

# Need of a New Frontline Health Functionary Dedicated to Non-Communicable Diseases in India

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## Abstract

Majority of global deaths are attributed to noncommunicable diseases (NCDs). Along with the ageing population, burden of non-communicable diseases is also rising. India shares more than two-third of the total deaths due to NCDs in the South-East Asia Region (SEAR) of WHO. Since the awareness level about the chronic diseases and their risk factors is still limited in the low and middle income countries, it is expected that the health education based primary prevention interventions could be as successful as the first generation community oriented primary care (COPC) models. Community health workers (CHWs) are central to the primary health care approach towards health care utilization in India but do they have sufficient training. The first step in primary prevention of cardiovascular diseases is to identify individuals at high cardiovascular risk. A number of methods have been devised to calculate individual risks based on risk factor levels. Under NPCDCS in India, there is a three tier structure of NCD Clinic at block, district and state level. At the village level in Subcentre, only opportunistic screening is being done to those who visit the subcentre and are above 30 years of age. There is no provision of active screening of non-communicable diseases and their risk factors under the programme. There is no dedicated health worker at the grassroot level for the NCDs. Thus the authors envisage that there is a dire need for the provision of new band of community based health functionary dedicated to control the burden of NCDs.

**Keywords:** Non-Communicable Diseases, Community Health Workers, Health System

## Introduction

Of 56.4 million global deaths in 2015, 39.5 million, or 70%, were due to noncommunicable diseases (NCDs). The burden of these diseases is rising disproportionately among lower income countries and populations. In 2015, over three quarters of NCD deaths -- 30.7 million -- occurred in low- and middle-income countries with about 48% of deaths occurring before the age of 70 in these countries.<sup>1</sup> Noncommunicable diseases (NCDs) contribute to 60 % (5.87 million) of all deaths. India shares more than two-third of the total deaths due to NCDs in the South-East Asia Region (SEAR) of WHO. Cardiovascular diseases (coronary heart disease, stroke, and hypertension) contribute to 45% of all NCD deaths followed by chronic respiratory disease (22 %), cancers (12 %) and diabetes (3%). The probability of dying between ages 30 and 70 years from four major NCDs is 26%.<sup>2</sup>

NCDs are largely the disease of the older generation. The population ageing, started in the last century with developed countries, is now encompassing developing countries too. India, by no means, is an exception to this phenomenon. In India, elderly population rose from 5.6% in 1961 to 8.6% in 2011.<sup>3</sup>

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Along with the ageing population, rises the burden of non-communicable diseases. The prevalence of diabetes has increased by 10% from 2010 to 2014 in India. Nearly one out of every ten persons aged 18 years and above in India has raised blood glucose.<sup>4</sup>

Hypertension (HTN) is the attributable cause for 57% of stroke and 24% of coronary heart disease deaths in India. Recent studies have reported that hypertension is present in 25-30% urban and 10-20% rural subjects in India.<sup>5</sup>

According to ICMR, India is likely to have over 17.3 lakh new cases of cancer and over 8.8 lakh deaths due to the disease by 2020 with cancers of breast, lung and cervix topping the list.<sup>6</sup>

With such a huge increasing burden of NCDs along with ageing population, there is an urgent need to address the NCD at primary level.

### Current NCD addressal at Primary level

In India, according to Census 2011, around 83.3 crore people live in rural India (70% of India's population) and 37.7 crore in urban India.<sup>7</sup> In the present health setup, at the Subcentre level, the most peripheral level of contact with the community under the public health infrastructure, there is one female health worker (ANM, Auxillary Nurse Midwife) and one male health worker. One Subcentre caters to a population of 3000-5000. ASHA, Accredited Social Health Activist, introduced under National Rural Health Mission in 2005, are the voluntary female health activist working on honorarium basis. One ASHA serves a population of 1000 in rural area and around 2000 in urban area.<sup>8</sup>

Based on the recent data from states, the total number of ASHAs across 32 states and UTs is 8,59,331. Overall achievement of ASHA selection against the revised target of 9,61,113 is 89.4%.<sup>9</sup>

The ASHAs receives performance-based incentives for promoting universal immunization, referral and escort services for Reproductive & Child Health (RCH) and several other healthcare programmes like Leprosy control, Kala-Azar, ICDS, NCDs, construction of household toilets and many more. In short, this health worker is entitled to look after all the age groups and most of the health programmes in her defined population.<sup>10</sup>

Indian government runs a health programme for reducing the burden of Non-communicable diseases, National programme for prevention and control of Cancer, diabetes, cardio-vascular disease and stroke [NPCDCS]. Under NPCDCS, there is a three tier structure of NCD Clinic at block, district and state level. At the village level in Subcentre, only opportunistic screening is being done to those who visit the subcentre and are above 30 years of age. There

is no provision of active screening of non-communicable diseases and their risk factors under the programme. There is no dedicated health worker at the grassroot level for the NCDs, though ASHAs have been trained in NCDs at several places in India.<sup>11</sup>

In an NPCDCS evaluation study done in Gujarat (2011) by Jasani P et al<sup>12</sup>, it was found that in only 26% of the households NCD screening was done by the ASHA/Health worker and 36% of people attended NCD health camps. It was also seen that even though the camps were being held, their frequency was not as per guidelines and they lacked the follow up services. Moreover, most of the staff at NCD clinics was untrained.

### Need for another frontline worker

It sums upto that majority of national programmes related to maternal and child health along with communicable diseases control programmes are being implemented by a part-time honorarium paid worker ASHA. The list of her incentives do not include any work done on Non-communicable diseases. Hence, apart from the limited available time, there is no driving force for the present frontline workers to work on non-communicable diseases.

There is no provision of active screening of non-communicable diseases and their risk factors at primary level. There is no dedicated health worker at the grassroot level bestowed with the responsibility to do active screening for NCDs.<sup>11</sup>

The INTERHEART study (a global case-control study to identify risk factors for acute myocardial infarction) identified that the risk factors for CVD are no different in the developing countries, than from the developed countries, except for the fact that they manifest about 8-10 years earlier.<sup>13</sup> When the public knowledge about the risk factors was limited, the Community oriented primary care (COPC) models such as CHAD<sup>14</sup>, North Karelia<sup>15</sup>, Stanford three community<sup>16</sup> were highly successful in terms of risk reduction. These projects were followed up by more intense and more rigorously designed programs such as Stanford five city<sup>16</sup>, German cardiovascular prevention<sup>17</sup> and Minnesota heart health program<sup>18</sup> and randomized control trials which paradoxically had a limited success. This inconsistency is attributed to secular trends, when during the duration of the study the individuals in the non-intervention areas also adopt preventive practices. Thus the success of individual based primary care programs is increasingly seen as an inverse function of the awareness level in the community.<sup>19,11</sup> Since the awareness level about the chronic diseases and their risk factors is still limited in the low and middle income countries, it is expected that the health education based primary prevention interventions could be as successful as the first generation COPC models.<sup>19</sup>

In India, there have been some attempts in pilot projects like DISHA, pREParE to train existing Community health workers in screening and promoting lifestyle modification for controlling NCDs.

DISHA is an ongoing project of Public Health Foundation of India and it involves trainings of ASHAs and Anganwadi workers to promote lifestyle modification for preventing non-communicable diseases.<sup>20</sup> On the similar lines, “Primary prevention strategies at the community level to promote treatment adherence to prevent cardiovascular disease” (pREParE), is an on-going project at MGIMS, Wardha.<sup>21</sup>

In this project Community Health Workers are being recruited to promote treatment adherence to prevent cardio-vascular diseases. These research projects show that field worker can be trained in skills required to implement health promotion and management of NCDs. But the authors are of opinion that our this ‘superpower multipurpose worker ASHA’ will be overburdened if she is being engaged for the further health programmes that will hamper her quality of work in existing health programmes of MCHN and communicable disease control programmes. This is especially true in case of noncommunicable diseases as they involve a different age group of population with different predisposing factors than MCHN problems and communicable diseases. Her incentives for work includes mainly RMNCH+A programme which includes reproductive, maternal, newborn, child and adolescent health, Janani Suraksha Yojana; Leprosy, Kala-azar, TB patient identification and counselling and treatment; Vector borne diseases, blindness control and iodine deficiency disorder control.<sup>8</sup>

The list of her incentives do not include any work done on Non-communicable diseases or people suffering from such chronic diseases.<sup>10</sup> ASHA’s work is supervised by the ASHA supervisor at the administrative level and by the ANM at the local level. Similarly to ASHA, ANM is over-burdened with work responsibilities related to Maternal and child health, family planning, nutrition, immunization, record keeping, several communicable and vector borne diseases. Male health worker is entitled with the responsibility of reducing the burden of several communicable and vector borne diseases, record keeping, sanitation and nutrition.<sup>8</sup> Moreover, 10.5% of the sanctioned posts of HW (Female)/ANM are vacant as compared to 40.7% of the sanctioned posts of Male Health Worker.<sup>22</sup>

Thus the authors envisages that there is a dire need for the provision of new band of community based health functionary dedicated to control the burden of NCDs. This health functionary can act as the first port of call for any Non-communicable disease related demands of the community, especially elderly, who find it difficult to access health services. He/She will be a volunteer health activists

in the communities, who is creating awareness on health and its social determinants and mobilize the community towards local health planning and increased utilization and accountability of the existing public health services. He/She will be a promoter of good health practices and will be entitled for Performance Based Incentives for prefixed activities. We are predicting that this additional frontline worker will not be an additional economic burden as he/she will get the incentives that are to be given to ASHAs for activities related to NCDs prevention and control. Thus, exploring this option of creating another army of health personnel to address a till date unattended chunk of disease burden of NCDs without any extra economic burden is ‘Faydeka Sauda’ for health policy decision makers.

**Conflict of Interest:** None

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