SAFANSI
The South Asia Food and Nutrition Initiative

EVIDENCE FROM PAKISTAN: CHILD NUTRITIONAL OUTCOMES AND COMMUNITY-BASED HEALTH SERVICE PROVISION

Malnutrition among both women and children remains a major health issue in rural Pakistan. It is also seen as contributing to the high neonatal and under-5 mortality rates as well as to excessive maternal mortality. Almost 40% of children under the age of five are underweight, over 50% are affected by stunting and some 9% by wasting—these rates are much higher in rural areas. Malnutrition is also pervasive among women of reproductive age.

In addition to the usual problems of poverty, poor infrastructure—particularly the lack of adequate sanitation and potable water—and weaknesses in the health care delivery system, Pakistan is also characterized by severe gender imbalances. Women have low mobility, and thus restricted access to health services. They also lack voice in relation to important health and nutritional decisions within their homes, for both themselves and their children, and they are systematically excluded from decision making at the community level.

This study assesses the extent to which: (1) Increasing the participation of women in the public sphere results in an increased use of health facilities, particularly for child and maternal needs, and in improved health outcomes; (2) Whether targeted interventions that provide information on health status and health behaviors needed for better hygiene and disease prevention are necessary for substantial improvements in health status, over and above any impacts of empowerment.

Using the Inclusion Village Approach

This study builds upon an existing evaluation of a Pakistan Poverty Alleviation Fund project (a World Bank supported Community Based Development Initiative) which investigates the impact of mobilizing communities into Village Support Organizations (VSOs) and providing them with village level grants for community infrastructure development and livelihood enhancement. The grant totaled approximately US $30,000 per village.

(World Bank)

In order to test the impact of women's involvement in village decision making bodies, half of the study villages were required to ensure that at least 40% of the members of the VSO were women—these will henceforth be referred to as *inclusion villages*.[1] In phase 1 of the study (concluded) the focus was on isolating the impact of female empowerment on health outcomes and health behaviors. Since the village grant was disbursed after phase 1 was completed, there is no concern of a lack of impact from the grant itself. The grant effect will be captured at the start of phase II, which will focus on targeted information interventions.

[1] The evaluation had a second treatment arm which is not relevant to this component of the study.

Measuring Impact

Some highlights from the extensive data collected at midline included key health indicators, private and community health behaviors, the quality of public and private health services and conditions in study villages with regard to sanitation and drinking water. In particular, at midline the impact of empowerment alone was assessed, since the midline was completed before any money had actually reached the treated villages—though Village Development Plans (VDP's) had been completed and approved.

The results reported fall under four broad categories: quality of water and sanitation; key health behaviors, like hand washing, solid waste disposal and practices around and; utilization and quality of health services, maternal and child outcomes.

The sample consists of 5823 households (HHs) drawn from 5 districts in 3 province in Pakistan.[2] Data was collected at the household and community level, including the testing of all water sources. In addition, all health facilities were surveyed through surprise visits and exit surveys were conducted with patients during these visits. All lady health workers (LHWs) assigned to each village were also surveyed and questions that assessed the quality of household information on the LHW were matched, and vice versa.

Drinking Water and Sanitation

- Water Contamination (mainly for presence of Ecoli):
  - 35% of HH source water (largely hand pumps), 68% of water stored in the household, and 55% of the water in drinking water supply schemes at the community level was found to be contamination.
  - Despite this, 98% of HHs do not treat their drinking water in any way
- Water contamination levels appear to be unrelated to treatment status, suggesting that the intervention had no impact on practices surrounding drinking water treatment or storage. This suggests that information may be a constraint on water treatment and or efforts to trigger a change in private behavior may be required.
- Disposal of Human and Other Waste
  - More than one third of all households have no access to toilet facilities and are defecating mainly in fields
  - 90% of HHs dispose waste water through open drain or open pits.
  - More than 4/5th of all trash (organic and inorganic) is thrown into backyards, villages lanes or open places in the villages.
  - Interestingly, even though the VDP was not yet implemented at midline, there appears to be about a 5% decline in the odds of open drains and a 6% decline in open defecation in inclusion villages, relative to controls.

(World Bank)

Health behaviors

- While knowledge regarding some aspects of hygiene appears to be relatively high: in particular, 76% of HHs report that they wash their hands in order to prevent disease, and only 7% profess to not knowing why it is important to wash hands after using the toilet, the preponderance of health behaviors suggests either poor knowledge or some dissonance between knowledge and behavior. For example, on the one hand:
  - 94% of HHs report using soap when they clean their hands

[2] Nowshera in KP, Mianwali and Bahawalpur in Punjab, and Tando Mohd.Khan and Hyderabad, in Sindh.

- 90% report washing hands after defecating
- 88% report washing their hands before eating food

- In contrast:
  - A substantial proportion of adults (35%) and children (48%) routinely walk barefoot
  - Only 37% report washing their hands after cleaning a baby's bottom and only 15% report washing hands before feeding children
  - Also, children's health behaviors appear to be poorer as per the female head's report: only 65% of children wash their hands after defecating and 73% before eating

Direct observation by enumerators indicates the absence of soap in about a 1/3 of all households, flies around about a 1/3 of all toilets and open excreta in 20%.

On balance, no significant impact of treatment and, in particular, inclusion, on any health behavior was found.

Utilization and Quality of Health Services

- Only 24% of households report utilizing a government health care provider when they are ill. A mere 10% of households utilize the Basic Health Unit (BHU) which is the lowest tier of health care provided by the government and their first point of access to government provided health care.
- The main reasons reported for low uptake of public facilities were a perception that the medicines provided were not effective (38%), that the facility was too far (16%), that the level of care available was not adequate for the condition (13%) and that there was not facility in/near the village (10%)
- That said, among users (polled in patients exit surveys and in the HH survey) there appears to be an overall positive view of basic health units/ rural health centers, with over 90% of users giving the BHU a 4+ rating on a 5 point scale:
  - Average wait and consultation time in BHU exit surveys is about 15 and 12 minutes, respectively. This is about the same time (15 and 10) as they get in private facilities, which are vastly preferred in terms of utilization.
  - Nearly 90% of patients in exit surveys also report that the BHU staff was competent and friendly in their interaction.
  - Cost differences between private and public facilities appear to be large with households paying only the administrative 'token' fee for consultation (equivalent of $0.01) in BHUs as compared to about $2 charged by private providers.
  - BHU's also appear to provide free medicines.

Interesting, the study found some treatments impact BHU wait times, which declined by about 6 minutes in treated villages while the time actually spent with the doctor is unaffected.

Maternal and Child Outcomes

The general level of maternal care in the sample is fairly low. For example,

- 58% of HHs report having received any antenatal care and only 32% of HHs report receiving post natal care
- Under one-half of pregnancies are registered and only 5% of babies have their birth weights recorded
- About one-half of all households had at least one pregnancy in the past three years and
- Child mortality (based on the past 3 years of pregnancy histories) shows that about 2% of pregnancies resulted in an abortion or miscarriage and an additional 3% died at birth or soon after. This implies a mortality rate of about 50 which is consistent with national statistics.

Lady Health Workers (LHWs) weigh a child

LHWs are intended to be the first point of contact for pregnant women. They are tasked with registering pregnancies via the BHU, encouraging women to obtain antenatal and post natal care and conducting well baby visits. In practice,

- Only 42% of HHs with pregnancies in the past 3 years report having been visited by the LHW
- Less than a quarter of the women who received any antenatal care obtained this from a LHW. Less than a fifth got postnatal care from the LHW and only 7% of HHs with pregnancies received well baby visits from the LHW.

Was there any improvement in LHW service quality in inclusion villages? The answer is a tentative yes. In particular, inclusion HHs report:

- A higher likelihood of being visited by a Lady Health Worker (LHW) during their last completed pregnancy
- Higher odds of receiving antenatal and postnatal care during the pregnancy and receiving this care from the LHW.
- Greater pregnancy registration and recording of child's birth weight
- More well baby visits, with higher odds of child height and weight being measured

Ironically, however, the perception of LHW service quality is lower in inclusion villages

- Inclusion HHs are more likely than non-inclusion HHs to report that the LHW spends insufficient time with them, and is less likely to discuss basic health matters concerning immunization, water purification, disease avoidance and family planning.

Taken together, these results suggest that empowerment led to a rise in expectations about the quality of care quality and that while the quality of care improved as well, the rise in expectations exceeded any actual improvement.

Looking Ahead: Empowering Women and Using Health Score Cards

Overall, the findings suggest that empowerment alone does not lead to substantial improvements in Household or community health behaviors or health service delivery and there is considerable scope for more targeted interventions. In phase II of this study, the impact of community health score cards, possibly combined with the strengthening of doorstep health delivery through LHWs, on community and households health behaviors and the quality of service provision will be investigated. The health score card will provide specific information regarding minimum standards of service delivery and quality of care at the local level (BHUs, RHCs and LHWs). This will allow further exploration of additional impacts of increasing awareness through targeted information provision with and without a strengthening of the door to door delivery system via the LHW.

(World Bank)

Partners

WORLD BANK GROUP
South Asia Food & Nutrition Security Initiative

DFAT

UKaid
from the British people

This results series highlights development results, operational innovations and lessons emerging from the South Asia Food and Nutrition Security Initiative (SAFANSI) of the World Bank South Asia region.