

BRIDGING THE GAPS



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Recollecting experiences of Project - Improving
the Health of Women, Children and Elderly (IHWCE)



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FOREWORD

In an area like the Thar Desert of India, where GRAVIS works primarily, availability of healthcare in remote clusters is a big challenge. Communities over there have to live under poor health and nutrition. Keeping this in view, GRAVIS has been running a medical and public health programme for many years. Our work has been quite meaningful in the area of health.

Over the last three years, we have started a Mobile Medical Unit (MMU) service that reaches out to a population in about 25-30 villages. The MMU services have been supported by The Hans Foundation under the Project – Improving the Health for Women, Children and Elderly (IHWCE). Our experience on this project has been quite positive so far, as the service is very well received. The project has a holistic nature and covers many public health aspects. We hope that our services continue to benefit the needy.

This document captures the journey of our project, which I hope is useful to read for different stakeholders. I Thank The Hans Foundation for their support to the IHWCE Project. I also express my gratitude to the author, to the team of GRAVIS and to our beneficiary communities for their contribution toward developing this document.

Shashi Tyagi

Secretary, GRAVIS





Author's Note

Far away from modern comforts, enveloped in the sandstorms very often, villages of rural areas in the Thar Desert bear the brunt of not only the hot sun as popularly believed, but extreme and dry winter too. When survival itself is a challenge, aspirations for even the basic facilities are dampened. Poor rural communities in western Rajasthan are victims of harsh weather, jeopardized water and food insecurities, and systemic failure of administrative machinery that has not been able to respond to their fundamental needs. Jodhpur, one of the most drought affected districts of Rajasthan, is known as the doorway to the Thar. Rural habitat in Jodhpur district demonstrates the Desert life of people living in villages in the Thar. Gramin Vikas Vigyan Samiti's (GRAVIS)' work with impoverished communities of Jodhpur and other drought prone regions of the Desert embodies the collective resolve of people in this area for an improved quality of life. Majority of GRAVIS' work revolves around finding and executing community-based solutions for water shortage, and its implications for human life, health being the most important of them.

GRAVIS' health programme is grounded in realities of the Thar Desert and hence is oriented towards finding solutions to the problems that people are confronted with in their struggle to access health care. Engagement with Desert communities for more than three and a half decades has shaped GRAVIS' understanding and strategic interventions. Optimising the opportunity that collaboration with the Hans Foundation (THF) presented, GRAVIS focused on making health care services accessible to most marginalized groups – women, children, and elderly – in the remotest area of the Thar Desert. Present document is an attempt at capturing the major outcomes, learnings, achievements, and challenges, of the Improving Health of Women, Children and Elderly (IHWCE) project.

Author expresses her gratitude to GRAVIS and its team for sharing insights into the project specific interventions, collecting relevant data and anecdotes, and providing a sneak peek into the lives of Desert people. The resilience of rural people deserves a special mention that has provided the inspiration to document the interventions as part of the project.

Neetu Sharma





Introduction

In a region that is largely desolate, shifting sand dunes, broken rocks and shrub vegetation, are aplenty, Thar Desert does not have welcoming conditions for human existence. Despite the inhospitable characteristics of the Desert, habitats of the Thar refuse to give up on their perpetual struggle called life. Difficulties arising from very low annual rainfall, about 25 centimeters, and consequential acute water shortage, are magnified for the impoverished local people by the distances and remote locations. The most densely populated Thar Desert is hence called a dichotomy. Rural remote areas of this Desert remain excluded from mainstream be it technological advances, industrial progress, or social development. Scanty rainfall in the region always casts a shadow on the rainfed agriculture, livestock management and other associated activities, forcing the farming and pastoral to verge of food and water insecurities. With inability to buy, grow and consume nutritious foods, water shortage leaves direct detrimental health impacts on the Desert people. Maintaining hygiene is a challenge and information on self-care and understanding of the significance of hygiene is also very little.

These inimical conditions largely determine the health and nutrition profile of children and women in the rural Thar, which is characterized by low birth weights, anemia, and iron and calorie and protein deficiencies. Poor health and nutrition status of women and children in rural Thar also gets reflected in the health profile of the state of Rajasthan in India and has remained a matter of concern for policy makers at state as well as national level. The fact that the state of Rajasthan carries a large share of overall maternal mortality in the country is reflective of the penury and social and economic backwardness of the Thar region, addition to the dry weather and water scarcity for human needs, farming and cattle.

Arid and drought-impacted state of Rajasthan does not have an encouraging record of public health and health care facilities. Amidst numerous issues emanating from water shortage, food securities and penury that rural communities face in the Thar Desert, not surprisingly, health care does not draw serious attention. It is easy to understand that the inhabitants of Thar cannot afford to spend much time and money on their health care, when the priorities are water, food, and fodder. Lack of education and awareness among rural population impairs their situation further. Lack of water renders maintenance of hygiene a rare luxury available only to the prosperous ones. Unhygienic conditions and unsafe water become breeding ground



for water borne diseases. Public health care services in rural areas are almost non-existent and private facilities are not only unaffordable but are inaccessible because of being located at long distances.

For the resourceless people, health screenings and treatment for seasonal and recurrent diseases is beyond means. When unavoidable, health care for young males, who are considered as breadwinners and are financially productive, is prioritized. Poverty and gender disparities reduce women's, children's, and older people's health care to a trivial and non-essential need. For older people, lack of physical mobility and for women, barriers on social mobility, affect their prospects to access health care services. With no control of women over finances health care, as other facilities, and opportunities, remains a gender disparate proposition.



Background

Deficient rains and frequent droughts result in crop failure, less food production, food and severe water shortage, and subsequently inadequate sanitation, and many more difficulties to the already tough lives of villagers in the Thar. Lack of healthcare service, low levels of education and strained financial means make those living in the Thar particularly susceptible to disease and premature mortality, and all this manifests very prominently in health and nutrition profile of Rajasthan state that has a major portion of the Thar Desert within its boundaries. With high infant mortality (41 per 1000 live births) under five mortality (45 per 1000 live births) and maternal mortality (199 per 1 lakh live birth), Rajasthan shares a major burden of malnutrition and resultant health issues in the country. Stunting (40%) and wasting (33%) among children that are considered the direct outcomes of malnutrition, are much higher in rural Rajasthan than the national and even state average. Further, with low Body Mass Index (BMI) for about 36% girls and high number of anaemic girls (40%) health indicators of adolescent girls in rural areas are quite discouraging too.

Table 1. Health status of children and women in Rajasthan as compared to India¹

Health Indicators	Rajasthan	India
MMR (per 100,000 live births)	199	130
IMR (per 1000 live births)	41	34
Under-5 Mortality (per 1000 live births)	45	39
Total fertility rate – TFR (2.5 births per woman)	2.7	2.3

As GRAVIS, an NGO based in Rajasthan, India, endeavours to improve the lives of those living in the Thar, public health and provision of health services remain substantial areas of its intervention. Through its health programmes, GRAVIS has reached out to the most isolated and remote area and administered healthcare services to thousands of people, and is working towards reaching out to many more requiring similar support. GRAVIS has been working with the rural Desert communities for more than three and a half decades towards the goal of integrated community development and food and water security for the most powerless. Through a three-year engagement with The Hans Foundation (THF), GRAVIS made concerted



¹ Comprehensive National Nutrition Survey, Rajasthan Preliminary Fact Sheet 2016-17, https://www.popcouncil.org/uploads/pdfs/2019RH_CNNSfactsheet_Rajasthan.pdf

efforts to replicate and extend its healthcare programme in remote villages of the most underserved areas of Western Rajasthan. Improving Health of Women, Children and Elderly (IHWCE) project was used as a vehicle for putting all the learning and experience gathered over more than three and a half decades through its care healthcare programme for the most marginalised and impoverished communities of the Thar Desert. The project approach was based on building partnerships in new areas through community based organisations, and ensuring the last mile delivery of health services along with finding the community based sustainable solutions to local issues.



Thar landscape

The project aimed at addressing public health issues among the most vulnerable and excluded communities of the rural areas in the Thar Desert. Under the aegis of its health programme, GRAVIS provided health care services, ensured provision of safe and clean drinking water and improved nutrition, and generated awareness among the community on health care and associated issues. The project was implemented in 15 villages in Jodhpur district of western



Rajasthan, which is one of the most affected drought prone district of the Thar Desert. Jodhpur district is among the most arid regions of the country and despite very low rainfall, a large number of rural population in the district is dependent of rainfed agriculture and allied activities for their livelihoods. Lack of safe drinking water, inadequate quality and quantity of food available and primary preoccupation with collecting water, make health care a secondary ask for rural poor. Situation gets aggravated with virtually nonexistent public health services, insufficient water to maintain hygiene and insufficient community knowledge and capacities as regards health care.



Young girls in Thar

The IHWCE project aimed at improving the health status of the Desert population in 15 remote villages in Jodhpur with a specific focus on women, children and elderly. The project strived to achieve the following objectives:

1. To generate health awareness among rural communities
2. To build local capacity through trainings and education
3. To seek active community involvement in planning, implementation and monitoring
4. To provide curative and diagnostic medical services to the community, especially women, children and elderly aimed at reduction of diseases prevalence, IMR and MMR.
5. To advocate for better health care for women, children and elderly in rural areas



The project was implemented in following 15 villages of rural areas in Jodhpur districts:

Table 2. List of Villages in Jodhpur Village covered under IHWCE

1. Bhalasariya
2. Mandai Khurd
3. BadlaBasani
4. Ghewda
5. Khabda
6. BhesarKotwali
7. Balarva
8. Gajana Was
9. Ram Nagar (Utambar)
10. Chanchalva
11. Panchala Khurd
12. Ramnagar (EkalKhor)
13. Bavarli
14. Meeno Ki Dhani
15. Chiari

Tucked away in the barren lands and dry sand of the Thar Desert, remote villages in Jodhpur district of Western Rajasthan portray a very grim picture of the state of health care facilities, trans-generational exclusion and low level of awareness on education. These 15 project villages were selected considering their remote locations, educational and financially backwardness and non-availability of adequate health care facilities. Majority of the villages lacked connectivity and transport needed to reach the public health services. Communicable diseases were quite prevalent in the identified villages, with recurrent outbreaks of seasonal and water borne diseases. Pre and ante natal checkups were not happening on regular basis and immunization of children and pregnant women was also very low. Baseline conducted at the onset of the project indicated towards lack of awareness on hygiene practices and reproductive health among adolescent girls and boys. All these factors were collectively leading to poor health status especially of women, children and adolescents, and elderly people. Baseline report also highlighted low female literacy, low level of participation of women in community life and high dropout rates of girls from schools, especially at secondary level. Most families in the 15 villages were engaged rainfed farming and associated activities. With per capita income, majority of these families were food insecure and lacked means to access health facilities, owing to transport and finance related challenges.



Table 3. Interventions

S.No.	Interventions	Direct Beneficiaries	Indirect Beneficiaries
1.	Health Awareness Camps	2305	NA
2.	Trainings of Village Health Worker	67	NA
3.	VHW Monthly Meetings	401	NA
4.	Community based health trainings	2124	NA
5.	Nutrition Sessions in Schools	3941	NA
6.	Adolescents Boys Trainings	2647	NA
7.	Adolescents Girls Trainings	2617	NA
8.	Outreach Medical Camps	1188	NA
9.	Setting up Nutrition Gardens	100	485
10.	Biosand water filters	100	545
11.	Medical camps	12,562	NA
	Total	28,052	1,030

Table 3 lists the activities implemented as part of the IHWCE project. Health awareness and services extended during and as follow ups of outreach medical camps organized through mobile medical units were, the central interventions that were supported by a series of capacity building and awareness initiatives for children, young boys and girls and adolescents, and village health workers. Direct support was extended through provision of biosand filters and setting of nutrition gardens.



Towards a Healthy and Prosperous Rural Community in Thar

Access to basic health care facilities, food and nutrition security, awareness on health care and best practices, along with the availability of safe drinking water, have decisive role in determining general health profile of any region. Remotely located villages of Thar Desert in Western Rajasthan present a grim state of affairs concerning public health. Water and food have always been scarce in the Desert, damp political will and administrative callousness leave their accentuated impact because of the difficulties arising from terrain and climate. Low level of education and even lower female literacy rates among rural women in Desert district of Rajasthan create further obstructions in generating awareness about health and usher in behavioural change. Age old practices and traditional beliefs discourage health seeking practices, and inadequate institutional structures remain elusive for especially those dependent on others to access them. GRAVIS adopted a multidimensional strategy to break this cycle that keeps reinforcing poor health and nutrition status of women, children and elderly people. On one hand, access of health service was enabled by reaching out to the remotest villages through mobile medical units (MMUs) and delivering health services to those who are generally left out, and on the other hand, local capacities - of young boys and girls, general community and local health workers - were built towards sustainable and pragmatic solutions to health related issues. Efforts to address immediate issues were further substantiated by enabling an environment conducive to maintaining good health and hygiene. Biosand filters were provided to 100 families for ensuring safe drinking water, and nutrition gardens were established in 100 households that provided additional nutrition through additional vegetables added to their regular diets. Both these interventions helped directly improve health and nutrition status of women, children and elderly.

Limitation of the resources, excessive vulnerability of specific groups and poor health profiles of especially women, children and older people, may be attributed as key factors that led to the adoption of strategy focused on their specific needs. Although services were provided to all the marginalised groups through direct outreach and most of the interventions benefited all the groups, the project aimed at addressing the specific health care issues that women, children and elderly people are generally subjected to. Figure 1 attempts at capturing the project design adopted to achieve the specific objectives of the IHWCE project:



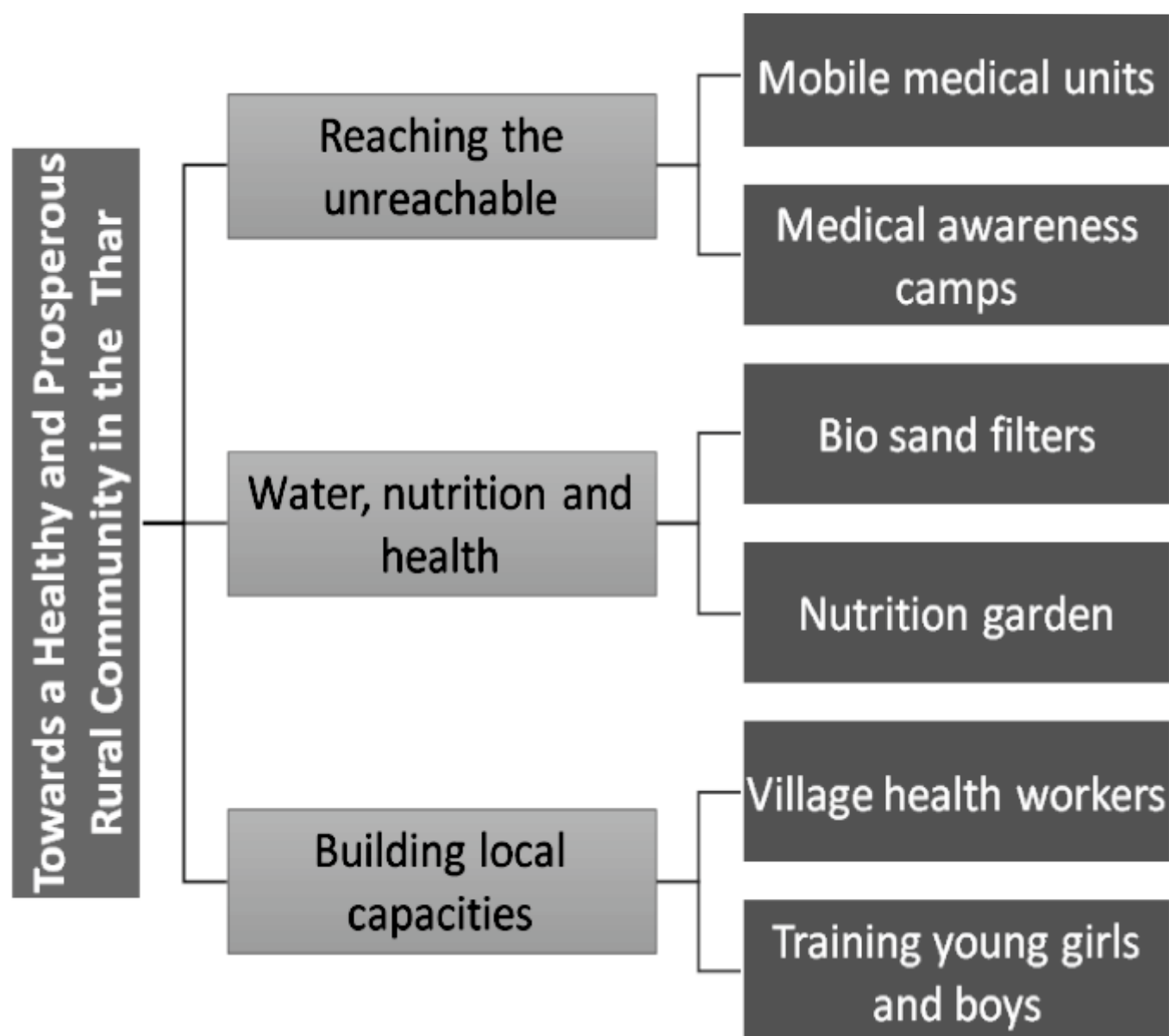


Figure 1 - IHWCE Programme design

With a focus on those who are at the receiving end of not only the healthcare system but any social or financial benefits available to others, IHWCE project worked in three specific areas: Reaching the unreachable, Enabling water and nutrition, Building local capacities. These marginalised groups who get most negatively impacted by lack of health care are women, children and elderly people.



A. Reaching the Unreachable

Despite being a densely populated Desert, existing population norms for provision of health care facilities get neutralised by the remotely located difficult to reach villages. Long distances and extreme weather conditions discourages even the public health administrative mechanism to extend service delivery in some of the villages. Out of the total 15 project villages, only 2 had primary health centres (PHCs), and another 4 did not have any health facilities available within the villages. 40% population of the target villages had to travel for more 5 to 10 kilometers on an average to reach any health facilities. It was also noted that only 13% population was seeking treatment for ailments in public hospitals and others either avoided visiting hospitals or preferred visiting private clinics. This speaks volumes of the state of public health facilities in rural areas which are either nonexistence or of low quality. Catering to the most excluded rural community that can neither access nor afford the quality health services required innovative strategy, and the same was found in mobile medical units (MMUs) that instead of expecting people to reach the facility, made health services available at their doorstep.

a. Mobile Medical Units (MMUs)

Mobile Medical Units (MMUs) is a key strategy to facilitate access to public health care particularly to people living in remote, difficult, under-served and un-reached areas. The objective of this strategy is to take health care to the doorstep of populations, particularly rural, and vulnerable. MMU services are envisaged to provide quality health services as a primary health centre. MMU have the potential to provide affordable and accessible last mile health care services to the needy. In the context of remote villages in the Thar Desert, GRAVIS adopted this strategy and catered to rural population in 15 remote villages with provision of a range of health care services, largely pertaining to – prenatal, antenatal, neonatal and infant health, immunisation child and adolescent health, management of common communicable, non-communicable and seasonal diseases, and eye care, besides enabling referrals. These services were provided with a nominal charge of Rs 10/- per patient and addressed the needs of virtually every patient in the project area.





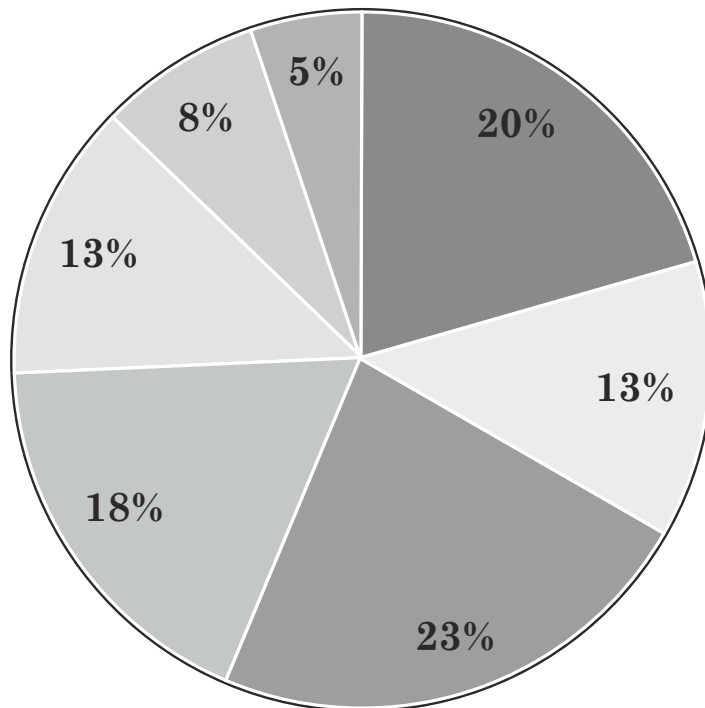
MMU in Service

A fully equipped MMU was procured and used to provide health services. This not only ensured provision of health services at doorstep but also saved a lot of hassle for those who could not otherwise avoid traveling all the way to health facilities because of serious ailments. The project approach hence was based on the cognisance of the most critical problem of accessing health care facilities and the provision of MMU addressed the issue of access for women, children and elderly people. An evaluation conducted as the part of the project revealed that a number of women, elderly people and children availed the services of the MMU 28 times on an average in three years of project duration, with a minimum of 20 and maximum of 36 times. It was reported that before the commencement of the project, remote rural communities were able to access medical facilities only once in two years on an average and that too only in case of medical emergencies, not for regular check-ups and common illnesses. Figure 2 projects the most critical advantages of MMU. A large number of people felt that apart from regular health checkups, reaching out to the rural remote areas was the most critical benefit of MMU. Apart from this, MMUs helped saved expenditures on travel, time, as well as expenses on medicines.



Figure 2 - Benefits of MMU

Benefits of MMUs



- Regular and timely health checkups
- Free distribution of medicines
- Necessary services more often delivered to client without any complex paperwork
- Healthcare facilities made accessible in rural areas by MMU
- Basic tests available
- Expenditure and time saved
- Treatment received on time

With diversification of health services and multiplied outreach, MMUs have the potential to revolutionise the health care for rural poor in remote areas and overcome exclusion in the health care delivery.

Ghenwar Ram gets back to work after medical support

Ghenwar Ram, a resident of village Chanchalwa, has been living with his breathing problem for past many years. At the age of 60, he found it very difficult to visit the city hospital located far away from his village. Going to the hospital would mean traveling long distance and losing wages for the whole day. The primary health centre (PHC) close to his village did not have a doctor who could diagnose the real issue. In this situation, Ghenwar Ram kept postponing the follow up visits to the doctor and his condition kept deteriorating till it was unbearable and he had to stop going for wage work. Loss of income destabilised his family's financial condition.

During one of the medical camps organised by GRAVIS, Ghenwar Ram's wife took him for check up. He was told that he needs to be under medication for at least 3 months. He was given medicine and his contact information was registered in the records of GRAVIS' hospital for follow ups.



Ghenwar Ram in consultation with GRAVIS doctor

I was not very optimistic about the check ups, I thought this must be one of those that we have at the PHC in the neighbouring village. But when I reached there, the doctor examined me thoroughly and asked a lot of questions. I was also asked to undergo few tests that were made available through a mobile medical unit (MMU) and I did not have to go far way for the tests done. All of it, consultation with doctor,

tests and medicines were provided at a small charge of Rs 10/-. I felt a lot better within the first month of the treatment, and was almost recovered in three months as told by the doctor. I feel very grateful to the GRAVIS team for providing me with the medical support. I feel healthy and am able to go to work on a regular basis.'



b. Health Awareness camps



An awareness camp

Lack of awareness on health care, health services and public health facilities, even if they are skimpily accessible, remain major public health challenge in India. Low level of education, traditional beliefs and lack of adequate information, do not let rural people prioritise their health, more so in the case of women, children and older people. Personal and social health seeking behaviour has been a key issue. Prenatal and neonatal health, health screening, growth monitoring and of medicines or supplements have been the most neglected areas. Reliance on non-scientific methods of treatment of communicable and non-communicable diseases may also come in the way to seeking health care. Importance of awareness on health cannot be emphasised enough in a context such as that of remote villages of the Thar Desert.

Through 50 medical awareness camps organized as part of the IHWCE project, GRAVIS reached out to 2805 people directly. 40% of those who attended these camps were of the view that the most important benefit of the health awareness camp that everyone became aware about the health care facilities that they can avail. Apart from learning about first aid, they were able to recognize the importance of balanced diet, exercise, meditation for mental health as well as importance of education for girls. Older people were of the view that regular checkups by experienced medical practitioners were most important for them. Most of the older people and women were of the view that they could avail the services and medical supplies only because these came almost free of cost. Some older people were of the view that due to the participation in the health awareness, they understood that they should never neglect their health needs.



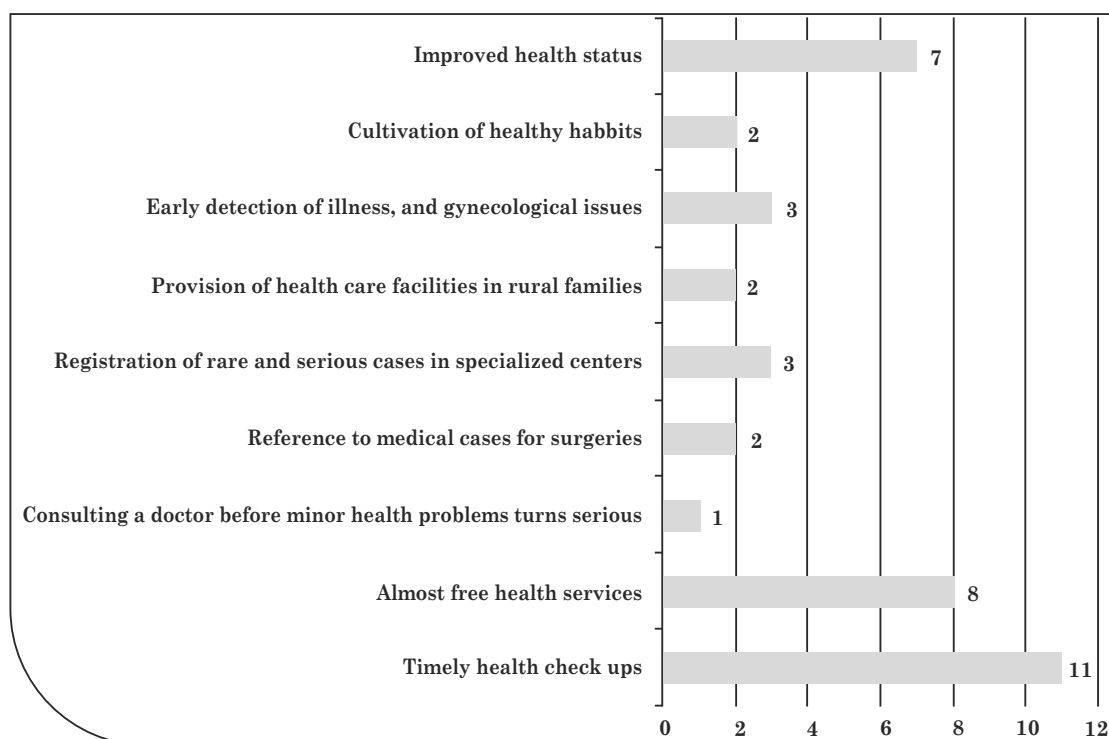


Figure 3 - Range of benefits from the medical camps

These awareness camps subsequently resulted in increased demand for health care facilities. Many older people and women were able to identify the symptoms and approach health facilities. The camps generated awareness among people on basic self-care, hygiene practices, nutrition, and the public health facilities that can be accessed by poor people. People also got to know about group specific schemes, such as free medicines and supplements, health checkups for pregnant women and growth monitoring for children. Information about these services led to creation of effective demand among community and they sought provision of all these services in their nearest public health facilities that were nearly defunct earlier.

B. Water, Nutrition and Health

Quality of drinking water and nutrient value of food are key determinants of health status for human beings. It is quite a complex task to improve the health of people in a region that has been historically devoid of both - safe drinking water and nutritious food. With a virtually nonexistent public supply of water, people in Thar Desert tend to consume ground water often. Considering that the ground water in the Desert is saline, contaminated and is not suitable for human consumption, cleaning the water before use, either through filtration or any other methods is very important. Poor household in rural areas do not have resources to invest in fancy purifiers and even if they do, they cannot use such filters without regular supply of power



or payment of electricity charges, rendering such option nonviable. While rainwater harvesting is an option, the harvested water does not last for whole of year. Harvested rainwater also, if not stored properly may get contaminated and become unsuitable for drinking.

a. Bio Sand filters

About 100 million people in India lacking access to safe water are faced with a real challenge of maintaining good health. Nearly 75% of India's surface water is contaminated by human, animal, agricultural and industrial waste, and its groundwater often contains high levels of fluoride and other mineral contaminants. Water and sanitation-related illnesses account for 70-80% of the country's disease. Water scarcity during periods of drought, lack of education, and the sheer number of people in extreme poverty adds to the complexity. Biosand filters (BSF) is a simple water purification system that uses sand, gravel, gravity and low-cost engineering to purify water contaminated with biologics and some chemicals. It is made of the commonly available material and is easy to maintain for people. IHWCE project supported 100 households and their 545 family members with provision of BSF.



Bhanwari Devi extends a warm welcome as one steps into her house. She is normally busy with the household work - cleaning, tending to her parents in laws and taking care of her children. When we visited her, she was transferring water in the pitcher from another vessel. The vessel was filled with water from the bio filter provided by GRAVIS. The filter was placed about three feet above the ground. Water from the filter was collected in a spotless glittery vessel which was placed on a trivet. We closely observed her washing her hands before touching the vessels. After filling the water, she covered the pitcher with a plate. A ladle was seen hanging from a nail embedded in the side wall. Each of her movements reflected her sense of cleanliness and hygiene.

Upon asking about the benefits of biosand filter, Bhanwari Devi says, 'Kids say water is tasty and sweet, there salinity has come down significantly. For me most important is the fact that I don't need to buy water from outside and since the filter is installed, expenses on water procurement and medicines have reduced. Children and my old parents in law are not falling sick that often. I remember my younger son used to always complain about stomach ache, now he doesn't.' 'Wash your hands before you start eating', Bhanwari Devi sternly instructed her elder son while he rushed to the kitchen. She explained, 'apart from getting a filter, I learned a lot from the meetings organised by GRAVIS on health awareness. I and few other women of our village were given information on self-health care, prevention of diseases, nutritious food and importance for hygiene...I have noticed that lesser number of children are falling ill now even during extreme weathers'. She concludes.



Bhanwari Devi with her Biosand filter



BSFs turned out to be a boon for rural households. Not only the water tastes sweeter now with most of the salinity gone, it's safe, has no odour and bacteria have significantly decreased. Distribution of BSFs was followed up with trainings on its maintenance and good hygiene practices, and consequently tangible results were recorded in health status of people in the villages. Those who had been using the BSFs for more than six months or so, recorded sweeping drop in seasonal illnesses in the families. Much lesser number of children were falling ill and elderly people felt much healthier than before. A substantial reduction was reported in the number of cases of water borne illnesses. Since the filter does not require electricity to function and can be repaired by themselves without any expenses, these filters are gradually become a ray of hope for the villagers who are vulnerable to disease and do not have financial resources to find procure safe drinking water.

A significant aspect of the use of BSFs has been the savings on expenses incurred on water. In case of non-availability of water, especially during extremely hot weather when all the water resources were dried out, people were forced to buy drinking water. With BSFs people do not need to buy water especially for drinking and save their limited resources to a great extent.

b. Nutrition gardens

Dry weather and lack of water in the Desert mean less quantity of nutritious food, fruits and vegetables available to people in remote villages, who neither afford to buy them from market, nor can they grow anything on their own owing to harsh weather conditions. However, nutrition gardens in the arid regions are established with the plants and trees that are resilient to extreme weather conditions and can be grown with limited quantity water. Nutrition gardens are horticulture units in which 20 to 25 Desert friendly plants of fruits and vegetables are cultivated. The families can even use domestic waste water for irrigation and various water saving methods such as pitcher irrigation are applied for irrigation. The produce helps families consume more vegetables and fruits as part of their diets, improving their nutritional status, and the surplus is sold in the market for income generation. Under the IHWCE project 100 such units were established that benefited 485 people.

Support provided for establishment of nutrition gardens resulted in better food available with families, leading to better nutrition and health. With the availability of vegetables, nutrition status of children and older people improved, and their general health is better than before. Diverse food available to within their premises, is enabling women, especially those who are pregnant or lactating, getting better nutrition since it is available for free and that too without having to travel. Poor people in villages are now eating green leafy vegetables 2 to 3 times a



week. They are also able to grow and consume certain vegetables that they had not eaten in ages because they are expensive.

Along with providing saplings, organic fertilizers and fencing for the nutrition garden, training was imparted in maintaining drought resilient nutri-gardens and taking care of them. People also learned about organic farming with chemical free compost. Older people found gardening very relaxing and satisfying. Since they cannot toil in field anymore, working in the nutri-gardens made them feel that they are engaged in some productive activities. Newfound sense of self-esteem and moderate physical exercise also had direct contribution in their improved health.

Improved nutrition and health with nutrition gardens

Picture 2 Niramala Devi in her nutri-garden Even early summer sun in the Thar may seem too sharp for those toiling in their farms, but Nirmala Devi didn't seem to have realised that it's already noon. She is busy tending to her plants in the nutrition garden that is filled with fresh and green vegetables. She plucked some green chilies and limes and handed it to a neighbour. The smile on her face exuded satisfaction and confidence.



Niramala Devi in her nutrition garden

Nirmala Devi is a 45-year-old resident of RamnagarUtamber village of Balesar block in Jodhpur district of Western Rajasthan. In a family of six with strained resources, she and her two daughters were always the last to eat. While food was not too short in supply, the family could not invest in nutritious food, especially fruits and vegetables. In July 2018, considering her financial status, she was selected as one of the beneficiaries by the village development committee (VDC) and the community elders. Prior to that VDC members and GRAVIS staff had also visited her house to assess the need.



Plants in nutrition garden

She was provided with saplings and training for starting and maintaining a nutrition garden that had drought resilient vegetables and fruits. She is now able to grow a variety of vegetables in her nutrition garden. Inclusion of increased amounts of greens and other vegetables, led to improvement in the health and nutrition status of the entire family, especially older members and children. Fruits and vegetables were available now at their reach. Nutritional level of the family was improved.

Nirmala Devi said, 'We could rarely have green vegetables earlier, and now we cook and eat greens vegetables 3 to 4 times a week. Fruits were not even affordable. But now we grow our own fruits too. Next month we are expecting excess fruits that we plan to sell.'



By the end of IHWCE project most of the beneficiaries had started getting vegetables from their gardens and planted fruit trees that had survived a couple of dry seasons already. On an average, families had started saving Rs 200/- per week on vegetables. By the end of project actual or projected income from nutrition gardens per family per year had reached Rs 3080/- per year and many of them were awaiting the harvest, that would leave potentially an ascending impact on the average increase in income.

Nutri-gardens have contributed towards resolving food insecurity and nutrition related issues for 100 families and with an aggregate number of 485 people among whom 4/5 of are women, children or older people. Success of nutri-gardens have inspired other people in the vicinity to start such nutri-gardens.

C. Taking charge: Enhanced local capacity

Public health facilities including the service delivery centers, human resources and infrastructure disproportionately exclude rural poor in the Western Rajasthan region. Population norms that determine number of health professionals per capita are disadvantageous for the communities in remote villages as houses are located far from each other and population density is not as high as in the urban or semi urban centres or the cities. This most of the times results in challenges stemming from distances, namely access, affordability, and time and energy required to be spent in accessing facilities located at distance. To overcome any of these challenges is an improbability for the vulnerable groups - women, children and elderly people. Physical fragility affects chances of older people and children to make use of such facilities that are located far off. For women, without control of finances, it is difficult to bear even the expenses needed to be incurred on travel. Their preoccupation with water fetching, tending to their children, looking after elderly at home, always remains a deterrent for them to access health facilities. Pregnancies, childbirth, severe illness and any such health emergencies may require health support at a beckon call that women and older people of the region are deprived of. Health monitoring and counselling of pregnant and lactating mothers and adolescent girls is nonexistent. In the absence of dissemination of information on health care, several traditional social beliefs are prevalent that create a complex milieu unsupportive of any investment in women's health.

a. Village Health Workers

Village Health Workers (VHWs) are individuals of varied backgrounds, coming from, and based in the communities they serve, who have received brief training, normally on basic health issues. VHWs were identified from the respective villages and hence were able to cater



directly to the community they belonged to. A cadre of VHWs was developed in 15 project villages through a series of orientations and trainings on community health. Training of VHWs ensure availability of primary health care for the communities within their villages.



VHWs training session

Specific technical skill sets were created through identifying local health workers from the community and training them on various health related issues and the ways to respond to them. VHWs received trainings on primary health care, reproductive health, and maternal and child health care. During these training, in addition to general health care regime, precautions and responses to health-related issues, discussions were also organised on women's rights, government's health schemes along with the service delivery centres.

Since the VHWs were the volunteers drawn from community, they became vehicle of community awareness and support for wider outreach and improved health outcomes for



people. 67 VHWs were hence identified and trained, ensuring availability of at least 4 VHWs on an average in each of the 15 project villages to provide information backstopping, primary health support and direct people to the appropriate health facilities based on their specific requirements. These trainings were followed up with regular meetings that doubled up as refreshers and skill building for them. More than 400 such meetings provided VHWs opportunities to discuss community level issues, possible solutions and share ideas for effective functioning. These meetings contributed towards taking informed decisions about implementation of activities under the project, such as organising health camps, and their prioritisation.

VHWs met the unmet health needs of poor people, who could not access or afford health care facilities or lacked knowledge about them. They became the ambassadors of good health and hygiene among local community and popularised basic notions of health care, disseminated information on prevention of diseases, and shared information with people on regular basis on identification of symptoms of common diseases. In the Thar region that is neglected in terms of health facilities, VHWs are exemplars of community-based solutions to local problems using the local resources. Considering the similar challenges in other parts of the Thar region, development of a cadre of VHWs can be used as a viable strategy for addressing immediate health needs of poor communities. Investment in local and indigenous capacities will have sustained impact on the health status of vulnerable groups.

Development of a cadre of trained community health workers through technical capacity building and orientation of children and adolescents on good nutrition created a background with receptive audience and a conducive environment for further endeavours towards improved health status of people, and a healthy and prosperous community in long term.

b. Young girls and boys becoming aware about health issues

Sustained health impacts can be achieved only through intergenerational interventions encompassing knowledge sharing with young people. In a region marred with traditional belief and cultural barriers discussions about reproductive health among adolescents is entirely absent. Adolescent boys and girls do not have any platforms to seek information or discuss health issues.

2617 girls and 2647 boys were directly reached out through 90 training sessions organised as part of the IHWCE project. Boys and girls were provided information in separate sessions on adolescent health, importance of nutrition and hygiene, within the overarching framework of good health and hygiene practices. Through these sessions, girls and boys were oriented on



both physical and mental health. They got to know the importance of nutritious food and playing outdoor games. Girls were able to learn about menstrual hygiene and other associated issues in a very comfortable environment. Boys underwent specific sessions on behavioural aspects and good conduct. Both the groups were oriented on the rights of women, gender disparities in the society and need for building a gender just society. Issues such as child marriage, girls' education and domestic violence were also discussed at length to sensitize both the groups on gender issues and need for women's empowerment.

Significance of such session lies in the fact that these young girls and boys normally do not get to learn about self-care. Such opportunities are even skewed for girls because they drop out of the school quite early, and taboos attached to discuss these issues deprive them of any opportunity to learn. Orientation through various innovative media such as role plays, discussions, skits and songs kept young boys and girls engaged in the discussions and left a lasting impact. Awareness among these young boys and girls has the potential to usher in a transformational change towards health issues and empowerment of women.

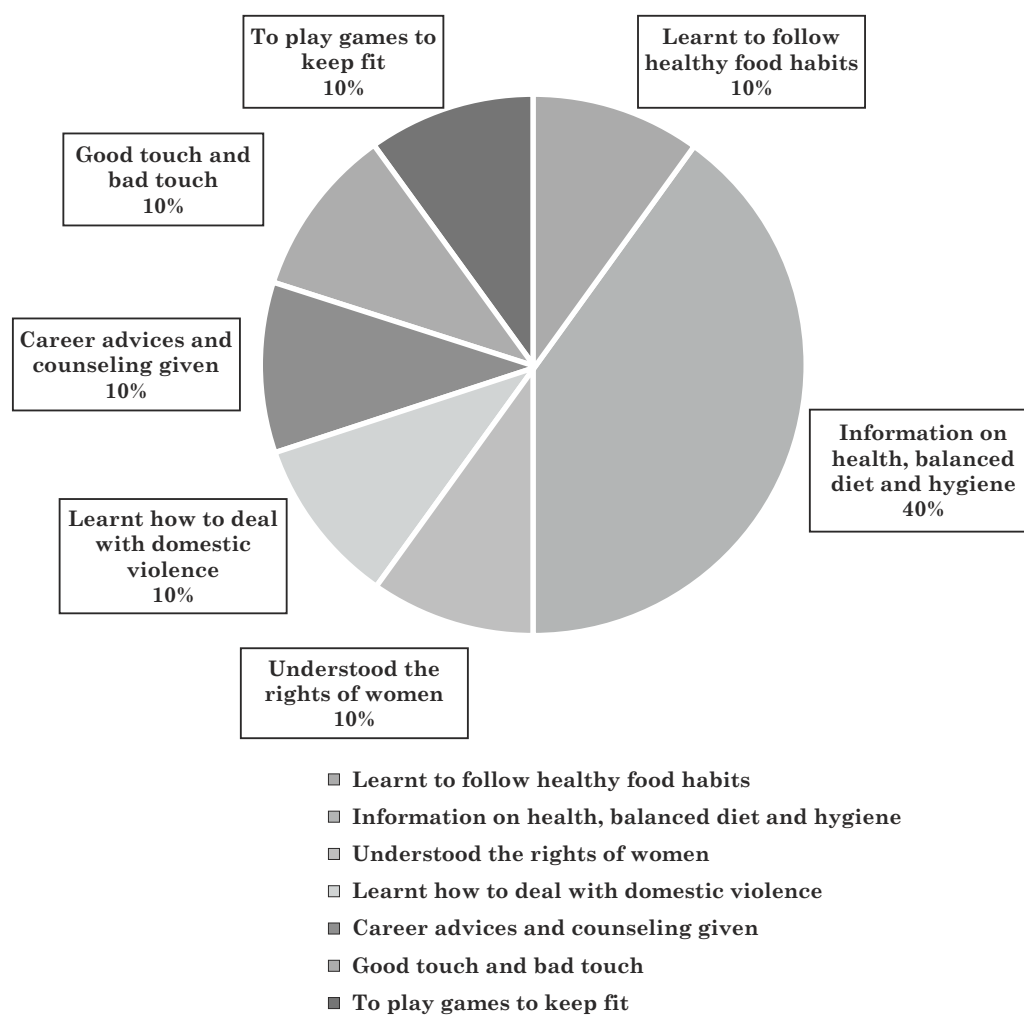


Figure 4 - Benefits adolescent girls got from trainings

Figure 4 captures some of the key benefits that adolescent girls and boys got from trainings. A large proportion of them found information on health, nutrition and hygiene quite useful and others learnt about social conduct, career prospects, good and bad touch, and even domestic violence.

c. Nutrition sessions in schools

Most effective way to bring in behavioural change and sustained social transformation is to start early. As part of IHWCE project special sessions were organized in schools to discuss adequate nutrition as a propeller of good health. While most of the school children enjoyed the nutrition, sessions organized in their schools as part of their 'co-curricular' activities as mentioned by some of them, all of them found these sessions quite informative. Students learnt about maintaining hygiene which will eventually keep them in good health. Such nutrition sessions laid the foundation for a culture of good hygiene and nutrition among them. Apart from nutrition, children also learnt about general health care and will share this knowledge with others. Almost 4000 children in 15 villages were made aware about health, nutrition and hygiene in 45 different sessions, laying the foundation for healthy community in rural Thar.



Nutrition session in School



Propelling the Change: Magnifying the Impact

Retaining the focus on improvement in health status of women, children and elderly, GRAVIS, in the spirit of its integrated community approach, addressed the issues engrained in social and economic context of the region. Gender disparity being one of the determining factors of social dynamics, women empowerment was woven into the design of the project. Interventions of the project prioritised women as beneficiaries in several ways. As a thumb rule, absolute ownership of all the assets created as part of the project was entrusted to women. Control over productive and useful resources - BSFs and nutri-gardens inculcated renewed confidence and self-belief in women and their contributions were recognised within households and the community. Health needs of women were immediately addressed, and importance of reproductive health was discussed with the community health workers who in turn disseminated information on the need to provide prenatal and antenatal care to women, in the community. This, along with inclusion of gender mainstreaming approach in all the training and orientation programmes for the community, young boys and girls and the community health workers, effectively addressed the gender issues in the society.

Knowing well that communities do not tend to invest in better health for vulnerable groups, IHWCE project accentuated the importance of health care for children, women and older people through focused sensitisation programmes. Discussions and regular follow ups with groups such as school children, adolescent boys and girls and general community created a supportive environment and a culture of healthcare for all the groups, overcoming a major impediment to achieving the goal of improved healthcare.

Beyond the immediate objectives of the IHWCE project, interventions contributed towards sustained economic empowerment of the communities through savings as well as additional incomes. BSFs saved their expenses on drinking water, and vegetables and fruits available in their own backyards ensured regular supply of sufficient vegetables with no extra cost. Excess produce through nutrition gardens became source of additional incomes for many households while others looked forward to harvesting the fruits and sell them in local market. Provision of health services not only saved people especially from preventable diseases, negligible cost at which all this came took away health expenses from their monthly expense portfolio.



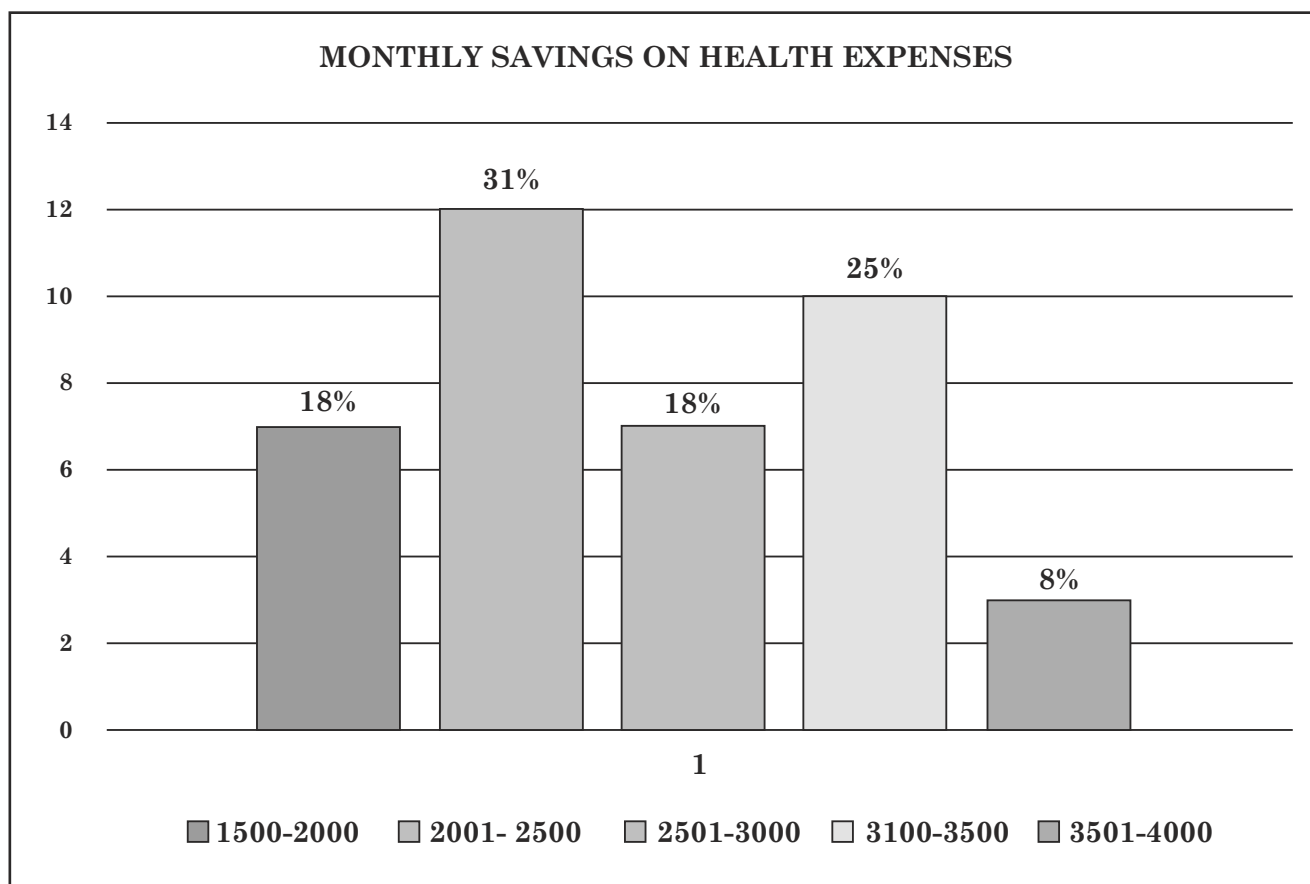


Figure 5 - Savings in health expenses in INR

Savings on health expenses in 15 village ranged from Rs 1500 to 4000 per month. Out of the total respondents more than half reported more than Rs 2500 per month of savings, with 25% saving Rs 3100 to 3500 per month. Considering low income levels, these savings meant additional disposable amount available within household that could be spent on better food, and nutrition, thereby propelling the pursuit to improved health profile in the region.

Steady improvement in general health status has sustained implications for monthly expenses for most of the households. Improved health and enhanced financial status and movement towards a gender just society will potentially lead the project villages out of the ignorance and poverty and will drive the social and economic development of the region.

Impact of IHWCE project on the lives of people in the identified 15 village is quite evident. This impact can be optimized and replicated in other areas in the same region with amplified outreach. The IHWCE model that encompassed immediate and systemic social, cultural and economic issues can inspire other similar geographies for a lasting change towards prosperity. Depending upon the availability of resources, medical interventions may be qualitatively diversified to include treatments for serious ailments and provision for advanced tests. VHWs may be equipped with specialized technical trainings to play the role of para medics, while maintaining their close connection with the community.



Women from project area

Further, institutionalization of the IHWCE model of improving health status provides for a success story having the potential to influence the policy decisions on provisioning of mobile health care services, dovetailing social and economic aspects along with health and medicine related information for the trainings, and adoption of lifecycle approach towards health and nutrition.

References

Comprehensive National Nutrition Survey, Rajasthan Preliminary Fact Sheet 2016-17,

https://www.popcouncil.org/uploads/pdfs/2019RH_CNNSfactsheet_Rajasthan.pdf

<https://www.safewaternetwork.org/countries-regions/india>, accessed on March 30th 2020.

National Family Health Survey (NFHS) – 4, 2015-16, Rajasthan Fact Sheet,

http://rchiips.org/nfhs/pdf/NFHS4/RJ_FactSheet.pdf

Rajasthan Health and Budget: A Fact Sheet 2018, <http://www.cbgaindia.org/wp-content/uploads/2Ra019/11/jasthan-Health-and-Budgets-A-Fact-Sheet.pdf>



Acronyms

GRAVIS	Gramin Vikas Vigyan Samiti
IHWCE	Improving Health of Women, Children and Elderly
MMU	Mobile Medical Unit
PHC	Primary Health Centre
THF	The Hans Foundation
VHW	Village Health Worker





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Gramin Vikas Vigyan Samiti (GRAVIS) or Center of People's Science for Rural Development is a non-governmental, voluntary organization that takes a Gandhian approach to rural development by working with the poor of the Thar Desert to enable them to help themselves. Since its inception in 1983, GRAVIS has worked with over 67,000 families across over 1,400 villages reaching a population of over 1.3 million, and has established over 3,400 Community Based Organizations (CBOs).



GRAVIS is registered under Rajasthan Societies Registration Act and under section 80 (G) and has tax exemption under section 12 A of IT Act, 1961 of Govt. of India.