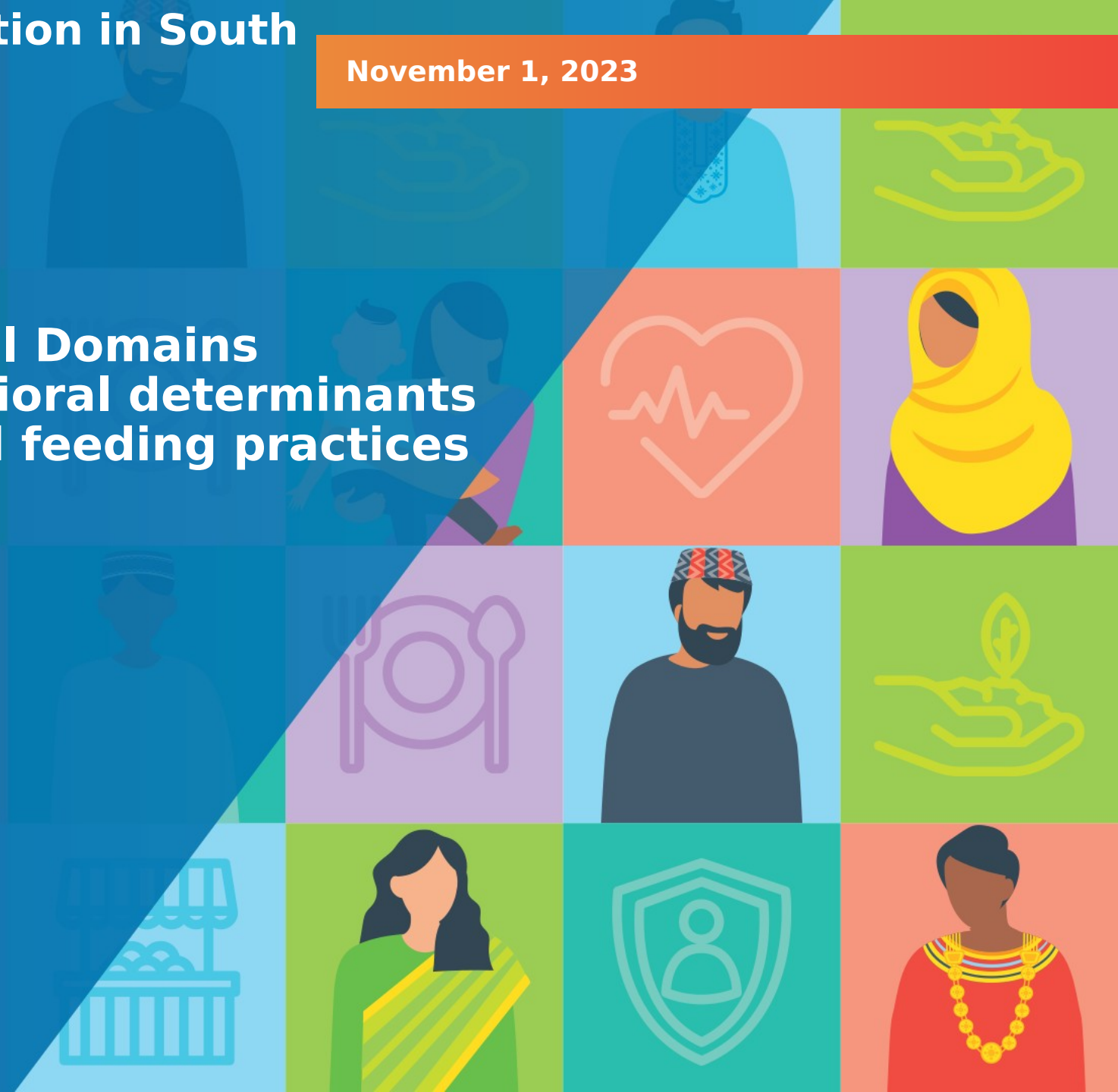


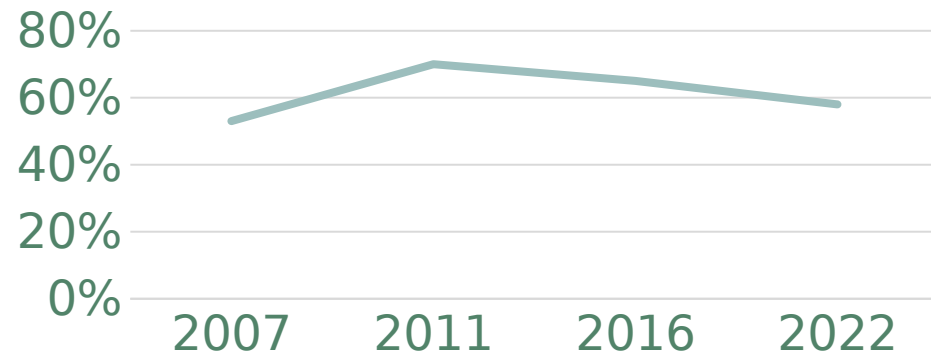
Application of the Theoretical Domains Framework to identify behavioral determinants of key infant and young child feeding practices

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Sub-optimal dietary practice in Nepal

Exclusive breastfeeding among children < 6 months in Nepal



56%

**Exclusive
breastfeeding**

48%

**Minimum dietary
diversity**

43%

**Minimum
acceptable diet**

Objective

Examine caregiver behavioral determinants of breastfeeding and complementary feeding behaviors

Methods

Overall approach

1. Applied the Theoretical Domains Framework (TDF)
Retrospectively identify TDF domains and constructs as behavioral determinants using quantitative data
2. Run regression models to determine significant behavioral determinants of key infant and young child feeding behaviors

Data sources

2017, 2018, 2019, 2022 *Suaahara* II cross-sectional annual household monitoring surveys (4 years)

Theoretical Domains Framework

Making psychological theory useful for implementing evidence based practice: a consensus approach

S Michie, M Johnston, C Abraham, R Lawton, D Parker, A Walker, on behalf of the "Psychological Theory" Group

Qual Saf Health Care 2005;14:26–33. doi: 10.1136/qshc.2004.011155

Background: Evidence-based guidelines are often not implemented effectively with the result that best health outcomes are not achieved. This may be due to a lack of theoretical understanding of the processes involved in changing the behaviour of healthcare professionals. This paper reports the development of a consensus on a theoretical framework that could be used in implementation research. The objectives were to identify an agreed set of key theoretical constructs for use in (1) studying the implementation of evidence based practice and (2) developing strategies for effective implementation, and to communicate these constructs to an interdisciplinary audience.

Methods: Six phases of work were conducted to develop a consensus: (1) identifying theoretical constructs; (2) simplifying into construct domains; (3) evaluating the importance of the construct domains; (4) interdisciplinary evaluation; (5) validating the domain list; and (6) piloting interview questions. The contributors were a "psychological theory" group (n=18), a "health services research" group (n=13), and a "health psychology" group (n=30).

Results: Twelve domains were identified to explain behaviour change: (1) knowledge, (2) skills, (3) social/professional role and identity, (4) beliefs about capabilities, (5) beliefs about consequences, (6) motivation and goals, (7) memory, attention and decision processes, (8) environmental context and resources, (9) social influences, (10) emotion regulation, (11) behavioural regulation, and (12) nature of the behaviour.

Conclusions: A set of behaviour change domains agreed by a consensus of experts is available for use in implementation research. Applications of this domain list will enhance understanding of the behaviour change processes inherent in implementation of evidence-based practice and will also test the validity of these proposed domains.

See end of article for authors' affiliations

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Implementation Science

METHODOLOGY

Open Access



A guide to using the Theoretical Domains Framework of behaviour change to investigate implementation problems

Lou Atkins^{1*}, Jill Francis^{2,3}, Rafat Islam³, Denise O'Connor⁴, Andrea Patey³, Noah Ivers⁵, Robbie Foy⁶, Eilidh M. Duncan⁷, Heather Colquhoun⁸, Jeremy M. Grimshaw^{3,9}, Rebecca Lawton¹⁰ and Susan Michie¹

Abstract

Background: Implementing new practices requires changes in the behaviour of relevant actors, and this is facilitated by understanding of the determinants of current and desired behaviours. The Theoretical Domains Framework (TDF) was developed by a collaboration of behavioural scientists and implementation researchers who identified theories relevant to implementation and grouped constructs from these theories into domains. The collaboration aimed to provide a comprehensive, theory-informed approach to identify determinants of behaviour. The first version was published in 2005, and a subsequent version following a validation exercise was published in 2012. This guide offers practical guidance for those who wish to apply the TDF to assess implementation problems and support intervention design. It presents a brief rationale for using a theoretical approach to investigate and address implementation problems, summarises the TDF and its development, and describes how to apply the TDF to achieve implementation objectives. Examples from the implementation research literature are presented to illustrate relevant methods and practical considerations.

Methods: Researchers from Canada, the UK and Australia attended a 3-day meeting in December 2012 to build an international collaboration among researchers and decision-makers interested in the advancing use

Theoretical Domains Framework: domains

- Knowledge
- Skills
- Social/professional role and identity
- Beliefs about capabilities
- Beliefs about consequences
- Motivation and goals
- Memory, attention and decision processes
- Environmental context and resources
- Social influences
- Emotion
- Behavioral regulation
- Nature of the behaviors

Theoretical Domains Framework: domains

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- Emotion
- Behavioral regulation
- Nature of the behaviors

Theoretical Domains Framework: constructs

- Knowledge Breastfeeding, timely introduction of complementary foods, home gardening
- Skills Responsive feeding skills, skills feeding a child with low appetite
- Social/professional role and identity Organizational commitment, group identity
- Beliefs about capabilities Self-efficacy, empowerment, self-confidence
- Beliefs about consequences
- Motivation and goals
- Memory, attention and decision processes
- Environmental context and resources Received counseling, has homestead garden
- Social influences Support from family members with child feeding
- Emotion Depressive symptoms
- Behavioral regulation Challenges with breastfeeding or complementary feeding
- Nature of the behaviors

Model

Exposure variables

Theoretical Domains Framework constructs

Outcome variable (infant and young child feeding behaviors)



Child minimum dietary diversity (4 of 7 food groups)

Child dietary diversity score (0-7)

Timely introduction of solid, semi-solid foods



Exclusive breastfeeding for children under 6 months

Approach

Poisson mixed effects regression to estimate prevalence ratios using bivariate and multivariate models

Results

**Determinants of child
minimum dietary
diversity**

Skills

Social/professional role and identity

Results

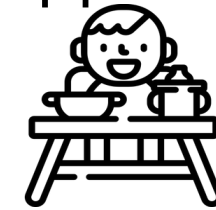
Determinants of child minimum dietary diversity

Skills

Responsive feeding with growing appetite

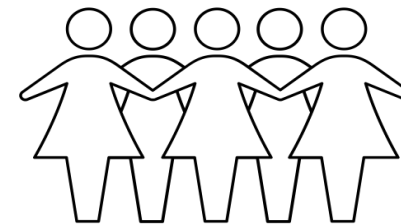


31% ↑



21% ↑

Social/professional role and identity



19% ↑

Active member in mothers' group

Results

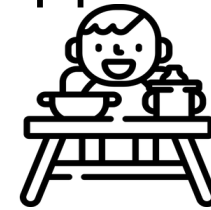
Determinants of child dietary diversity score

Skills

Responsive feeding with growing appetite

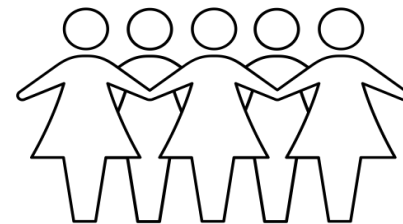


25% ↑



13% ↑

Social/professional role and identity



8% ↑

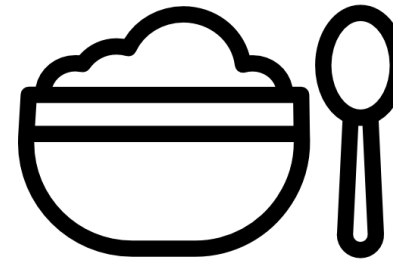
Active member in mothers' group

Results

Determinants of timely introduction of solid or semi-solid food

Knowledge

Knowledge that complementary foods should be introduced at six months



26% ↑

Implications

- Responsive feeding, skills to feed a child with low appetite associated with child dietary diversity
- Underscores importance of incorporating responsive feeding in infant and young child feeding global guidance
- Mixed evidence linking knowledge and complementary feeding behaviors
- Quantitative application of TDF using secondary data

Thank you!

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