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## Original Research Article

## SWOT of a Non-Communicable Diseases (NCD) care program in western India – lessons learned

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## ABSTRACT

**Background:** Shree Krishna Hospital Program for Advancement of Rural and Social Health (SPARSH), it means “touch” in Hindi) aims to address the NCD burden through community-based service delivery.

**Objectives:** We carried out SWOT analysis to understand the Strengths, Weaknesses, Opportunities, and Threats of SPARSH for further strategic planning.

**Materials and Methods:** Exploration of items for SWOT with staff was done. Salient items (items with more frequency) for each domain were selected to develop a five-point Likert type scale. Consensus score of each item was calculated and a score above 75% was considered salient.

**Results:** Major strength was door to door medicine service & delivery worked. Weakness was communication gap while working in a large team. Staff felt that in era of emerging pandemics, NCD care must be strengthened and financial stability to run such a program was perceived as a threat.

**Conclusion:** SWOT explored the strengths which need to be strengthened. Weaknesses and opportunities to be addressed in future planning and program development.

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## 1. Introduction

In October 2010, the Government of India initiated a national program for the prevention and control of diabetes, cardiovascular disease, and stroke (NPDCS) to tackle Non Communicable Diseases (NCDs). The objectives of the program being risk reduction for the prevention of NCDs (diabetes, cardiovascular disease, and stroke), early diagnosis & their management. Despite having a program in place we have a long way to go for increase in uptake of healthy practices among the general population for NCD prevention and deliver holistic health care at outreach.<sup>1</sup>

Charutar Arogya Mandal (CAM) [currently the sponsoring body of Bhaikaka University (BU)] has

been implementing Shree Krishna Hospital Program for Advancement of Rural and Social Health (SPARSH) as a community-based three tire NCD health care model since the year 2015-16. The program has been successful in development of the conceptual model of care, undertake the village level enumeration to identify beneficiaries, select and train village level health workers in NCD care, develop treatment protocols and health education materials, and provide individualized health care to NCD patients at village level through health camps, Telemedicine units and screening camps.

SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis is a strategic planning tool used to evaluate a policy, a program, a project or an intervention.<sup>2</sup>

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**Table 1:** SWOT Analysis - Total scores for each key factor/item, obtained from the weights and values assigned to every single item

<b>Strengths</b>			
<b>S. No</b>	<b>Items</b>	<b>Weighted Mean</b>	<b>Consensus Score (%)</b>
<b>Category 1: Provision of diverse interventions</b>			
1	Our project provides door to door medicine service & delivery	1.33	80.3
2	We have an extensive reach across 150 villages with medicine delivery and regular follow up strategies	1.38	80.2
3	We ensure regular camps and health education at SPARSH villages	1.68	80.1
<b>Category 2: Interprofessional team</b>			
4	We have a huge infrastructure and manpower in form of 150 VHW's and experienced office staff	1.43	80.2
5	Separate field Level staff exists for better implementation of project in Community	1.54	76.8
<b>Category 3: Supportive Work environment</b>			
6	We have a Supportive Team Leader at various levels	1.63	76.6
<b>Category 4: Innovations in SPARSH</b>			
7	We run a cancer screening component with high end mobile van facilities providing services to remotest areas for primordial & primary prevention and early diagnosis & treatment	1.38	76.7
<b>Category 5: Strong Operational Systems</b>			
8	Our Clinical protocols are prepared – after discussion with SPARSH Staff, hospital staff	1.68	80.8
9	Training of staff was a major component, which helped to strengthen our service delivery	1.52	80.7
<b>Weakness</b>			
<b>Category 1: Interpersonal issues among team members</b>			
1	At times there are communication gaps while managing huge team	1.91	68.3
<b>Category 2: Duplication (Lengthy) in reporting systems</b>			
2	There is too much paperwork/reporting which inhibits staff to supervise/focus on routine activity	2.33	63.5
<b>Category 3: Challenge with staff motivation &amp; commitment</b>			
3	A lack of motivation among staff exists as per their skill set	2.42	56.1
4	There is a lack of discipline & accountability from the staff in terms of ownership & commitment	2.54	55.5
<b>Category 4: Lack of focus (depth) in interventions</b>			
5	We focus on superficial aspects of NCD care and need to shift focus on indepth interventions on NCD care	1.78	80.8
<b>Category 5: Lack of continuous skills up-gradations among staff</b>			
6	There is a lack of good/effective technical skills regarding one's position/cadre	2.59	57.3
<b>Opportunities</b>			
<b>Category 1: In depth intervention in NCD care</b>			
1	In present times, our interventions should focus on self care & healthy dietary practices.	1.57	79.3

Continued on next page

Table 1 continued

<b>Category 2: Coordination with Government facilities, NGO's to provide continuum of care</b>			
2	We should plan linkage with government programs for NCD to provide services along with government systems as we are already looking in a huge population	1.87	73.10
<b>Category 3: Getting staff involved with regular trainings provided by various NGO's</b>			
3	Regular training or staff by external NGO's/faculty should be done	1.56	79.1
4	We should have regular training our doctors, medical offices, AMO's & paramedical staff on interventions, Training should be assisted with regular assessments in certain time period	1.49	78.6
<b>Threats</b>			
<b>Category 1: Sustainability of project based on Financial Support</b>			
1	Financial stability of funder and their continuous support is required	1.52	79.9
<b>Category 2: Readiness during Pandemics</b>			
2	We should be ready with strategies for unexpected diseases, pandemics , In distant areas health care should not stop	1.43	79.4

The purpose of performing a SWOT was to reveal positive forces that work together, and potential problems that need to be recognized and possibly addressed in existing program.

## 2. Materials and Methods

This was a group discussion/activity conducted within office premises of Bhaikaka University with SWOT as a framework.

### 2.1. Sample size & sampling

Out of 64 personnel employed in the program, staff who had been associated in implementation of the program for at least a year (adequate time to assess the benefits & shortcomings) of the program were invited to be a part of the study (n=52).

### 2.2. Data collection and analysis

An overview of the activity was briefed. Under each theme, program staff were asked to write their experiences. The session was open to discuss/address queries raised by the staff. No leading questions were given during this session.

To generate their ideas and perceptions, they were given sets of blank papers where they were instructed to write down each idea/experience. No identifiers such as name, designation were noted. The responses were collected, sealed and stored in envelopes labelled as Strengths, Weaknesses, Threats & Opportunities (SWOT). They were then read and entered in an Excel sheet under respective headings - SWOT. These were analyzed carefully and codes were given to each response. Later a similar set of codes were grouped under categories. These categories were mutually discussed and agreed upon by the authors.

In further steps, codes were prioritized or weighted by using the cumulative voting technique. Each identified item/code was ranked on a Likert scale - likewise, each item received a value on a 5-category verbal rating scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree & 5 = Strongly Agree) according to its assessment at that time. The weighted mean for each item against its cumulative ranking was calculated. A Consensus score (in percentage) was calculated to have an understanding of the consensus of the program staff. A cutoff score equal and above 75% was kept for items under respective categories to be reported and the design of the strategic planning was done accordingly for the future projects.

## 3. Ethical Clearance

Ethical Clearance [IEC/BU/2021/Ex.37/257] was taken from the Institutional Ethics Committee of Bhaikaka University.

## 4. Results

The highest consensus score was for having clinical protocols prepared after mutual discussions with inter and intradepartmental staff (80.8%). Following was our training - for staff which ensured strengthening service delivery (80.7%). These further strengthened the door step delivery of medications (80.3%). Also regular camps and health education at village levels for continuous support and care pointed as strengths. We had focused on superficial aspects of NCD care and needed to shift focus on in-depth interventions on NCD care (80.8%). From execution point of communication gap among team members at work (68.3%) and lots of paperwork (63.5%) were the other weaknesses pointed out.

The highlighted opportunities were focus on self-care like yoga, exercise and meditation and improve exiting dietary practices (79.3%). Regular training of staff either by NGO's/faculty should be done along with assessments. In the existing program, a major threat was assurance of having continuous financial support and stability (79.9%), not having project strategies (79.4%) for current pandemics.

## 5. Discussion

The reported strengths comprised of providing diverse interventions at primary, secondary and tertiary levels. Staff had been receiving regular training and clinical protocols were regularly updated and prepared in consultation with experts. Certain drawbacks did exist in handling an interprofessional team managing diverse interventions like interpersonal issues, multiple stages of reporting, lack of ownership and commitment towards work. Suggestions were to shift focus on deeper aspects of NCD intervention especially during pandemics. To ensure staff being motivated, regular training of new interventions and its assessment should be done regularly. A threat to the program was the lack of financial stability and sustainability.

This analysis reflected the implementation status of SPARSH. Enrolled patients received continuum of NCD care through regular mobile health camps, continuous follow ups, doorstep delivery of medications. SPARSH had similarities with existing government programs like the NPCDCS.<sup>3</sup> An opportunity suggested was that certain components like laboratory investigations, medications can be linked to Government setups. This gives an opportunity to create synergies between public & private facilities.

The strength of this study design was that views of all program staff were included. Our program aimed to design interventions that have been tested regionally and locally which are needed to reduce the incidence, prevalence, morbidity and mortality of NCDs. A study by Kar SS et al. mentioned that in NCD prevention, targeting risk factors will improve the overall health status of the community,<sup>4</sup> this was in congruence with our approach.

Some quantitative studies with the aim to analyse gaps and reasons in implementation of NPCDCS program was done and believed that it would be the feedback for primary care physician's team to improve services at grassroots level.<sup>5-7</sup> They did point out the logistical constraints and enormous reporting systems as their shortcomings. An absence of supportive supervision was highlighted across all the studies. In terms of opportunities, the focus was on training and time management to pursue their routine field activities were emphasized.

Certain studies<sup>8,9</sup> strongly suggested that private institutions involvement on public partnership mode will lead to increase knowledge and awareness and more people will participate in the NPCDCS activities, more prominence must be given on better integration of NPCDCS program with public health facilities, which will improve the health care utilization in government health facilities. There is a need for constant monitoring and evaluation of the program to identify the gaps and subsequent actions for further improvisation.

Another evidence of having initiatives like SPARSH was given by a study<sup>8</sup> which 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.<sup>9</sup>

SWOT analyses provide a basis to assess the likelihood of a program's success or failure.<sup>10</sup> Very few studies on health programmes have been published using the SWOT framework, one being a study done by Kataria et al.<sup>11</sup> aimed to develop a non-communicable disease research agenda, by engaging a community collaborative board and scientific advisory group and another being a study done in Pakistan where The National Program for Family Planning and Primary Healthcare was analyzed using SWOT.<sup>12</sup> A limitation to our study was that this program was an Institution based initiative covering a certain geographical area. The findings of this study cannot be generalized to a larger geographical spread and other programs.

## 6. Conclusion

The results could be adapted and conducted in other programs/projects to identify their own internal and external key factors, an initial step before developing or implementing such programs.

## 7. Source of Funding

None.

## 8. Conflict of Interest

None.

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