



HEALTH PROMOTION THROUGH COMMUNITY-BASED ORGANIZATIONS FOR IMPROVING KNOWLEDGE, ATTITUDE AND PRACTICE PERTAINING TO HYPERTENSION

Anuj Mundra¹, Hemant D Shewade², Ashok M Mehendale³, Bishan S Garg⁴

Financial Support: None declared
Conflict of interest: None declared
Copy right: The Journal retains the copyrights of this article. However, reproduction of this article in the part or total in any form is permissible with due acknowledgement of the source.

How to cite this article:
Mundra A, Shewade HD, Mehendale AM, Garg BS. Health Promotion Through Community-Based Organizations for Improving Knowledge, Attitude and Practice Pertaining to Hypertension. Ntl J Community Med 2016; 7(5):359-361.

Author's Affiliation:
¹Post graduate student, Dept of Community Medicine, MGIMS, Wardha, India; ²Operational Research fellow, International Union Against Tuberculosis and Lung Disease (The Union), SEARO Office, New Delhi, India; ³Professor & Head; ⁴Director – Professor, Dept of Community Medicine, MGIMS, Sevagram, Wardha, India

Correspondence:
Dr. Anuj Mundra
Email: anuj_mundra87@mgims.ac.in

Date of Submission: 22-12-15
Date of Acceptance: 12-04-16
Date of Publication: 31-05-16

INTRODUCTION

Community-based organization (CBO) is a public or private non-profit entity that is representative of a community or a significant segment of a community, and is engaged in meeting human, educational, environmental, or public safety community needs.¹ CBOs provide a platform for i) experience and thought sharing among the members and also with others, helping in disseminating information in community. ii) empowering members through peer support, promoting self-advocacy and group advocacy iii) opportunities for leadership, educa-

ABSTRACT

Introduction: Hypertension is a growing health problem. Various approaches have been proposed for control of hypertension. We wanted to evaluate whether supporting and providing health education to comm.

unity-based organisation (CBO) members resulted in better Knowledge, Attitude and Practice (KAP) pertaining to hypertension when compared to other CBOs.

Methodology: This cross-sectional study was conducted in rural central India in September 2014. We randomly selected CBOs under two groups: intervention CBOs supported by medical college and control CBOs not supported by medical college (16 each). A structured, pre-tested, close ended questionnaire was administered to the members (10 from each CBO). Mean of individual scores was considered as CBO's KAP score. A score of ≥ 14 (total=24) was taken as a good score.

Results: Proportion of CBOs with good score was higher in intervention CBOs compared to control CBOs (81% v/s 25%, $p < 0.002$). Overall mean KAP score was 14.0 (SD=1.6). The scores were significantly better in intervention CBOs for overall KAP, knowledge and attitude but not for practice.

Conclusion: There is scope to convert the knowledge and attitude into desired practice.

Keywords: Health Promotion, Health education, Hypertension, Self-Help Groups, Rural health centre

tion and acquiring new knowledge, thus enabling choice and decision making among members. iv) health and wellness related activities as it promises greater outputs and positive impact with addition of health activities in their agenda.²

Hypertension is growing public health problem not only in elderly but also in youths; in both urban and rural areas.³ Interventions for its primary prevention include community-based as well as targeted approach for high risk individuals. Health promotion increases the awareness and treatment

compliance⁴ and also helps prevent and control hypertension.⁵

We wanted to evaluate whether supporting and providing health education to CBO members resulted in better Knowledge, Attitude and Practice (KAP) pertaining to hypertension when compared to other CBOs.

METHODOLOGY

Study Setting: The study was conducted in Wardha district, Maharashtra. Kasturba Rural Health and Training Centre (KRHTC) in Anji village under the Department of Community Medicine, MGIMS, in collaboration with the Primary Health Centre (PHC) serve about 20 of 27 villages under Anji PHC (Population~37000).

We provide primary curative care at the PHC and in the villages, through the community-owned clinics (n=9), guide Village Health Nutrition and Sanitation Committees and support Village Health and Nutrition Days. Since 2003, KRHTC also supports various types of CBOs viz. Women's Self Help Groups (SHG) (n=55); Kishori Panchayat (n=24) and Kishor Panchayat (n=4) for adolescent girls and boys respectively; and Kisan Vikas Manch (KVM) for farmers (n=10). They contain 15-20 members from a village. SHGs and KVM as a source of economic empowerment provide financial help to its needy members.

We support CBOs by facilitating their monthly meetings and routine activities, guiding them in other endeavours they wish to perform e.g. procuring cheap seeds and fertilizers for KVMs, guiding women to carry out activities for making the villages alcohol free. We also provide health education in their monthly meetings and perform health promotional activities like Aahaar Spardha (Nutritional competition), Mahila Melava (Women's fest) with their participation, thus adding a health agenda to its function and promoting community-based health action. A month wise schedule of health education topic is adhered to (Hypertension - May). There are additional 117 CBOs in these villages over those supported by us.

Study Design: In this cross-sectional analytical study only SHGs and KVM were included. 16 Intervention CBOs (those supported by KRHTC-14 SHGs, 2 KVMs) were selected using stratified random sampling against a similar randomly selected control CBO (not supported by us) from the same village i.e. either functioning independently or supported by Gram Panchayat or other NGOs without any education program.

Data collection: Data was collected by social workers who were involved in the health education ac-

tivities, trained beforehand to ensure reliability. The questionnaire from Mahajan et al.⁶ was modified to suit our local needs to develop a structured, pre-tested, close ended questionnaire containing 18 questions; 6 each for knowledge, attitude and practice. It was translated in local language (Marathi), checked and back translated to English. The maximum and minimum possible score was 24 and 2 respectively. Mean score of all the members was considered as the CBO KAP score. Operationally CBOs scoring ≥ 14 were considered as good.

During monthly meetings of selected CBOs in September 2014, verbal informed consent was obtained and questionnaire administered to 10 randomly selected members from each CBO one-to-one to avoid influencing the response of others.

Sample size and data management: For a difference of at least 2 points in the mean KAP score of CBOs with 95% confidence and 80% power we needed at least 16 CBOs each in intervention and control. Data was double entered, validated and analyzed using EpiData (v3.1 for entry and 2.2.2.182 for analysis, EpiData Association, Odense, Denmark). Chi-square and student's t-test were used to compare means and proportions respectively. Unit of analysis was a CBO.

RESULTS

The mean (SD) age of participants was 38.7(4.9) years - 40.3(5.5) years in intervention and 37.2(3.7) years in control CBOs.

Of the 16 intervention CBOs, 13(81%) had good KAP score when compared to 25% (4/16) among the control CBOs ($p=0.001$). The mean KAP score was 14.03 (95%CI 13.48-14.59) and differed significantly ($p<0.005$) between intervention (15.08) and control CBOs (12.99). Knowledge and attitude but not practice score were significantly higher in intervention CBOs (**table 1**).

Table 1: Comparison of CBO KAP* score between study and control CBOs in the field practice area of KRHTC† Anji, Wardha, India (2014)

	Intervention CBO (n=16)	Control CBO(n=16)	P value
CBOs with good KAP score (score >14)			
Yes	13	4	<0.01#
No	3	12	
Mean CBO KAP score (SD)			
Knowledge (max 6)	3.6 (0.8)	2.9 (0.4)	0.005
Attitude (max 6)	5.1 (0.5)	4 (0.3)	<0.005
Practice (max 12)	6.4 (0.8)	6.1 (0.7)	0.24
KAP Score (max24)	15.1 (1.1)	13 (1.2)	p<0.005

#OR = 13.00 (95% CI: 2.40-70.46); *Community-based Organization Knowledge Attitude Practice Score pertaining to hypertension;

†Kasturba Rural Health and Training Centre

DISCUSSION

Intervention CBOs had significantly better KAP scores pertaining to hypertension when compared to control CBOs.

Strengths and limitations: The intervention was feasible and done using existing resources. The data entry error was minimized by double data entry and validation. Intervention and control CBOs were from the same villages thus, we cannot rule out spill over. In all probabilities, it would have reduced the differences, indicating that our estimate was still a conservative one. A before-after design with control arm though ideal; was not feasible because this routine activity was going on for past many years. Although we tried to minimize the interviewers' bias, the possibility of the same cannot be ruled out. The assumption of uniform educational status of people and clustering effect might have also affected the results and it might not be generalizable.

Comparison with other studies: Community-based interventions help control hypertension, treatment compliance and improving awareness.⁴ However, individual treatment compliance was not evaluated as it was beyond the scope of our study. It has also been shown that intensive interventions progressively improve the outcomes.⁷ A study from a nearby PHC area showed an improvement in awareness about the symptoms, risk factors and treatment options of hypertension with integrated health promotion initiatives among opinion holders.⁸ Other studies showed improved general health awareness and behaviours regarding conditions other than hypertension with this approach.^{9,10} We assume that these findings may be extrapolated to other non-communicable diseases (NCDs) as well.

Way forward: The study highlighted the scope of further strengthening the interventions with focus on NCDs since many of them go hand in hand. A comprehensive evaluation of the effectiveness and acceptance of different health promotion interventions among different strata of the society is needed for targeted approach and obtaining maximum dividends.

Community-based health action promotes primary prevention and health seeking. In our setting, the difference in the score may be attributable to the on-going health promotion, but it was not enough to convert the knowledge and attitude into desired practices. Similar views were shared by a multisite study from India.¹¹

Health promotion is not just education but a comprehensive social and political process which is our long term goal.

CONCLUSION

Although knowledge and attitude of CBO members improved with health promotion but there is scope to convert it into practice of desired health actions. For the same, these interventions need to be strengthened and backed by involving community in intervention selection, implementation and assessment along with establishing enabling factors like i) expansion of the community-owned clinics; and ii) strengthening NCD services in PHC with referral linkage.

REFERENCES

1. Community Based Organization Defined | National Network of Libraries of Medicine [Internet]. [cited 2016 Mar 25]. Available from: <https://nmlm.gov/sea/funding/cbodef.html>
2. White BJ. Promoting Wellness & Recovery Through Self-Help Groups [Internet]. New Jersey: New Jersey Self-Help Group Clearinghouse; [cited 2016 Mar 25]. Available from: http://www.power2u.org/downloads/Maximizing_2.pdf
3. Anchala R, Kannuri NK, Pant H, Khan H, Franco OH, Angelantonio E Di, et al. Hypertension in India: a systematic review and meta-analysis of prevalence, awareness, and control of hypertension. *J Hypertens*. 2014;32(6):1170-7.
4. Thankappan KR, Sivasankaran S, Mini GK, Daivadanam M, Sarma PS, Khader SA. Impact of a community based intervention program on awareness, treatment and control of hypertension in a rural Panchayat, Kerala, India. *Indian Heart J*. 2013;65(5):504-9.
5. Saptharishi L, Soudarssanane M, Thiruselvakumar D, Navasakthi D, Mathanraj S, Karthigeyan M, et al. Community-based Randomized Controlled Trial of Non-pharmacological Interventions in Prevention and Control of Hypertension among Young Adults. *Indian J Community Med*. 2009 Oct;34(4):329-34.
6. Mahajan H, Kazi Y, Sharma B, Velhal GD. Assessment of KAP, Risk Factors and Associated Co-Morbidities in Hypertensive Patients. *IOSR J Dent Med Sci*. 2012;1(2):6-14.
7. Lu C-H, Tang S-T, Lei Y-X, Zhang M-Q, Lin W-Q, Ding S-H, et al. Community-based interventions in hypertensive patients: a comparison of three health education strategies. *BMC Public Health*. 2015 Jan;15(1):33.
8. Dongre A, Deshmukh P, Garg B. The Effect of "Integrated Health Promotion Initiative" on Awareness among Opinion Leaders Regarding Hypertension. *Indian J community Med*. 2008 Jan;33(1):63-4.
9. Dongre AR, Deshmukh PR, Garg BS. A comparison of HIV/AIDS awareness between self-help group leaders and other women in the villages of Primary Health Centre, Anji. *J Commun Dis*. 2007 Jun;39(2):101-4.
10. Dongre AR, Deshmukh PR, Garg BS. The effect of community-based health education intervention on management of menstrual hygiene among rural Indian adolescent girls. *World Health Popul*. 2007;9:48-54.
11. Pandey RM, Agrawal A, Misra A, Vikram NK, Misra P, Dey S, et al. Population-based intervention for cardiovascular diseases related knowledge and behaviours in Asian Indian women. *Indian Heart J*. Elsevier Ltd; 2013;65(1):40-7.