Factors influencing the readiness to tackle the burden of ischemic heart disease in India: a systematic review protocol

Shuvarthi Bhattacharjee, Nima Yaghmaei, Cao Tran Le Phuong, Dinesh Neupane

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Review question
(i) What is the existing evidence base of primary studies related to the readiness of India to tackle the burden of Ischemic Heart Disease?

(ii) What are the health system factors influencing the readiness of the public health system to tackle the burden of Ischemic Heart Disease in India?

Searches
Electronic databases of EMBASE (Ovid), AMED (Ovid), HMIC (Ovid), BNI (ProQuest), CINAHL (EBSCO), EMCARE (Ovid), PsycINFO (ProQuest), MEDLINE/PubMed and Web of Science (Clarivate Analytics) will be searched with use of appropriate Boolean operators (AND, OR & NOT) till 1st November, 2020. No filters (like language) or limits will be used at this stage except limiting the timeline from 1st January, 2000 till 1st November, 2020.

All electronic databases (except MEDLINE/PubMed and Web of Science) will be accessed through the Healthcare Databases for NHS in England (HDAS) of the NHS Openathens, UK. HDAS mirrors search results of platforms like Ovid, EBSCO and ProQuest to retrieve results from these databases.

Registers like PROSPERO, Cochrane Database of Systematic Reviews, Campbell Collaboration and CRD/DARE Database will be searched to avoid duplication of existing knowledge on the topic and identify relevant primary studies from available systematic reviews.

Moreover, citation tracking, footnote chasing, bibliography scan and citation alerts (on Web of Science) will be conducted for a comprehensive search. A combination of free texts and corresponding synonyms of terms comprising but not limited to “Ischemic Heart Disease” AND “Health System” AND “Readiness” AND “India” will be made for the initial search and appropriate preidentified MeSH Terms (‘Emtree Terms’ for Embase) in PubMed/MEDLINE will be included to make a comprehensive search strategy across the electronic databases. Thesaurus terms appropriate to the databases will be used to account for the variation in such terms across databases.

Grey literature will be accessed through OpenGrey, TRIP Medical, World Health Organization (WHO) Database, Ministry of Health & Family Welfare (MoHFW) of Government of India Website, Open Government Data (OGD) Platform India and Google Scholar (only first 10 pages).

Search strategy
https://www.crd.york.ac.uk/PROSPEROFILES/219490_STRATEGY_20201106.pdf

Types of study to be included
All forms of study design of both quantitative & qualitative nature will be included. Primary studies published in peer-reviewed journals and grey literature in English published between 1st January 2000 and 1st November 2020 will be included.
**Condition or domain being studied**
The domain being studied is public health system readiness of India in response to the growing burden of ischemic heart disease in the country.

**Participants/population**
People born and brought up in India residing presently in India either living with or at the risk of ischemic heart disease.

**Intervention(s), exposure(s)**
National programs of NCD, National Health Policies (NHP-2012 & NHP-2017), interventions concerned with both prevention & control of ischemic heart disease in India will be included.

We will include studies concerning facility readiness of primary care facilities as treatment & risk prevention of ischemic heart disease is integrated at primary care levels in the public healthcare setup of India.

**Comparator(s)/control**
None.

**Main outcome(s)**
Data of both quantitative & qualitative nature related to health system readiness to prevent & tackle the burden of Ischemic Heart Disease in India. Health System Readiness is defined as the cumulative availability of components required to provide health services. This will include data at all levels of care that offers qualitative or quantitative information on cumulative availability of health service delivery, health workforce, health information system, access to essential medicines, health financing and health system governance concerning health system readiness.

In terms of quantitative data, data from facility readiness assessment, health facility assessment, WHO Service Availability & Readiness Assessment (SARA) data, surveys, baseline study of health facilities and monitoring & evaluation data of health facilities along with data from the national NCD program of India will serve to provide information on the outcome.

In terms of qualitative studies, data from in-depth interviews, focus group discussions, researcher observations of facilities and data from the national health policies will serve to understand the outcomes better.

* **Measures of effect**
  Not applicable

* **Additional outcome(s)**
  None

* **Measures of effect**
  Not applicable

**Data extraction (selection and coding)**
COVIDENCE® systematic review software, will be employed to manage the studies retrieved and perform the process of systematic review. On COVIDENCE® duplicate articles will be checked & rejected to gather a set of unique articles for this study. Such an unique set of articles will be subjected to title & abstracts screening based on our research objectives. Once screened, full texts of those papers with potential to meet our research objectives will assessed for their final inclusion in our study based on our inclusion & exclusion criteria. The reasons for inclusion & exclusion will be documented and reported. The above stated steps will be conducted by three reviewers (SB, NY, CLP) independently. Any conflict at any stage will be mediated by DN. References will be managed and stored on EndNote®. A 'PRISMA flow chart', based on PRISMA guidelines for systematic review, will be created on the COVIDENCE® platform populated with data of
The descriptive data items that will be collected by three reviewers (SB, NY & CLP) independently constitute:

(i) Characteristics of the study including country & year of publication, research aim & participant characteristics;

(ii) Methodological characteristics including study design, data/information collection methods and data analysis;

(iii) Results associated with readiness of the public health system to tackle the burden of ischemic heart disease.

The data collection items will also include risk of bias and quality assessment of included studies based on appropriate tools. Any disagreements will be resolved through mediation with DN. All relevant quantitative data will be converted into meaningful qualitative data for compatibility with our conceptual framework.

Risk of bias (quality) assessment

In order to minimize the risk of bias and evaluate the quality of included studies, the Cochrane collaboration tool for assessing the risk of bias of Randomized Control Trials (RCTs), Newcastle-Ottawa Scale for cohort & case-control studies, NIH Quality Assessment Tool for Cross-Sectional Studies and Critical Appraisal Skills Program (CASP) tool for qualitative studies will be used based on the methodological design of the individual eligible study.

We will not reject any study based on assessed quality only the information will be documented in the data extraction and synthesis stage. The risk of bias assessment and quality appraisal will be independently performed by each reviewer before converging to a mutually agreed decision. Any discrepancies will be mediated by DN.

National Health Policies of India, national NCD program guidelines and raw primary data from the OGD Platform cannot be assessed for risk of bias and quality appraisal. They will be excluded from this process of evaluation.

Strategy for data synthesis

The extracted data will be analysed through the WHO Framework for Action conceptual framework followed by summarization of findings to answer the research questions. We do not expect to conduct a meta-analysis as we do not anticipate many articles in which meta-analysis may be appropriate. Additionally, the inclusion of qualitative studies will likely lead to a heterogeneous outcome which is not suitable for meta-analysis. Moreover, we will be transforming the quantitative data to meaningful qualitative units for assimilation into the conceptual framework for our study.

The WHO Framework for Action rather serves as a conceptual lens for this study. Therefore, we will be deductive in our approach assuming all health system readiness issues are inclusive within this conceptual framework. The conceptual framework was chosen for this study through mediation with all reviewers and moreover, straightforward demarcation of health system components allows for clear interpretation of data. We also considered other conceptual frameworks; however, they were either overly complex for the purposes of this study or considered factors beyond the health system that were not relevant for the present study.

We do not plan to conduct any assessment of meta-bias(es) as the expected studies included for this systematic review might be of varied study design making it difficult to assess such bias such as ‘publication bias across studies’ or ‘selective reporting within studies. At present we do not have plans to assess the
confidence in cumulative evidence as this study does not report effectiveness of clinical outcome(s).

Analysis of subgroups or subsets
At present, considering the research objectives, we do not plan to undertake any sub-group analysis. However, should we find after the data extraction stage that certain sub-groups or sub-sets like gender, rural/urban population, health professionals in varied levels of care etc. can provide unique insights on the topic under consideration then we might undertake such sub-groups/subsets analysis.

Contact details for further information
Shuvartii Bhattacharjee
S.Bhattacharjee@brighton.ac.uk

Organisational affiliation of the review
University of Brighton
https://www.brighton.ac.uk/about-us/contact-us/academic-departments/school-of-health-sciences.aspx

Review team members and their organisational affiliations
Mr Shuvartii Bhattacharjee. Early Stage Researcher, School of Health Sciences, University of Brighton (Falmer Campus), Brighton, BN19AG.UK.
Mr Nima Yaghmaei. Independent Consultant, Toronto-M5M3S3, North York, Ontario, Canada.
Ms Cao Tran Le Phuong. Researcher, University of Medicine & Pharmacy, 217, Hong Bang Street, Ward 11, District 5, HCMC, Vietnam.
Dr Dinesh Neupane. Research Associate, Welch Center for Prevention, Epidemiology and Clinical Research, Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health Baltimore, Maryland, Baltimore, USA.

Type and method of review
Service delivery, Systematic review

Anticipated or actual start date
16 November 2020

Anticipated completion date
31 January 2021

Funding sources/sponsors
No Financial support was received for this study. Authors are academic students or staff in universities & civil society organizations. Access to Healthcare Databases Advanced Search (HDAS) will be provided by NHS Openathens, UK for searching of databases. Access to Web of Science will be provided by the University of Brighton (UK). Data Management support will be sought from COVIDENCE® systematic review software, Veritas Health Innovation, Melbourne, Australia.

Conflicts of interest

Language
English

Country
Canada, England, United States of America, Vietnam

Stage of review
Review Ongoing

Subject index terms status
Subject indexing assigned by CRD

Subject index terms
Humans; India; Myocardial Ischemia

Date of registration in PROSPERO
16 November 2020
Date of first submission
07 November 2020

Stage of review at time of this submission

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The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.

The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions
16 November 2020