

A Geographical Analysis Of Pharmacist Distribution And Healthcare Facilities Of Western Mizoram

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Abstract

Health is the key driving factor in contemporary world, there are multiple factors contributing to overall development of health scenario, no denial; it directly impact the economy of the country. In tribal areas of Mizoram, the number of health practitioners are inadequate, therefore pharmacist plays an important role in uplifting the society by filling the gap of doctors, nurses and other health workers, this paper finds out the ratio of pharmacist per population in Reiek RD block, including the overall health infrastructure and manpower engaged in the study area. Primary data accompanied by secondary data are obtained through household survey, interviews, government reports, etc. Findings enrich the conclusion with practical solutions for the betterment of health environment in western Mzoram.

Keyword: Pharmacist; health; shortage; tribal area; economy

1.1 INTRODUCTION:

'Health' is an umbrella term for overall wellness, countable components are responsible for the development of health well being. Qualitative factors and quantitative factors are relevant for expanding positive results in health welfare. In Mizoram, health care infrastructure in rural areas has been developed as a three tier system i.e. Sub-Centre (SC) in the lowest, Primary Health Centre (PHC) stands in the middle and Community Health Center (CHC) at the top. They all plays a vital role in transforming the health conditions of western Mizoram.

1.2. Community Health Center (CHC):

According to the norms of Government of India CHC is a Referral Centre with 30 Beds, established for populations of 1 lakh to cover 4 or more PHCs'. CHCs are being established and maintained by the State Government under MNP/BMS programme. It serves as a referral centre for 4 PHCs and also provides facilities for obstetric care and specialist consultations.

Table-1.2.1. Availability of healthcare staff in Reiek RD Block

| Staff | Mandatory for CHC staff | Lengpui CHC | Health personnel Population Ratio |
|-----------------|-------------------------|-------------|-----------------------------------|
| Medical officer | 4 | 4 | 1:4403 |
| Pharmacist | 2 | 1 | 1:17611 |
| Sister | 1 | 0 | 0 |
| Staff Nurse | 8 | 6 | 2935 |

| | | | |
|--------------------------------|----|----|---------|
| Health worker(F) | 2 | 0 | 0 |
| Health Worker (M) | 1 | 0 | 0 |
| Health Supervisor(F) | 1 | 1 | 1:17611 |
| Health Supervisor(M) | 1 | 0 | 0 |
| Health Educator | 1 | 0 | 0 |
| Lab.technician | 2 | 2 | 1:8806 |
| Radiographer | 1 | 1 | 1:17611 |
| UDC | 1 | 1 | 1;17611 |
| Dresser | 1 | 0 | 0 |
| Driver | 1 | 1 | 1:17611 |
| Ward Boy | 2 | 0 | 0 |
| Dhobi | 1 | 0 | 0 |
| Sweeper | 3 | 2 | 8805.5 |
| Chowkider | 1 | 1 | 1:17611 |
| F.A | 2 | 1 | 1:17611 |
| Mali | 1 | 0 | 0 |
| Peon | 1 | 1 | 1:17611 |
| Cook | 2 | 1 | 1:17611 |
| Bed* | 30 | 30 | 1:587 |
| *No. of CHC Bed per Population | | | |

(Source: Field Work by author)

There is only one CHC in the study area, i.e, Lengpui CHC, where there are 4 doctors and 6 nurses. There are 30 beds in the CHC and the bed population ratio is 1:587. In Reiek Block one Doctor is shared by as many as 4402 person and one Nurse by 2935 persons (table-2).

Presently, there is only one pharmacist in Lengpui CHC while there should be two according to government of India norms. In Lengpui CHC Microscopic Centre also attached, where Malaria Parasite and Tuberculosis can be detected.

At present, there is one radiography centre at Lengpui CHC. With the help of this radiography, Doctors can easily know the conditions of patients and can know how to give treatments rightly to the patients. In Lengpui CHC, OPD is done on Monday to Thursday (10am-12noon). Minor surgery also can be done at every Saturday of the week and there are separate room for Maternity case and Surgery too.

The average area covered by one CHC in India is 770.90 sq km radius whereas 2277.1 sq.kms in Mizoram and 620 sq km radius in Reiek RD Block. In terms of population, average covered by one CHC at national level is 1.83 million, 49730 in Mizoram and 17611 in this block. It is appears that the condition of healthcare services, particularly coverage of healthcare facilities much better in Reiek RD Block compared with national average as well as Mizoram state performance. Since CHC is the available highest medical Institutions of the study area, it plays an important role for the development of health condition for the people living there (table-2).

1.3. Primary Health Center (PHC):

As per the norms of Government of India, the PHC is a 10th bedded institution with an average of 4 or more Sub Center under it and covering populations of 20,000 in hilly and tribal areas and 30,000 in the plain areas. PHC is the first contact point between village community and the Medical Officer. The PHCs were envisaged to provide an integrated curative and preventive healthcare to the rural population with emphasis on preventive and promotive aspects of healthcare. The PHCs are established and maintained by the State Governments under the Minimum Needs Programme (MNP)/ Basic Minimum Services Programme (BMS). It acts as a referral unit for 6 Sub-Centre. The activities of PHC involve curative, preventive, promotive and Family Welfare Services.

The Reiek RD block has 3 PHCs' located at Reiek, Kanghmun and Rawpuichhip. These PHCs' have four doctors, nine nurses and two pharmacists.

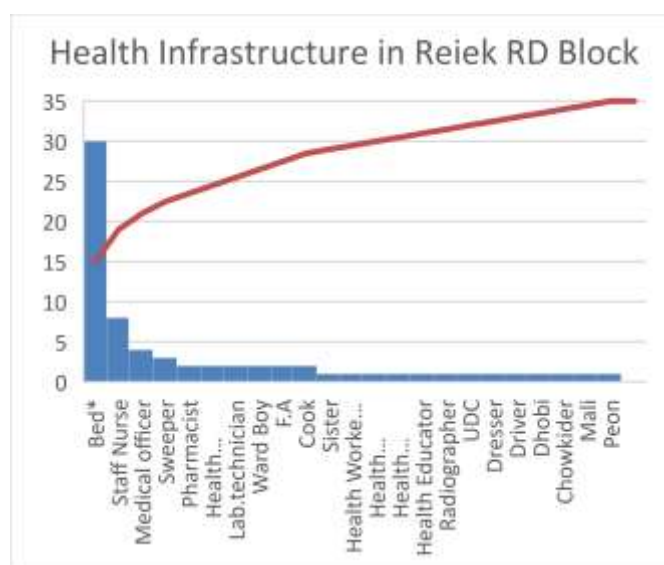
In a PHC level, one doctor is shared by 4402 persons, a nurse by 1956 persons, and a pharmacist by 8805 persons. There are 30 beds at these PHCs' and the bed ratio is 1:587

The most important organ of these PHC is Out Patient Department (OPD) and generally opens in the Week days. Minor surgery also can be done according to arrangement made by Doctors. These three PHC also served a separate room for maternity and surgery.

Average rural population covered by one PHC is 5870 in this block, 7852 in Mizoram and 33191 persons are covered in national level. The average rural area covered by one PHC at this block is 206.6 sq. km while 359.5 sq.kms in Mizoram and 139.40 sq.km at National level (table-3).

Table-1.3.1. Availability of Healthcare Staff in Reiek RD Block

| Staff | Mandatory for PHC staff | Rawpuichhip PHC | Reiek PHC | Kanghmun PHC | Health Personnel Population Ratio |
|----------------------|-------------------------|-----------------|-----------|--------------|-----------------------------------|
| Medical officer | 1 | 1 | 2 | 1 | 1:4402 |
| Pharmacist | 1 | 1 | 1 | 0 | 1:8805 |
| Staff Nurse | 4 | 3 | 4 | 2 | 1:1956 |
| Health Worker(F) | 2 | 0 | 0 | 0 | 0 |
| Health Worker(M) | 1 | 0 | 0 | 0 | 0 |
| Health Educator | 1 | 0 | 0 | 0 | 0 |
| Health Supervisor(M) | 1 | 1 | 0 | 1 | 1:8805 |
| Health Supervisor(F) | 1 | 0 | 0 | 0 | 0 |
| LDC / UDC | 1 | 1 | 1 | 1 | 1:5870 |
| Lab. Technician | 1 | 1 | 1 | 1 | 1:5870 |
| Driver | 1 | 1 | 0 | 0 | 1:17611 |
| Class IV | 4 | 4 | 4 | 4 | 1:1467 |



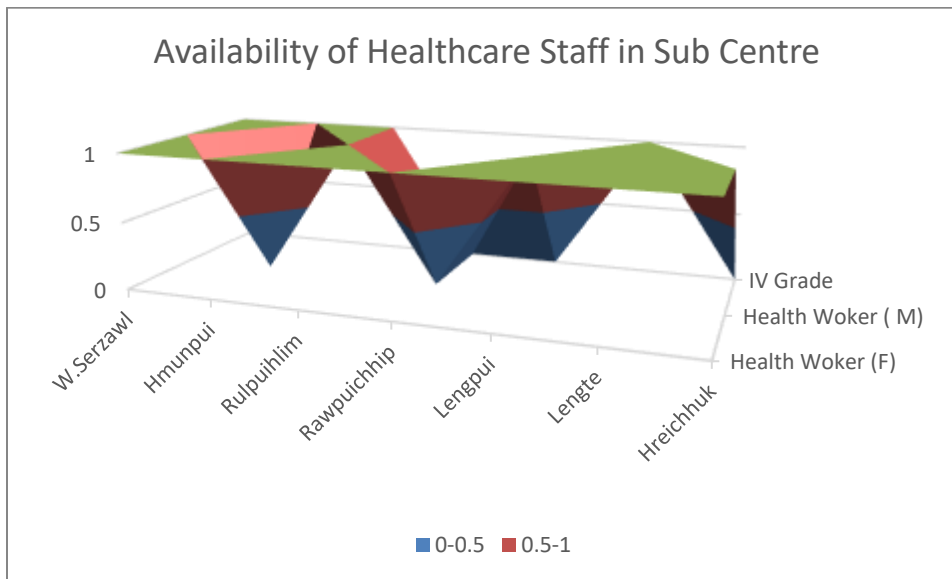
Source: Field Work

It appears that in term of population coverage, Reiek Block seems the best compared with national and state level while medium rank among the three when it comes to geographical area coverage.

1.4. Sub-Health Center (SHC):

In the public sector, a Sub-health Centre (Sub-centre) is the most peripheral and first contact point between the primary healthcare system and the community. As per the population norms, one Sub-centre is established for every 5000 population in plain areas and for every 3000 population in hilly/tribal/desert areas. A Sub-centre provides interface with the community at the grass-root level, providing all the primary healthcare services. As Sub-Centres are the first contact point with the community, the success of any nationwide programme would depend largely on well functioning Sub-Centre providing services of acceptable standard to the people. The current performance of Sub-centres is much below the expectations.

Table-3(a). Reiek RD Block: Availability of Healthcare Staff in Sub Centre

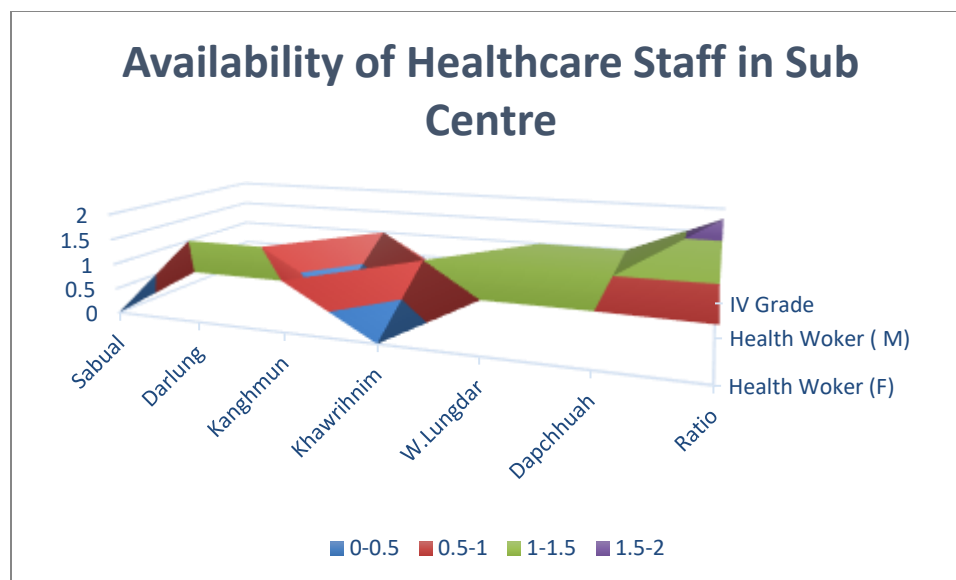


Source: Field Work

A Sub-centre provides interface with the community at the grass-root level, providing all the primary healthcare services. Of particular importance are the packages of services such as immunization, antenatal, natal and postnatal care, prevention of malnutrition and common childhood diseases, family planning services and counseling. They also provide elementary drugs for minor ailments such as ARI, diarrhea, fever, worm infestation etc. and carryout community needs assessment. Besides the above, the government implements several national health and family welfare programmes which again are delivered through these frontline workers.

Table-3(b). Reiek RD Block: Availability of Healthcare Staff in Sub Centre

Source: Field Work



Source: Field Work

Currently a Sub-centre is staffed by one Female Health Worker commonly known as Auxiliary Nurse Midwife (ANM) and one Male Health Worker commonly known as Multi Purpose Worker (Male). One Health Assistant (Female) commonly known as Lady Health Visitor (LHV) and one Health Assistant (Male) located at the PHC level are entrusted with the task of supervision of all the Sub-centres (generally six Sub-centres) under a PHC.

The Reiek RD block has 15 sub health center located in the village of Reiek, Ailawng, West Serzawl, Hmunpui, Rulpuihlum, Rawpuichhip, Dapchhuah, Lengpui, Lengte, Hreichuk, Sabual, Darlung, Kanghmun, West Lungdar, and Khawrihnim.

Sub health center are not expected to admit patient except for a maternity case. However, they work as much as they can provide healthcare for the people. In the above mentioned sub health centers, there are 26 health workers and implying that 765.69 persons share one health worker.

Despite having a number of healthcare institutions within the block area, some of the village like Bawlte, Tuahzawl, Chungtlang, Bawngthah, and Dilzawl does not have any kind of health institution. However, these villages do not face much of a problem as they can easily access the medical facilities to the nearest medical institutions. In addition to it, the mentioned villages are less in numbers and houses.

There are 15 Sub-centres, the average area cover by one Sub-centre of this block is 41.3 sq km and 55.9 sq km is state level and the national level average area covered by one Sub-centre is 21.47 sq km. The average Population covered by one Sub centre of this block is 1174 and 1223 in Mizoram and 5111 at National level.

1.5. ASHA (Accredited Social Health Activities):

ASHA is a trained female community health activity and works especially women and children, who find it difficult to access health services. ASHA counsels women on birth preparedness, importance of safe delivery, breast feeding and complementary feeding, immunization, contraception and prevention of common infections including reproductive tracks infections/sexually transmitted infections

ASHA must be a primarily resident of the village preferably in the age group of 25 to 45 years. Within the block area, there are 36 ASHA and the ratio is 1:489 persons.

Table 5: Availability of ASHA in Reiek R.D Block

| Name of Village | No. of ASHA |
|-----------------|-------------|
| Reiek | 4 |

| | |
|--------------|-------|
| Ailawng | 1 |
| W. Serzawl | 1 |
| Dilzawl | 1 |
| Hmunpui | 2 |
| Rulpuihlum | 1 |
| Rawpuichhip | 3 |
| Tuahzawl | 1 |
| Dapchhuah | 1 |
| Lengpui | 5 |
| Nghalchawm | 1 |
| Lengte | 2 |
| Hreichuk | 1 |
| Bawlte | 1 |
| Sabual | 1 |
| Darlung | 1 |
| Kanghmun | 3 |
| Khawrihnim | 1 |
| West Lungdar | 2 |
| Chungtlang | 1 |
| Bawngthah | 1 |
| Lungphun | 1 |
| Total | 36 |
| Ratio | 1:489 |

Source: Field Survey

1.6. Integrated Testing And Counseling Centre (ICTC):

At present there is only one ICTC at Lengpui CHC that conducting HIV testing, counseling and HIV treatments is the main works of this ICTC. There are two councilors at Lengpui ICTC and the ratio is 1:8805. An ICTC is a site where a person is counseled and tested for HIV, on a voluntary basis or as advised by a medical practitioner. The main functions of an ICTC are conducting HIV diagnostic tests, providing information on the modes of HIV transmission, promoting behavioral change to reduce vulnerability and linking people with services for the prevention, care and treatment of HIV. This commendable initiative taken by the Mizoram State Government sets the stage to take forward the continuum of care for the inmates, together with suitable components from the comprehensive package of HIV prevention services, which is a clear expression of respect for the human rights of the prisoners. UNODC hopes that the Mizoram model will encourage even other states to follow this example!

UNODC's work on HIV/AIDS prevention in prisons is possible thanks to the contribution of the Swedish Government.

1.7. Findings

A number of research questions were sought during the course of this research. These include a major question as to the factor that explain healthcare infrastructure, availability and accessibility and persons health seeking behavior of the block.

In order to get satisfactory answers to many of these questions, relevant data were collected from diverse sources as available from published records. But emphasis was laid on collecting first hand data through an intensive field investigation conducted in Reiek RD Block.

In compare to doctor population ratio, the block is lower than the national level like Reiek Block is 1:2201, while in Mizoram 1:2623 and 1:1786 at national level. The Block stands the lowest position when we compare nurse population ratio with the level of state and national.

The study reveals that mere establishment of health institution is not enough rather how it function and utilization part needs to be taken care of. Assessment of availability of Sub Center infrastructure reveals that Reiek RD Block is lagging behind the national average. The condition in Reiek RD Block is better off than national performance level in terms of population coverage by a health institution (Sub-Centre, PHC and CHC) but this is simply due to sparse population distribution and low density of population in the block.

There exist regional differences regarding availability of health centre at village level. Many villages in the block are devoid any healthcare unit (Bawlte, Chungtlang, Bawngthah, Tuahzawl and Dilzawl).

1.8. SUGGESTION:

From the above discussion the following suggestions are made:-

- 1) The health Facilities of Lengpui CHC is too far and inaccessible for Reiek and adjoining areas. Therefore, it is suggested that one more CHC should be set up in and around Reiek to fully serve the block population.
- 2) Since the lone state Airport located in Lengpui town, it is suggested that higher referral hospital should be established as the area is more prone to accident and emergency.
- 3) The area is not well connected and it is suggested that in case of referring and emergency, more ambulance is needed for this block at least one vehicle each at PHC and CHC.
- 4) Equal distribution of health personnel and fill up of the vacant posts are also needed for this block.
- 5) As we seen earlier, there is only one ICTC in this block. So, it is suggested to set up more ICTC in this block for proper caring of HIV positive, HIV prevention and checking.

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