



Sporadic health camps for children: Are we reaching the unreached?

Kamwamangika Rapphap, Himesh Barman*, Lima Sangla

Department of Pediatrics, North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong, India



ARTICLE INFO

Keywords:

Health camps
Community outreach
Healthcare disparity

ABSTRACT

Introduction: Health camps are a popular way for community outreach and most such camps are done in sporadic manner. Effectiveness of such camps are not documented well.

Methods: We documented the variables of the children seen in 3 such health camps and did an audit.

Results: A total of 345 children attended the all the 3 health camps of which 1 was in rural setting (camp A) and 2 were in urban setting (camp B&C). Most children had some ailments; 83.8%, 96.1% and 61.9% in Camp A, B and C respectively. In all the three camps, a majority of the children had trivial common ailments, for which treatment was given on site. Viral upper respiratory tract infection was the most common diagnosis. A total of 18 (5.1%) of children required referral to our institute for further evaluation. No child referred for follow at the institute had come back in the 7 days following the camp. The incomplete primary immunisation rates and underweight rates for under-five attending the camps were very low (0.01%, 3.17% and 8.3% underweight and 1.5%, 0% and 23% of incomplete immunisation in Camp A, B and C respectively) suggesting that the true at risk population was probably not reached.

Conclusion: We conclude that, sporadic health camps are not effective as a community outreach programme as the target population is not reached. More planning is required compared to what is normally done to reach the unreached.

1. Introduction

Health camps are a way for community outreach and thus a means to 'reach the unreached'. As in developing countries like India, there is gross health care disparity, health camps are quite popular. Both Non-government organization and government organisations conduct health camp with varying degree of preparedness. They are a popular tool among both as a strategy to provide aid to 'the unreached'. However, there is a lack of evidence on the effectiveness of these sporadic camps as a community outreach programme in its true sense.¹ It is generally assumed that health camps benefit the attendees and number of health camps conducted and number of people attending the health camp is taken as default measure of impact. Our institute is a government medical organization and various NGOs conducting health camps approach our organization for manpower support in terms of doctors where institute is not involved in management or planning of the camp. It is a usual practice that the institute entertains such request assuming that health camps as outreach program benefits the 'unreached mass'. We did an audit of 3 consecutive health camp attended by us with special focus on benefit to children.

2. Methodology

The three consecutive multispecialty health camps conducted by 3 NGOs were attended by a pediatrics team consisting of a senior resident doctor and a Junior resident doctor of department of pediatrics. The first camp was over a 3 day period in a village setting. The other two camps were of one day each in urban localities within 5–10 km of our institute. We adopted a cross-sectional observation study design. A log was maintained in regards to relevant variables of children examined. Information was collected on site and maintained in registers, and were later transferred onto an excel sheet. The variables recorded were name, gender, age, weight, height, complaints, immunisation status (for children under 5 years of age) and exclusive breastfeeding status (for infants up to 1 year) and blood pressure (for adolescents) and number of children seen, problems identified and referral to the base hospital (our institute) for further evaluation. The pediatrics team saw children upto 18 years of age. All children seen by the pediatrics team were included in the study and none was excluded. Furthermore, the Medical record department (MRD) database and Pediatrics Out patient department (OPD) register was checked for next 7 days to find that if any of those referred has attended the institute. The data is described as proportions. Underweight was defined of weight for age below the $-2 Z$

* Corresponding author. Department of Pediatrics, NEIGRIHMS, Shillong, 793018, India.
E-mail address: neigrihmspedia@gmail.com (H. Barman).

<https://doi.org/10.1016/j.cegh.2018.07.004>

Received 3 May 2018; Accepted 6 July 2018

Available online 06 July 2018

2213-3984/ © 2018 INDIACLEN. Published by Elsevier, a division of RELX India, Pvt. Ltd. All rights reserved.

Table 1
Summary of the children seen in the health camps.

Variables	Camp A	Camp B	Camp C
Total attendance	130	128	87
Males	66 (50.7%)	61 (47.6%)	41 (47.1%)
Females	64 (49.2%)	67 (52.3%)	46 (52.8%)
Under fives	54	20	47
Underweight*	1 (0.01%)	4 (3.17%)	7 (8.3%)
Incomplete immunisation*	2 (1.5%)	0	11 (23%)
Number of infants below 6 months	5	3	1
Exclusive breastfeeding among infants below 6 months [#]	3 (60%)	3 (100%)	1 (100%)
Children with some diagnosis	109	123	52
Children requiring referral to base hospital	12 (11%)	2 (1.6%)	4 (7.6%)
Normal children	21 (16.1%)	5 (3.9%)	32 (36.7%)

Denominator is under five children* and infants below six months [#] seen in respective camps.

score as per the WHO standards.² Complete immunisation was defined as those children under 5 years of age having completed primary immunisation.

3. Results

A total of 345 children attended the all the 3 health camps taken together. The findings of the various variables recorded are summarised in Table 1. Most children had some problem which ranged from 96.1% in Camp B to 61.9% in Camp C. The diagnoses are detailed in Table 2. Viral upper respiratory tract infection was the most common diagnosis. A total of 18 (5.1%) of children required referral to our institute for further evaluation. There were 12 children (11%) referred from camp A, and 2 (1.6%) and 4 (7.6%) children from camps B and C respectively. Cases referred from camp A were 2 children with congenital heart disease, and 1 each with floppy infant, hypertension, recurrent febrile seizure, facial nerve palsy, ascites, paroxysmal cough, recurrent epistaxis, and alopecia areata. Cases referred from camp B were voiding dysfunction, and AV malformation. Cases referred from camp C were 1 child each with delayed milestone, recurrent epistaxis, unilateral ptosis, hypothyroidism not compliant with medications. No child referred for follow up at the institute had come back in the 7 days following the camp. In all the three camps, a majority of the children had trivial common ailments, for which treatment was given on site. The ailments detected are summarised in Table 2.

4. Discussion

Accessible health care is fundamental to a high performing health system. In fact, access to primary health care is a fundamental human right. It is in this light that the slogan “Health for All by 2000 A.D” was coined at the 30th World Health Assembly, 1977, which aimed at access to primary health care by every individual.³ However, maintenance of a

Table 2
Profile of diseases diagnosed and treated in the camps.

	Camp A	Camp B	Camp C
Children with some ailment	109	123	52
Cough and cold	53 (48.6%)	62 (50%)	19 (36.5%)
Otitis media	8 (7.3%)	2 (1.6%)	1 (1.9%)
Acute gastroenteritis	8 (7.3%)	12 (9.7%)	4 (7.6%)
Helminthiasis	5 (4.6%)	21 (17%)	4 (7.6%)
Others ^a	35 (32.1%)	26 (21%)	24 (46.1%)

^a Others include cellulitis, dental caries, gastritis, chill blain, reactive airway disease, irregular menses, impetigo, stye, urinary tract infection, sinusitis, warts, on specific headache, growing pains, aphthous ulcers, dry eyes, scabies, dermatitis, cut injury, and referred cases as mentioned below.

quality health care and the whole health care system ladder requires a sustained effort depending much on political commitment and will, community participation and intersectoral coordination.

In contrast to the structured health care delivery systems, are the health/medical camps that are organised by both the government and Non Government organisations for providing medical aid and reaching out to the ‘unreached’ in attempt to bridge this gap of health care disparity. Most of such camps in developing countries are conducted in a sporadic manner and have various issues of concern.¹ There have been lots of success stories of health camps as medical relief in disaster situations where interventions involve medical teams addressing the most urgent health needs of people in crisis. The experiences from global NGOs like the WHO, UNICEF, MSF etc show that their health camp activities are carried out in settings of instability where interventions involve medical teams addressing the most urgent health needs of people in crisis.^{4–6} Health camps held by different organisations during times of disaster, for instance during the great Tsunami of December 2004, that involve emergency relief measures and epidemic control, remain creditable.⁷

Unlike these above mentioned camps that necessitate urgent medical attention, we look at health camps that are held at random areas. Even outside disaster scenario, Health camps can be a good means to reach the unreached if they are conducted with proper planning and follow up. Health camps presented here were the one that were conducted in sporadic manner and without any follow up plan. There can be four models for conducting health camps viz. shifted outpatients, replacement, consultation and liaison attachment model as initially suggested by British psychiatrists.⁸ Our health camps worked as a shifted outpatient model without direct collaboration with the primary health centre (PHC) or the urban health centre (UHC). Any of the model could work based on the situation but none will work without proper planning and homework. When a health camp is conducted there are various interest involved. Some of them wish to reach the needy: this kind of organization hire doctors and health professionals, buy required medicine and provide services in really needy places. However, even in this category the intention does not translate into results if it is not properly planned. For some it's like a showcase, they just want to show that they are doing something for the community and earn some goodwill. Even in this category, if a needy area is chosen some benefit could be done. But in reality, whatever is the primary intension, most of the health camps are not properly planned. In all the three health camps, there was prior information and to village headman but publicity was limited. No medications were supplied and only prescriptions were dispensed. There was no follow up plan. Two out of the three health camps were conducted in urban area from where access to health care systems was not difficult. The need for choosing such areas for health camp could be questionable and may reflect poor planning. The Cochrane review also concluded that the benefits of simple outreach models in urban non-disadvantaged settings seem small.⁸

In the state of Meghalaya, as per NFHS-4, the underweight status of under 5 children is 22.9% and 29.9% in urban and rural areas respectively, our observations at the 3 health camps detected 0.01%, 3.17% and 8.3% underweight in under fives, which are far below the state statistics. Also, complete primary immunisation coverage for children (BCG, measles, and 3 doses each of polio and DPT/pentavalent) in the camps are 98.5%, 100% and 77%, respectively, as opposed to the state statistics of 81.4% and 58.5% in urban and rural areas respectively.⁹ The exclusive breastfeeding rate of infants under 6 months were also very high though number were too small to draw any conclusion. One way to look at it is, the areas where the camps were conducted might have had good nutritional status, exclusive breastfeeding and immunisation coverage which may reflect a better health status of the community and, thus, question the need of ‘health camp’ in these areas. However, we do not fail to note that the low attendance to these camps as compared to the actual population of these 3 areas may have underestimated our findings. This may indicate that we have not been able

to reach the underweight children in the three communities and same goes for incompletely immunized and children who were not exclusively breastfed. This may also be linked to the health seeking behaviour.¹⁰ Those families with poorer health seeking behaviour may not come to the camps even if it's at their door steps. Proper identification and sensitization of such families will be key before undertaking such health camps whereas no such provisions are there in a routine sporadic health camp. Thus, we will continue to miss such families negating the benefit of an outreach.

A majority of the illnesses detected and treated at these camps are trivial illnesses that do not really necessitate the services of a trained 'specialist' for the same. The major diseases brought to our notice at the 3 camps are those that have already been detected elsewhere and undergoing treatment or awaiting therapy or defaulted medications. All these children were referred to our tertiary health care centre. However, none of the children came back for follow up over the next 1 week post camp period. Also the organizers of the camps did not have provision for follow up of such children. We feel that this non follow up and lack of a good tracking system negates the purpose of a health camp. We cannot overemphasise over the need of having a good follow up system as an important ingredient of a quality health camp.¹¹ This also underscores the need for prior screening before a specialist camp. Children referred to our institute were asked to come early. Though it is prudent to expect referred children to come within seven days, this figure was chosen imperically for logistic reason. It is possible that some children might have reached after 7 days which we would have missed. Another limitation of our study is that it included only 3 health camps and this may not be representative of all spectrum scenarios under which such sporadic health camps are organised.

We do not question the importance of health camps that improve or benefit community health. For instance, health camps for screening congenital diseases or childhood disability, school health programs, diabetes screening camp, cataract screening camp, or a sterilization camp, or even a blood donation camp. However, the danger arises when the focus is only on the targets and not in the quality and safety of the camps, or when NGOs hold camps just as an activity which does not yield quality.¹¹

On the other hand, there are successful community outreach programs where proper planning, ongoing commitment, community participation, sustainability and follow-up are the key components and are not based on uncoordinated and fragmented efforts.^{12–16}

5. Conclusion

We conclude that, based on our experience, sporadic health camps

are not effective as a community outreach programme as the target population is not reached. We suggest if the need arises for a quality health camp to be organised, a prior survey of the region of interest to assess need is required. Also, developing a good tracking system to achieve necessary follow up should be considered. If these are done, then we believe, quality health camp may have a potential to benefit the community. More reaserch is required in this regard to improve the evidence base.

References

1. Pandey A, Paudel P, Paudel L. Scenario of health camps in Nepal. *J Nepal Health Res Counc.* 2011 April;9(18) 86–8.
2. WHO. *Child Growth Standards Methods and Development.* 22 France. 2006; 2006.
3. WHO. Global strategy for health for all by the year 2000. *Health All Ser.* 1981;3.
4. MSF International Activity Report 2016. Available from: <http://www.msf.org/en/article/msf-international-activity-report-2016>. Accessed April 20, 2018.
5. WHO. From Kit to Camp: Delivering Primary Health Care in Post-Quake Nepal. Available from: <http://www.searo.who.int/entity/emergencies/crises/nepal/from-camp-to-kit/en/>. Accessed April 2018.
6. WHO. Assessing health facilities in Rohingya camps. Available from: www.searo.who.int/mediacentre/ser-in-the-field/assessing-health-facilities-in-rohingya-camps/en/. Accessed April 20 2018.
7. Murty CVR, Jain SK, Sheth AR, Jaiswal A, Dash SR. Response and recovery in India after the december 2004 great Sumatra Earthquake and indian ocean Tsunami. *Earthq Spectra.* 2006 June;22(S3):S731–S758. Available from: http://www.iitk.ac.in/nicee/RP/2006_Response_Recovery_EQSpectra.pdf Accessed April 2018.
8. Gruen RL, Weeramanthri TS, Knight SE, Bailie RS. Specialist outreach clinics in primary care and rural hospital settings. *Cochrane Database Syst Rev.* 2004(1) CD003798.
9. State Fact Sheet Meghalaya. National Family Health Survey – 4. Available at: http://rchiips.org/NFHS/pdf/NFHS4/ML_FactSheet.pdf. Accessed april 20 2018.
10. Rahman SA, Kielmann T, McPake B, Normand C. Helathcare seeking behaviour among the tribal people of Bangladesh: can the current helathsystem really meet their needs? *J Health Popul Nutr.* 2012 Sep;30(3):353–365.
11. IIPH Bangalore. Is health camp an effective strategy? Available from: <http://iphindia.org/is-health-camp-an-effective-strategy/> accessed 30th april 2018.
12. Singh AK, Joshi D, Shah A. Ranjeev Spectrum of ocular diseases in patients attending eye camps in Andaman and Nicobar. *Med J Armed Forces India.* 2016 Jan;72(1):45–47.
13. Kshetrimayum N, Bennadi D, Siluvai S. Outreach programme – key to success in health care Access. *Pharma Innovation J.* 2015;4(4):04–07.
14. Nitin vasista. Health camp for school children. Available at: <https://youthforseva.org/health-camps-school-children/> accessed: 30th april 2018.
15. Vellore Christian mediacal college foundation. Community based care. Available at: <https://www.vellorecmc.org/what-we-do/compassionate-care/community-based-care/> accessed 30th april 2018.
16. Nxumalo N, Goudge J, Thomas L. Outreach services to improve access to health care in South Africa: lessons from three community health worker programmes. *Glob Health Action.* 2013 Jan 24;6 19283.