

## Disease Pattern around Border Belt Area

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### ABSTRACT

**Objective:** To promote health, prevention of disease, close contact to community and provide health facilities

**Study design:** Descriptive

**Study place:** the study was conducted at rural areas of the radius about thirty kilometers from Avicenna medical college phase 1X defense Lahore cant.

**Study duration:** This study was done from December 2009 to February 2010.

**Methodology:** It is a cross-sectional survey, carried out by the department of community medicine and the medicine department, at Avicenna medical college and hospital. This study was done under the outreach program. The free medical camp was conducted in each village once; some areas were visited twice too. A team of doctors with trained nurses visited twenty three villages. The patients were seen in the free medical camp. The check up, diagnosis and provision of the available medicine were given with no cost. The patients who need further follow up or referral were referred to the nearby Hospital, the Avicenna hospital. This study describes knowledge, attitudes and practices regarding healthcare in a border belt rural area of Pakistan. This is a cross sectional survey of a rural area of district Lahore, Pakistan. There were 3000 of population seen out of 39,200 living in 5000 households.

**Result:** In this study there were total of 3000 patients were seen. The household living in these areas is 39,200. There are 5000 houses are in these areas. This whole information gained through the general communication with the villagers, there is no consensus since 90, s so this was the only source of information for this area. This study time period rages three months from December 2009 to February 2010. These were given free medical checkup and medicines. Most of these were convinced about their personal hygiene .these people were loaded with the information about preventive simple measure, they could adopt in order live better and healthy life with less hassles.

**Conclusion:** the people of these villages have inadequate access to health care due to limited healthcare options and poor knowledge of disease complications. This can be corrected by improving services and increasing overall health awareness in the community.

**Key words:** rural health care, medical education, preventable diseases, outreach program, rural health centers

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### INTRODUCTION

The provision of medical facilities to rural areas is a major objective of development in Pakistan but the health care system in rural areas of our country has been confronted with problems of inequity, scarcity of resources, inefficient and untrained human resources, gender insensitivity and structural mismanagement<sup>1</sup>. This study was conducted by the outreach program at Avicenna medical college Lahore by the community medicine and medicine departments. In this study twenty three villages were visited .two thousands patients were seen during the period November 2009 – March 2010. The area was included about the radius of thirty kilometer from the phase 1X Bedian road Defense to the B R B nahar (cannal). The infrastructure is undeveloped in these

areas. The basic health units in rural areas are not seen, if there is some then that one is not equipped enough to better the falling health of rural populace. Glaringly, the quakes are performing in every nook and corner of the rural area without any fear of accountability.

The problems being faced by these visited rural areas include: inadequate primary health care (PHC), high rate of population growth, prevalence of communicable diseases, managerial deficiencies, inadequate funding and manpower imbalances. Besides there are other contributing factors like malnutrition, inadequate water supply, lack of intersector coordination and environmental pollution. The main interest to do this study was to explore the disease dispersion in this area and the health services provided in these areas. The outreach program was done to give the free medical services

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through free medical camp to the people of the visited villages.

Scabies is an itchy, highly contagious skin condition caused by an infestation by the itch mite *Sarcoptes scabies*<sup>5</sup>. Scabies can spread rapidly under crowded conditions where close body contact is frequent<sup>6</sup>.

In these areas the large majority was seen suffering from scabies and dermatitis. Other big hit was the COPD (chronic obstructive pulmonary diseases were very common just like skin diseases. Mostly people were aware about the treatment and measures, but the problem was that they could not afford these aids.

Rheumatoid arthritis is a chronic, autoimmune, inflammatory disorder in which the joints are primarily affected with synovitis causing the articular destruction<sup>7</sup>. Mostly elder population was the victim of this disease.

The main issue for the rural population is waterborne diseases. Cholera and gastroenteritis is very common. And open defecation is a key factor in this because the waterways are polluted. Its simple measures, like not going to the bathroom outdoors, which can be very effective in preventing sickness. The medical team did give a stress on a need to do more to promote these ideas and overcome the awkwardness people feel in talking freely about them. Like other major disease cataract was also noticeably present in these rural areas. A cataract is a clouding of the normally clear and transparent lens of the eye<sup>16</sup>. It is not a tumor, a new growth of skin or tissue over the eye, but a fogging of the lens itself. [8]The most common complaint of cataracts was the noticeable blurring and worsening of vision. Other complaint includes the dimming and fading of colors, decreased night vision, problems with bright lights and sunshine. Most patients in rural areas live well under the poverty line, thereby finding both the cost of surgery and the traveling distance to a hospital preventing them from accessing any available services<sup>16</sup>.

Furthermore, quacks are destroying the health of innocent people. The quacks are operating across the area. Quacks trap credulous people by making false claims. These practitioners advertise through hoardings inscribed with misleading claims and through wall chalking in commercial and residential localities across the village.

Unhygienic conditions and use of unsterilized equipment by quacks sitting at different localities are spreading a number of diseases including cancer, hepatitis B and C, and AIDS. A number of quacks are doing business unchecked while the main cause for spread of these diseases is dental treatment.

HIV/AIDS spreads through unscreened blood transfusion, reuse of used syringes and unsafe sexual behavior<sup>17</sup>. The disease also spread through use of used razors and needles mainly amongst drug addicts<sup>18</sup>. There is a need to create awareness among people, of the disease for their protection.

## METHODOLOGY

The need for effective strategies for delivery of healthcare to rural population is paramount and requires a study of perceptions and experiences of the healthcare system. The present study aimed to asserting the health facilities in the border belt areas. The main interest was to provide the free medical treatment to the patients through the free medical camp. The other significant objective was to give the education about the preventive measures of the common preventable diseases. The common pattern of the diseases was also assessed during this study.

It is a descriptive study, carried out by the department of community medicine and the medicine department, at Avicenna medical college and hospital. This study was done under the outreach program. The free medical camp was conducted in each village once; some areas were visited twice too. The camp included the medical officer, assistant professor from community medicine department. There was also a group of Para medical staff of trained nurses'. the timing for the camp was from 9 O'clock to 4 O'clock. The general population was informed through the announcements one day prior to the visit. The announcement was made usually at local mosque giving the information about the location and services about the camp on the next day. The team of doctors checked vital signs of the patients, getting the history and then the diagnosis and gave the free medicines. The patients who needed to see the specialists those were referred to the near hospital like Avicenna Medical hospital for further treatment. The whole service was given at free of cost. There was no charge for check up and medicines. According to the need and condition of the patients they were given all the information about the Avicenna medical hospital. The patients were given the services according to their conditions and available services. If more serious, or for follow up required patients were referred to the nearby Avicenna hospital. The Avicenna hospital is of 400 bed capacity facility around the vicinity. A group of specialists are available with no admission or check in fee. Only minor charges are asked after the tests and services provided. The group of the specialists includes Physician, Pulmonologist, Pediatrician, Neonatologist, Cardiologist, Gynecologist, General surgeon, ENT Specialist, EYE Specialist, Orthopedic

Surgeon, Neuro-Surgeon, Psychiatrist, Pediatric Surgeon, Plastic Surgeon, Urologist, Dental Surgeon, Radiologist, Physiotherapist, Gastroenterologist, Plastic Surgeon, Nephrologists, Cosmetologist, Dermatologist, Anesthesiologist, and Educational & Speech Therapist<sup>19</sup>.

**RESULTS**

In this study a large area was covered. Under this study twenty three villages were visited. This study period ranges from three months December 2009 to February 2010. Total number of patients who were seen, diagnosed, checked and given the services is 3000. Almost Fifty patients were seen every day on average. One thousand were seen in one month on average. The patient’s population was mostly the female residing in their home during the day time. Twenty one hundred (70%) of the patients were female. The kids patients were six hundred (20%), and the male were three hundred (10%).

Table 1: Population of patients (n=300)

Gender	=n	%age
Female	2100	70
Kids	600	20
Male	300	10

Issues of access and affordability of the health care facility include factors such as the cost of transport and hospitals, and restrictions on women's movement in public. These villages lack community-level services. This can mean that poor women have no access to health services, as families are less inclined to allow women to attend more distant and costly hospitals. The issue of socially acceptable services is also critical here. Even where services are available, existing gender norms make it very difficult for women to attend clinics, which lack trained female staff and cannot guarantee privacy for examinations. Women in rural area have lesser access to health care than men, because of absence of female doctors. Factors like lack of awareness regarding women health requirements, low literacy ratio, low social status and civil constrains on females are responsible for women below standard health.

Intra-household bias in food distribution leads to nutritional deficiencies among female children. Early marriages of girls, excessive childbearing, lack of control over their own bodies, and a high level of illiteracy adversely affect women’s health. More female population is anemic than male.

The doctors who attended the patients were surprised to see that out of three thousand people who visited the camp, six hundred (20%) were suffering from scabies including women and children. Skin diseases, especially complaints of itching, are

on the rise in these villages. Scabies is spread by skin-to-skin contact<sup>15</sup>. If there was one scabies patient in the family, it was advised that all members of that family must also be treated at the same time. These people were educated that in The early stages of scabies may not itch; on must be sure all his or her close personal contacts are treated, even if they are not itching. All these patients were advised that clothing, linens, and towels need to be washed in hot, soapy water. There is a general lack of knowledge regarding various aspects of scabies among these patients. Therefore, active intervention is required to improve their awareness.

Table: 2 disease dispersion in rural areas (n=3000)

Disease	Frequency	%age
Scabies	600	20
Dermatitis	150	5
COPD	750	25
Arthritis	300	10
Gastroenteritis	150	5
Cataract	180	6
Anemia	60	2
Fever	60	2
Hypertension	180	6
Diabetes	150	5
Antenatal	150	5
ENT	150	5
Dental	60	2
worm infest	60	2

The population of children younger than 5 years old in theses villages were Approximately one hundred and fifty (5%).The children had infectious skin disease, mostly dermatitis. this data again emphasize the amount of skin disease, particularly in children, in rural areas , and the desirability of focusing attention on the dermatologic needs of this sector of the country.

Many rural people go undiagnosed, and untreated, even though they have recognizable symptoms such as a chronic cough (often called a smokers’ cough) or become short of breath after the slightest exertion. Seven hundred and fifty (25%) were diagnosed with the COPD. these patients were advised that treatments are available that can prevent further lung deterioration and improve the quality of life for patients with COPD. With the Rheumatoid About 300 hundred (10%) of the patients were affected with chronic disease. A great majority was suffering from the gastroenteritis. One hundred and fifty (5%) were diagnosed and given the treatment of the gastroenteritis. Some severe cases were referred to the Avicenna Hospital for further investigation and treatment. One hundred and eighty (6%) patients were seen suffering from cataract; most of the cases need immediate care because of high

sugar and high blood pressure. The results of high sugar and blood pressure were accompanied them from previous visits to clinic or hospital. But no further treatment was there because of un-affordability of the cost.

Mostly anemia patients were female of child bearing age were seen. Total sixty patients (2%) were labeled as anemic. Same number like anemia total of sixty (2%) patients was seen having the fever. The patients who diagnosed on the check up of hypertension were one hundred and eighty (6%). the diabetic patients were the number of one hundred and fifty (5%). Most of the patients did not know that suffer from this disease, a very small number have awareness of this disease and having their previous records with them of blood sugar levels.

The women came to the free medical camp for the antenatal care and issues with their pregnancies. One hundred and fifty (5%) female patients were seen by the medical doctor .they were given the advised about antenatal care and immunization through the medical camp.

One hundred and fifty (5%) patients were seen with the diseases of ear nose and mainly the throat. Total of sixty (2%) patients were diagnosed with different tooth problems, mostly the tooth decay, unhygienic oral health. Sixty (2%) patients came to the free medical camp suffering with worm infestation, and most of them got treatment from local quack, and the patients admitted that their conditions are worse even before seen to the quacks.

## DISCUSSION

Punjab is the largest province of Pakistan with a population of over 85 million. Provision of equal access to primary healthcare is a mammoth task in this developing country with well known resource constraints. Punjab has a network of 2748 primary healthcare (PHC) facilities spread over an area of 205,345 km<sup>2</sup>.

In the rural areas Basic Health Units and Rural Health Centers (BHUs/RHCs) have been set up to provide PHC. However, they are a long way from realizing their service goals. At the villages that were surveyed there is no organized public sector health system and no linkage with the health care is seen. There is no community involvement with the management of health services which is contrary to the basic philosophy of PHC. In these areas no PHC is provided through local or any government level .Communicable diseases such as diarrheal diseases, respiratory infections, tuberculosis, and immunizable childhood disease account for the majority of sicknesses and deaths in these areas. In these rural areas like other parts of Pakistan polio has not been

eradicated. The provision of medical facilities to rural areas is a major objective of development in Pakistan<sup>12</sup>.

Diabetes prevalence in Pakistan is high, 12% of people above 25 years of age suffer from the condition and 10% have impaired glucose tolerance (IGT) [9].The people with diabetes in the country cannot be provided with the care they require. Failure to implement preventive measures has led to a growing incidence of the condition, with the rural areas being the worst affected<sup>10</sup>. In this study only one hundred and fifty (5%) patients were seen. The patients were only diagnosed with the records they brought. Most of the people may have this disease but there were no medical facilities available in this area, they never checked it. They are not aware the medical conditions, having it. So this seemed that more patients were present if they were tested or visited to the health facility. In these areas no health facility available, mostly medical conditions go undiagnosed.

Hypertension is a condition characterized by an increase in the blood pressure. Primary hypertension is usually diagnosed in persons of old age as their arteries become less elastic and thus increasing the blood pressure. Most of the patients with uncomplicated hypertension remain asymptomatic<sup>11</sup>. Hypertension is detected incidentally in them when the medical team was checking and taking vital.

An estimated 400,000 infant and 16,500 maternal deaths occur annually in Pakistan<sup>13</sup>. These translate into an infant mortality rate and maternal mortality ratio that should be unacceptable to any state. Disease states including communicable diseases and reproductive health problems, which are largely preventable account for over 50% of the disease burden<sup>13</sup>.

The Culture and poverty, unawareness all these factors have been compounded by cultural practices in the area. The gender bias is very strong. Pakistan is a male-dominated society and prejudice against women is reflected in the higher female mortality rate and low literacy rate (32% for 15 yr and above<sup>9</sup>).

The combination of factors is giving rise to strong negative repercussions on health. Women suffer most. They perform all the domestic chores and take care of the large extended families while gender discrimination means they enjoy only secondary status in the home. Women in the rural areas are doubly oppressed. Child marriages and lack of mobility confine the women to their homes. While they perform physical labor without remuneration, they are very often not allowed to set foot outside the home, even for medical treatment. Women have inadequate access to obstetric care due to limited healthcare options and poor knowledge

of obstetric complications. This can be corrected by improving services and increasing overall maternal health awareness in the community.

About 80% of all major diseases such as diarrhea, cholera, typhoid, hepatitis are due to unsafe drinking water, inadequate sanitation and poor hygiene. Health and hygiene are causing major disruptions in the lives of people of these villages. Outside the houses, the medical team saw the reckless disposal of wastage. Just outside the boundary wall of house, there was the waste of that or other houses in the street. The streets were littered with garbage, which include papers, polythene bags, stale meals, dung, debris and other weird things. People habitually throw things in street after cleaning their houses.

Commuters throw wrappers and other things from the vehicles while traveling. One can commonly see people urinating on the sidewalks. There are many roads and streets which are suffering from the disorder of sewerage system.

The major health problems in these areas include infectious diseases, including tuberculosis, diarrhea, dysentery, typhoid and increasing prevalence of common chronic diseases, including cardiovascular disease, diabetes and lung disease. Pakistan also has relatively high infant and maternal mortality rates, with a need for more maternal education and improved maternal and child health care<sup>14</sup>.

There are two main issues that characterize the problems in these areas to be addressed. The first issue is that the provision of health services is inequitable. Although rural dwellers comprise two-thirds of the population, the majority of health services are located not in these village areas, but to the urban areas. Almost no attempts observed in rural areas to solve their health problems. The cost of health care to the poor villagers is high if it available and the health care are inaccessible for reasons of cost or distance. Women and children suffer disproportionately from this shortage. Other issues is poor effectiveness surveyed by the poor health statistics, under-utilization of rural health facilities and the continuing problems of malnutrition and preventable diseases<sup>4</sup>. This study was done around the area of thirty kilometer in radius from Phase1X Defense to the B R B nahar. The distances of villages are given in the table below.

The pricing of drugs and access to them had extremely. There is low availability of essential medicines” while “medicines for common treatments were unaffordable and out of reach to the poor when purchased in the private sector. Basically health has become a luxury. The rich can get the best treatment.

But people like these villagers cannot afford to be sick.

Table 1: Villages population and distance from Avicenna

Village	Population	Distance km from hospital
Chahl	450	1
Karbath	650	5
Motasing	350	3
Thaether	350	4
Heir	750	5
Jaman	550	14
Burje	450	8
Bedian	1500	20
Keerke	250	21
Asal	500	13
Malkoki	1300	15
Lidher	5000	5
Kamaha	2000	9
Keriawala	250	8
Rodebogl	1100	10
Leel	900	8
Yuhanabd	1300	28
Hajipark	2500	9
Bhatachok	3000	12
Chachowali	3000	8
Jamostp	1200	4
Mehrtown	4000	5
Manawala	8000	8

## SUGGESTIONS

The neglecting of rural healthcare system is largely due to lack of doctors in the rural sector. The need is to establish much more achievable and a simple health system which can ensure good healthcare of the villagers. The need is to breakdown the current rural health system in place of having trained dais and primary health care system which calls for training of the rural people for the treatment. The whole system should be cracked down to 2-step system and it should be divided according to the population of the villages. The villages where range of population is 5,000 to 10,000, the establishment of small clinics is a must, which can take care of small diseases and help the women during their pregnancy months. These clinics can organize camps in different small villages. But the need is also to get the doctors and paying them good salary. The need is also to improve the participation of the private sector in the rural areas, which can attract new blood. There is a need for greater participation of the government in the health infrastructure.

## CONCLUSIONS

These rural communities have difficulties attracting and retaining physicians because of concerns about

isolation, limited health facilities, or a lack of employment and education opportunities for their families.

Offers of higher pay to work in rural settings are often underscored by unfavorable working environments because of poor health care infrastructures in rural communities. The smaller, poorer, and more isolated a rural community is, the more difficult it is to ensure the availability of high-quality health services. While rural communities likely encounter many of the same health care quality challenges faced by metropolitan areas, evidence shows that lack of access to primary care, emergency medical services, hospital and long-term care, mental health and substance-abuse treatment programs, and dental care for rural populations has resulted in the provision of a lower quality of care. Major problems being faced by this rural health sector are inadequate primary health care, high rate of population growth, prevalence of communicable diseases, managerial deficiencies and inadequacy of funding and trained manpower.

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