Assessment of Non-Communicable Disease Clinic for Early Detection and Management of Diabetes Comorbidity with Tuberculosis in Chomu, Jaipur

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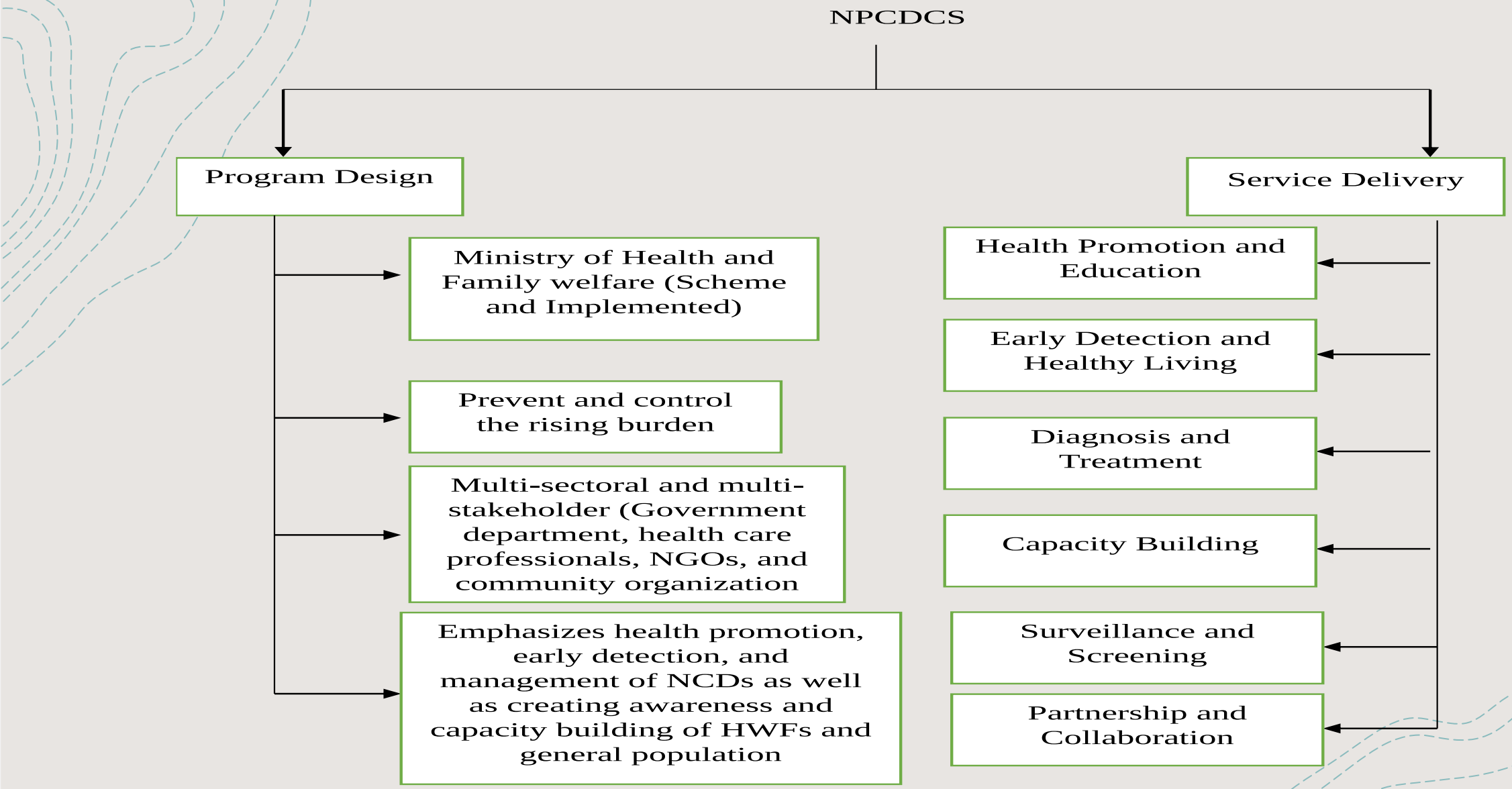
Background

- India is experiencing a dramatic transition in its health, with the burden of non-communicable infections surpassing that of communicable diseases including tuberculosis, the HIV, and other water- or vector-borne infections. Non communicable diseases such as cardiovascular disease, cancer, chronic respiratory disorders, diabetes, and so on are thought to account for over 60% of all deaths.
- Cardiovascular disease is the foremost cause of death and morbidity, followed by chronic respiratory disorders, cancer, and diabetes. In 2016, cardiovascular disease was responsible for 28.1% of DALYs, chronic respiratory illness was responsible for 10.9% of DALYs, and cancer was responsible for 8.3% of DALYs.
- Considering this, The National Program for Control of cancer, diabetes, cardiovascular diseases, and stroke was launched by Ministry of Health and Family Welfare of the government of India during the period of 2010-11with the goals of preventing and controlling common non-communicable diseases through behavioural and lifestyle changes.
- People with diabetes have a two to three times higher risk of active TB than people without diabetes. Diabetes is thought to be the cause of 15-20% of all TB cases in India. Preliminary evidence also shows that diabetes worsens TB treatment outcomes in terms of increased deaths, failure and relapse rates
- Therefore, The Revised National Tuberculosis Control Programme and National Program for Control for Cancer, Diabetes, Cardiovascular diseases, and Stroke have been integrated as part of another initiative, and the "National Framework for Joint Tuberculosis-Diabetes Collaborative Activities" has been initiated.

Schematic Illustration depicting Program design and service delivery



Objectives and Methodology

The objective of capstone projects is given below: -

- To explore the implementation of Diabetes and Tuberculosis collaborative activities
- To identify the facilitating and hindering factors in the implementation of Diabetes and Tuberculosis collaborative activities

Methodology

- Study area- Community Health Centre (NCDs clinic), Chomu, Jaipur, Rajasthan
- Study period- 24th to 29th March 2023
- Study participants- 1 Medical officer, 1 ASHAs, and 3 beneficiaries
- Study design- Mixed method
- Sampling- Purposive sampling technique
- Data collection method- key informant interview and observation (using open ended questionnaire and observation check list

Findings

“Based on observational assessment, providers and beneficiaries information”

Problems	Suggestive Actions	Feasibility	Priority
Poor focus on health education and promotion	Focus on active community participation and engagement for health promotion and early detection and management, basically community driven program	Swift	
	Developing IEC materials, tools, and focusing on proper counselling for individuals and community to explain the association between TB and diabetes highlighting health lifestyle, self-management, and adherence to treatment	Swift	
Ineffective coordination between NCD clinic and Tuberculosis unit	Create integrated information systems that enable patient data to be shared easily across NCD clinics and TB units.	Swift	
	Improve the referral mechanism between the NCD clinic and the TB units to ensure prompt and appropriate patient transfer	Swift	
Lack of regular training among health professionals of NCD clinics mainly to Counsellor, lab technician	Provision of compulsion refresh or update training	Swift	
	Conducting webinar, conference, and so on using online media related to NCDs update and skill enhancement	Challenging	

Problems	Suggestive Actions	Feasibility	Priority
Accredited Social Health Activists have no formal responsibility in the delivery of NCD care.	Government should consider ASHAs as formal community health workers who provides NCDs related services	Challenging	
	Distribution of roles and responsibility should be systematic; low workload burden	Challenging	
Unavailability of patients record book for the common population	Provision of patients record book for general population which may help in follow-up and further treatment process too.	Swift	
	Public private partnership for the effective digitalization record system for every individual's detail	Difficult	

Supporting action to sustain the best practices

Best Practices	Supporting actions required to sustain the best practices
Building relationships of trust with the community through ASHAs	Performance-based reward for NCD-related services
	Better working conditions and more helpful supervision
	More opportunity for learning and career progression
National framework for joint tuberculosis-diabetes collaborative activities	Foster accountability and transparency
	Sensitized for political commitment or will
	Advocacy for allocation of budget and resources
Operational research to improve the implementation of Tuberculosis-diabetes initiatives	Investment on appropriate research for identify, and developing tools and strategies
	Public private partnership to conduct research
	Bringing expertise of research on board
Multi-sectoral approach to reduce morbidity and mortality due to NCD	Advocacy at policy level highlighting its significant
	Regular monitoring and evaluation to assess the impact of multi-sectoral approach
	Sustainable funding to support the approach
Every level of the health-care system, from sub-centre to hospitals, conduct outreach program for opportunity screening to identify patients who would benefit from early diabetes and tuberculosis diagnosis.	Public private partnership to bring together resources, expertise, and funding
	Capacity building at various levels of health
	More focus on community driven program and activities

Conclusions

- Emphasized the significance of integrating diabetes screening and management into existing TB control programs to ensure early detection and proper treatment for people with both illnesses.
- lack of awareness among community people, unavailability of patients record book, insufficient training of health care providers and a lack of a holistic care approach making difficulties in managing diabetes and tuberculosis in current scenario.
- Collaboration between the TB and diabetes programs, relationships with community healthcare professionals, and community involvement were highlighted as facilitating factors.

Recommendations

To support effective and efficient health education and promotion, a multi-sectoral, multi-stakeholder initiative addressing the socioeconomic determinants should be prioritised.

Supportive monitoring and supervision, regular training of healthcare workers, and management information system in terms of patients' record books for additional follow-up and medicines should be focused.

Furthermore, community driven program with help of active community engagement should be highlighted to promote healthy lifestyles.

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Annexures

Thank You