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Applying a case study approach to understand context in implementation research

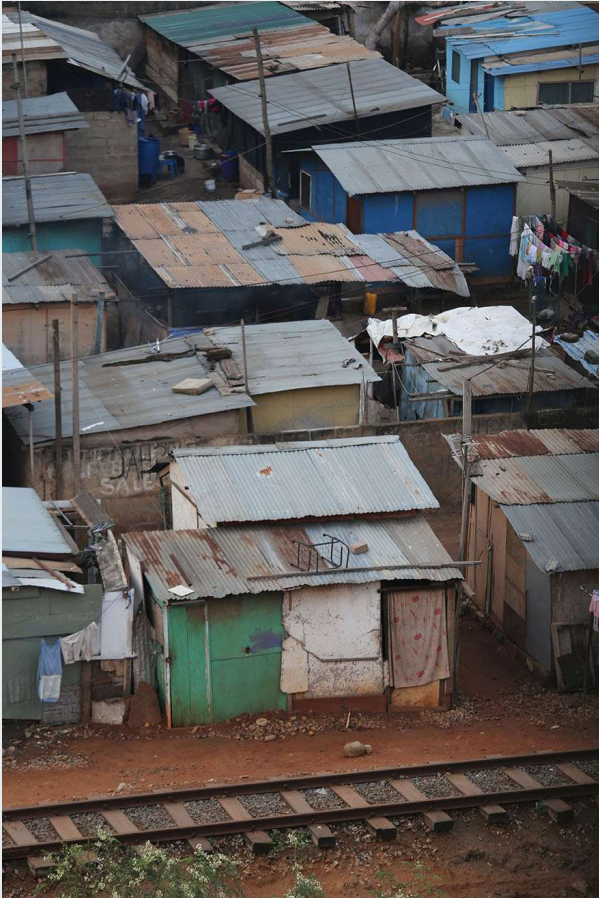


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Key questions about context in implementation research

1. What do we mean by context in implementation research?
2. How might we theorise the relationship between context and intervention within implementation research?
3. How might context be operationalised to investigate implementation?

Context and Intervention Implementation



But what is context?

In your groups, discuss (10 mins):

1. Is context a thing?
2. Where does context begin and end?
3. How do you know which context matters and to whom?
4. How can we think about context in time and space?

Why is case study research helpful for understanding context?

- Context and complex interventions are difficult to separate (and may not be helpful to do so)
- Methods requiring a separation between context and intervention (e.g. randomised controlled trials) are unlikely to capture complex and dynamic interactions between context and implementation
- Case study research provides evidence on context to understand how, why and where interventions have observed effects
- Case studies offer potential for understanding how interventions are implemented 'within context' and how this evolves over time

CASE STUDY, CONTEXT & COMPLEX INTERVENTIONS (TRIPLE C)

Review of Context in Case Study Health Research

Reading, thinking, debating:

- what context is *doing* in this paper
- where does *this* notion of context come from (epistemology in focus, because it's a meta-narrative)
- what it allows us to take into account
- what kind of knowledge it produces about interventions
- what it neglects



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How context is conceptualised and operationalised in case study health research

	How context is conceptualised	How context is operationalised	Example	Type of knowledge typically produced
Case studies develop and test complex interventions	Characteristics of the implementation setting or human factors impacting the intervention	Lists of contextual factors or characteristics external to the intervention	<i>'(a) the characteristics of the population; (b) the characteristics of the staff; (c) the organizational milieu, including formal and informal power structures, policies, and funding; (d) the political policy and economic context (...); and (e) the historical and geographic context, specifically, the physical location of organizations in varied rural and urban locations, and the social conditions linked to those locations'</i>	Description of steady-state generalisable relationships between intervention and local circumstances
Case studies analyse change in organisations	Dynamic organisational, policy or human backdrop, changing over time as the intervention is implemented	Heterogeneous but often detailed descriptions of organisational conditions linked to macro processes or forces	<i>'the micro detail of healthcare reform processes' was made up of the 'forces that influence [the] nature of change efforts in the healthcare sector'</i>	Intervention effects through perspectives of actors within organisation. Findings positioned as offering transferability rather than theoretical generalisability
Case studies are appropriate for conducting realist evaluation	Set of circumstances where particular mechanisms are triggered to produce particular outcomes	Wide-ranging, capturing characteristics of organisations or local area, relationships between staff or broader regional or national policies. Context was also linked to 'space and place'	<i>'the public-private interface and tensions between a mother's choice and societal pressures'</i>	Technical reports focused on how and why the intervention did (or didn't) work. Descriptions of context-mechanism-outcome configurations as 'demi-regularities' for an intervention to be effective
Case studies enable naturalistic study of complex change	Emergent and co-shaped through relationships and wider social influences on implementation practices	Actors' social actions and their interaction with wider social forces. Narrative iteration between macro and micro	Campbell et al. (2007) – Context linked individual and community capital, social actions and interactions with political and economic forces, power structures, stratified according to structural gender and age inequalities	Thick descriptions of the case. Instrumental in offering insight into wider structural relations, providing 'naturalistic generalisation' of sensitising concepts or theory

What counts as context?

- Demographic factors – location, deprivation, population
- Service - GP practices, paediatric services, mental health services
- Components of organisation – staff members, relationships between staff, organisation priorities
- Trial context – protocols and procedures of study processes
- Individual factors – motivation, experience, perceptions of intervention
- Problem the intervention addresses – nature, scale, and causal mechanism (Wells et al., 2012)
- Social, political, and organisational setting within which an intervention is implemented (Hawe et al., 2004)
- Broad social actions, events, interactions or forces (Hawe et al., 2004; Rhodes & Lancaster, 2019; Meier & Dopson, 2019)
- Language produced within interactions (Atkinson & Heritage, 1984)
- Relationships between the above?

Mobilising context as a set of characteristics - a worked example

Aim

- **To develop hypothetical propositions regarding the contextual determinants of problems in TB care in South Africa**

Pre-implementation phase work to provide evidence to inform intervention development, pilot and evaluation.

Murdoch, J., Curran, R., van Rensburg, A.J. et al. (2021) Identifying contextual determinants of problems in tuberculosis care provision in South Africa: a theory-generating case study. *Infect Dis Poverty* 10, 67. <https://doi.org/10.1186/s40249-021-00840-5>

Design

- Theory building case study design (Thomas, 2011)
- Case definition: TB care provision and care seeking
- Instrumental case (Stake, 1995) of contextual determinants of problems in TB care in South Africa
- Context and Implementation of Complex Interventions (CICI) framework (Pfadenhauer, et al., 2017) – context, setting, implementation
- CICI context domains: geographical, epidemiological, socio-cultural, socio-economic, ethical, legal, political

Which type of knowledge was made visible?

Table 4 – Contextual determinants, hypothetical propositions and intervention components for tackling problems in TB care.

Problem	Contextual Domain: Level	Contextual Determinants	Evidence	Hypothetical Propositions	Recommendations for intervention components and implementation strategies
Delayed diagnosis at community and facility level	Epidemiological; institutional; political; socio-cultural: Macro, meso and micro	<ul style="list-style-type: none"> - <u>Verticalised</u> TB provision within facilities. - Inadequate screening of patients at community and facility level. - Inefficient referral pathways (private/clinic/hospital) -Lack of patient knowledge of how to provide sputum sample. 	<ul style="list-style-type: none"> - One nurse dedicated to TB care. Reports that TB not managed by other clinicians. - Observations and patient reports identified inconsistent screening. Some patients reported accessing multiple public and private services before diagnosis. 	<p>Delayed diagnosis caused by interaction between:</p> <p><i>Macro:</i> Cultural stigmatisation of TB; vertical disease programmes; fragmented public and private healthcare provision; limited resources to support efficient and timely screening, testing and diagnosis;</p> <p><i>Meso:</i> Inadequate screening of the community, poor sputum</p>	<ol style="list-style-type: none"> 1. Provide staff training to improve identification and management of patients. 2. Strengthen screening and case finding at community and clinic level. 3. Strengthen clinical practice and records of testing, diagnosis and treatment initiation at community and clinic level. 4. Improve sputum collection at facilities and educate patients about providing sputum samples.

Which type of knowledge was less visible?

“We try and admit all patients, just to sort out all social issues and then within about a week we have the sputum results. There is a smear that ...tells us there’s a low possibility of the patient actually being infectious to the community or relatives, and then we can think about discharging and treating as an outpatient. If they’re ill and they still need further inpatient treatment, we keep them here and discharge once they've stabilized. Otherwise anyone with positive [tests] stays here until they have two negative, basically two months in a row.”

(Doctor working in TB ward)

Mobilising context as social action - example (Campbell et al., 2007)

- Context initially set as political, economic, ethical, geographical factors, power, and psycho-social preconditions for an 'AIDS-competent community'
- Context respecified in terms of 'social capital' to link individual and community capital to wider political and economic forces, as well as how context is created through social action
- Observations of 'dissemination workshops' facilitated insight into:
 - stakeholder committee membership stratified according to gender and age inequalities
 - wider social forces shaping community member interactions
 - Institutions marginalising alternative discourses about AIDS and how to manage it.

Campbell C, Nair Y, Maimane S. Building contexts that support effective community responses to HIV/AIDS: a South African case study. *Am J Community Psychol.* 2007;39(3-4):347-63.

The researcher and the construction of context

“a claim about context is precisely that—an articulation concerning a set of connections and disconnections thought to be relevant to a specific agent that is socially and historically situated, and to a particular purpose” (Dilley, 2002)

What do you think context is now?

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Resources on context and complexity in implementation research

Health Foundation webinar and essays on context:

<https://www.health.org.uk/event/webinar-quality-improvement-the-role-of-context-and-how-to-manage-it>

King's Global Health Institute seminar by Jamie Murdoch: Process evaluation of complex healthcare interventions: Investigating implementation within context: <https://www.youtube.com/watch?v=fZgu5Z-W1Kc&t=3063s>

Craig, P., Di Ruggiero, E., Frohlich, K. L., Mykhalovskiy, E. & White, M., for CIHR/NIHR Context Guidance Authors Group. Taking account of context in population health intervention research: guidance for producers, users and funders of research. NIHR (2018).

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