Breakthrough ACTION Nepal/JHU-CCP/CDPH-IOM
Data scoping exercise

14th February 2020
CDPH-Breakthrough ACTION Data Scoping Exercise

1. Data scoping
   - Prioritization activity
   - Desk review
   - Introduction to evidence maps
   - Findings

2. Next steps
CDPH-Breakthrough ACTION Data Scoping Exercise

• Supported by Breakthrough ACTION Nepal
• Conducted by students of MPH, MPHN, MHPE, CDPH, IOM (Kamal Raj Adhikari, Nabin Dhakal, Preena Lal, Preeti Bhattarai, Sapana Panta, Soniya Gurung, Sharmila Acharya, Sushma Pokharel)
• Duration- November 2019 to February 2020
CDPH-Breakthrough ACTION Data Scoping Exercise

Objectives

• To learn about Data Scoping exercise process
• To create search protocol for literature review
• To summarise findings and generate Evidence map
• To write technical briefs based on Evidence map
• To disseminate findings of Data Scoping exercise
What is data scoping?

A data scoping exercise reviews and maps a wide range of literature with the purpose of envisioning where gaps and innovative approaches may lie.
Goals of the data scoping activity

1. Guide future research and SBC health planning based on prioritized health issues/research questions
   • *E.g. by creating evidence maps; developing analysis plans; identifying data sources to answer research questions; conducting simple data analyses*

2. Identify opportunities for future research, collaborations, skills-building
   • *E.g. Data dissemination for data use*
Components of the data scoping activity

1. Identification of prioritized health issues and research questions
2. Desk review
3. Evidence maps
4. Data availability, sharing and use
1. Prioritization Activity

Identify health issue:
Non-communicable diseases and socio-behavioural risk factors

Identify research questions:
What are the socio-behavioural risk factors contributing to NCDs in Nepal?
Components of the data scoping activity

1. Prioritization of health issues and key research questions
2. Desk review
3. Evidence maps
4. Data availability, sharing and use
2. Desk review

• Methods: Literature review and data summary
  – Identify a list of key search terms
  – Identify a list of databases to use (PubMed)

2. Desk review

- Methods: Literature review and data summary
  - Literature review
    - Peer-reviewed literature
  - Inclusion criteria: We used articles published in the last 10 years and related to Non-communicable diseases and socio-behavioural risk factors specifically in Nepal
2. Desk review

• Data collection

<table>
<thead>
<tr>
<th>Abstracts retrieved</th>
<th>Pubmed; Search terms 1(743) + 2(979)</th>
<th>284</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total relevant with full-texts pulled</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>Total not relevant on initial review</td>
<td>193</td>
</tr>
</tbody>
</table>
### 2. Desk review: Data summarization

<table>
<thead>
<tr>
<th>Content summarized</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full reference</strong></td>
</tr>
<tr>
<td><strong>Organization affiliated</strong></td>
</tr>
<tr>
<td><strong>Publication type</strong>: peer-reviewed publication</td>
</tr>
<tr>
<td><strong>Specific geographical location(s)</strong></td>
</tr>
<tr>
<td><strong>Study type</strong>: Qualitative, quantitative, or mixed methods</td>
</tr>
<tr>
<td><strong>Primary audience(s) or populations of interest</strong></td>
</tr>
<tr>
<td><strong>Sample sizes</strong></td>
</tr>
<tr>
<td><strong>Primary health areas of interest</strong>: NCDs; risk behaviours</td>
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<tr>
<td><strong>Specific health behaviors</strong></td>
</tr>
<tr>
<td><strong>Primary predictors or explanatory variables of interest</strong></td>
</tr>
<tr>
<td><strong>Specific SBCC intervention component discussed/described</strong> (if any)</td>
</tr>
<tr>
<td><strong>Major findings</strong> (Summarized in 1 sentence only)</td>
</tr>
<tr>
<td><strong>Relevant level(s) of the socio-ecological model</strong>: individual, household, community/societal, health facility, or structural/policy</td>
</tr>
</tbody>
</table>
## 2. Desk Review: Data summarization

<table>
<thead>
<tr>
<th>Number</th>
<th>Reference</th>
<th>Geographical location(s)</th>
<th>Study type: Qualitative/Primary audience</th>
<th>Sample sizes</th>
<th>Primary health area: Specific health behavior</th>
<th>Primary predictors or explanation</th>
<th>Specific SBCC intervention</th>
<th>Major finding (Summary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 NCD1</td>
<td>Tobacco smoking, chewing habits, alcohol drinking and the risk of head and neck cancer in Nepal</td>
<td>Chitwan, BPKMCH</td>
<td>Hospital based</td>
<td>Head and Neck Cancer cases</td>
<td>HNC cases: 549; Controls: 601</td>
<td>Head and Neck Cancer</td>
<td>Tobacco smoking, chewing habits (Tobacco, Sungai, Zarda, Lwung, Pan Masala); Alcohol drinking</td>
<td>Types, frequency and duration of tobacco smoking, chewing habits and alcohol drinking</td>
</tr>
<tr>
<td>2 NCD2</td>
<td>Study of the magnitude of diabetes and its associated risk factors among the tuberculous patients of Morang, Eastern Nepal; Babaha</td>
<td>Morang</td>
<td>Cross-sectional study</td>
<td>Tuberculous patients</td>
<td>320</td>
<td>Cervical cancer, Alcohol consumption, Alcohol consumption, Tobacco consumption, Alcohol consumption, Fruit and vegetable consumption, Physical activity</td>
<td>Tobacco consumption; Alcohol consumption; Tobacco consumption; Alcohol consumption; Tobacco consumption; Alcohol consumption</td>
<td>Tuberculosis incidence, Alcohol consumption, Tobacco consumption, Stress level, Family history</td>
</tr>
<tr>
<td>3 NCD3</td>
<td>Analyzing Awareness on Risk Factors, Barriers and Prevention of Cervical Cancer among Pairs of Nepali High School Students and their Mothers</td>
<td>Lalitpur</td>
<td>Descriptive Cross-sectional study</td>
<td>Adolescents and their mothers</td>
<td>253 pairs of adolescent students and their mothers</td>
<td>Reproductive health, Adolescent health, Cancer prevention</td>
<td>Lifestyle; Cancer talk with others</td>
<td>Knowledge on cervical cancer and health beliefs; Student and teacher awareness of cervical cancer and health behaviors.</td>
</tr>
<tr>
<td>4 NCD4</td>
<td>Prevalence of American Heart Association defined ideal cardiovascular health metrics in Nepal; findings from a nationally representative sample</td>
<td>Nepal</td>
<td>Cross-sectional study</td>
<td>Adult (15-69 years of age)</td>
<td>4200</td>
<td>Cardiovascular disease</td>
<td>Physical activity, smoking and the consumption of fruits and vegetables</td>
<td>More than half of the participants, 45-69 years of age group having the best health behaviors (60.6%, vs. 20%).</td>
</tr>
<tr>
<td>5 NCD5</td>
<td>Lifestyle-related risk factors among patients with coronary artery disease in Nepal</td>
<td>Kathmandu, Siddhartha Heart Hospital</td>
<td>Cross-sectional study</td>
<td>CAD patients</td>
<td>224</td>
<td>Coronary artery disease (CAD)</td>
<td>Dietary habits, smoking, alcohol consumption, stress, physical activity, overweight or obesity, and adherence to lifestyle-related risk factors</td>
<td>The prevalence of risk factors increased among patients with coronary artery disease (CAD). The risk factors were lifestyle-related risk factors.</td>
</tr>
<tr>
<td>6 NCD6</td>
<td>The burden and correlates of multiple cardiometabolic risk factors in a semi-urban population of Nepal: A community-based Self-Care Adherence And Barriers Study</td>
<td>Kathmandu, Pokhara</td>
<td>Cross-sectional study</td>
<td>adults aged 25-64 years</td>
<td>2,316</td>
<td>Cardiometabolic risk factors (hypertension, diabetes, and overweight or obesity)</td>
<td>Dietary habits, smoking, alcohol consumption, physical activity, adherence to lifestyle-related risk factors</td>
<td>The prevalence of risk factors increased among patients with coronary artery disease (CAD). The risk factors were lifestyle-related risk factors.</td>
</tr>
</tbody>
</table>
Components of the data scoping activity

1. Prioritization of Health issues and key research questions
2. Desk review
3. Evidence maps
4. Data availability, sharing and use
3. Evidence maps

• Evidence maps offer a visual way to examine trends and gaps in existing literature
  — Flexible
  — Can contain as little or as much detail as desired
  — Can be organized based on a specific theoretical approach
Influencing factors

National (NCD 4,11,17,22,23,42,65,66,68,69,71); Kathmandu (NCD 5,6,7,8,10,12,14,18,31,34,35,38,40,46,53,55,57,64,72); Bhaktapur(NCD 41,44,51,90); Chitawan (NCD1,37,82); Morang (NCD2); Lalitpur (NCD3); Sunsri (NCD9,29); CDR (NCD79); EDR (NCD13,32,33,45,52); Kaski (NCD15,20,21,24,26,36,77); Lamjung (NCD47); Dhanusha (NCD 19); Kavre (NCD 25,61,74); Ranchchhap (NCD 30); Jumla (NCD48); Surkhet (NCD 60); Sarlahi (NCD 76)

National (NCD4,11,17,23,65,66,68,69); Kathmandu (NCD5,8,10,12,14,18,31,34,35,40,53,57,64,72); Bhaktapur(NCD44,51); Chitawan (NCD1); Morang (NCD2); Sunsri (NCD9,81); CDR (NCD79); EDR (NCD13,45,52); Kaski (NCD15,24,26,68); Lamjung (NCD47); Dhanusha (NCD19); Kavre(NCD61,74,75); Surkhet (NCD60); Sarlahi (NCD73)

National (NCD68); Kathmandu(NCD5,7,16,18,40,43,58,72); Bhaktapur(NCD-42); Chitawan (NCD1); Morang (NCD2); Lalitpur(NCD3); EDR (NCD29,32); Kaski (NCD6,15,26,74); Lamjung (NCD47); Dhanusha (NCD19); Ranchchhap (NCD30); Sarlahi (NCD76)

National (NCD4,11,17,23,65,66,68,69); Kathmandu (NCD5,8,10,12,14,18,31,34,35,40,53,57,64,72); Bhaktapur(NCD44,51); Chitawan (NCD1); Morang (NCD2); Lalitpur(NCD3); EDR (NCD29,32); Kaski (NCD6,15,26,74); Lamjung (NCD47); Dhanusha (NCD19); Ranchchhap (NCD30); Sarlahi (NCD76)

National (NCD54,71); Kathmandu (NCD 83); Kaski (NCD50)

National (NCD4,17,22,23,42,65,68); Kathmandu (NCD 5,7,8,10,12,14,16,18,31,34,35,49,53,55,57,64,68,88); Bhaktapur(NCD 41,44,51,90); Morang (NCD2); Lalitpur (NCD3); Sunsri (NCD29,61); CDR(NCD79); EDR (NCD33); Kaski (NCD6,20,24,26,36); Lamjung (NCD47); Ranchchhap(NCD 30); Sarlahi (NCD73,76)
NCDs & Socio-behavioral risk factors

- Structural/Policy
- Health Facility/Health System
- Community/Societal
- Family/Household
- Individual

Influencing factors

Location (rural/urban, terai/mountain/Hill)

National (NCD4, 22, 28, 66),
Mustang (NCD 27, 43),
Jumla (NCD 48,)
Sarlahi (NCD 66),
Chitwan (NCD 82),
Achham & Lalitpur (NCD 89)

Community support (transportation, FCHV role, students role)

National (NCD 59, 78),
Kathmandu (NCD 16, 46, 56, 72),
Kaski (NCD 26, 39, 56, 63),
Chitwan (NCD 37),
Morang (NCD 45),
Sindhupalchowk (NCD 56),
Sunsari (NCD 56),
Kavre (NCD 56),
Bhaktapur (NCD 90)

Community awareness, social acceptability

Kathmandu (NCD 40, 46, 58),
Jumla (NCD 48),
Surkhet (NCD 60)

Location of study and reference
NCDs & Socio-behavioral risk factors

- Structural/Policy
- Health Facility/Health System
- Community/Societal
- Family/Household
- Individual

Access to health-care services (Affordability, Limited screening program)

Health professional (information, motivation, competency, human resources)

Influencing factors

Location of study and reference

- National (NCD 28, 54, 71)
- Kathmandu (NCD 40), Sindhupalchowk, Sunsari, Kavrepalanchowk, Kaski and Kathmandu (NCD 56)
Influencing Factors

Location of study and reference

Educational system

Structural/Policy

Occupational and workplace environment

Health Facility/Health System

Lack of access to health-care services

Community/Societal

Inadequate health care system

Family/Household

Individual

Sunsari (NCD9); National (NCD28); Kathmandu (NCD38); Bhaktapur (NCD44); Jumla (NCD48); Kaski (NCD50); Solukhumbu, Ilam, Dhankuta, Sunsari and Morang (NCD52); National (NCD54); Kavre (NCD61); National (NCD66); Kavre (NCD73); South Asia (NCD 78)

Sunsari-Morang (NCD33); Kathmandu (NCD38); Bhaktapur (NCD41)

National (NCD28); National (NCD54); South Asia (NCD78)

Sindhupalchowk, Sunsari, Kavrepalanchowk, Kaski and Kathmandu (NCD56); Kaski (NCD62); South Asia (NCD78); Kaski (NCD39)
Components of the data scoping activity

1. Prioritization of Health issues and key research questions
2. Desk review
3. Evidence maps
4. Data availability, sharing and use
4. Data availability, sharing, and use

- Technical or summative briefs
- Platform or portal upload
- Dissemination to relevant stakeholders for future SBC collaborations
Summary of Data Scoping exercise

- Majority of the studies were patient-centered and hospital based.
- Location of studies were mostly based on tertiary-care hospitals.
- Population-based studies were addressed by articles based on STEPS survey.
Thank you