Community health profiling and accessibility of health care services at subcentre Abedal, central Kashmir

Auqfeen Nisar^{1,*}, S. Muhammad Salim Khan², Sheikh Mohd. Saleem³

¹Postgraduate Scholar, ²HOD, ³Demonstrator, Dept. of Community Medicine, Government Medical College, Srinagar, India

*Corresponding Author: Auqfeen Nisar

Email: auqfeen@gmail.com

Abstract

Introduction: Subcentre is a fundamental unit of the health care design specifically put up to serve extremely rural areas. Expenses are fully incurred by the central government. One cannot deny that government has not set right the rural health care framework but due to scant availability of these facilities on qualitative and quantitative basis, we have yet not reached the WHO standards. The objectives of the study were to estimate the community health profile of the area covered by subcentre Abedal and to evaluate the accessibility level of health care facilities and their delivery at the subcentre.

Materials and Methods: Research was conducted in the Abedal (Dal Lake) area of rural Kashmir carrying a total population of 1040. No. of households in the area are 139 with a total of 297 families. Study was conducted over a period of 3 months. The research was performed on the health profile data collected door to door by trained FMPHWs/ANMs and recorded on a predesigned and pretested proforma. Other information was also extracted in the form of feedback forms and interviews.

Results: It was found that the male and female population is nearly equal with females dominating by 51 percent. Around 62 percent of the total population is covered by the adult age group. 4% of the population is widow mostly from the old age group. The area has a 16.25 percent population of smokers as well. All the 297 families were found to be non-vegetarians. 59.95 percent of the families belonged to the upper lower class followed by lower middle class which cover 29.6 percent of all the families. 17.26 percent of the population suffered from at least one disease. 17.26 percent of the population suffered from at least one disease. 17.26 percent followed by heart diseases in 6.15 percent of the population. The overall accessibility of the health care services at the subcentre is good. 24 out of 297 families have found the location of the subcentre far from their residences. The subcentre staff is cooperative and always ready for assistance. Around 48 percent of the population says that they do not find all the medication and not every health issue is entertained. However, minor ailments are treated without a delay. 51.6 percent say that they have faced a lot of discomfort in waiting rooms due to lack of ample space every time they visit. This also makes them switch to expensive clinics sometimes for minor health problems but takes a toll on their finances.

Conclusion: It is concluded from the present study that overall, the community is satisfied with the services catered at the subcentre. The basic needs are met as per standards. It is suggested that better waiting room facilities and space be made available to lessen the discomfort faced by ailing patients while waiting for their turn. The data collected on disease burden of the area should be kept in records. Provisions should be made for necessary medication at the time of emergency mostly for hypertension and related complications.

Keywords: Subcenter abedal, Subcenter population, Health care services, Survey.

Introduction

Introduction to Health Care

Health care is a basic necessity and right of a human being as without health, there exists nothing. India is one of the first Nations to give all its citizens a uniform health care right.¹ Indian Government has been successful in raising the health care infrastructure and facilities of its urban extents. However, rural India carrying nearly seventy percent of the whole population still faces an enormous amount of crises in this sector. It is clear from the fact that only 1.0+ percent of the GDP is kept aside for the health care sector in India.²

The introduction of National rural mission (NRHM) in the year 2005 by The Government of India has proved beneficial and has brought significant improvement in the health care delivery system. One cannot deny that government has not set right the rural health care framework but due to scant availability of these facilities on qualitative and quantitative basis, we have yet not reached the WHO standards.³ The solution of a problem lies at its base. As far as the health care delivery in India is concerned, it's important to understand the framework and try to fill this void at the very basic level or the sub center level.

Subcentre

It is a fundamental unit of the health care design specifically put up to serve extremely rural areas. Expenses are fully incurred by the central government. There is a minimum mandatory requirement of two health workers (A male HW and a female HW) and covers a population of 5000 people (3000 in remote areas). Sub Centre also works to bring behavioral changes in the community.⁴ They provide first hand services related to maternal and child health, nutrition, immunization, family welfare and contraception, school health services, adolescent health care, water and sanitation, disease surveillance, control and communicable diseases, implementation of national health programs, house to house visits and outreach/field services.

Objectives of the Study

- 1. To study the community health profile of the area covered by subcentre Abedal, Central Kashmir.
- 2. To study the accessibility level of health care facilities and their delivery at the subcentre.

Material and Methods

Research Design Cross sectional descriptive analysis. Study Area and Duration Location: Abedal (Dal Lake) Total population (Sample size) = 1040 No. of households = 139, No. of families (n) = 297. Study Duration: Oct 2017 - Dec 2017.

Data Collection Method

The study is based on the data collected door to door by trained FMPHWs/ANMs and recorded on a predesigned and pretested proforma. Data on awareness of the existence of subcentre, its accessibility, facilities available and level of service delivery was recorded as a feedback form from each family. Head of the families were also interviewed to extract more information on their feedback. The whole area was covered by revisiting locked houses in the study duration. All households consented to be the part of our survey.

Secondary data was also collected for literature review through health journals, blogs and newsletters.

Statistical Analysis: Data was analysed using Microsoft excel 2010 software.

Ethical Issues: The study had no ethical issues related to human or animal experimentation.

Results

Socio Demographic Characteristics of Community population

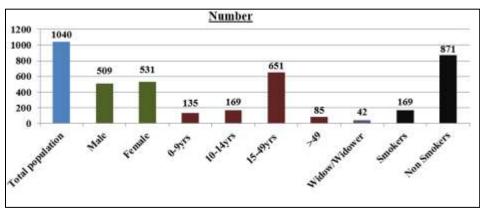
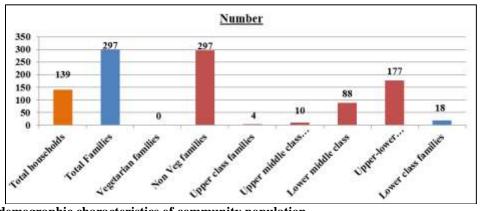
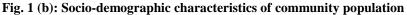


Fig. 1 (a): Socio-demographic characteristics of community population





According to the socio demographic characteristics chart (Fig. 1 (a), the total population of the area is 1040. It was found that the male and female population is nearly equal with females dominating by 51 percent. Around 62 percent of the total population is covered by the adult age group. 4% of the population is widow mostly from the old age group. The area has a 16.25 percent population of smokers as well.

According to Fig. 1 (b), all the 297 families were found to be non-vegetarians. 59.95 percent of the families belonged to the upper lower class followed by lower middle class which cover 29.6 percent of all the families. Lower class families consist of 6.02 percent of the total population lowest being the upper middle and upper class families covering a total of 3.36 percent and 1.34 percent respectively.

Disease Burden in the Community

According to Fig. 2, hypertension was found to lead among the chronic diseases with 11.05 percent (Males 39% females 61%) followed by heart diseases in 6.15 percent (Males 33% Females 67%) of the population. 4.42 percent (Males 22% Females 78%) of the population was also found to have thyroid disorders. Records showed that 1.82% (Males 42% females 58%) and 1.25% (Males 69% Females 31%) was suffering from diabetes mellitus and stroke respectively. 0.67 percent (Males 71% Females 29%) also had liver diseases and 0.57 percent (Males 33% Females 67%) of the population was infertile.

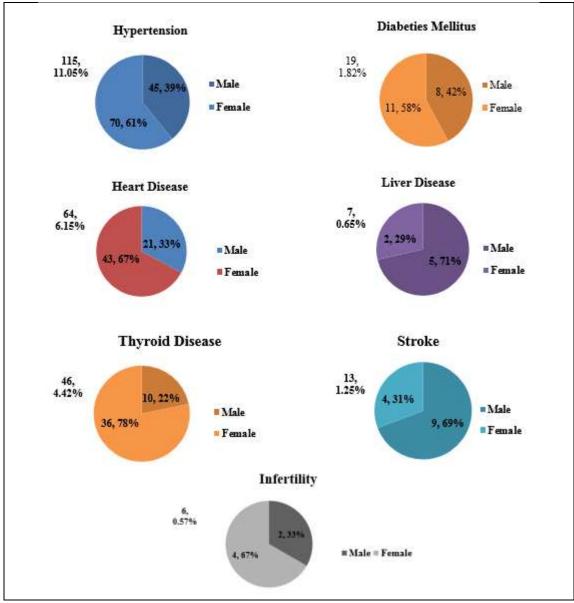


Fig. 2: Disease burden in the community population (2017)

Accessibility of Health Care Services at the Sub-Centre Abedal

Table 1

Trait	n = 297	Percentage (%)
Ease in accessing the subcentre	273	91.9
Finding a health care provider on a working day	297	100
Availability of a health care provider on holidays	13	4.3
Lack of availability of drugs	143	48.1
Delay in treatment of minor ailments	0	0
Cost effective treatment	297	100
Cooperative staff	297	100
All the health needs are met	145	48.8
Lack of Availability of ample waiting space with sitting facilities	153	51.6

Indian Journal of Forensic and Community Medicine, January-March, 2019;6(1):40-44

Table 1 lists the factors that could act as barriers in accessing the services of a subcentre. In our study we found that: 91.9% of the people find the subcentre accessible to their residences while the rest find it difficult to reach the subcentre due to longer distances from their houses. At least one health care worker was present in the subcentre at any time of the day and people have not faced difficulties in getting the assistance when they visited. However, only 4.3 percent say that they have not faced any problem in finding a health worker on a holiday. 48.1 percent of the population has experienced lack in the availability of required medication. According to all, there has never been a delay in treating minor ailments and first aid was available all the time. The staff is cooperative and handles cases with patience and politeness. Every one finds the treatment at the subcentre affordable. 48.8 percent of the population says that all their health needs are not met as expected. 51.6% of the people have faced discomfort pertaining to the lack of availability of sufficient space and sitting facility almost all the time.

Discussion

The study was conducted in Abedal Subcenter of Block Hazratbal which is under the administrative control of Department of Community Medicine, Government Medical College, Srinagar. A total of 139 households having 297 families were visited and data collected from 1040 individuals living in the Subcenter's vicinity.

A total of 509 males and 531 females are living in the area and we found that the male to female ratio is 1:1.04 which is better than the nationally calculated figures.⁵ Furthermore, the population dwelling around the subcentre usually consume non-vegetarian diet including red and white mean. A study in the same medical block few years back has also revealed strict consumption of non-vegetarian diet by the study population.⁶ On determining the socioeconomic status of the study population using, "Updated modified Kuppuswamy scale" for 2018,7 it was found that majority of the study population belonged to lower middle socioeconomic class and upper lower socioeconomic class. This is due to the fact that 80 percent of the community population is daily wager and lake dwellers. They usually earn their livelihood by rowing boats, weaving carpets, small scale agriculture and labour work. Basic amenities and facilities were found in their houses. This shows that the community has a provision to prosper which is in accordance to the already available studies.8 Among 1040 study individuals 169 (16%) were found to be current smokers and they mostly consume hukka followed by cigarettes. Various studies in the past have estimated prevalence of smoking among the rural population in the range of 10-20%. The results of our study are in accordance with the already published literature.^{6,9}

Our evaluation the disease status among the study population, we found that 17.26% of the subcentre population suffered from at least one chronic disease. The most common disease among the lake dwellers was hypertension with the prevalence rate of 11.05% with female predominance. The results of our study are in accordance with the already published literature (10, 11), where they found higher prevalence of hypertension among the study population. A study by Saleem SM et al found only 3% of the rural population to have suffered from hypertension.⁶ This may be due to the changing life styles, dietary pattern and high consumption of Kashmiri salt tea in the study population of subcentre Abedal. Sixty-four (6.15%) of population was suffering from heart diseases, almost 2% from Type 2 diabetes mellitus, 0.65 from liver diseases including jaundice, and about 2% from neurological problems including stroke. Thyroid disorders were found only in 4.42 percent of the study population. This could be because people of the community rely on water borne vegetables and use of iodized salt in their diet. H Bashir et al studied the rural hilly population of Kashmir and observed higher prevalence of hypothyroidism in the study population.¹² In a recent study done by Saleem SM et al on rural community in Northern India, it was found that only 3 percent had hypothyroidism.⁶ This is accordance with the results of ours study. Moreover, the prevalence of diabetes mellitus was found to be 1.82% which seems to be very less as compared to the available studies from the same district.13-15

In our study, we observed that the overall accessibility of the health care services at the subcentre is satisfactory. Twenty-four (8.08%) out of 297 families have found the location of the subcentre far from their residences. The subcentre staff is cooperative and always ready for assistance. Around 48 percent of the population says that they do not find all the medication and not every health issue is entertained. However, minor ailments are treated without a delay. This is because subcentre works at a primary level and refers cases not in their scope to higher health care units. 51.6 percent say that they have faced a lot of discomfort in waiting rooms due to lack of ample space every time they visit. This also makes them switch to expensive clinics sometimes for minor health problems but takes a toll on their finances.

Conclusion

It is concluded from the present study that overall, the community is satisfied with the services catered at the subcentre. The basic needs are met as per standards. It is suggested that better waiting room facilities and space be made available to lessen the discomfort faced by ailing patients while waiting for their turn. The data collected on disease burden of the area should be kept in records. Provisions should be made for necessary medication at the time of emergency. At least one health worker should be kept available on holidays.

Limitations of the Study

This study is limited to the area covered by subcentre Abedal only. Extensive research could be performed by studying all the subcentre of the zone first and then at each zonal level. This could be extended to whole of India. The data collected may or may not be biased. This research was conducted for over a period of 3 months only.

Conflict of Interest: None.

Funding: None

References

- 1. National Economic and Social Rights Initiative. What is the Human Right to Health and Health Care? | NESRI | National Economic & amp; Social Rights Initiative [Internet]. National Economic & Social Rights Initiative. [cited 2019 Mar 4]. Available from: <u>https://www.nesri.org/programs/what-is-thehuman-right-to-health-and-health-care</u>
- Prinja S, Chauhan AS, Karan A, Kaur G, Kumar R. Impact of publicly financed health insurance schemes on healthcare utilization and financial risk protection in India: A systematic review. Xia C-Y, editor. Vol. 12, *PLoS ONE*. 2017 [cited 2019 Mar 4]. p. e0170996. Available from: http://dx.plos.org/10.1371/journal.pone.0170996
- 3. Singh S, Badaya S. Health care in rural India: A lack between need and feed. *South Asian J Cancer* 2014;3(2):143-144.
- Khan SMS, Quansar R, Saleem SM. Door to Door Survey cum Health Camp in Tribal Population of Northern India. *Int J Curr Res Rev* 2017;9(11):36–39.
- Reports And Publications | NITI Aayog, (National Institution for Transforming India), Government of India [Internet]. [cited 2019 Mar 4]. Available from: <u>http://niti.gov.in/content/sexratio-females-1000-males</u>
- 6. Saleem SM, Khan S M, Jan SS. Subcenter health profiling and health care delivery services in a rural community of northern India. *Ann Trop Med Public Health* 2017;10:436-439
- 7. Sheikh Mohd Saleem. Modified Kuppuswamy scale updated for year 2018. Indian J Res. 2018;7(3):6–7
- 8. Directorate of Economics and Statistics. *J Econ Surv* 2014;1:15.
- Jindal, Surinder & Agarwal, Anant & Chaudhry, Kishore & K Chhabra, S & D'souza, GA & Gupta, Dheeraj & K Katiyar, S & Kumar, Raj & Shah, Bilal & Vijayan, Vk. (2005). Tobacco smoking in India: Prevalence, quit-rates and respiratory morbidity. *Indian J Chest Dis Allied Sci* 2005;48:37-42.

- Anchala R, Kannuri NK, Pant H. Hypertension in India: a systematic review and meta-analysis of prevalence, awareness, and control of hypertension. *J Hypertens* 2014;32(6):1170-1177.
- P.R. K, S.S. G, P.M. D. Prevalence of hypertension in a rural community of Central India. *J Assoc Physicians India* [Internet]. 2012;60(6):26–29.
- Majid S, Bashir H, Farooq R, Bhat M. Increased prevalence of subclinical hypothyroidism in females in mountainous valley of Kashmir. *Indian J Endocrinol Metab* 2013;17(2):276.
- Sheikh MS, Sheikh IS, Khan SMS, Mir S. Prevalence of type 2 diabetes mellitus among adult population of District Srinagar. *Int J Diabetes Dev Ctries* [Internet]. 2019; Available from: <u>http://link.springer.com/10.1007/s13410-018-0704-4</u>
- 14. Saleem SM, Jan SS, Haq I, Khan SMS. Identification of risk factors affecting impaired glucose metabolism among the adult population of district Srinagar. *Diabetes Metab Syndr Clin Res Rev* 2019;13(2):1047–1051. Available from: <u>https://doi.org/10.1016/j.dsx.2019.01.023</u>
- Dar IH, Dar SH, Bhat RA, Kamili MA. Prevalence of type 2 diabetes mellitus and its risk factors in the age group 40 years and above in the Kashmir valley of the Indian subcontinent. 2015;16:187–97.

How to cite this article: Nisar A, Khan SMS, Saleem SM. Community health profiling and accessibility of health care services at subcentre Abedal, central Kashmir. *Indian J Forensic Community Med* 2019;6(1):40-44.