

Lessons from National Surveys: Comparing PDHS and PSLM

Systematic surveys inform about changes in national indicators over time. Pakistan Social and Living Standards Measurement Survey (PSLM, by the Bureau of Statistics) and Pakistan Demographic Health Survey (PDHS, by the National Institute of Population Studies, MoNHSRC) are the most widely referred surveys in Pakistan. PDHS is conducted every five years, whereas PSLM is conducted each alternate year.¹ PDHS addresses demographics, health, and nutrition², mainly with a reproductive health focus, and is powered only at national and provincial levels. On the other hand, PSLM reports on a wider array of indicators, including socioeconomic indicators, health, education, and consumption and wealth. It includes two different surveys. A more in-depth survey is powered to national and provincial levels. It alternates biennially, with a district level survey with a sparser complement of questions. A key advantage of the PSLM is that it allows correlation of health indicators with many “social determinants of health” such as sanitation, socioeconomic indicators, health, demographics, expenses, income, education, consumption, and wealth, as the same households simultaneously participate in a “Household Integrated Economic Survey” (HIES). This study explores the gaps and differences by comparing key health indicators from PDHS and PSLM.

Methodology

Questions on reproduction health, contraception, and child immunization were cross-compared, by depicting differences in the estimates for key indicators. Such comparison is possible since both surveys use a similar sampling frame and interview married women of reproductive age (MWRA, ages 15-49y).

To standardize the analysis, the comparison was restricted to four provinces only, and erstwhile FATA is included with KP in PDHS to make it consistent with PSLM. Similarly, the required variables were transformed to have standard responses for the modules in both surveys. A simple difference of estimates was calculated, followed by a proportions test to check if there was a significant difference between weight-adjusted estimates of PSLM and DHS.

¹<https://www.pbs.gov.pk/content/pakistan-social-and-living-standards-measurement>

²<https://microdata.worldbank.org/index.php/catalog/3411>

Salient Points

- 01 The differences between PSLM & PDHS for two key indicators are due to whom and how questions are posed, plus survey timing
- 02 The actual relative difference for FP is 1% vs. 10% for Immunization
- 03 Despite a few limitations, PSLM has comprehensive reporting on 31 SDGs
- 04 PSLM has the potential to be standard national survey, potentially reducing financial and human resource burden

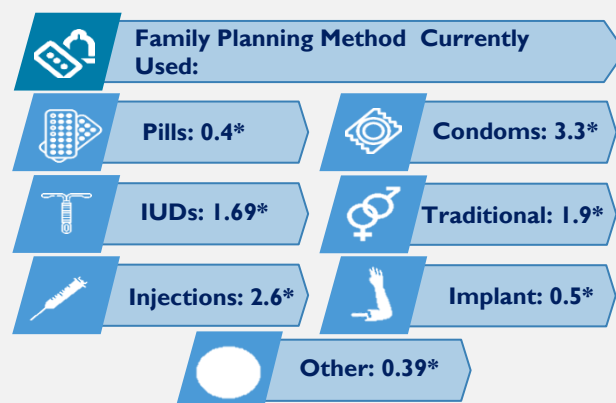
Key Findings

The differences range from 1%-5% for each family planning method and other key indicators such as decision making. They are considerably higher for immunization, especially for polio, measles, and full vaccine coverage.

Table 1: Percentage differences between PDHS and PSLM FP indicators

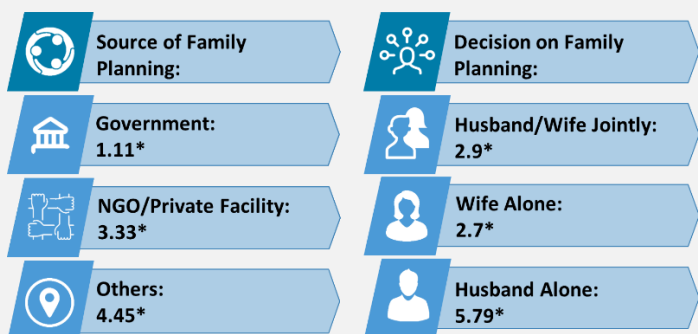
Indicators	PDHS (%)	PSLM (%)	Absolute Difference (%)
Have heard of contraceptive method?	98	99	1.1
Ever used family planning method?	45	43	2
Currently using any family planning method?	33	34	0.9

Figure 1: Percentage difference between PDHS and PSLM FP Method Use



*Represents the statistically significant differences

Figure 2: Percentage difference between PDHS and PSLM Source of FP Methods



*Represents the statistically significant differences

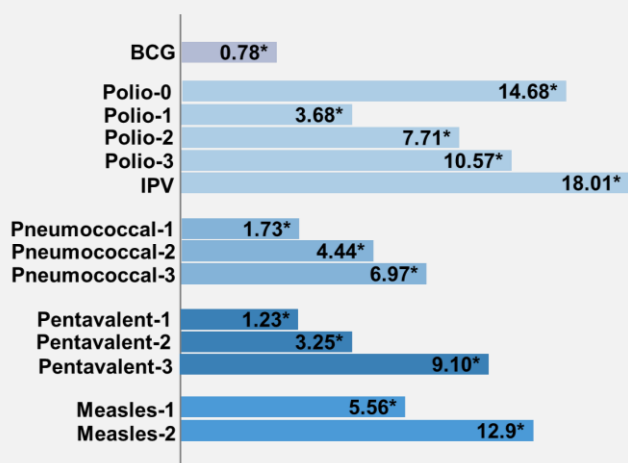
Table 2 Percentage difference between PDHS and PSLM for Child Immunization

Indicators	PDHS (%)	PSLM (%)	Absolute Difference (%)
Basic immunization	66	76	10*
All age-appropriate vaccinations	51	75	24*
All age-appropriate vaccinations (excluding all Polio vaccines)	56	76	20*

Discussion

On average, the difference for family planning indicators is less than 5%, but can be much large, by as much as 24% for immunization. One explanation is the specific nature of recall bias. For many mothers, particularly those that are low or not educated, it would be difficult to remember the specific type of vaccines and the number of doses their children received. This may be further compounded for some families that have more than one child under 5 years. Recall issues may be less problematic for FP services that are availed by the mother herself.

Figure 3 Percentage difference between PDHS and PSLM child immunization



*Represents the statistically significant differences

Another reason for the differences may be the way the questions are recorded. In PDHS recall for each vaccine

is done as yes or no, while on PSLM a mother is asked to self-list the vaccines received.

PSLM is a powerful tool for reporting various indicators at the national level. It has a larger sample size, covers multiple SDGs, and is conducted every alternate year. Most importantly, it is owned and funded by the Government of Pakistan.

On the other hand, DHS is a more limited survey focused on reproductive health and is funded by donors. As such its funding remains questionable and is reviewed at each round. Finally, many of the modules in the DHS are underfilled, reflecting a lower focus on these questions.

Recommendations:

1. There is a need to standardize how key questions are asked in national surveys. This includes both the respondent from whom the survey is administered, the language and how questions are filled. Lessons may be learnt from the in-depth prompting that is done by PDHS interviewers.
2. It may help to include a more comprehensive array of questions on reproductive health in the PSLM so that it is more comparable to the PDHS.
3. The differences between the surveys should serve as inquiry points about the quality of data collection. The goal of such exercise would be to minimize major gaps to within a few percentage points.
4. These difference lowering measures will improve country ownership and acceptance of national surveys while better informing about key national health indicators, so that the debate can proceed to using the results rather than disputing them.

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