

Original Research Article

A study on scenario and assessment of health camps in north Karnataka by KLE's Dr. Prabhakar Kore hospital: facilitate health care to community people

Rajashree Koppad¹, Allamprabhu B. Kudachi^{2*}, Dayanand M.³, Mahantesh Kunchanur⁴

¹Department of Public Health, Jawaharlal Nehru Medical College, Belagavi, Karnataka, India

²Department of Hospital Administration, Jawaharlal Nehru Medical College, Belagavi, Karnataka, India

³Medical Director, KLE's Dr. Prabhakar Kore Hospital and Research Center, Belagavi, Karnataka, India

⁴KLE College of Pharmacy, Nipani, Karnataka, India

Received: 21 June 2024

Revised: 06 August 2024

Accepted: 07 August 2024

*Correspondence:

Dr. Allamprabhu B. Kudachi,

E-mail: contacts.allam@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Health-camps offering specific populations brief medical interventions could be helpful as 60% of India's population lacks access to basic medical facilities. This study provides useful insights for organizing, planning, and implementing health-camps by epidemiologically analyzing a health-camp event in a rural area in southern India; arranging and planning health-camps, as well as using exit interviews to gauge participants' expectations and levels of satisfaction; determine the health issues that impoverished residents of Belagavi district. Health-camp is a strategy for universal health coverage used by highly qualified doctors to offer the underprivileged affordable care.

Methods: A self-structured questionnaire was utilized to interview 219 beneficiaries for the research. These were divided into sections containing participant sociodemographic data, 21 items that evaluate satisfaction of health camps and question concerning expectations of post camps. 4-point rating system was employed to collect the responses: poor (1) to excellent (4). Ages ≥ 14 for men or women. Along with medical or non-medical services, the questionnaire also included questions about camp site accessibility, reception counters, initial medical check-ups, screening tests, behavior of doctors and other staff, waiting times, drug supply, preliminary information, referrals, length of health camp, cleanliness, and camp performance overall. The participants' average age was 40.2 years.

Results: Both genders participated equally in study, 76% married and 46% participants studied up to high school. 59% of the participants, belong to a nuclear family, rural residence (81%), occupation 33% housewife and 26% business. More number of participants (46.51%) received information about camps through the village announcement.

Conclusions: The health camp was conducted and appreciated by most of the participants and suggested to continue the same health camps programme to promote good health every one the area.

Keywords: Check-up, Community people, Health camps, Health care, Treatment

INTRODUCTION

Health care is right of every individual, but lack of quality infrastructure, dearth of qualified medical functionaries and non-access to basic medicines and medical facilities

thwart its reach to Indian citizens.¹ At present health care scenario of our nation, health camps which are stationary or mobile can be a convenient solution imparting short-term medical intervention to targeted population.² Most of the health camps are initiated by non-governmental

organizations, medical colleges, political organizations and local private practitioners.³ The health services through health camp include comprehensive healthcare services with approach to meet health needs of rural needy population both in quantity as well as in quality services.⁴

Belagavi is one district of Karnataka state. Belagavi district mainly contains 547 VA circles, 35 Hoblies, 506 Grama panchayaths, 1263 inhabited and 12 uninhabited villages, 34 urban local bodies. The district is divided in to 14 talukas for administrative purposes viz., Athani, Bailhongal, Belagavi, Chikkodi, Gokak, Hukkeri, Kagavada, Khanapur, Kittur, Mudalagi, Nippani, Raibag, Ramdurg and Savadatti. Belgavi district is bordered by Maharashtra state to in north, Bagalkot district in east, Dharwad and Uttar Kannada districts in south, Goa and Maharashtra state in the west, with a total population of 54,95,366 (estimates as per Aadhar UIDAI.gov.in DEC 2020) is the second most populous district in the state. In 2021 at Belagavi district all types of hospitals were found total 2300 hospitals. Belagavi district is fortunate to have some of the best health institutions serving people not only in Belagavi district but also people from all over Karnataka and other States. The KLE hospital of Belagavi is the second largest hospital in Asia which provides all the modern facilities and treatment. Recently, a cancer research center has been inaugurated which has now made cancer treatment easier and affordable.⁵

Health 'camps' are one of strategies adopted by both government and non-government organizations. Team of health professionals 'camp' in an area to carry out a limited health intervention.⁶ To increase the access to healthcare near to the doorsteps of people, the camp approach is being preferred for a long time. After the National Health Mission, this approach was very commonly used. Medical graduates who are future medical practitioners of primary healthcare need to be oriented toward common health needs of people. They also need to understand the management of a multi-specialty camp. The recent regulations for graduate medical education prescribed by Medical Council of India revolutionized the concept of community health through emphasizing the concept of early exposure to field settings under integrated teaching. This document also strongly emphasizes the need to sensitize medical students regarding primary care.^{7,8}

KLE hospital organises free mega health camps every year in all talukas of district, Maharashtra and Goa states. The poor and needy people attend camp with aim of free check-up and treatment. Hospital provide free quality treatment and cases are followed up, if essential cases are operated free of cost. Through health camps targeted approach provide quality health services is vital for every human being and improve health status of patients and develop trust between the community people and hospital health care providers. Medical examinations, tests at early stages of illness can help to cure it faster and save a life before it can cause any damage. One can live longer and healthier only when the individual gets the right kind of health

check-up, screening and treatments. Even the most basic check-ups can identify underlying illnesses. For achieving goal of universal health coverage, there is a need to increase health service delivery, improve access to health services in poor and difficult to reach population.

Objectives of this study include planning and organizing health camps and to assess the satisfaction and expectations of people about camp through exit interview. Identify health problems of underprivileged community people living rural and urban areas of Belagavi. Health camp and approach for universal health coverage by super specialized medical professional to provide cost effective service to needy.

METHODS

Planning of health camps

Planning is prime phase of conducting a health camp. This phase included mapping of all health camp sites including venue, manpower, finance, food, logistic and transportation. During camp monitoring and supervision was done, is important for smooth functioning of camps. Venue organized was accessible to people, preferably in school, colleges, marriage hall and community centers etc. where there was availability of adequate waiting area and examination space. Organizers coordinated with interested stakeholders like local leaders, politicians and community voluntary workers for adequate budget to conduct the camp. Medicine and consumable supplies, manpower obtained from prior request from the institutions. Camps sites were organized based on needs of community people and information was disseminated by pamphlets, placing camp banner, loud speaker announcement with catchy information about free medicine, referral services at least few days prior to the event.

One-day community-based health camps organized in January 2024 at Joida, Savadatti and Chikkodi, to address medical problems of the people. The online and offline registration done for all patients, followed by screening for communicable and non-communicable diseases (ARI, HTN, DM etc.). The patient consultation was provided by physician, patient details, diagnosis and treatment provided documented in case sheet also distributed free medicines. Patient information like age, gender, residence and principal diagnosis were extracted using a self-structured datasheet, referral cards were given to patients and ambulance referral services made available in camp. The routine medical health team comprised one general physician, residents from ENT, obstetrics and gynecology, pediatric, orthopedics, cardiology, general surgery, neurosurgery, gastroenterology, dentists, nurses, physiotherapy, pharmacists and many other super specialist doctors. Exit interview was conducted by following a using personal interview method by using convenience sampling to assess clients' satisfaction and expectation regarding mega health camps. Information on camp arrangement, waiting time, registration procedure,

attitude of health care providers was collected using questionnaire. People not willing to participate in study were excluded. Total 6860 beneficiaries attended, 1983 patients with different problems were referred to KLE hospital and 219 patients consented to participate in the feedback survey.

Self-structured questionnaire was divided into sections consist of socio-demographic information of participants, 21-item used to determine satisfaction toward organizing and conducting health camps and one question on expectation about future camps. Responses were collected 4-point rating scale; poor (1), satisfactory (2), good (3) and excellent (4). Men or women age ≥ 14 years and able to speak or understand local/Kannada language were included in the study. Also, the questionnaire consists of medical and non-medical services of items on accessibility of camp sites, reception counters, initial medical check-ups, screening tests, doctor and other staff's behaviour, waiting time, drug supply, preliminary information, referral, and duration of health camp, cleanliness and overall performance of the camp. All necessary permissions were taken from the institutional ethics committee.

Statistical analysis

Collected data were entered into a Microsoft Excel spreadsheet and analysed with suitable statistical methods like descriptive statistics including frequency and percentages.

RESULTS

The socio-demographic characteristics of study population are summarized in Table 1. The mean age of the participants 40.2 years. Both male and females participated (50%) equally in study, 76% married and 46% participants studied up to High school. Of the participants, belong to a nuclear family (59%), rural residence (81%), occupation 33% housewife and 26% business. More number of participants (46.51%) received information about camps through the village announcement.

Table 2 represents findings on satisfaction towards conducting medical health camps. Study reported camp beneficiaries were satisfied with good services in terms of initial medical check-up such as monitoring vital signs, registration process, sufficient counters and separate queue for female and older people followed by attitude and explanation of the physician and staff showed in the camps. Further, they mentioned good services about camp's organization in terms of venue, cleanliness,

infection control practices, waiting time before doctor consultation and referral to the higher medical center. More than 55% participants met their perceived need was good. Likewise, 43% participants mentioned that good services received regarding information on medicine dosage, met the perceived needs of the people and 56% good services about specialist consultation and other health care providers. A large number (57.3%) of beneficiaries were satisfied with the overall performance of the camps.

Table 1: Socio-demographic characteristics of participants (n=129).

Variables	Category	Frequencies (%)
Age group (years)	10-20	13 (10.07)
	21-30	31 (24.03)
	31-40	29 (22.49)
	41-50	19 (14.72)
	51-60	22 (17.05)
	above 60	15 (11.6)
Gender	Female	65 (50.3)
	Male	64 (49.6)
Occupation	Housewife	42 (32.55)
	Business	33 (25.58)
	Labour	24 (18.60)
	Cultivation	6 (4.65)
	Service	6 (4.65)
	Student	8 (6.20)
	None	10 (7.75)
Education	Primary	35 (27.13)
	High school	59 (45.73)
	Graduate	9 (6.97)
	illiterate	21 (16.27)
	Degree and above	5 (3.87)
Residence	Rural	104 (80.62)
	Urban	25 (19.37)
Marital status	Married	100 (77.51)
	Unmarried	29 (22.48)
Type of family	Nuclear	76 (58.91)
	Joint	53 (41.08)
Source of information on camp	Banner	40 (31.00)
	By friend	15 (11.62)
	Village announcement	60 (46.51)
	Others	14 (10.85)

The expectation of people about free camps to be organized in future and provide free treatment for poor and needy people.

Table 2: Satisfaction and expectation of beneficiaries towards services provided at health camps (n=129).

Accessibility	Poor N (%)	Satisfactory N (%)	Good N (%)	Excellent N (%)
Health camp site is easily accessible	4 (3.10)	32 (24.80)	73 (56.58)	20 (15.50)

Continued.

Accessibility	Poor N (%)	Satisfactory N (%)	Good N (%)	Excellent N (%)
Sufficient reception counters are available and Queue at the reception counter	1 (0.77)	14 (10.85)	76 (58.91)	38 (29.45)
Separate queue for ladies and elderly	9 (6.97)	25 (19.37)	69 (53.48)	26 (20.15)
Initial medical check-up	1 (0.77)	23 (17.82)	76 (58.91)	29 (22.48)
Meeting of perceived need	5 (3.875)	30 (23.25)	71 (55.03)	23 (17.82)
Medicines available in the pharmacy counter	3 (2.32)	26 (20.15)	62 (48.06)	38 (29.45)
Pharmacist explained medicine dosage	3 (2.32)	27 (20.93)	56 (43.41)	43 (33.33)
Routine blood investigations available at camp	1 (0.77)	17 (13.17)	72 (55.81)	39 (30.23)
Referral system	1 (0.77)	17 (13.17)	79 (61.24)	32 (24.80)
Specialist consultation and other health care providers services	2 (1.55)	15 (11.62)	72 (55.81)	40 (31.00)
Quality of treatment given by the doctor	1 (0.77)	18 (13.95)	58 (44.96)	52 (40.31)
Attitude of auxiliary staff available at camp		31 (24.03)	56 (43.41)	42 (32.55)
Waiting time before doctor consultation	4 (3.10)	32 (24.80)	75 (58.13)	18 (13.95)
Doctor treated me in a very friendly and courteous manner	4 (3.10)	7 (5.42)	70 (54.26)	48 (37.20)
Doctor listened carefully about my problems	1 (0.77)	19 (14.72)	56 (43.41)	53 (41.08)
Non-medical services				
Cleanliness during camp		32 (24.80)	68 (52.71)	29 (22.48)
Infection control practice during camp		35 (27.13)	62 (27.13)	32 (24.80)
Time duration of the camp	6 (4.65)	29 (22.48)	73 (56.58)	21 (16.27)
Need and explanation for referral services and other health schemes		20 (15.50)	73 (56.58)	36 (27.90)
Overall performance of camp	1 (0.77)	27 (20.93)	74 (57.36)	27 (20.93)

DISCUSSION

The present study was conducted to determine satisfaction toward medical health camps in different areas of Belagavi district. Camps were conducted with super speciality doctors from various departments. The population reported reasonable levels of satisfaction toward medical health camps in general. Beneficiaries stated they were satisfied with good services in terms of medical and non-medical services provided at the different sites. A similar finding also reflected in earlier research reported that population attended health camps were satisfied with the camp's different health services like free provision of everyday use drugs, timely information by village head about upcoming camps, transportation arrangement, guidance by the camp volunteer and minimal waiting time.¹¹

Our study stated 57% participants mentioned camp venue is good and accessible and 58% patients felt that no waiting time for consultation of the doctor. The pharmacist services were good 48%. Selvaraj et al study showed (87.9%) attendees felt that the venue was comfortable with adequate privacy, around (74.3%) of the participants felt that they need to wait for long time to receive the drugs, (82.9%) healthcare provider spends sufficient time with patient, doing thorough examination (85.7%) explaining about the drugs and diet (87.1%) was considered to be satisfactory. (54.3%) camp attendees felt that the doctors should have been friendlier.¹²

Out of 219, 76 participants mentioned that initial medical check-up were good with screening for communicable and non-communicable diseases and 74 patients were mentioned explanation for referral services and other health schemes and overall performance about camp was good. Likewise, study from Puducherry revealed that two attendees (2/9) also made a comment that there should be a proper continuum of care in terms of referral to higher centre or nearby health facilities for those who were newly detected to have disease during screening.¹²

However, this short-term survey may miss accurate findings on satisfaction and perception toward medical camps and recommend an extensive scale survey using a qualitative and mixed method research design. Planning and executing medical health camps by a tertiary care teaching institution need a liaison with different authorities, community health workers and other organizations such as non-governmental organizations.

Limitation was that the study was done in selected villages and towns of the district.

CONCLUSION

Health camp beneficiaries appreciated the event and expressed need to organize such camps in the future. Organizing camp is a novel approach to deliver essential health-care services at the doorstep in rural, urban slum and remote areas. It can be used as a new approach to teach

medical students. Likewise, these camps can act as a best teaching-learning strategy for orientation to the budding medical and nursing students to understand the problem and explore various health agencies' roles to take preventive or curative measures for prevailing health problems before time. However, this study can be considered a new hope for health-care professionals interested in investing in undeserved populations living in inaccessible areas with non-affordable people. The health camp with super specialist services is a cost-effective way to bridge the major gap in achieving universal health coverage in difficult to reach areas.

The health camp was conducted and appreciated by most of the participants and suggested to continue the same health camps programme to promote good health every one the area.

ACKNOWLEDGEMENTS

The authors are very much thankful to J. N. Medical College Belagavi and KAHAR Belagavi for providing opportunities to this study.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

- Reddy AS, Reddy SA, Takalkar AA. Screening for various non-communicable diseases: a community based multi-diagnostic mega camp approach study from Raichur, Karnataka. *Int J Adv Med*. 2022;9(1):1-9.
- McManus A. Health promotion innovation in primary health care. *Australas Med J*. 2013;6(1):15-8.
- Is health camp an effective strategy- Institute of Public Health, Bengaluru. Available from: <https://iphindia.org/is-health-camp-an-effective-strategy/>. Accessed on 24 October 2018.
- Peters DH, Rao KS, Fryatt R. Lumping and splitting: the health policy agenda in India. *Health Policy Plan*. 2003;18(3):249-60.
- Venkatashivareddy B, Gupta A, Singh AK. Health camp profile and its cost in Hilly terrains, North India. *Clin Epidemiol Glob Health*. 2015;3:S101-66.
- Patil VN, Pandey B, Joshi M. Organising a health camp and its Management. *J Emerg Tech Innov Res*. 2021;8(8):e584-8.
- Ministry of Health and Family Welfare. Guidelines for Village Health Sanitation and Nutrition Committees (VHSNC); 2013:1-38. Available from: <https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=149&lid=225>. Accessed on 7 June 2024.
- Financial Management Group, National Rural Health Mission. Ministry of Health and Family Welfare. E-Training Module on "Induction and Orientation". 2011;1-69. Available from: <https://nhm.gov.in/WriteReadData/1892s/nrhm-framework-latest.pdf>. Accessed on 7 June 2024.
- Patel V, Patel VR. MCI regulations on graduate medical education, 2012 are we ready for paradigm shift. *NHL J Med Sci*. 2012;1(1):5-6.
- Medical Council of India Regulations on Graduate Medical Education, 1997. Available from: <https://www.nmc.org.in/rules-regulations/graduate-medical-education-regulations-1997/>.
- Bhondve A, Pathak B, Manapurath RM. Mixed-method analysis of community health camps: a novel approach beckoning. *Indian J Community Med*. 2019;44(3):233-7.
- Selvaraj K, Lakshminarayanan S, Saya GK. Perception of public health on health camp: findings and lessons learnt from camp held at rural Puducherry. *Int J Adv Med Health Res*. 2015;2:140-1.

Cite this article as: Koppad R, Kudachi AB, Dayanand M, Kunchanur M. A study on scenario and assessment of health camps in north Karnataka by KLE's Dr. Prabhakar Kore hospital: facilitate health care to community people. *Int J Community Med Public Health* 2024;11:3477-81.