods of birth control. The most consent was given to the pill. Nearly all (97%) of the interviewed women had ever heard about it. Other methods like injectables, intrauterine devices or condoms are widely known too. Like mentioned before, the knowledge about the methods is increasing with the consumption quintile.

While the knowledge about methods of family planning and birth control is high, its usage is not.

When a woman stated that she knows a method of birth control she was also requested if she had ever used a method. Table 17 shows the percentage of women that have ever used a method on all married women between 15 and 49 years. In Pakistan 2005-06 only 37% had ever practices birth control. In urban areas the share is with 49% clearly higher than in rural areas (31%). The usage of birth control methods is increasing with the consumption quintile too. One reason might be that poor households have no monetary recourses to pay for methods.

Table 17: Currently married women between 15 and 19 years that have ever used birth control in percent

Area	Year	Consumption quintile					Total
		1	2	3	4	5	
Pakistan	1998-99	16.5	18.2	21.0	26.6	35.1	22.7
	2001-02	19.7	21.5	25.6	31.9	36.8	26.3
	2005-06	24.9	33.2	34.7	41.1	50.5	36.7
Urban	1998-99	31.3	30.4	32.3	42.2	47.2	39.0
	2001-02	31.0	35.2	37.4	43.7	44.9	40.1
	2005-06	35.1	45.0	40.8	50.0	56.9	48.6
Rural	1998-99	14.0	15.4	17.6	18.9	21.8	16.8
	2001-02	18.4	19.3	22.6	27.0	28.7	21.9
	2005-06	23.0	29.3	32.4	35.4	41.7	31.0

In general the usage of birth control has increased over time but is still low. In 2005-06 only 26% of all requested women stated that they are presently using any method.
What are the reasons for the strong lack between knowledge and usage of methods of birth control?

Table 18 shows that around 31% of the requested women stated that they want more children. With 36% this reason is higher in the fifth quintile compared to the first (29%). Other important reasons are current lactation and present pregnancy. On the other hand about 9% of the women of the first

consumption quintile stated religious reasons for not using any method. The importance of this reason is decreasing in higher consumption quintiles.

The high values of knowledge about methods of family planning show that the requested women are well informed, but state also reasons for not using

any method. This can be seen for all income quintiles. Thus, the found gap between the knowledge about methods of birth control on the one hand its usage in practice on the other seems to be a matter of culture and a matter of income.

Table 18: Reasons for not using any method of family planning 2005-06

Reason	Consumption quintile					Total
	1	2	3	4	5	
Want more children	28.7	29.2	30.9	31.7	36.1	31.1
Lactating	17.8	17.4	15.5	12.3	10.3	14.9
Pregnant	15.0	15.6	14.2	13.2	13.7	14.4
Religious reasons	9.4	7.6	6.1	6.6	3.5	6.8
Husband away	3.2	4.6	6.2	8.3	9.6	6.2
Menopausal	3.8	4.2	5.4	5.7	5.4	4.9
Husband opposed	5.0	5.5	4.0	3.6	4.7	4.6
Adverse side effects	4.0	3.7	3.8	3.0	2.6	3.5
Other	13.0	12.0	14.0	15.6	14.1	13.7

Note: Other comprises e.g. infertility, lack of knowledge, unavailability of methods etc

SUMMARY

This paper analyses differences in health and family planning as well as the availability of health facilities for different welfare and regional groups in Pakistan. The analysis is based on Household Integrated Economic Survey data for the years 1998-99, 2001-02 and 2005-06. Our aim is to identify inequalities between the population groups and how these differences change over time.

Regarding information about hygiene and clear water it was found that households with higher welfare seem to be more likely informed than the other. This pattern can be found for all provinces as well as for urban and rural areas too. Main source of information are media and family members.

Also for the treatment of diarrhoea of children under five years differences between the quintiles can be observed. While in fifth quintile households about 90% in case of diarrhoea consulted someone, in first quintile it was less than 80%. In urban areas around 91% and in rural areas about 85% consulted someone.

It was found that the overall level of immunisation is increasing over time. The percentages are slightly higher in urban areas compared to rural. The immunisation level in the poorest quintile is about 10% smaller compared to highest quintile; this holds for the total and the rural figures.

Mobile vaccination teams are very important since 64% of the households stated that immunisations were done by them. This figure is even higher for low expenditure households. About 27% state that the absence of a vaccination team is the reason for not immunising the child. 20% have no knowledge about immunisation and 15% assume

immunisation as unnecessary. For 12% the facilities are too far away.

Regarding health expenditure our results show a sharp increase of health expenditure for fees as well as for medicines from 2001 to 2005; expenditures on both categories have almost doubled for all quintiles during these years. The amount which has been spent on health as share of the total expenditure is also increasing over time. For whole Pakistan the share of health expenditure is similar in all consumption quintiles. But, the share is higher in rural areas (4-5%) compared to urban areas (3%).

PSLM collected information on family planning like knowledge of women on methods of birth control. The most consent was given to the pill. Nearly all (97%) of the interviewed women had ever heard about it. Other methods like injectables, intrauterine devices or condoms are widely known too. Like mentioned before, the knowledge about the methods is increasing with the consumption quintile. But there is a gap between knowledge and usage of methods of birth control. In general the usage of birth control has increased over time but is still low. In 2005-06 only 26% of all requested women stated that they are presently using any method. About 31% of the requested women stated that they want more children. With 36% this reason is higher in the fifth quintile compared to the first (29%). Other important reasons are current lactation and present pregnancy. On the other hand about 9% of the women of the first consumption quintile stated religious reasons for not using any method. The importance of this reason is decreasing in higher consumption quintiles.

Overall, the paper finds that for most indicators, individuals from rural areas as well as from low welfare households have worse health and family planning information and less availability of health

facilities. More detailed information on beneficiaries of health expenditures will be available with the second round of National Health Accounts Pakistan produced by Federal Bureau of Statistics.

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