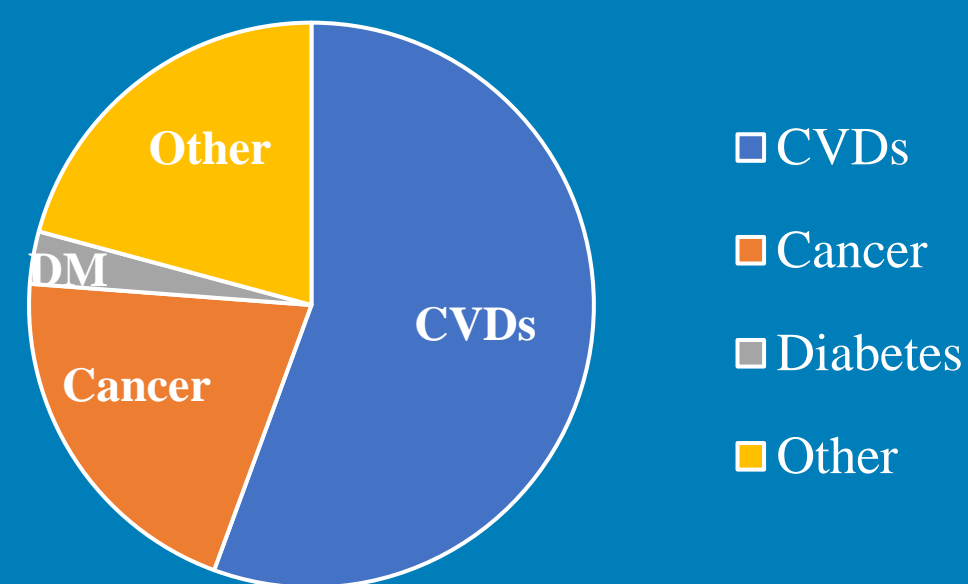


RESEARCH QUESTION: The aim of this project was to understand the state of Armenia’s NCD burden and subsequently identify a roadmap for action with impactful & cost-effective policy options and interventions that reduce the NCD burden of Armenia.

BACKGROUND

Globally, the high rates of non-communicable diseases (NCDs) are a growing cause of concern as NCDs cause nearly 71% of all deaths. Low- and middle- income countries experience over 85% of these deaths. Among these, cardiovascular diseases (CVDs) cause 44% of preventable deaths, followed by cancers, respiratory diseases and diabetes.¹

Fig. 1: % of all deaths caused by NCDs in Armenia



Similarly in Armenia, 93% of all deaths are due to NCDs. CVDs have the highest-burden, causing 55.6% of total deaths and are also one of the main drivers of premature mortality in the country (Fig. 1).² Policy and clinical interventions focused on NCDs is a key aspect of prevention and control.²

DESCRIPTION OF ORGANIZATION

The Program for Education in Global and Population Health provides the education, training and research skills needed to develop future leaders in global and population health to contribute to a healthier, more equitable world. Based at the Vagelos College of Physicians and Surgeons at Columbia University, this program views global health as a discipline that seeks to understand the interplay of the many factors that impact health without respect of national borders, and by understanding those factors, move towards achieving health and health equity worldwide.⁴

OBJECTIVES

- Objective 1: To understand the burden of disease of hypertension and diabetes (Armenia and globally) and conduct stakeholder interviews
- Objective 2: Develop a series of research questions to support ongoing policy approaches in the area of hypertension and diabetes in Armenia.
- Objective 3: Objective 4: Write a preliminary research proposal

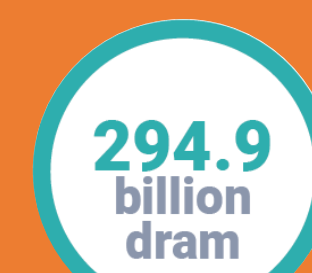
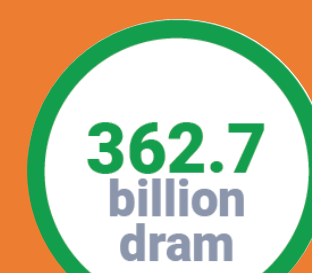
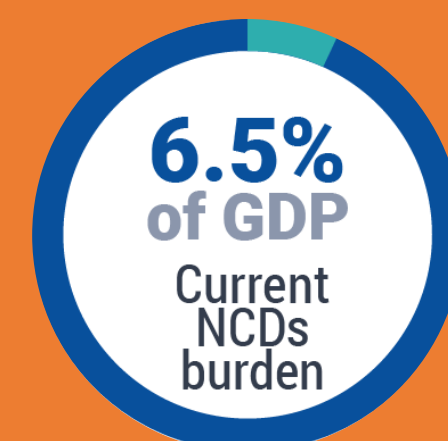
METHODS

- *Desk reviews* (semi-formal literature review & grey literature review) to analyze the state of NCDs globally and specifically also in Armenia
- *Key informant interviews* with Armenian National Institute of Health staff

→ **Recurring themes were identified, and categories of research were developed**
 → **Outstanding gaps in evidence or directions for future research were extracted**

FINDINGS

- 93% of all deaths in Armenia are due to NCDs with 22% of the population dying prematurely; higher proportion for men (31%) than women (15%)³
- The top five risk factors are tobacco use, harmful alcohol consumption, high salt intake, physical activity & high metabolic factors such as blood pressure, cholesterol, obesity and diabetes. 45% of the population is overweight or obese³
- In addition to its clear impact on human health, NCDs also have a **high economic cost**. Armenia’s economic cost of NCDs accounts for 6.5% of its gross domestic product (GDP). In 2019, the WHO identified five selected best buy interventions for Armenia to decrease the burden of NCDs globally³



- Salt intake in Armenia is estimated to be TWICE the WHO recommendation of 5 grams per day which contributed to 26% of CVDs in the country. The WHO has recognized **salt reduction has one of the most cost-effective interventions**³
- More work needs to be done to strengthen Armenia’s Armenia clinical interventions focused on CVD and diabetes to ensure consistency across the country.³

DISCUSSION

- Based on the WHO’s economic analysis of Armenia’s NCD strategy, analysis of the literature and key informant interviews, a roadmap has been developed for future action on **two of the five** selected interventions.
- To achieve a reduction in CVD deaths in Armenia, salt reduction and strengthening of the CVD and diabetes clinical interventions need attention. The goal of our roadmap is to provide clear directions to policy-makers, researchers and funders for further action on NCDs prevention, control, and surveillance in Armenia.

ROADMAP FOR FUTURE ACTION

Salt Reduction

Priority 1: Strengthen the salt surveillance

- Break down of sodium in various food items
- Urine analysis for more accurate salt levels

Priority 2: Develop a salt reduction strategy

- Industry regulation and standards for marketing
- Health education and communication

CVD & Diabetes Clinical Interventions

Priority 1: Analyze the utilization of free screenings for CVDs & diabetes

Priority 2: Strengthen the national coordination and planning for preventing and controlling NCDs

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