The Sehat Ghar: An Innovation to Improve Primary Healthcare in Rural Punjab

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Abstract:
An effective healthcare sector essentially relies on a strong primary healthcare system. The primary healthcare system governs all major aspects of preventive healthcare and family planning services including immunization, hygiene, communicable disease prevention, sanitation, etc. In addition to this, a major bottleneck limiting the quality of healthcare at secondary and tertiary health facilities is the very high patient footfall that these hospitals. The primary healthcare facilities are designed to be the first tier of facility that a patient falls onto, and hence is either treated there or referred to higher level facilities by screening and limiting patient flow to next levels. Supporting this tier hence helps reduce burden on secondary and tertiary facilities of patients that could have been treated at primary facilities and hence exponentially improve the quality of health services in these larger hospitals.

The document discusses some of the major issues faced by the primary healthcare sector in Punjab. These issues were studied and analyzed in detail at South Punjab Health Department, which is an arm of the provincial health department governing 11 districts of Southern Punjab – districts where socio-economic conditions are generally much poorer than the rest of Punjab. This document discusses the initiative of Sehat Ghar, its model, potential to ensure basic health services delivery to the local population and its direct & indirect contribution to tackle major issues of primary healthcare in Punjab.

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Problem statement
In its concept, the BHU was made to cater to a catchment population of 10,000 while RHCs were established to cater to a catchment population of 30,000-50,000. However, since the past few decades rural population has been increasing at a high annual rate (2.3% on average since 1970, according to the data made public by the World Bank)¹. In the same system, the facilities of BHU and RHC have not been upgraded as much as it should have, in terms of both quantity and quality. As a result, according to the data analyzed in South Punjab districts, a BHU currently caters to an average catchment population of around 35,000, while an RHC caters to an average catchment population of 100,000. Thus, in rural areas of Punjab, the average population that has access to at least one doctor lies around the 35,000 range².

Studying health sectors of different developing countries shows us that Punjab is lagging behind significantly in terms of this figure of doctor access. In Brazil, the program “Programa Saúde da Família” or PSF is one of the largest communities based preventive healthcare programs in the world³. Under this program, Family Health Teams were established which include at least one general physician. These family health teams are catering to a population of 3,000 to 4,500. In Iran, a health house is established which houses a doctor and is a central point for all field staff⁴. In Turkey, Family Health Centers were established in 2005⁵. These FHCs cover a population of 3,000 to 4,500 and have at least one family physician. These primary health systems govern all aspects of immunization and outreach campaigns and hence are the main catalyst of achieving
Sustainable Development Goals (SDGs). Therefore, strengthening them is the first stepping stone towards attainment of a proactive primary healthcare system. The aim is to provide primary health services on a smallest population cluster rather than existing spread over large distances. The figure below shows how the countries discuss above, stand on the achievement of key SDGs. This leads to the deduction that a better doctor access in primary areas, and more centers for outreach activities are some of the key drivers of achieving key primary health indicators.

<table>
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<tr>
<th>Doctor coverage</th>
<th>Brazil</th>
<th>Iran</th>
<th>Turkey</th>
<th>Pakistan</th>
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<td>One doctor for ≈4,000 population</td>
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<td>One doctor for ≈35,000 population</td>
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| Reduce under 5 mortality to less than 25 per 1,000 new births | Achieved | Achieved | Achieved | Off-track |
| End TB Epidemic | On-track | Needs improvement | Needs improvement | Off-track |
| Out of pocket health expense | On-track | On-track | Needs improvement | Off-track |

**Figure 1: Comparison of SDG Achievement Between Various Health Systems**

The tier of dispensaries are currently redundant at the primary level. They are rarely visited by any health professional, and hence most of the dispensaries are very poorly equipped, both in terms of medicines and equipment. Most dispensaries are offering OPD services, of a limited scope as only dispensers are available at the facilities. Even though positions for midwives are filled at this level, lack of gynecological equipment at the facility makes it difficult and unsafe to administer birth. Similarly, the provision of immunization services is affected due to the dearth of equipment and staff necessary to administer vaccines in the catchment area. In addition to that, some of the facilities have poor physical infrastructure which makes it unfit for even the designated service of the dispensary.

Research was conducted in different areas of Europe analyzing the ease of access to care by doctor and its effect on primary healthcare. The findings suggested that the ease of access to doctor care, and healthier doctor-patient relationship directly correlated with quality improvement in primary health care. This further emphasizes on the importance of easy access to a doctor, and low patient burden so that the quality of care for each individual patient is improved.

Almost all aspects of outreach initiatives in Punjab revolve around the Lady Health Workers. These Lady Health Workers were initially hired under family planning and maternal health initiative of the Punjab government. Their core services include assisting skilled birth attendance, facilitating family planning, improving maternal health by encouraging ANC / PNC visits, generating demand for immunization and recording birth related data. In an analysis done in South Punjab, in all of the 11 districts the LHWs were overburdened by addressing a catchment population way
greater than their designated targets. In addition to their core responsibilities, in which they are already overworked, they are also handed additional tasks regularly related to different preventive health programs. In South Punjab, almost 40% of the areas are uncovered by these outreach staff mainly due to unavailability of physical centers and appropriate infrastructure. In addition, this, there are other field staff such as the Lady Health Visitors, CDC officers and sanitary inspectors. There is poor oversight and visibility of a lot of area that these staff work in, hence adversely affecting their efficient utilization.

**The Sehat Ghar Model**

As suggested by the country analysis above, enhanced doctor availability for the population is one of the primary drivers of improvement in preventive health and hence directly contributes to the achievement of Sustainable Development Goals (SDGs). During the 2000s, a major issue for BHUs and RHCs was unavailability of doctors to fill the empty seats. However, after steps taken by the Punjab Government including increased financial and career development incentives for doctors posted at primary health facilities doctor availability started increasing exponentially. Currently, there are more doctors than the seats available in Punjab and hence the human resource bottleneck in expansion of primary health facilities is no longer existent.

These premises supported the need for physical expansion in the primary healthcare regime so that we can move towards achieving the SDGs and improving service delivery in rural areas. In essence, there are many ways to do this. One of the ways could be increasing the number of BHUs in all areas. Another option could be to create a seat for doctors at existing dispensaries. However, both of these options had some core flaws which made its implementation difficult.

For the first option, constructing new BHUs at the same existing model accompanies high capital and revenue costs, which makes it difficult to implement. For the second option, most of the dispensaries in rural Punjab do not have a well-maintained infrastructure and are far off from urban areas. With no facility of residence, it becomes more difficult for a trained doctor to work at a dispensary.

Therefore, to solve these issues it was necessary to think in a new direction that has not been actively journeyed on before; establishment of a new tier of facilities with compact and modern design to save initial costs. This new tier of facility was named 'Sehat Ghar'. The Sehat Ghar was designed to take up only 25% of the area that a typical BHU was constructed on hence saving a significant amount in the capital costs. In addition to putting in effort to construe a design both efficient in terms of cost and area, the department conducted

![Figure 2: Basic Design of a Sehat Ghar developed by Infrastructure Development Authority of Punjab.](image-url)
analysis in select districts to identify areas that are uncovered in terms of any public sector primary facility with a doctor available. Using this data, and conducting special analysis allocation and rollout plans were prepared for Sehat Ghar. A sample of this analysis for Tehsil Rahim Yar Khan of district Rahim Yar Khan is provided in Figure 3. In areas where the local dispensary could be upgraded, they were selected as new Sehat Ghar sites.

![Figure 3: Spatial Analysis conducted with the assistance of Urban Unit, to highlight missing pockets of primary healthcare in District Rahim Yar Khan.](image)

The Sehat Ghar will be established to cover an approximate population of 10,000. This will be a huge step in improving access to quality care where currently a doctor is available for a rural population of 35,000 to 50,000 with the situation worse in hard and difficult to access areas. The facility will comprise of two categories of HR, as listed in (insert figure number) below. The fixed site HR will be stationed at the facility, while the facility will also act as a hub for field HR which is instrumental in immunization, maternal and child health and general sanitation in the catchment area.

The Sehat Ghar will act as the focal point for the below key services:

- **Maternal and child healthcare**

  The Lady Health Visitor (LHVs) supported by Lady Health Workers (LHWs) and the medical officer would provide skilled birth attendance with post-delivery care and complete child immunization as per standard protocol. In case of any complication, the Sehat Ghar would also act as the first referral point for the pregnant mother for safe delivery at appropriate facility. In South Punjab, the percentage of women who had skilled birth attendance was around 63% (MICS 2018). The expansion of services through Sehat Ghar would allow LHVs and LHWs to support more women to get delivered through SBA and hence would improve this crucial indicator of maternal health.

- **Reproductive health**

  The LHWs play a crucial role in improving reproductive health by creating awareness in the target population and ensuring availability of family planning commodities. In addition to this, LHVs are vital in ensuring ante-natal and post-natal care visits for pregnant and lactating women respectively.

- **Immunization**

  Apart from acting as a center for LHWs and through them a center for child immunization, the Sehat Ghar will also act as a central point for vaccination and other
immunization activities. As witnessed in the COVID pandemic, vaccination in hard-to-access rural areas with low LHW coverage was a fairly difficult and cumbersome process which halted the complete vaccination process. Sehat Ghar would be vital in countering this problem in rural areas.

- **Preventive health activities**

Sehat Ghar will act as a center for all preventive health activities chiefly through the out-reach team at every Sehat Ghar. Sanitary patrol officers keep a check on all aspects of public hygiene including water sources, sewage and solid waste disposal and treatment, etc. to limit birth/spreading of related diseases. Communicable disease coordinators will support all communicable diseases programs and play a major role in creating awareness on how to limit the spread of major diseases such as HIV, different types of flu, TB, Malaria, Diarrhoea, etc. The school health and nutrition super-visors will be the focal agents for implementation of the School Health and Nutrition Program which aims to screen primary school children to prevent and counter problems in physical and mental health of these children.

- **Limited symptomatic treatment**

In addition to supporting all of the elements discussed above, the doctor available at Sehat Ghar will lead all the basic diagnosis, treatment and referrals to advanced facilities of all patients.

**Impact**

Estimates from the officials of Specialized Healthcare and Medical Education Department, Punjab state that 70-80% of the patients at tertiary health facilities can be treated at primary facilities. Hence the major burden of these tertiary hospitals can be screened out in a better and more efficient primary health regime. Sehat Ghar would increase the access to general curative health, maternal and child health, nutrition and family planning services by almost three-fold (estimated though the increase doctor coverage) which would be instrumental in reducing the burden of higher-level hospitals and directly improving the quality of care of more deserving patients at these hospitals.

The most crucial impact of Sehat Ghar would be to increase the doctor coverage per population. From a doctor for every 35,000 to 45,000 population, the coverage would increase to one doctor for every 5,000 to 10,000 population. Sharing the burden of other doctors currently in BHUs and RHCs would mean that each doctor would be able to focus more on their catchment population which would increase the quality of healthcare. This would also increase the seats of doctors which is a dire need currently.

In addition to the increased doctor coverage, the coverage of field staff would also be increased. These field staff are the main facilitators of preventive healthcare in rural areas and hence amplifying their services would strengthen a multitude of indicators. With the battle against Polio being at a crucial stage, establishing Sehat Ghar would act as a strong addition to the weapons being used against Polio. In addition to that, countering child and maternal health problems is a global as well as local government’s priority which would be supported.
extensively through this initiative. Similar to the case of doctors, this enhancement will also create more job opportunities, especially for the locals.

In addition to this, as many areas do not have a public sector facility and trained doctors do not prefer working in poorly equipped rural areas, these areas act as incubators for quackery. Expanding the health infrastructure through Sehat Ghar would work to remove the currently brazen practice of quackery in these areas.

A factor that makes Sehat Ghar highly scalable, especially when compared to the current tiers of primary healthcare establishments is its efficient design and cost. Through innovative design and efficient use of resources a Sehat Ghar, with the same ability of service delivery as a BHU costs almost 19% of the cost of establishing a BHU. This was the turning point in the perception that the authorities have shared since long, that it is expensive to expand doctor coverage in rural areas. Thus, with potential benefits far outweighing potential costs, the pilot of this project was recently approved in select Tehsils of Rahim Yar Khan and the complete district of Layyah. In total the pilot includes 189 Sehat Ghar facilities – 105 in Rahim Yar Khan and 84 in Layyah.

However, a lot of key milestones need to be achieved for this new tier to bear the fruits that it has been designed for. Firstly, implementation of the approved PC-1 needs to be ensured. After the infrastructure is implanted, the next major and cumbersome step would be recruiting and posting of appropriate human resource in these facilities. The health department will have to put in the extra effort to ensure that this new tier does not face the same time lag that the BHUs did in ensuring doctor availability at these health facilities. Finally, after the facility is functioning at its designed capacity, its progress through complete data reporting should be monitored and based on these results the program may be scaled up to all other districts.

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