

# A Study on Evaluation of Non-Communicable Disease Control Programme in Surendranagar District

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**Abstract:** *Introduction:* in India, Over 52 lakh people died of non-communicable diseases (NCDs) like cardiovascular diseases, stroke, diabetes & cancer in 2008. NCDs accounted for 53% of all deaths. In response to this, Government of India launched the National Programme for Prevention & Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke in the year 2009 which focuses on screening & management of risk factors. The project has been functioning in Surendranagar district, Gujarat from the year 2011. **Aims & Objectives:** to gain insight into the perception of the beneficiaries regarding functioning & quality of services received under this programme in Surendranagar district and to assess the implementation in terms of input & process indicators. **Methodology:** out of 13 non communicable disease cells in Surendranagar district, 5 cells were selected through simple random sampling. Information was collected through structured questionnaires. **Results:** the study revealed that NCD cells were established & functioning in every CHC in Surendranagar district as per programme guidelines, however there was deficit in staff & regular availability of drugs, laboratory services, IEC materials etc. Training & sensitization regarding the programme were inadequate. The study also revealed that no. of camps held per month were less than what has been given in the guidelines, available medicines were inadequate for all the beneficiaries & follow up of the newly diagnosed patients was not satisfactory. **Conclusions:** the programme is new & hence awareness about this programme per se was low. Hence it would be worthwhile to conduct regular sensitization activities for the public, so that they come back for follow up & utilize the services adequately. Regular training programme for the implementers also can go a long way in making the programme a success. Regular & adequate supply of drugs as per the guidelines should be maintained for the effectiveness of the programme.

**Keywords:** NCD cell, Evaluation, Sensitization, Surendranagar, Process indicator

## 1. Introduction

Chronic non-communicable diseases (NCDs) have replaced communicable diseases as the most common causes of morbidity and premature mortality worldwide[1]. In India, Over 52 lakh people died of non-communicable diseases (NCDs) like cardiovascular diseases, stroke, diabetes and cancer in 2008[2]. In response to this, Government of India launched the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & Stroke (NPCDCS) in the year 2009 which focuses on screening and management of risk factors[3]. The project has been functioning in Surendranagar district, Gujarat from the year 2011. The range of services under the programme includes health promotion, psycho-social counseling, management (out-and-in-patient), day care services, home-based care and palliative care as well as referral for specialized services as needed. Periodic evaluation of such programme can help to understand the problems in programme management, implementation and service utilization, so that necessary modifications can be suggested. The study was therefore taken up to understand the management, implementation and service utilization which can thereafter help in capitalizing on the strengths and focus

on modifications in the problem areas. The aim and objective of study was to assess the implementation of the NCD control programme in terms of input and process indicators and to gain insight into the perception of the beneficiaries regarding functioning and quality of services received under this programme

## 2. Methodology

As the study aims to understand the management, implementation and service utilization in Surendranagar district, it was decided to collect data at all levels where different stakeholders (in the district) are involved.

State Level: State NCD Cell, District Level: District NCD Cell & NCD clinic, Block Level: NCD Clinic, Sub centre Level: Screening facility

At District NCD cell and District NCD clinic, Data were collected by directly questioning the District Programme Manager using a pre-designed and pre-tested questionnaire and by visiting the District NCD clinic. At CHC NCD clinic (Block level), Out of total 13 NCD clinic set up, 5 NCD clinics were selected for collecting the data by simple random sampling. These 5 NCD clinics were than, chotila,

mulu, limdi and sayla. At Sub centre level, 2 sub centers from each of above selected taluka were selected by simple random technique. These 10 sub centers were than-1, than-4, zinzuda, rampara, jashapar, limli, bhagamda, pandari, nadala and ori. For evaluating Stakeholders' opinion, District Programme Manager, 5 Medical Officers from each above selected 5 CHC NCD clinics, 1 MHW, 1 FHW and 2 ASHA workers from each above mentioned sub centers were selected as stakeholders. And their opinion regarding the programme was asked. For assessing community perception regarding the programme, 1% of the population covered from each selected sub centre was selected. This came down to 669. It was a community based cross sectional study and data was analyzed by using Microsoft Excel 2007 and relevant statistics were computed.

### 3. Results & Discussion [4],[5],[6],[7],[8]

The evaluation of the programme was done in terms of conceptualization and planning, staff pattern, community level implementation at all levels in Surendranagar district.

#### 3.1 Evaluation at NCD Cell (Administrative)

**Table 1:** Stakeholders recruited at managerial level

Staff	Recruited	Trained
District Programme Manager	Yes	No
District Programme Assistant	Yes	No
Finance/Logistic officer	Yes	No
Data Entry operator	Yes	No

**Table 2:** Activities performed at the managerial level

Activities performed	Yes/No	Frequency
Preparation of district action plan	Yes	Six monthly
Regular updating of database	Yes	Monthly
Conduction of training	No	Nil
Monitoring & Evaluation of the programme	Yes	Weekly/ Monthly/ Quarterly

#### 3.2 Evaluation at District Hospital (NCD clinic)

**Table 3:** Staff recruited at district hospital as compared to guidelines

Staff	Recruited	Trained
Doctor	No	No
Medical oncologist	No	NA
Cyto-pathologist	No	NA
Cyto-technician	Yes	No
Nurses (4)	Yes (4)	No
Physiotherapist	Yes	No
Counselor	Yes	No
Data entry operator	Yes	No
Care-coordinator	No	NA

**Table 4:** Materials and logistics at district NCD clinic as compared to guidelines

Materials/Logistics	Adequately available(As per guidelines)
Medicines	Yes
Equipments	Yes
IEC materials	Yes

Table-1, 2, 3 and 4 shows that funds and logistics were available from NRHM. At the district level, most of the logistics and supplies were adequately available and there

were no complaints regarding the same from the stakeholders. The medicines were good quality and adequately available. \*District level planning & updating of database are quite satisfactory but the training component is missing which may be counted as a deficit. Hence, the staffs are technically untrained. The recruitment Vs guidelines show non-recruitment of doctor, cyto-pathologist, medical oncologist & Care coordinator This deficit need to be tackled to reach the optimum efficiency of the programme.

**Table 5:** Activities performed at district hospital (NCD clinic) as compared to guidelines

Activities performed	Adequate services available
Functional OPD	Yes
Functional indoor unit	No
Basic laboratory services	Yes
Functional ICU	No
Cardiac Care Unit	No
Emergency care services	No
Screening of the patients	Yes
Day care chemotherapy	No
Home based palliative care to disabled person	No
Referral services	Yes
Health promotion activities	Yes
Camps	No
Data monitoring	Yes

Table 5 shows that, even though the services were adequate in terms of OPDs, basic laboratory services and screening of the patients, there was large deficit in services like indoor unit, functional ICU, Cardiac Care Unit and emergency care. Also there was no availability of home based palliative care to disabled person and day care chemotherapy. It was also seen that even though the camps are being held, their frequency was not as per guidelines and they lacked the follow up services.

#### 3.3 Evaluation at CHC (NCD clinic)

**Table 6:** Table showing the staff recruited at CHC (NCD clinic) as compared to guidelines

Staff	No. of NCD clinics with adequately recruited staff (n = 5)	Percentage	Trained
Doctor	5	100%	Nil
Nurse	1	20%	Nil
Counselor	5	100%	Nil
Data entry operator	5	100%	Nil

**Table 7:** Materials and logistics at CHC (NCD clinic) as compared to guidelines

Materials/ logistics	No. of NCD clinics with adequate availability (n = 5)	Percentage
Medicines	3	60%
Equipments	5	100%
IEC materials	3	60%

**Table 8:** Activities performed at CHC (NCD clinic) as compared to guidelines

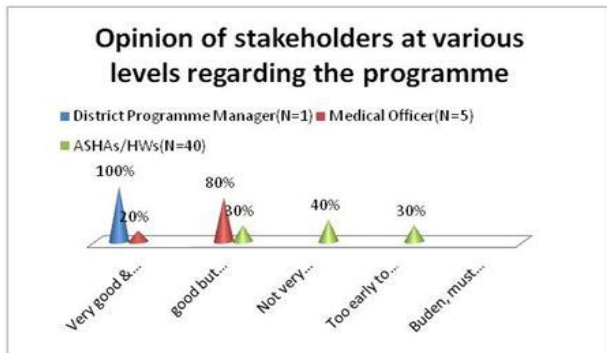
Activities performed	No. of cells with adequate activity as compared to guidelines (n = 5)	Percentage
Functional OPD	5	100%
Functional indoor unit	3	60%
Basic laboratory services	5	100%
Screening of the patients	5	100%
Home based palliative care to disabled person	Nil	Nil
Health promotion activities	5	100%
Camps	2	40%
Follow up	1	20%
Referral services	5	100%
Data monitoring	5	100%

### 3.4 Evaluation at Sub center

**Table 9:** Materials/Logistics and services at sub centers as compared to guidelines

Materials/Logistics/ Services	No. of sub centers with adequate availability as compared to guidelines (N= 10)	Percentage (%)
Supply of materials-Medicines, Equipments	2	20%
Regular IEC activities	3	30%
Screening by ASHA/FHW/MHW	2	20%
Data monitoring	10	100%
Referral services	10	100%

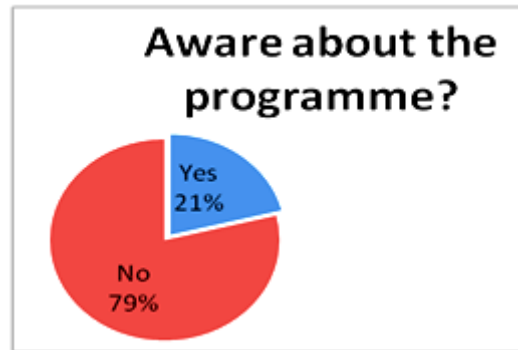
### 3.4 Opinion of stakeholders regarding the programme



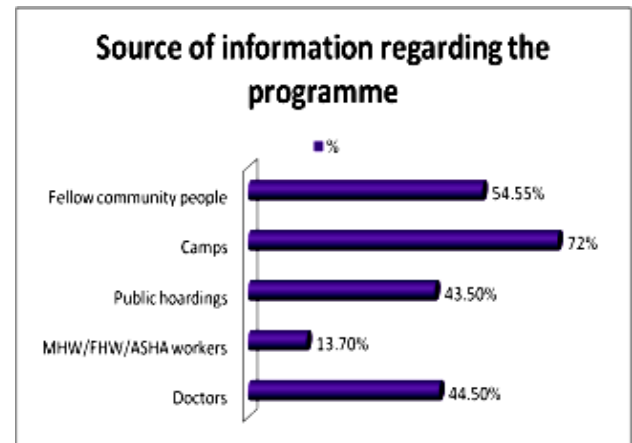
**Figure 1:** Opinions of stakeholders regarding the programme

Figure-1 shows opinion sought from stake holders at various levels like District Programme Manager & Medical Officers revealed that they had a positive opinion about the programme and felt that it must continued. However, Health workers/ASHA workers had a rather mixed opinion, where about 30% believed that the programme was good but needs improvement and 40% felt that it is not useful to the community. Whereas, about 30% felt that it was too early to comment about the programme.

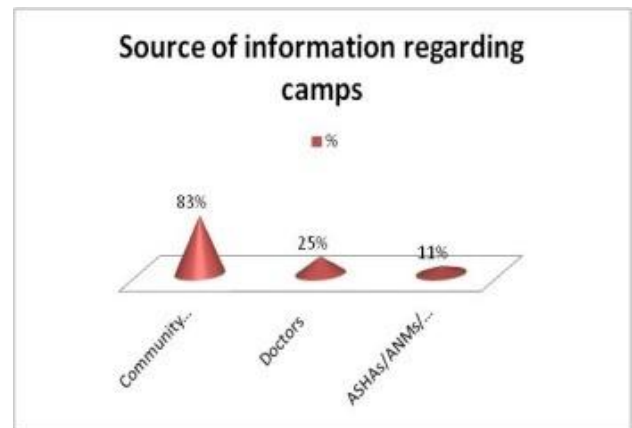
### 3.5 Community perception regarding the programme



**Figure 2:** Awareness about programme in community



**Figure 3:** Source of information regarding programme



**Figure 4:** Source of information regarding camp



**Figure 5:** Information regarding the camp

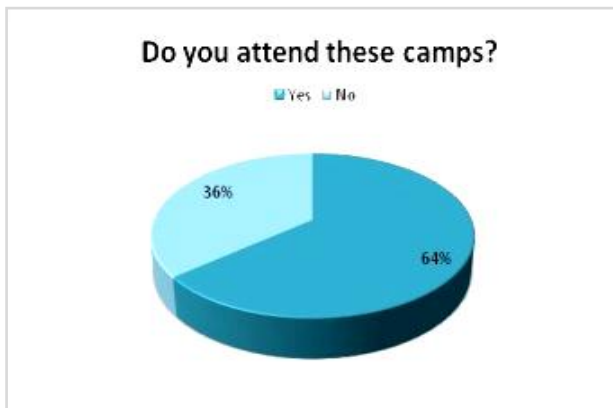


Figure 6: Regarding participation in the camp

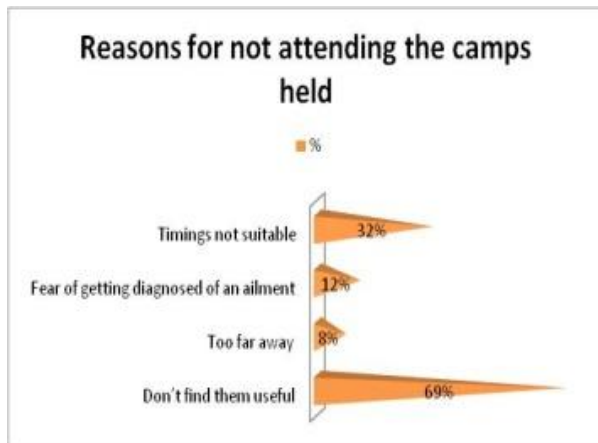


Figure 7: Reasons for not attending the camp

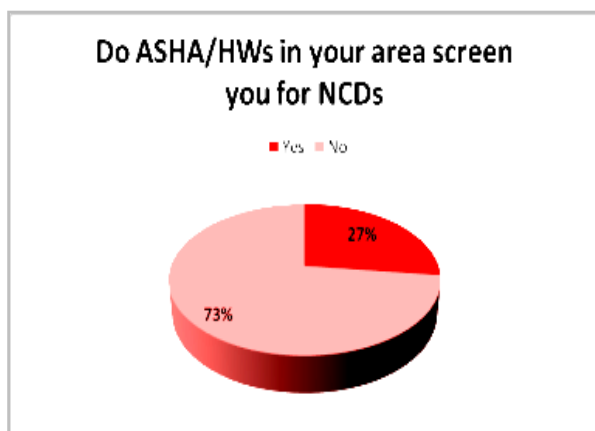


Figure 8: Screening by ASHA/HWs in the camp

To assess the community awareness and perception about the programme, questions were asked as mention in figure 2 to figure 9 which show that nearly 80% were not aware of the programme. The main source of information for those aware were the camps followed by fellow conversations and only 34% had not heard about the camps. The main source was again community talk. The official machinery for creating awareness did not seem to be very effective. Most of the ASHA workers were actively involved in the programme but 27% participated well. It should have been 100% and reasons for the deficit need to be identified and sorted out. In spite of the lacunae, neatly 86% of the community (who were aware & who attended the camps) thought that the programme initiative was useful to the community

#### 4. Conclusions & Recommendations

Most of the staffs are technically UNTRAINED. Training at intervals helps in motivation and knowledge up gradation. Drugs and equipments should be made available and their quality should be ensured. Follow up camps should be managed at sub centre level by ASHA and special clinic may be conducted on a fixed day in a month at sub centre level to prevent gaps in follow up of diagnosed patients. The urgent and acute need to tune up the official machinery to create awareness about the community programme is clearly felt. The implementation also needs to be closely observed and frequently evaluated to make it sharp and effective

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