

Original Research Article

Importance of giving health education regarding lifestyle modification and perceived barriers: focus group discussion among community health workers of slum of Kolkata, India

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ABSTRACT

Background: Considering the poor health literacy and high prevalence of risk factors of NCDs in the slums, health education remains prime intervention. Indeed, successful intervention requires programmes tailored not only to local needs and available resources but also the way it is implemented in the community. The objective was to assess the knowledge of NCDs and NCD care, identify the barriers that impede community level workers from providing services pertained to achieve and maintain healthy living among the community.

Methods: It was a qualitative study (FGD) conducted on 30th November 2017 among community level workers of Urban Health Unit and Training Centre (UHU and TC), Chetla, Kolkata. A thematic qualitative analysis was conducted to identify significant themes in the data.

Results: It was found that everyone was aware of Non-communicable Diseases. In terms of physical activity, lack of time, whereas in tobacco, it had become a habit from the young age, poor knowledge about healthy diet were the main challenges in adopting the healthy lifestyle. Health education to create awareness is crucial in tackling NCDs.

Conclusions: The study revealed that the community workers were aware of the importance of health education and poor awareness regarding healthy lifestyle among people was the main challenge. By delivering holistic interventions that address multiple lifestyle risks and incorporate relapse prevention strategies, health trainers could potentially have a significant impact on control of NCDs.

Keywords: Health education, Lifestyle modification, NCDs

INTRODUCTION

Non-communicable diseases (NCDs) affect millions of individuals over an extended period of time and have a wicked impact on quality of life. NCDs are estimated to account for 60% of total adult deaths in India.¹ In line with WHO Global Action Plan for the prevention and control of NCDs 2013-20, India in its national health

policy 2017, stated to reduce the number of premature deaths from NCDs by 25% by 2025.²

In the management of NCDs like diabetes or hypertension, lifestyle (i.e. non-drug) measures such as decreasing physical inactivity, healthy diet, stress management, avoidance of tobacco products, moderation in alcohol intake and most importantly increased awareness about the condition are of paramount

importance for therapy to be successful. According to Global Burden Disease 2015, unhealthy diet ranked first among 79 risk factors which contributed disease burden since 1980.³ Eliminating obesity, unhealthy diets, and physical inactivity could prevent up to 80% of heart disease, stroke, and diabetes mellitus.⁴

Lifestyle modification is inevitable at all levels of prevention, especially in patients, to prevent complications. Individual barriers to change in lifestyle include lack of proper knowledge particularly about nutrition and physical activity, lack of acceptance to change behaviour, lack of self-motivation and lastly physical and socioeconomic limitations.⁵

Thus lifestyle programs might assist in changing one's behaviour which can be multi-factorial interventions that are designed for individuals or groups according to their risk factor status and the needs of the subjects.

Community health workers (CHWs) are essential personnel in resource-limited settings, they are heavily involved in community mobilization, maternal and child health and prevention of communicable diseases, there is currently no NCD component to their role; however, their skills could potentially be utilized in national efforts to reduce the growing burden of NCDs, as they serve as the initial point of contact for healthcare services in their communities.

So, it is utmost important to know their views regarding the importance of giving health education and also to know what factors can impede this process of giving health education and how to overcome these issues with their experiences with the community. This information will be useful to public health practitioners interested in developing strategies to promote participant adherence and maintenance of the healthy lifestyle.

METHODS

As there were no previous study and data regarding this issue, so focus group discussion was found to be the best available choice among the wide range of available qualitative methods:

- To generate a hypothesis based on the perception of the community health workers' regarding NCDs and its care with special emphasis on lifestyle modification and their field level experiences within the grass-root level of healthcare delivery system.
- Moreover, an FGD would provide an opportunity to the researchers to find out the reflection, expression, and viewpoint of the participants to the views of each other.
- To collect data until the point of saturation and modulate the course of flow of information according to the knowledge gap as well as sudden disclosure of new information.

It was a qualitative study (FGD) conducted on 30th November 2017 among community level workers of Urban Health Unit and Training Centre, Chetla, Kolkata which is the field practice area of All India Institute of Hygiene and Public Health (AIIPH and PH), Kolkata. So first the FGD guide was prepared using previous reviews and revised by experts of AIIPH and it was pretested. It was prepared with 7-8 questions to direct the flow of discussion. The objectives of this study were:

- To elicit the knowledge and perception of CHWs regarding NCDs and its risk factors and why it is a public health concern.
- To find out various ways to implement strategies to prevent NCDs and to explore the various barriers faced in the community.

Special emphasis was given to various important risk factors of NCDs such as:

- Physical activity
- Diet
- Addiction
- Stress
- Weight reduction

Permissions from the office in charge of UHUTC Chetla and the Institute Ethics Committee were taken to perform the research work. Before the session health workers were informed about their autonomy, confidentiality and right to leave the study at any given point of time and informed consent was taken from each participant

For the study, one focus group with 10 participants was held in the conference cum meeting room of UHUTC, Chetla. The age of the recruited participants varied from 30 to 60 years. Among 10 workers, there were two male community level workers. Apart from the youngest participants, all had at least 5 years of service experience of working as health workers. So, the homogeneity of the group is ascertained. We chose a moderator who had an experienced in conducting FGDs who is good at local language and two note-keepers to write all the discussion. All questions were open-ended. The FGD was conducted in the local language of Bengali which is spoken and well understood by all study participants. A semi-circular sitting arrangement was planned to ensure that everyone can see each other and to have a good conversation between the study participants and interviewers in a non-threatening and flexible interactive ambience. The instructions to the participants before commencing FGD were as below:

- Please talk one at a time and speak up as much as possible.
- There is nothing such as right or wrong answers to the questions and this is not an evaluation process.
- Authors are interested in knowing what each of other thinks, so please feel free to share your point of view, regardless of whether you agree or disagree with

what you hear. It is very important that we hear all your opinions.

A set of induction involved greetings, ice-breaking questions like how many of you have diabetes and hypertension, and how many of you know your BMI and followed by the discussion proper. Questions were asked to the group and each participant was given an opportunity to respond. Simple language with short well-constructed and understandable questions was used in the discussion. All non-verbal communication such as laughter, disagreements by shaking head was also documented. Questions were asked until there was no new information that was generated from the study participants. At the end of each FGD, study participants were given an opportunity to ask questions related to the discussion. The group discussion lasted for 75 minutes. Discussion was recorded using mobile phones.

During the session, validity was ascertained using the following methods:

- All the persons involved in conducting the session of FGD except the moderator refrained from talking.
- The note-takers produced notes as exact as possible.

For improve the credibility of the results, meeting with the note-takers, and two independent expert observers were held separately.

The analysis was started with Line-by-line coding after getting familiarized with data. After getting insight into the data, inductive coding was done to generate initial codes as there is no prefixed theory or model then thematic analysis was performed by searching for themes among codes, then the themes were reviewed and named according to objectives and contextual of data (Figure 1). The analysis attempted to achieve equal and fair representation of the participant's opinions. We selected representative quotes to illustrate study findings and retained colloquial language.

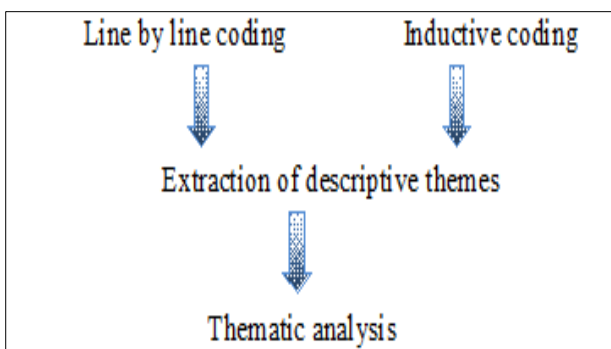


Figure 1: Steps of thematic analysis for the study.

Peer debriefing with specialist in the field of health education was performed to ensure disclosure of blind spots and compare the working hypothesis and results.

Feedback forms were distributed at the end of the session. A sociogram was prepared and the flow and dynamics of the session were ascertained (Figure 2).

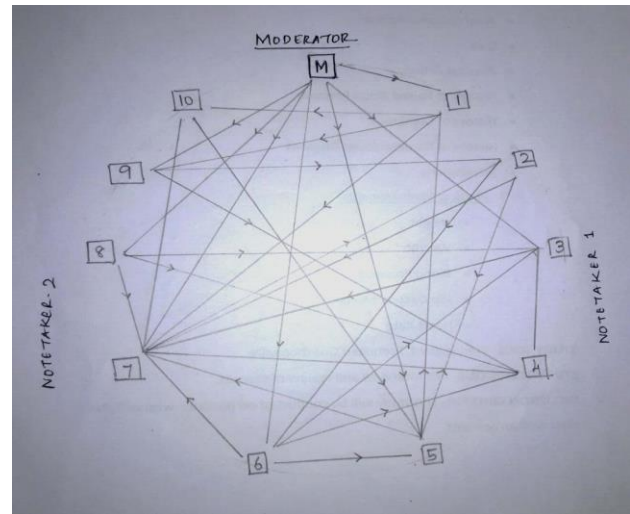


Figure 2: Sociogram.

RESULTS

The participants

There were 2 out of 11 participants were hypertensive whereas one of them was both a diabetic as well as hypertensive. Age of the health workers ranged from 30 to 60 years. Out of the two were male. Except one all had 5 years of field experience. Most of them were graduates while one was studied up to secondary, one was studied up to higher secondary and one was post-graduate (Table 1).

Table 1: Background characteristics of the study participants (n=10).

Participant	Age/ gender	Educational level	Years of experience
P-1	38/F	Graduate	5
P-2	32/F	Post Graduate	3
P-3	39/F	Graduate	5
P-4	42/F	Secondary	5
P-5	45/M	Graduate	5
P-6	44/F	Graduate	7
P-7	48/F	Graduate	5
P-8	54/M	Graduate	5
P-9	54/F	Graduate	8
P-10	60/F	Higher secondary	5

Main diseases in the community

The health workers were asked about the major diseases prevalent in the community. Most of them reported

Diabetes, Hypertension and TB among adults and ARI, diarrhoea among children and low back pain were most common among females.

Non-Communicable Diseases (NCDs)

All of them were aware of NCDs and they agreed that all are preventable. According to them, it comprised of Diabetes/High blood sugar, Hypertension/high blood pressure, Overweight, Arthritis and High cholesterol. One of them named NCDs as “Life-style diseases”. Two participants also included Anaemia and Thyroid disorders as NCDs.

Life-style modification

The participants opined that life-style modification includes quitting the addiction, dietary modifications and physical activity/exercise. None of them mentioned stress management as a life-style modification.

Physical activity

Importance

The participants reported that physical activity can help in controlling sugar, increase metabolism, relieves arthritis and good for the heart. One of them said, “Physical activity can decrease the pain due to long desk work.”

Meaning

The responses varied from 30 minutes to 1 hour per day. None of them could define accurately. But one of them said “10 minutes fast walking, then rest for 2 minutes and then again 10 minutes of fast walking” as the appropriate physical activity.

Health education

All of them opined that health education to the community should be given regarding physical activity through “clinics, community camps, club gathering or door to door visit.”

Barrier perceived

The most common barrier perceived by the participants against following physical activity in community was the lack of time due to household and office work. One of them also mentioned there is no place in the slum to do exercise.

How to overcome

The responses of the participants to overcome the barriers were in a traditional direction. They believed that same type of advice cannot be given to every person. “We have

to customize our advice as per the individual. If the person is busy at his/her work, then he/she can take out some time for exercise at the work place itself.” one of them said.

Dietary modification

Importance

The participants believed that the dietary modification is a basic preventive measure for prevention of NCDs.

Meaning

The participants opined that spicy or ‘rich’ and red meat should be avoided. Junk foods, fried foods and oils/ghee intake should be decreased. One of them emphasized, “First we should know all the problems of the person like diabetes thyroid etc. and then recommend accordingly.” Salt should be restricted in hypertensive patients and sweet and sugar should be restricted if suffering from diabetes. One of the participants mentioned that along with above-mentioned restrictions, they should increase the intake of green leafy vegetables and fruits as per their economic status and affordability.

None of them could specify the maximum amount of salts that should be consumed in a day. Their responses ranged from 1 gram to 1 spoon. Two of the health worker suggested “kaccha noon” i.e. extra salt with the meal should not be taken. Even they were not clear about the amount of visible fats which should be consumed.

Health education

All of them opined that health education to the community should be given regarding dietary modification through “clinics, community camps, club gathering or door to door visit.”

Barrier perceived

The most common barrier which they perceived was the daily measurement of salt is tough and not feasible. According to one of them, “accurate amount calculation of 5 gram is not feasible. It is practically tough for people of low socio-economic status.” Few of them agreed that it is very difficult for a poor person to eat green leafy vegetables and fruits regularly. They also focused on the fact that many people work outside where fast foods are easily accessible to them, so they consume it regularly. One of them also informed that people usually women misinterpret “kaccha noon” as raw salt and consume excess salt after frying it.

How to overcome

One health worker suggested that people should be advised to carry tiffin with home-made foods as much as possible to their work place and even if they eat outside

instead of fast and junk foods they can look for rice and dal which is a healthier alternative.

Quitting addiction

Importance and meaning

All of them unanimously agreed that any sort of addiction is bad for health and should be quit for a healthy and

better life. Addiction, especially passive smoking is very harmful. According to them drivers most commonly are alcoholics.

Health education

All of them emphasized that health education should definitely be given to all but only via door-to-door visits so that the people don't feel embarrassed.

Table 2: Highlight of findings.

Main diseases in the community: Most of them reported Diabetes, Hypertension and TB among adults; ARI, diarrhoea among children and low back pain was most common among females.			
Knowledge of NCDs Everyone aware about Non-communicable Diseases and they agreed that all are preventable. One of them named NCDs as "Life-style diseases"			
Life-style Modification None of them mentioned stress management as a life-style modification.			
Theme	Context	Barrier Perceived	How to overcome
Physical activity	Basic preventive measure for control of NCDs.	Lack of time and place in slums	Overcome barrier by customizing advises as per the individual. One of them said "...10 minutes fast walking, then rest for 2 minutes and then again 10 minutes of fast walking..." as appropriate physical activity.
Dietary modification	Basic preventive measure for control of NCDs. None of them could specify the maximum amount of salts that should be consumed in a day	Difficult for a poor person to eat green leafy vegetables and fruits regularly. Many people work outside where fast foods are easily accessible to them so they consume it regularly. One of them also informed that people misinterpret "kacha noon" as raw salt and consume excess salt after frying it.	Overcome these by carry tiffin with home-made foods.
Quitting addiction	Everyone agreed that any sort of addiction is bad for health and especially passive smoking.	It is not easy for someone with 30 years of addiction to quit all of a sudden.	Sharing experiences regarding cessation of addiction and praising the individuals who start to quit may help.
Weight reduction	Obesity is an early indicator of NCDs. None of them could define obesity.	Not able to make separate food for overweight individual. Not tasty as junk foods.	Similar as of physical activity.
Stress	None of them mentioned stress management as lifestyle modification.	On probing lack of time was stated by one of the participants.	Laughing clubs, role-plays and morning walks in groups can help in stress management.

Barrier perceived

Counselling to quit the addiction is very difficult especially for those who are addicted for decades. According to some health workers, "It is not easy for someone with 30 years of addiction to quit all of a

sudden." Even if the harmful effects of addiction have been explained, the people are not convinced. One participant shared her experience of a TB patient who continues to consume alcohol even when he knows it is harmful. "People argue that it is equivalent to consume tea every day."

How to overcome

One health worker suggested that organizing small meetings with previously addicted persons and sharing their experiences can be motivating. Praising the individual who has initiated quitting also boosts their confidence. Another participant opined that knowing the reasons behind the cause of addiction such as marital conflict, family problems can also help in quitting. The participants reached a consensus that addiction is a social problem and now children aged 10-11 years are also addicted. So, the children should be encouraged to go to schools where health education on harmful effects of addiction is given to them regularly.

Weight reduction

Importance

The participants believed that obesity is an early indicator of NCDs.

Meaning

None of the participants could define obesity accurately in terms of BMI. Very few of them knew about BMI calculation. Only one participant knew about waist circumference.

Health education

Here also they realised the importance of giving health education through the same means mentioned earlier. The participants suggested that a diet with low carbohydrates, low junk food more vegetables, fruits and more water should be taken to reduce weight. One health worker stated that anti-obesity medicines can be given to reduce weight.

Barrier perceived

As reported by one of the participants, people are not able to make separate food for the overweight individual in the family. Also, adapting to the healthier diet becomes difficult for them as it is not as tasty as the junk/fast foods.

How to overcome

Here also the suggested ways to overcome this similar to that of physical activity and diet modification.

Stress

None of them mentioned stress management as lifestyle modification. When the moderator probed in, the participants suggested some reasons of stress such as “genetic, lack of family support, old age problem, poverty, work pressure, lack of time etc.”

They came up with quite interesting ideas to relieve stress. They suggested music therapy, developing a hobby like reading books, watching TV, to drink water etc. One of them suggested that “thinking of worst scenario can motivate to reduce stress”

Some participants also recommended that laughing clubs, role-play and morning walks in groups can help in stress management.

Highlights of findings were summarized in Table 2.

DISCUSSION

This is the first study on barriers in implementing services regarding lifestyle modification in a slum of Kolkata. All the participants had vast idea about NCDs and its public health significance as they are generally updated by refresher training and awareness programmes. They also knew about the risk factors and various ways to prevent its occurrence.

In this study, everyone had stated that lifestyle modification in terms of quitting the addiction, dietary modification and reducing physical inactivity reduce the prevalence of NCDs in large numbers, similar to various other studies.⁴

In terms of physical activity, among the risk factors, everyone stated that physical inactivity is the main cause, but no one could define the favourable physical activity accurately. Few studies had shown that even walking for 20 minutes 3 times a week can significantly reduce the complications and effectively manage the conditions similar description was given by health workers in this study.⁶⁻⁸

The most important barrier in doing physical activity is lack of time due to their household work. Most of the participants opined that dietary modification as the basic preventive measure, regarding this; barrier was lack of knowledge about salt restriction and over intake of junk foods, as they are easily available and affordable at slums.

This had to be overcome by educating them about good dietary practices. Similar results were shown in studies done in healthy individuals also opined that good dietary practices reduce the incidence of NCDs.^{9,10}

Regarding tobacco quitting, everyone stated that health education through camp, awareness programmes on school, colleges and clubs is the most practical way to approach community. Few other studies had shown that behaviour change communication is the way to break the socio-cultural barriers through locally available clubs and camps.^{11,12}

In terms of weight reduction, very few had considered this as an important issue, when compared to others,

among all; none could correctly give the definition of BMI. Only one among them knew about waist circumference. Another was saying about anti-obesity drugs to reduce weight. As other risk factors, for obesity also, health education was crucial to spread awareness about the healthy lifestyle.

None of them stated about the importance of stress reduction, after asking more, they elicited a lot of factors which cause stress and they stated that awareness should be created through role plays; even simple morning walk can help reduce stress. This study was limited by the exploratory nature of this qualitative study, confinement to the participants and small sample size limit the generalizability of our findings to other population. However, qualitative study is designed to understand the phenomenon, and not to measure variables.¹³

This is the first qualitative study of its kind in this part of the country, which aimed to explore the perceived importance and barriers to giving health education regarding life-style modification among community health workers in the slum of Kolkata. The use of open-ended questions helped to gather rich information on participants' views and experiences. The study was constructed on the direct experience of participants.

Further, we feel that we have used the open framework of a qualitative design and uncovered regionally important factors that we would not have done otherwise. Obtaining data on perceived barriers by our participants demanded thorough understanding and planning of the content.

CONCLUSION

In this study, we have found that CHWs already possess knowledge and understanding of NCDs and its preventive measures and poor awareness regarding healthy lifestyle among the community was found to be the important barrier in implementing life-style modification. Giving health education emerged as the prime solution to tackle NCDs. Interventions should be in a tailored manner; as providers select the intervention models that best meet the needs of their local populations. As these workers are the mainstay of our health system, their views and perception are quite important. The appropriate training programme should be arranged for them to improve their knowledge and the effectiveness; as a step toward identifying their potential role in community NCD prevention and management.

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