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PROCESS: a multimethods protocol to develop principles to operationalise community engagement, equity and sustainability in South Asian Health Research in Canada

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ABSTRACT

Introduction While health research about persons of South Asian ancestry has been conducted for decades in Canada, it often uses pathologising approaches that fail to consider historical, social and political factors shaping health disparities. Further, this research rarely engages South Asian communities in meaningful ways, reinforcing feelings of disconnect and longstanding mistrust. Greater collaboration and transparency are needed to build trust and generate credible findings. The aims of this research protocol are to (1) examine how community engagement has been implemented in health research involving South Asian populations, (2) explore the experiences of both South Asian community members and academics involved in community-engaged research and (3) develop a framework guiding health research with and for South Asian communities in Canada, titled PRinciples to Operationalize Community Engagement, Equity, and Sustainability in South Asian Health Research in Canada (PROCESS).

Methods and analysis This ongoing codesigned concurrent multimethods study is being conducted with community partners across Canadian provinces. First, the scoping review is examining how community engagement has been operationalised in health research involving South Asian populations in Canada. We are performing a search in Cumulative Index to Nursing and Allied Health Literature (CINAHL), MEDLINE, Web of Science, Scopus and PsycINFO databases for articles published between 2003 and 2024 referring to the concept of community engagement in South Asian health research. Two reviewers are independently completing abstract and full-text reviews based on preselected eligibility criteria. Data are being extracted from peer-reviewed studies using a data extraction framework. Findings will be aggregated and synthesised using descriptive content analyses.

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This multimethod design combining a scoping review with qualitative description enables triangulation of findings and supports the development of the PRinciples to Operationalize Community Engagement, Equity, and Sustainability in South Asian Health Research (PROCESS)—the first research framework tailored specifically to South Asian health contexts, integrating both academic and community perspectives.
- ⇒ The codesign of PROCESS strengthens the framework's legitimacy, promotes community ownership and enhances its practical applicability in guiding ethical, equitable and sustainable health research partnerships.
- ⇒ The empirical findings and the PROCESS framework have the potential to be adapted for countries such as the UK, USA, Australia and numerous other countries, where large South Asian communities face persistent health inequities.
- ⇒ There is a potential challenge in recruiting people from certain communities within the South Asian diaspora, which could result in an over-representation of some groups and not reflect the multitude of intersectional identities among South Asians.

Second, a qualitative descriptive study is being conducted to explore the experiences of diverse stakeholders, including academics and community partners who are partaking in academic health research focused on South Asians. Semistructured interviews are being analysed using an inductive thematic content analysis. Results from the scoping review and qualitative interviews will be triangulated to detect emerging themes and patterns, which will enable the identification of principles to be incorporated within a draft of the PROCESS framework. In the final phase, we will use a modified Delphi process to iteratively codevelop the PROCESS framework with community partners and researchers across Canada.

Ethics and dissemination The Faculty of Medicine and Health Sciences Institutional Review Board at McGill University approved the study's protocol (24-05-080). Results will be submitted for publication in peer-reviewed journals and presented in academic and community forums. Results will also be shared with diverse audiences across Canada through multiple formats, including articles, conferences, infographics and social media, with the aim of raising awareness and promoting the adoption of research principles and practices for engaging South Asian communities in health research. This research received funding from the Canadian Institutes of Health Research (Grant #507768).

INTRODUCTION

South Asian settlers in Canada span generations and trace their heritages to diverse world regions, including India, Pakistan, Sri Lanka, Bangladesh, Nepal, the Caribbean, Africa, China and West Asia.[1] Journeys of South Asian settlement were influenced by forced migration, xenophobic policies, economic opportunities and political instability.[2] The scientific record is saturated with research documenting health disparities affecting Canadians of South Asian ancestry and South Asian origin communities in Canada.[3] South Asians experience significantly higher rates of cardiometabolic diseases, cardiovascular disease and mental health conditions compared with people of European ancestry.[4–14] These health disparities that are intergenerational stem from and are further exacerbated by structural barriers rooted in the social, economic and political legacies of imperialism and colonialism—including racism, income inequality, inadequate housing and language barriers, especially in under-resourced metropolitan areas.[5 15 16] Despite a substantial body of research, conventional scientific approaches have largely failed to advance equity or effectively support the health and well-being of South Asian communities.[3]

In recent years, academic interest in health equity-related research continues to grow, largely driven by public acknowledgements and commitments from healthcare institutions, research organisations and funders to address inclusion, diversity, equity, antiracism and accessibility.[17 18] As a result, some researchers have capitalised on this momentum to study systemically marginalised communities, including South Asians who continue to experience significant health disparities.[19] Researchers often parachute into communities to extract knowledge without conducting meaningful community engagement necessary to understand their health needs and priorities.[3] Administrative data are also frequently manipulated by researchers through proxy measures, inaccurately aggregating and adjusting for missingness, often diminishing its value and benefit for communities.[5] The end results are typically publications that overlook intersectional complexities, perpetuate pathologising narratives and trivialise meaningful community engagement.[3]

South Asians are incorrectly regarded as a monolithic population

With a global history extending over 5000 years, the South Asian diaspora in Canada represents a complex and heterogeneous population shaped by diverse geographies, migration trajectories, cultural practices, linguistic traditions and lived experiences.[20] The homogenisation of the South Asian population in health research contributes to and reflects structural racism (eg, in how population and health data are collected) and leads researchers to often draw broad, inaccurate, biased and harmful conclusions.[3] Yet, intersectionality is rarely used in South Asian health research as an analytic tool to examine South Asian health inequities. Intersectionality rejects the notion that health inequities are a result of single, distinct factors, such as just being South Asian.[21] Instead, it focuses on the relationships among overlapping social identities that can create or compound to produce inequities based on age, sex, gender, sexuality, class, immigration status, race, religion, caste, ability and others.[22] These varied socially constructed factors play a significant role in disproportionate health outcomes and challenges faced by the South Asian population.[20]

South Asians are pathologised in scientific literature

In our view, numerous published studies on South Asian health inequities in Canada have often reproduced harmful narratives, reinforcing cultural stereotypes and biases that pathologise South Asian communities.[7–11 23–28] They fail to link South Asian health disparities to the precise mechanisms that produce them, such as government decision-making, public policy, racism, as well as differences in power, privilege and access to resources. These are commonly referred to as the social and structural determinants of health.[29] Further, the contemporary health impact of over four centuries of European colonisation (which, eg, culminated in the Partition of India in 1947) and its legacies of intergenerational trauma have not been acknowledged to explain health inequities experienced in South Asian communities.[16]

Other forms of structural violence inflicted by colonial rule include the loss of agricultural land, the collapse of livelihoods, plantation economies and forced migration.[15] Modern forms of European and non-European colonial influence on South Asian health include globalisation, neoliberalism and structural adjustment policies.[30] Yet, health researchers often rely on harmful explanations, such as biological essentialism (linking traits solely to genetics) and cultural blame, which further pathologise South Asian communities.[3 31] Strength-based perspectives are rarely emphasised. This was observed in many reports and scientific articles throughout the COVID-19 pandemic, where inequities in morbidity and mortality among South Asian individuals were incorrectly attributed to harmful stereotypes, such as genetic inferiority, and wilful assumption of pandemic risk and cultural gatherings, despite the absence of supporting evidence.[32] These reductive explanations overshadow the resilience, community solidarity and adaptive coping strategies that South Asian communities have consistently demonstrated in the face of such challenges.

Lack of meaningful South Asian community engagement in health research in Canada

To date, academic health research has not consistently or meaningfully engaged with or benefited South Asian populations in Canada.[3] Community engagement in research is a participatory methodology that integrates community members to varying degrees of participation in research processes. Communities may be engaged in problem identification, priority setting, data collection and analysis, knowledge mobilisation and implementation in real-world contexts on research that aims to address and reduce health disparities.[33] Health research collaborations involving South Asian community partners are often opportunistic, marked by unequal power relations with Canadian academic institutions, where research is often not conducted with or led by community members.[3] South Asian community expertise is frequently undermined or disregarded in research processes.[34] Once projects conclude, community members are left to wonder what happened to '*our* data, our stories, our insights', what conclusions were drawn from them, and what policy changes could have been advocated for as a result.[3] The patterns of exclusion in health research focused on South Asian communities not only foster deep mistrust but also uphold a research system that extracts knowledge without accountability, ultimately failing to deliver on its aims of informing actions that improve South Asian people's health. These power imbalances have contributed to ongoing gaps in knowledge and highlight the need to critically examine how health research involving South Asian communities is currently designed, conducted and mobilised.

Gaps in knowledge

Intersectional community-engaged research is essential for addressing health inequities in South Asian populations, as it acknowledges the complex interplay of social identities and structural determinants that shape health outcomes.[33] Achieving this requires creating a research framework that empowers South Asian communities to own, control and meaningfully shape research processes in ways that are fair, sustainable and effective for improving South Asian people's health now and into the future. Centring South Asian engagement, equity and sustainability helps ensure that health research reflects community priorities and is conducted in ways that are appropriate and acceptable to communities. This approach also actively challenges systemic biases and builds trust through continuous, respectful collaboration, addressing specific health needs and challenges while honouring the strengths of South Asian communities in leading the research process.

Limited information is available about the role and scope of South Asian community engagement or specific approaches to community engagement across research processes. As with the guidelines developed by and for research and community engagement with other marginalised communities, for example, the First Nations Principles of Ownership, Control, Access, and Possession (OCAP);[35 36] Research, Evaluation, Data Collection, and Ethics Protocol for Black Populations in Canada (REDE-4BlackLives);[37] and Engagement, Governance, Access and Protection for Health Data Collection from Black Communities in Ontario (EGAP),[38] a tailored framework is needed to address data collection, management, analysis and knowledge mobilisation, as South Asian communities have differing and distinct histories.

South Asian communities in Canada vary significantly from Indigenous and Black communities in their migration histories, relationships to colonialism and internal cultural and linguistic diversity. Unlike Indigenous people and Black communities, whose histories are rooted in colonisation, cultural erasure, genocide, enslavement and systemic anti-Black racism, South Asians are diverse immigrant groups who primarily come to Canada for economic reasons, including access to employment, social mobility, education and better living conditions.[39] These migration patterns, shaped by economic immigration policies, often overlook social integration and long-term well-being. Sociopolitical and environmental factors are additional drivers of migration for South Asian communities.[40] As a result, South Asians face distinct health inequities that are frequently neglected in broad equity frameworks, underscoring the need for culturally responsive research and policy solutions.

Central to this effort is the development of the PRinciples to Operationalize Community Engagement, Equity, and Sustainability in South Asian Health Research in Canada (PROCESS). These principles can guide academics in prioritising meaningful engagement with South Asian communities on health research, while also providing a framework for governments, health system organisations, research institutes and community-led organisations to collaborate effectively using strength-based approaches to address health needs. Although multiple community-designed research frameworks exist in the literature,[41] there is limited to no guidance on how to operationalise these frameworks in the health research process, nor for the specific needs and contexts of South Asian communities. This project is grounded in an intersectional and community-engaged approach that seeks to shift power dynamics in health research by centring South Asian leadership, lived experience and values. PROCESS will offer a practical roadmap for researchers, institutions and policy makers to foster meaningful, long-term partnerships with South Asian communities in the pursuit of health equity.

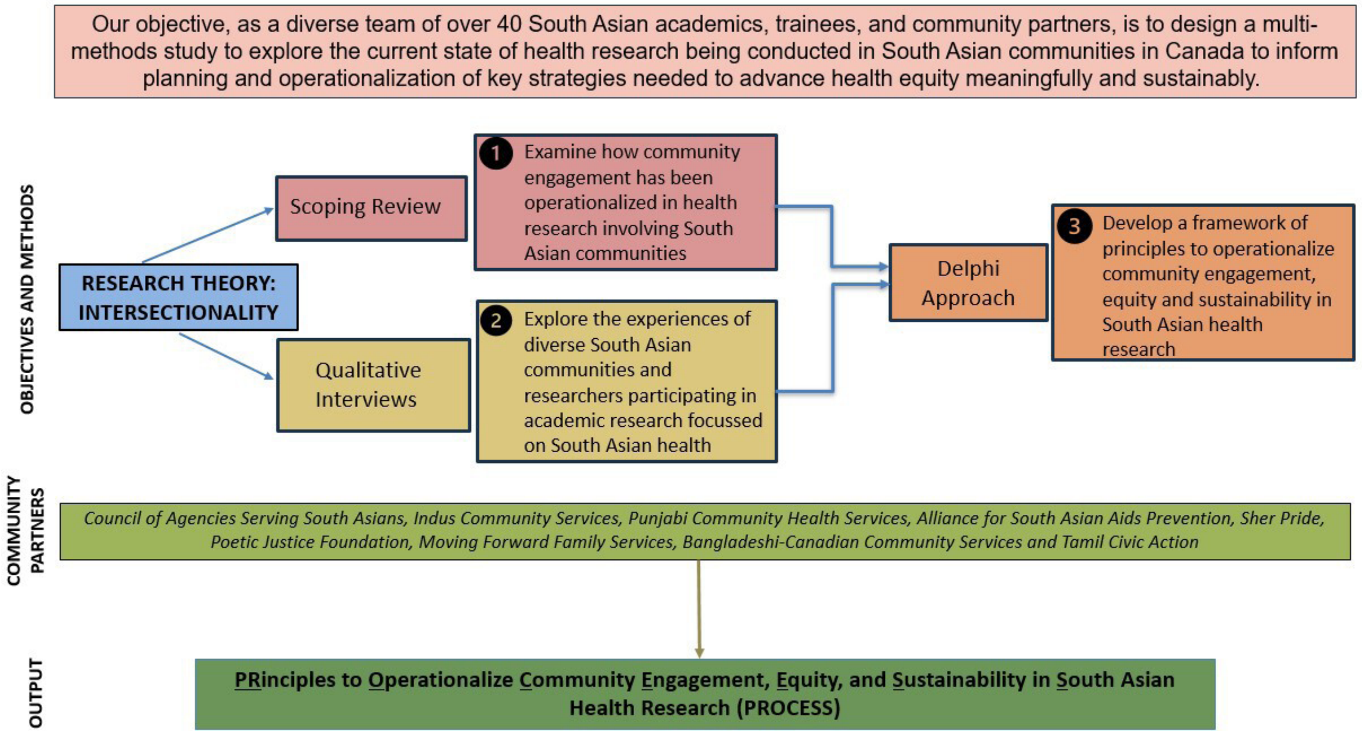

Figure 1 PROCESS objectives and methodology overview. Illustrating the objective, methods, guiding theory and community partners of the project.

OBJECTIVES

The aims of this current study being led by a team of diverse South Asian academics, trainees and community partners in Canada are:

1. Examining how community engagement has been operationalised in health research involving South Asian communities.
2. Exploring the experiences of diverse researchers and South Asian communities participating in academic research focused on South Asian health.
3. Developing a framework of principles to operationalise community engagement, equity and sustainability in South Asian health research.

METHODS AND ANALYSIS

Study design

We are conducting a concurrent multimethods study from August 2024 to December 2026, where qualitative and quantitative data from two distinct research methodologies (scoping review and qualitative description study) are being collected and analysed in parallel and subsequently will be integrated to develop a framework of principles using a modified Delphi process.[42] Please see figure 1 for an overview of the methodology aligned with our study objectives.

Component for aim 1: scoping review

The scoping review is guided by methodologies by Levac *et al* and the Joanna Briggs Institute.[43 44] The project will follow the first five stages of Levac *et al*'s framework, which are: identification of the research question (stage 1); identification of relevant studies (stage 2); study selection (stage 3); data charting (stage 4) and data synthesis, collating, summarising and reporting (stage 5).[43] Findings will be reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist.[45]

Stage 1: identification of research question

The research question is: *How has community engagement been operationalised in health research involving South Asian communities in Canada?* This research question will review published academic literature to understand how community engagement has been defined, applied and evaluated in South Asian Health Research.

Stage 2: identifying relevant studies

The search strategy was developed with an academic librarian at McGill University. Search strings were developed for the concepts 'community engagement', 'South Asian' and 'Canada', which were combined using Boolean operators on the following academic health research databases: CINAHL (EBSCO), MEDLINE (Ovid), Web of Science (Index Chemicus (IC); Current Chemical Reactions (CCR); Science Citation Index (SCI); Arts & Humanities Citation Index (AHCI); Book Citation Index - Social Science and Humanities (BKCI-SSH); Book Citation Index - Science (BKCI-S); Emerging Sources Citation Index (ESCI); Conference Proceedings Citation Index - Science (CPCI-C); Social Sciences Citation Index (SSCI); Conference Proceedings Citation index - Social Science & Humanities (CPCI-SSH)), Scopus and PsycINFO (Ovid).

Literature was included if published in English or French between 1 January 2003 and 31 December 2024. Search filters created by the University of Alberta for the concepts 'Canada' and 'community engagement' were adapted to formulate the search strategy.[46] Please see online supplemental file 2 for the scoping review's full search strategy. The concept 'health research' is also being assessed in the screening process.

Stage 3: study selection

The inclusion criteria are:

Study design

Quantitative, qualitative or mixed-methods journal articles that report original health research studies. 'Health Research' was categorised based on the Canadian Institute of Health Research's definition of health research, allowing for the inclusion of health-adjacent topics, such as the social and structural determinants of health.[47]

Population and context

Studies conducted in Canada involving South Asian populations.

Concepts

Studies that explicitly incorporate some form of community engagement, which can also be referred to as community-based research, participatory research, community-based participatory research (CBPR), participatory action research and/or community partnership in their methodologies.

Stage 4: charting the data

Two types of data are being charted: study characteristics and assessments of community engagement operationalised in each study. A data extraction form was developed to systematically select and organise relevant study characteristics, including publication year, study design, study method, health issue, geographic setting/location, sample characteristics (eg, age and gender), purpose and study outcome. The assessment of community engagement involves the evaluation of eight community-based participatory research elements adapted from Viswanathan *et al.*'s report on assessing CBPR evidence for the Agency of Healthcare Research and Quality.[48] The eight CBPR elements include (1) shared decision-making with community, (2) community participation barrier removed, (3) social and structural determinants of health considered, (4) flexibility to community needs and priorities, (5) capacity building, (6) findings disseminated to participants and community, (7) intent to apply findings to health-related intervention or policy change and (8) sustainability.[48 49] The degree of community engagement is being assessed using Harvard's continuum of community engagement, which has five levels, with each subsequent level increasing in difficulty and public impact: (1) inform, (2) consult, (3) involve, (4) collaborate and (5) empower.[49] The rationale for community engagement will be analysed within the included studies, as well as the effects and potential benefits of engagement within the context of an article's reported outcomes being extracted. To understand how components of community engagement were applied, we are also extracting direct quotes referencing the compensation of community partners, whether a framework was used to guide participatory efforts, and how community partners or collaborators were acknowledged. South Asian authorship is also being assessed by reporting the proportion of authors of a paper who self-identify as South Asian. The research team is directly contacting authors to determine whether they identify as South Asian to avoid making assumptions. We are recording whether the first or last author of each peer-reviewed article identifies as South Asian to assess the representation and leadership of South Asian scholars in the research. The stages of the research process that incorporated community engagement are being identified. These stages include (1) priority setting and hypothesis generation, (2) methods selection, (3) proposal development, (4) funding, (5) data collection tools, (6) recruitment and retention, (7) analysis and interpretation, (8) intervention design, (9) intervention implementation, (10) translation of research findings, (11) dissemination of research findings and (12) integration and sustainability.[48] Study titles and abstracts, and then full-text studies, are being independently screened for inclusion by two reviewers (II and MA) from the research team, and a third reviewer (AS) is consulted to resolve disagreements if they arise. Screening, data extraction and assessments of community engagement are performed by two independent reviewers (II and MA) on Covidence (Veritas Health Innovation, 2025). To obtain a high interrater reliability score, both reviewers aim to screen the same 100 publications as a test set prior to the title and abstract screening stage. Both reviewers will also extract data from a test set of five articles to ensure the inclusion criteria are applied consistently.

Stage 5: collating, summarising and reporting the results

Data will be charted independently by two reviewers to capture the key characteristics and thematically analysed to identify patterns, gaps and areas of convergence. Findings will be presented in both narrative and tabular formats, aligned with the PRISMA-ScR guidelines to ensure transparency and rigour.

Component for aim 2: qualitative description study

A qualitative description study[50] is being conducted to explore the experiences of researchers and community partners who have or who are currently conducting health research focused on South Asian communities in Canada. Qualitative description methodology is well suited for eliciting and representing participants' perspectives in their own words and experiences, with little interpretive inference.

Participant sampling and recruitment

Participants are being included in this study if they are researchers, healthcare professionals, members of community organisations in the health, social, faith-based, cultural, civic, patient and advocacy organisations that provide services to South Asian communities in Canada. Participants must be (1) previously or currently conducting or involved in academic research focused on South Asian health in Canada; (2) able to speak and understand English, French, Urdu, Punjabi, Hindi, Tamil, Bengali or Gujarati; (3) 18 years or older and (4) consent to participate in the research. The chosen languages reflect the languages that research team members can speak fluently.

Recruitment and sampling strategies

Maximum variation sampling is being used to include diverse experiences of conducting community-engaged South Asian health research.[51] We are sampling across a range of South Asian health research topics and South Asian community organisations who have partnered with researchers. In addition, the maximum variation sampling approach considers a range of sociodemographic variables, such as race, ethnicity, gender, class, caste, immigration status or family migration history, sexuality, disability and religion, to ensure that the data collected reflect the diversity of and represent the South Asian diaspora.

Recruitment has been underway since August 2024 through the South Asian Health Research Hub, founded by the first author (AB), using its social media platforms including LinkedIn and Instagram, as well as within the professional networks of the research team. We have requested our community partners to post the recruitment flyers on their social media platforms and to circulate them in their networks. In addition, members of the PROCESS research team (academic researchers, knowledge users, which includes clinician-scientists, community organisations, health programme developers and administrators and community partners) have been invited to participate in the study. Many research team members have had experiences with conducting community-engaged South Asian health research and represent an important point of sampling and recruitment for this study. Furthermore, this reflects an intentional insider–outsider research approach, where team members not only help shape the research design but also contribute as participants by sharing their experiences.[52] This dual role enhances reflexivity, enriches the data and grounds the study in lived realities and collaborative knowledge production.[52] Members of the research team selected for interviews are being interviewed by research staff with whom they have no prior relationship. This approach helps minimise potential bias, power imbalances and social desirability in participants' responses, thereby supporting more open, honest and credible data collection.[53] A snowball sampling approach is also being implemented throughout the recruitment process. This additional method of snowball sampling, in conjunction with maximum variation sampling, has been effective in obtaining a diverse and representative sample.[51] Interested individuals are screened for eligibility before being invited to participate. All eligible participants who agree to take part provide written informed consent electronically.

The exact number of interviews will depend on data saturation, the point at which information collected adequately addresses the research questions and additional interviews no longer yield new or meaningful insights.[54] This flexible approach ensures that the study captures a rich and diverse range of perspectives without unnecessary data collection. The number of participants required to reach data saturation depends on several factors expected to emerge related to the intersections of ethnicity, gender, class, caste, immigration status or family migration history, sexuality, disability, religion, the types of health issues studied and occupation (whether researchers or working at community organisations). As a result, taking these factors into account and being intentional about inclusivity and representation, the exact number to achieve data saturation cannot be determined. The project will also ensure the representation of sexually and gender-diverse participants that go beyond cis-women or cis-men to include trans, gender fluid, hijras, khawaja sira and non-binary individuals to detect meaningful non-normative sexuality and gender transgressive modes in South Asians[55] emerging in the data. Overall, our sampling strategies are essential from an intersectional perspective, as they ensure that the full complexity of social identities is meaningfully represented in the data. It allows the research to capture the diverse and intersecting experiences within South Asian communities, rather than defaulting to dominant or normative narratives.

Data collection

Demographic data will be compiled and recorded based on demographic form responses via LimeSurvey, hosted on the McGill University server. A semistructured interview guide has been codeveloped with community partners to explore their experiences being engaged in health research. The research team shared draft interview topics with community partners and refined the guide until all partners approved the final version. Please see the academic and community member interview guides in online supplemental file 1. Data will be collected through semistructured interviews and a demographic form by experienced multilingual South Asian qualitative researchers. The intention of having experienced multilingual researchers from the community to conduct the interviews in the participants' choice of language is to build a strong rapport between the researcher and the stakeholder and allow more meaningful data to emerge. Semistructured interviews are conducted via videoconference (Zoom) and audio recorded with informed consent.[56] These interviews typically last up to 75 min, based on the number and depth of questions in the semistructured interview guide.[57]

Data analysis

Sociodemographic data will be analysed using descriptive statistics (eg, frequencies, percentages, means and SDs) to summarise participant characteristics. Sociodemographic data will also be used to explore the similarities and differences between researchers' and community members' perspectives. Transcribed interviews will be open-coded using NVivo software (QSR International, V.142025). An inductive line-by-line analysis is being used.[32]

Open coding allows for developed codes to remain close to the language used by participants. Five data coders are working collaboratively to code all transcripts. One coder opens codes three transcripts to generate an initial codebook. The remaining coders review the coding and discuss until a consensus is achieved. Open coding occurs concurrently while interviews are taking place.[25] In the second stage of the analysis, transcripts are assigned to additional team members to ensure intercoder reliability. Team members meet regularly to discuss differences and similarities and resolve any conflicts.

Once all transcripts are coded and reviewed, the coding team will meet to analyse the codes and deduce emerging themes using an intersectional lens. Once the team has agreed on a broad set of results, these results will be translated into a synthesised document for member-checking procedures with participants. Birt's Synthesized Member Checking methodology will be used as a form of data validation in qualitative studies.[34] This member checking methodology requires sharing synthesised results, which include qualitative themes and supporting quotes, with participants with the following reflection questions: 'Does this match your experience?', 'Do you want to change anything?' and 'Do you want to add anything?' Participant responses will be treated as additional qualitative data and analysed using the qualitative codebook. We will test and report disconfirming cases.

Triangulation of scoping review and qualitative study findings

The research team will follow the procedures recommended by Creswell[58] to identify common concepts across the findings from the scoping review and qualitative description study. This process will involve comparing relevant quantitative and qualitative data from the scoping review and qualitative data from the interviews. For example, codes from the qualitative analysis conducted for both methods will be compared and grouped according to pertinent themes. Through triangulation, the research team will assess how findings from each study complement or differ across methodological approaches. The combination of data from different methodological approaches will enable the identification of emerging common themes and patterns. Furthermore, this process will facilitate the cross-validation of findings across multiple methodologies, providing a more complete understanding of community engagement within health research involving South Asian communities in Canada. Results elicited from both the scoping review and qualitative description study will then be used to guide the development of a draft set of principles to be examined in the modified Delphi approach.

Component for aim 3: modified Delphi approach

A virtual modified Delphi approach[59] will be conducted during the summer of 2026 with participants representing academic institutions, health and social services and community-based organisations vested in ethical and equitable academic research involving South Asian communities (figure 2). Academics and community partners from the research team will be invited to participate in the Delphi process. Prior to the initiation of feedback rounds, a meeting will take place, providing participants with the opportunity to learn more about the preliminary principles, how they were developed, and the planned procedure of the Delphi process. The approach will involve three rounds of participant feedback on the draft principles based on the findings from the scoping review and qualitative interviews.[60] Each round will include an online, anonymously-rated survey via Research Electronic Data Capture (REDCap).[61] Each survey will present the set of principles (modified between each round of data collection based on prior panel feedback) and will ask participants to rate and rerate (if applicable) each of the draft principles in terms of importance for inclusion. Participants will rate the importance of inclusion using a 4-point Likert scale: (1) omit, (2) possible candidate for inclusion, (3) desirable candidate for inclusion and (4) essential for inclusion. The survey will include open-text fields for each principle where participants could offer recommendations for modified wording of the principles and their corresponding descriptions, as well as for new principles to consider. The final survey will also include open-ended questions about considerations for the implementation of the principles. On analysing the results of the final survey, PROCESS will be developed and comprised of prioritised principles if at least 75% of participants rated a principle in the 'essential' category.[62] This high level of agreement indicates that the principle is widely valued and should be prioritised in practice or recommendations. There will be one final synthesis meeting to present PROCESS and gain consensus among the research team and incorporate any additional insights from the participants. Visualisation of the principles in the framework, along with strategies to plan knowledge translation, dissemination and uptake, will also be discussed with participants.

Patient and public involvement

The research team for this project includes a diverse group of more than 40 individuals, the majority of whom are self-identified South Asian, representing academics, early-career researchers, trainees and community partners from across Canada. From the inception of this study, the academic team has worked and will continue to work in genuine partnership with 10 South Asian community organisations that have codesigned the research proposal, ensuring that community perspectives, priorities and

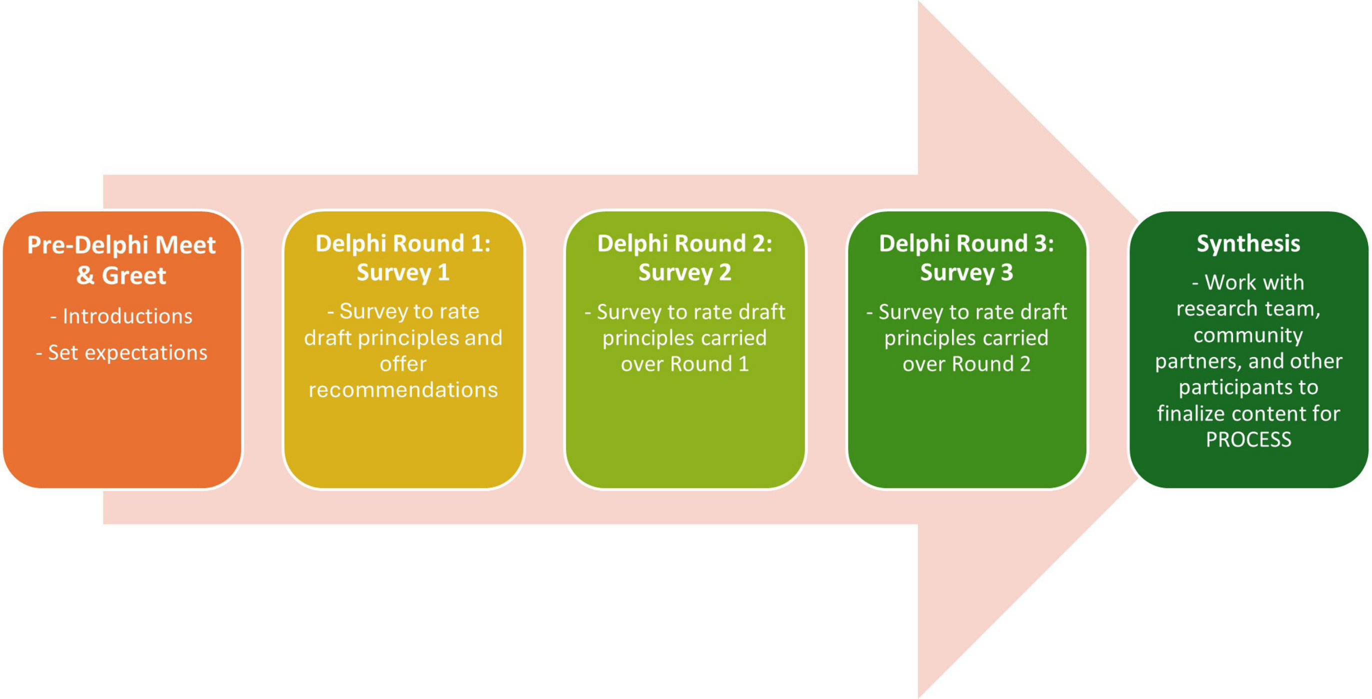

Figure 2 Modified Delphi approach to develop PROCESS. Presenting the steps of the modified Delphi approach that will be used to develop the research framework. PROCESS, PRinciples to Operationalize Community Engagement, Equity, and Sustainability in South Asian Health Research.

lived realities remain central to the work. Importantly, the initial idea for this project was conceived by one of the community partners and cosenior author (GM), who had been inundated with research requests from academics across Canada that offered little to no direct benefit to the communities they claimed to serve. This burden, well documented in the literature, underscored the urgent need for a new model in which South Asian community voices are not only included but also drive the research agenda.[42] This project responds directly to that need. Our community partners have been instrumental in reshaping how South Asian communities should be engaged in health research in Canada. Their insights have meaningfully contributed to the study's objectives and methodologies, and this codesign process will remain dynamic throughout the project, with ongoing iterations to study materials and approaches to ensure the research remains responsive, relevant and grounded in community benefit.

ETHICS AND DISSEMINATION

The Faculty of Medicine and Health Sciences Institutional Review Board at McGill University approved the study's protocol (24-05-080). Results from each of the three phases of this research will be submitted for publication in peer-reviewed journals and presented in academic and community forums. Results will also be shared with diverse audiences across Canada through multiple formats, including articles, conferences, infographics and social media, with the aim of raising awareness and promoting the adoption of research principles and practices for engaging South Asian communities in health research. This will include knowledge mobilisation and translation strategies to ensure findings are accessible, culturally relevant and tailorable to diverse contexts. This research received funding from the Canadian Institutes of Health Research (Grant #507768).

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