Use of evidence in mental health policy agenda-setting in low- and middle-income countries: A systematic review of reviews and conceptual meta-framework

RUNNING HEAD: Evidence-informed mental health policy

Abstract

The purpose of this article is to close the gap in frameworks for the use of evidence in mental health policy agenda-setting in low- and middle-income countries (LMICs). Agenda-setting is important because mental health remains a culturally-sensitive and neglected issue in LMICs. Moreover, effective evidence-informed agenda-setting can help achieve, and sustain, the status of mental health as a policy priority in these low resource contexts. A systematic *review of reviews* of evidence-to-policy frameworks was conducted which followed PRISMA guidelines. Nineteen reviews met the inclusion criteria. A meta-framework was developed from analysis and narrative synthesis of these 19 reviews which integrates the key elements identified across studies. It comprises the concepts of evidence, actors, process, context, and approach which are linked via the cross-cutting dimensions of: beliefs, values and interests; capacity; power and politics; and, trust and relationships. Five accompanying questions act as a guide for applying the meta-framework with relevance to mental health agenda-setting in LMICs. This is a novel and integrative meta-framework for mental health policy agenda-setting in LMICs and, as such, an important contribution to this under-researched area. Two major recommendations are identified from the development of the framework to enhance its implementation. First, given the paucity of formal evidence on mental health in LMICs, informal evidence based on stakeholder experience could be better utilised in these contexts. Second, the use of evidence in mental health agenda-setting in LMICs would be enhanced by

involving a broader range of stakeholders in generating, communicating and promoting relevant information.

Use of evidence in mental health policy agenda-setting in low- and middle-income countries: A systematic review of reviews and conceptual meta-framework

Introduction

Evidence-informed policymaking occurs when governments base their policies and plans on the best available information (Brownson et al. 2009; Green & Bennett 2007). The use of evidence to inform policymaking offers the best chance that actions address the needs of the population and with efficiency of public expenditure (Allen 2017), particularly important in low resource settings.

Recognised as a global development priority (Patel et al. 2018), mental health policy provision is receiving greater attention, particularly in the context of LMICs. This is demonstrated by the increase in the prominence of mental health within the Sustainable Development Goals compared to the preceding Millennium Development Goals (Mills 2018). Targets (3.4; 3.5; and 3.8) for SDG3 'Good Health and Well-Being' (United Nations 2015) all relate to mental health.

The Stages Heuristic Model is the prevailing conceptualisation of the policymaking cycle (Walt et al. 2008). Four stages are posited: agenda-setting, policy formulation, implementation, and evaluation. Agenda-setting is the focus of the present study given that mental health remains a sensitive and stigmatised issue (Thornicroft et al. 2022), globally and in LMICs (Javed et al. 2021), leading to relatively limited political attention and under-prioritisation of mental health on the policy agenda. This, in turn, leads to absence, or ineffective implementation, of mental health policies in many LMICs (Bird et al. 2011; Omar et al. 2010), The COVID-19 pandemic has given rise to a "global crisis for mental health" (World Health Organization 2022, para 3) with long-term and profound effects most acute in low-resource settings (Kola et al. 2021). As well as shining a light on mental health as a

policy issue in LMICs (Torales et al. 2020), the pandemic has shifted societal priorities, processes, and roles (Kola et al. 2021). Consequently, there is a unique opportunity to raise-up and reshape the agenda for mental health and understanding of the evidence by which it is informed(Goldman et al. 2020). Effective evidence-informed agenda-setting can be particularly instrumental in bringing and maintaining mental health as a priority policy issue. However, the pervasive stigma surrounding mental health globally has also been proposed to provide a challenge to the use of evidence for mental health policymaking (Botticelli 2019).

Many LMICs lack a stand-alone mental health policy, and one-quarter (25%) of WHO member states do not have a standalone mental health policy or plan (World Health Organization 2020). Existing policies are not always evidence informed (Omar et al. 2010; Williamson et al. 2021). For example, in Commonwealth countries with a mental health policy, only 8% refer explicitly to within-country data and to research that informed policy development (Bhugra et al. 2018). Furthermore, the research that exists is often not being used to inform policy in LMICs (Wei 2008; Williamson et al. 2015). Indeed it has been argued for health policy more broadly that the lack of translation of evidence into policymaking is as important a focus as bridging than the evidence gap (Martin et al. 2019; World Health Organisation 2021a).

Substantial headway is being made in conceptualising the intricate relationship between evidence and policy (Smith & Joyce 2012). Theory is particularly useful for health systems and policy research (de Leeuw et al. 2014), due to the complexity involved (Gilson 2012). Specifically, frameworks can provide a structure within which to organise and describe the relationship between variables (Nilsen, 2015). Moreover, frameworks provide a scaffold on which theory can be synthesised and summarised to aid application (Kivunja 2018), and thus shape and structure inquiry (Walt et al. 2008). For example, the taxonomy of models of evidence use comprising incrementalist, rationale and networks (ref here), can help

explain the nature of engagements of different policy actors in health policy processes, and possibly inform strategies for enhancing evidence use in health policymaking.

An initial scoping search revealed numerous frameworks for understanding, strengthening, and assessing the role of evidence in health policymaking more generally. Yet, only one framework focused specifically on mental health agenda-setting in LMICs: the EVITA (EVIdence To Agenda setting) framework (Votruba et al. 2020; Votruba et al. 2021). However, EVITA narrowly focuses only on research evidence. Evidence comes in a multitude of forms including both formal evidence produced by scientific research, such as academic studies and national surveys, as well as informal evidence based upon personal experience, such as expert opinion and community narratives (Mirzoev et al. 2017; Mirzoev et al. 2013). Focusing on published academic literature as the only evidence may exclude a large body of tacit knowledge and voices, from policymaking (Abimbola 2021). Hence, it could be argued that a focus on formal mental health research evidence may prevent effective agenda-setting for mental health and reducing mental health inequities. Furthermore, empirical work on the role of evidence for mental health policymaking has also focused on research evidence (Williamson et al. 2015).

In the current article, we reframe the focus to encompass a broader range of evidence, informal as well as formal. This is poignant for mental health policymaking due to the widely documented lack of formal mental health research evidence on many key topics relevant to government planning, including health provision and the creation of health policy (Iemmi 2022; Mackenzie 2014; Omar et al. 2010; World Health Organization 2018). This evidence gap appears to be most acute in LMICs; the percent of mental health research output against total research output (World Health Organization 2021b) is lower in LMIC than HICs. Although mental health research output is increasing, it is in fact decreasing in comparison to general health research output (World Health Organization 2021b). .

In focusing on evidence, we also acknowledge that it is one of many influences on policy decisions, which are taken by policy actors who typically bring their agendas, interests and are engaged in complex power interplay (Capano & Malandrino 2022; Walt and Gilson 1994). Exploring the wide range of influences on mental health policy decisions is outside the scope of this study, but in addition to examining the role of evidence *per se* we also explore the, perhaps equally important, interrelated contextual elements that affect the (non)use of evidence.

The context is especially important in relation to mental health (Montenegro & Ortega 2020) given heterogeneity of local understandings and implications (Krendl & Pescosolido 2020), including stigma (Gopalkrishnan 2018). Seeking universal applicability may potentially reduce and distort complex realities (Abimbola 2021). EVITA framework has to date been applied to the South African and the global LMIC context (Votruba et al. 2021). Votruba et al. (2018) argued that frameworks from other health/policy areas can offer lessons for strengthening the role of evidence in mental health agenda-setting in LMICs and the value of synthesising learning across settings in relation to evidence-informed policymaking has been demonstrated (Langlois et al. 2016).

Hence, it is appropriate to survey frameworks from the wider health policy literature for insights (Buse 2008). However, the insights from general health frameworks and frameworks from other areas are limited as they do not capture the unique context of mental health policy and evidence use.

The aim of this article is to report results of a *review of reviews* of evidence to health policy frameworks to glean insights into mental health agenda-setting in LMIC. Our review sought to answer the following research question: What can be learnt from health evidence-to-policy frameworks for the use of evidence in mental health agenda-setting in LMICs? The first objective of this review was to review the applicability of current theorisations and

frameworks for evidence-informed policymaking to mental health agenda-setting in LMICs. A second objective was, as a result, to propose a meta-framework for the role of evidence in agenda-setting for mental health policymaking in LMICs. We hope that this article will be of interest and relevance to policymakers, practitioners and researchers who are interested in advancing the understanding of and improving, evidence-informed mental health agenda-setting and improving evidence-informed policymaking more generally.

Methods

Review of Reviews

Given the existence of multiple reviews of health evidence-to-policy frameworks (e.g., Graham et al. 2007; Ward et al. 2009), instead of reviewing primary sources we conducted a systematic *review of reviews* (Smith et al. 2011), also referred to as 'overview of reviews' (Hunt et al. 2018) or 'umbrella review' (Aromataris et al. 2015), following the PRISMA guidelines. Systematic reviews of reviews are a relatively recently-established and distinct form of evidence synthesis which aim to integrate the findings of different reviews on the same topic (Oliver et al. 2014). Comparing and contrasting the findings of individual reviews enables assessment of the consistency of research findings, identification of ambiguities, and discovery of insights adding value beyond restating previous findings (Hasanpoor et al. 2019). Reviews of reviews are particularly beneficial where there are multiple reviews of the same topic that differ in quality, scope, and exact focus. Our approach allows us to identify relevant theories, assess their importance, and to offer a synthesis with respect to evidence to health policy frameworks to glean insights into mental health agenda-setting in LMICs (Campbell et al. 2014).

Search Strategy

Database Selection

Four health-related academic databases were searched in November 2018 with alerts for later relevant publications until October 2021 when the review was largely completed: Medline, Global Health, HMIC (Health Management Information Consortium) and PsychINFO, followed by citation search for further publications. The HMIC database includes grey literature (Paez 2017) which increased the comprehensiveness of our review.

Search Terms

The BeHEMoTh framework (Booth & Carroll 2015b) was used to define the key components of the research question (Table 1). A concept map was subsequently developed setting out the search terms for the database search, consisting of: review; frameworks; evidence; policymaking; and the pathway of evidence-to-policy. It was particularly challenging to devise adequate search terms for the latter given the large number of potential synonyms (McKibbon et al. 2010), and low specificity due to the inclusion of these terms in policy-relevant papers. The search strategy (SI 1) was only modified for each database where required for technical reasons such as differences in subject headings.

Inclusion Criteria

Our inclusion criteria were: existence of theoretical/conceptual frameworks in the review; focus on the role of evidence and the process of health policymaking; and are in English; and published in or after 2004. Although we are primarily interested in the agenda-setting stage of the policymaking cycle and/or LMIC contexts, our scoping search suggested that such a narrow focus in the first instance would yield insufficient results to elicit meaningful findings. We followed the definition of frameworks as structures that describe the relationship between variables (Nilsen 2015). Results were limited to reviews published in or after 2004 because this was the year of the landmark World Health Organisation (WHO)

Mexico Ministerial Health Summit (The Lancet 2004) which increased attention to evidence-informed policymaking (Bennett et al. 2018).

Screening and Quality Assessment

Results were first screened by titles and abstracts, then full texts. Results were single-screened, and the screener brought unresolved questions regarding individual papers to the team for discussion and joint decision making. Screening mainly filtered out results that were not reviews of theoretical/conceptual frameworks due to the difficulties in designing a search with high specificity. There was minimal ambiguity and any unclear decisions were discussed among all researchers.

Limited tools exist specifically for assessing the quality of reviews of frameworks or theory. Therefore, an adapted version of GRADE-CERQual was used (SI 2). GRADE-CERQual provides an assessment of confidence in the evidence from systematic reviews of qualitative research or syntheses of qualitative evidence (Lewin et al. 2018) and is used widely (Pollock et al. 2020). GRADE-CERQual is suitable for adaptation because it can incorporate other tools: we incorporated CASP (CASP 2018) and AMSTAR 2 (Shea et al. 2017).

The developers of GRADE-CERQual recommend assessing the primary studies included in each review (Munthe-Kaas et al. 2018). We were not able to do this for the following reasons: limited tools and guidance are available for assessing the quality of theoretical papers (Votruba et al. 2018); the primary studies in the selected review articles do not allow meaningful application of more established tools (Contandriopoulos et al. 2010); and authors, on the whole, did not attempt to assess the quality of their primary studies. The present study is interested in the quality of the reviews themselves, in how well they synthesise findings, and less on quality of the primary studies. Hence, if a review provides insufficient detail on primary studies to enable GRADE-CERQual assessment, or presents an

appropriate quality appraisal, these are notable findings. In consequence, rather than assess the level of confidence that can be placed in the body of data directly, we have assessed how reviews have evaluated the quality of primary studies included in their own review and considered the confidence that can be placed in the conclusions authors have drawn from their findings.

All included reviews were scored independently by the first author and an independent assessor. Inter-rater reliability was high: 15 of the 19 reviews were given the same rating (80%). Three reviews were discrepant in only a single rating, and one review was discrepant in two ratings. All disagreements were resolved at a consensus meeting. About half the reviews (9 out of 19, 47%) were awarded a high level of confidence in their findings: the highest-level possible (SI 3). Only one review (5%) was awarded the lowest level of confidence (very low). Following the GRADE-CERQual approach, no review was excluded. However, the score was considered in interpreting results of our analysis. Few reviews sufficiently assessed and/or documented the quality of the frameworks, or the primary studies. Additionally, few reported the source of funding of the frameworks, or studies. Frameworks produced outside of academia, for example by non-governmental organisations, may be more likely to use a broader definition of 'evidence' beyond research.

Analysis and Synthesis of Results

For the review papers included in the sample the full article was analysed with the narrative synthesis of the reviews, and any frameworks produced from the reviews as data. Data was extracted by a single author into the data extraction table. For the analysis of our data and synthesis of results we were guided by the 'best fit' framework synthesis approach (Carroll et al. 2013): an established method for the systematic review of qualitative evidence (Booth & Carroll 2015a; Brunton et al. 2020). An existing framework from the literature, devised for a closely related purpose, is used as a starting point to aid the initial analysis of

the data. Through the analysis the initial framework is developed; new concepts that cannot be incorporated can also be generated, thereby creating a new 'meta-framework' based on the *a priori* concepts and expanded with any new concepts (Carroll et al. 2013).

An obvious candidate for the initial *a priori* framework was the policy triangle (Walt & Gilson 1994), a general framework ubiquitous in health policy analysis. Not overly prescriptive, the policy triangle is often used alongside other frameworks (O'Brien et al. 2020). Moreover, the policy triangle was designed primarily for health policy reform in LMIC settings (O'Brien et al. 2020).

The policy triangle consists of four concepts: actors, context, content, and process. At the outset, we replaced 'content' with 'evidence' due to our specific interest in how evidence informs policy. During the analysis it was apparent that a fifth concept, 'approach,' was needed to capture this aspect of our findings and enable actionable recommendations. The resultant concepts that form the initial framework (Figure 1) are defined below in the results section.

Thematic analysis was applied to identify patterns in the data (Braun & Clarke 2006) to enable the frameworks to be compared and contrasted. After familiarisation, data was coded inductively under the concepts of the *a priori* framework. The codes were then grouped together to form higher-level descriptive factors, both common and unique, which were iteratively developed. Higher-level interpretation of these descriptive factors enabled the concepts of the framework to be linked together.

Multiple links between the different concepts were explored, with the data being continually revisited to ensure that the data supported the links and the significance ascribed to them. These links were used to extend the initial framework and link the concepts together, with a meta-framework being developed from the multitude of frameworks. At regular stages the authors critically discussed the analysis to ensure that the framework represented the data

and was as useful to the intended audience. This meta-framework was then considered alongside existing knowledge about the mental health agenda-setting in LMICs to explore how the framework might be usefully tailored to this specific context.

An approach that combines inductive and deductive analysis and starting with pre-determined concepts was appropriate because health evidence-to-policy has been previously studied by various scholars (Oliver et al. 2014). Hence, it was reasonable to anticipate that concepts suggested by classic previous literature will be relevant. This helped us connect our findings to the extant research while adding nuance through iterative refinement and development of these concepts via inductive analysis of the data. Our *review of reviews* therefore unites common and unique elements of existing frameworks into a meta-framework.

Results

The next sections will explore the included reviews, including the key factors identified for the use of evidence, culminating in the development of a meta-framework for the role in evidence in agenda-setting for mental health policymaking in LMICs.

Overview of Included Reviews

The PRISMA Flow Diagram (Figure 2) shows the initial database search yielded 6,116 articles. A further 32 articles were included from the citation search and 1,060 duplicates were removed. After title and abstract screening, 725 articles were retained and the full texts were assessed for eligibility. Nineteen met the inclusion criteria (SI 3). No eligible reviews were identified via alerts after the initial search in November 2018.

The two reviews focused on *assessing* the use of evidence in health policymaking (Cruz Rivera et al. 2017; Newson et al. 2018) identified were not analysed further due to the limited relevance for mental health in LMICs.

An adapted version of GRADE-CERQual that was developed to provide an assessment of confidence in the evidence from systematic reviews of qualitative research or syntheses of qualitative evidence (Lewin et al. 2018) was used (see the Screening and Quality Assessment). The reviews included both systematic (N = 6; 32%) and non-systematic narrative reviews (N = 13; 68%). Greenhalgh et al. (2018) argued that narrative reviews should not be considered lower in the evidence hierarchy that systematic reviews and, although our quality appraisal tended to assign them a lower level of confidence, some narrative reviews were rated 'high'.

The only review not authored from the Global North was by Almeida and Báscolo (2006) situated in Brazil and Argentina. The dominance of authorship from the Global North was also reflected for the individual frameworks (Votruba et al. 2018).

Four reviews originated from a particular area of health: health surveillance (Green et al. 2009), nursing (Mitchell et al. 2010), emergency medicine (Graham et al. 2007), and mental health (Votruba et al. 2018). Nonetheless, all studies reviewed general health evidence-to-policy frameworks. Votruba et al. (2018) limited their review to frameworks that had been applied to mental health policymaking in an LMIC setting.

Some reviews built upon previous reviews. For example, Damschroder et al. (2009) used the findings of Greenhalgh et al. (2004). In turn, Moullin et al. (2015) built on Damschroder et al. (2009) to produce their framework. Ten of the 17 reviews listed included frameworks in an easily-accessible tabular format. Analysis of this subset indicates a reasonably high percentage of unique frameworks in each review (18% - 59%, Table 2). Variation in the foci and inclusion criteria of the reviews does not fully explain why frameworks are included in some, but not other, reviews. Moreover, some reviews treated different versions of the same framework as distinct, whilst others considered the different versions combined.

Each review did one or more of the following: described, categorised, compared and contrasted (including from different fields), and critiqued existing frameworks of (at least some part of) the evidence-to-policy pathway. The level of detail provided on included frameworks varied greatly as did the level of analysis. Some reviews presented a list of available frameworks, some provided a categorisation, and some identified common factors. Seventeen focused on *explaining* and *strengthening* the use of evidence in health policymaking (Figure 3). Of these, eight provided a synthesis to summarise development of the current evidence base and to aid the selection of relevant frameworks and nine produced a new framework intended to guide action, research, and discussion. These 17 reviews were analysed to identify which of our priori key concepts were included in the synthesis or framework produced (the full analysis is provided in the Supplementary Information). 'Actors' were a major concept in the lowest number of reviews (47%), with 'approach' included by the greatest number of reviews (77%). This suggests that developing recommendations for strengthening the role of evidence is a key focus.

Underlying Theories

Theories explain the relationship between variables, whereas frameworks are structures to describe the relationship between variables (Nilsen 2015). Thus, it is useful to understand the theories that underpin frameworks, to help assess the applicability of health evidence-to-policy frameworks to mental health policy agenda-setting in LMICs.

The theories underlying individual frameworks included in each review were rarely presented. Mitton et al. (2007) was an exception. Most reviews noted that some frameworks were based on existing theories, others on empirical studies, and some on the authors' personal experience. The nine reviews which produced a new framework were analysed to understand what theories contributed to their development, and this is presented in Table 3.

Relevant information was often alluded to indirectly but was sometimes dealt with explicitly, for example in the discussion.

Six key theories, apparent in the frameworks produced by the reviews were identified: Theory of Diffusion of Innovations (N = 5, 56%) (Rogers 2010); Two Communities Theory of Research Utilisation (N = 4, 44%) (Caplan 1979); Theory of Opinion Leadership (N = 5, 56%) (Katz & Lazarsfeld 1955); Social Network Theory (N = 6, 67%) (Barnes 1954); Complex System Theory, or Complexity Theory (N = 5, 56%) (Thompson et al. 2016); and Punctuated Equilibrium Theory (N = 2, 22%) (Baumgartner & Jones 1991). All six theories originated outside of health policy. Punctuated Equilibrium Theory and the Two Communities Theory both have their origins in the field of political science and public policy. The Theory of Opinion Leadership was developed in media and communication sciences. Social Network Theory came from social and behaviour sciences. Complex System Theory is transdisciplinary. None of the nine new frameworks appeared to be influenced by all six theories. Notably, in many frameworks the Two Communities Theory was extended to include three communities: researchers, policymakers, and intermediaries.

Relevance to Mental Health Agenda-setting in LMICs

There was broad consensus among the reviews that few frameworks have been applied and tested for any context (Votruba et al. 2018; Ward et al. 2009). However, the extent to which the application of frameworks was explored by reviews varied with some, for example, offering citation frequency (Tabak et al. 2012). Application of frameworks to mental health policymaking in LMICs was even more limited (Votruba et al. 2018). In addition to the four frameworks identified by Votruba et al. (2018), Shiffman and Smith's (2007) framework was noted to have been applied to global mental health and to be relevant to evidence, although focused on the determining of issue salience (Tomlinson & Lund 2012).

Interestingly, among the frameworks applied to mental health in LMICs reported by Votruba et al. (2019), including the Rapid framework (Court & Young 2006), Knowledge Policy and Power framework (Jones et al. 2013), power and political context feature strongly. This indicates the perceived importance of these factors to mental health by authors selecting appropriate frameworks. Key findings with regards to the application of the frameworks include the need for early stakeholder engagement, to understand the beliefs and values of actors, and to integrate monitoring and evaluation to assess the use of evidence in policymaking. Reflection on the utility of the frameworks was limited, although authors were always positive. Tomlinson and Lund (2012) propose that a debate among researchers is needed to agree upon key policy priorities and solutions for mental health in order to advocate more coherently and convince policymakers to take action based upon the evidence presented. The only suggested refinement was greater consideration of the heterogeneity of mental health (Mackenzie 2014) due to the challenges this presents to constructing a single clear policy ask.

The findings from our thematic analysis will now be presented under the five key concepts (evidence, actors, process, context, and approach). The specific relevance of these findings for mental health policy agenda-setting in LMICs will also be highlighted. Table 4 shows the extent to which the reviews focused upon each of the concepts.

Evidence for Mental Health in Agenda-setting

Findings emerged from our analysis relating to evidence in four key areas: nature, perception, supply and demand, and use.

1. Nature of evidence

'Evidence' was often used interchangeably with related terms such as 'knowledge', and not explicitly defined. Different types of evidence were identified including *tacit*, *implicit*, and *explicit* (Oborn et al. 2013). Evidence from *formal* research was generally

prioritised over *informal* sources, such as expert opinion. Because of the mental health evidence gap, especially in LMICs (Mackenzie 2014; Omar et al. 2010; World Health Organization 2018), *informal* sources may be particularly important. One review discussed how research evidence originating from different *disciplines* are perceived differently, with the social sciences sometimes viewed as providing 'shallow' insights (Contandriopoulos et al. 2010). Finally, some reviews highlighted a need to understand how research evidence is considered and integrated alongside other sources of information (Almeida & Báscolo 2006; Contandriopoulos et al. 2010).

Important characteristics identified for evidence, although not specifically for agenda-setting, surrounded the context of its intended use and include *relevance*, *applicability*, and *salience* (Gold 2009). Accordingly, the capacity of stakeholders to appraise the *quality* and *value* of evidence featured in the reviews (Damschroder et al. 2009; Green et al. 2009; Mitton et al. 2007). This is particularly important in mental health agenda-setting to avoid stigma-related prejudice introducing bias and knowledge synthesis is considered a useful mechanism to improve the robustness of evidence (Graham et al. 2007).

2. Perception of evidence

As one review noted, evidence is encountered often in a social context and is open to debate and interpretation (Oborn et al. 2013), influenced by the beliefs, values, and biases of the audience. As argued elsewhere, destigmatising of mental health therefore warrants greater focus (Botticelli 2019). Reviews tended to focus on how policymakers and researchers may interpret the evidence differently. One review highlighted how discrepancies between researchers can undermine confidence in the evidence (Almeida & Báscolo 2006).

For mental health agenda-setting in LMICs, the influence of stigma may mean that formal research evidence is actually viewed as more robust than informal evidence, based on personal experience, that comes directly from communities (Mackenzie 2014). Communities

are also recognised as important users and sources of mental health evidence (World Health Organization 2005) and therefore understanding the factors that shape the perception of a wide-ranging array of stakeholders is likely to be useful given the important influence of different beliefs, values, and biases.

3. Supply and demand of evidence

Supply and demand was often framed as the, dynamic, mismatch between the availability of evidence and demands of policymakers (Milat & Li 2017). An area of exploration for mental health agenda-setting in LMICs is the evidence needs of other stakeholders, such as communities and service users. Information overload was raised as a potential challenge (Mitton et al. 2007), although this may be less relevant for mental health in LMICs given the evidence gap (World Health Organization 2021b).

4. Use of evidence

Different uses of evidence were recognised including *conceptual*, *direct*, *tactical*, *political*, *imposed*, and *procedural* (Almeida & Báscolo 2006; Gold 2009; Oborn et al. 2013; Votruba et al. 2018). Prior identification of how the evidence is intended to be used was reported to be likely to increase the effectiveness with which evidence is communicated by better defining the intended audience defined and selecting the most appropriate medium (Graham et al. 2007; Green et al. 2011). The quality and quantity of evidence influences its utility in policymaking, often evaluated in terms of its practical value for policymakers rather than for the full range of stakeholders (Gold 2009; Milat & Li 2017). Moreover, evidence needs to be adapted to context (Milat & Li 2017; Mitchell et al. 2010) and premature use of research may have unintended negative consequences and ethical costs Graham et al. (2007). Hence, the availability of suitable evidence is a necessary but not sufficient condition for its use in policymaking.

***Actors* that Use Evidence in Mental Health Agenda-setting**

Actors are individuals and groups directly or indirectly involved in policymaking. Interestingly, actors was the concept least featured by the reviews (Table 4). Three key factors relating to actors were identified from the analysis: categories, characteristics, and relationships.

The three predominant categories of actor identified were *researchers* (producers of evidence), *policymakers* (users of evidence), and *intermediaries* (knowledge brokers). Some reviews acknowledged that their classifications were a gross simplification (Contandriopoulos et al. 2010; Gold 2009) and that the categories were not necessarily mutually exclusive (Gold 2009). Other reviews, however, noted the large cultural differences between researchers and policymakers (Oborn et al. 2013). Terminology sometimes implied a hierarchy of actors according to knowledge and expertise (Mitchell et al. 2010). Interestingly, one review suggested that frameworks were often researcher-focused (Wilson et al. 2010).

Characteristics of actors received attention in many frameworks. *Knowledge* and *capacity* were discussed within the context of the ability and power to use evidence (Contandriopoulos et al. 2010; Moullin et al. 2015). Capacity of individuals and organisations, including human and financial resources, (Greenhalgh et al. 2004) often constrained the ability of actors to use evidence in policy processes, including advocacy and agenda-setting (Votruba et al. 2018). Although the focus tended to be on actors as individuals, their position within organisations and the characteristics of those organisations were reflected upon to varying degrees (Contandriopoulos et al. 2010; Damschroder et al. 2009).

Softer' characteristics, including the *beliefs*, *values*, and *interests* of individual and organisational stakeholders was a frequent factor (Almeida & Báscolo 2006; Contandriopoulos et al. 2010; Damschroder et al. 2009; Gold 2009; Greenhalgh et al. 2004; Mitton et al. 2007; Nilsen, 2015; Votruba et al. 2018; Wilson et al. (2010). Beliefs, values,

and interests shape how actors understand the world, what they value as important, and their interests, and hence directly shape how evidence is used. Interestingly, in the review focused on frameworks for mental health (Votruba et al. 2018), of the four relevant to LMICs only one has a component on actors' beliefs, values and interests, and are included only implicitly in the other three. Stigma against people with lived experience of mental health conditions is likely to affect how evidence on mental health is viewed and therefore used policy in agenda-setting (Botticelli 2019).

Much of the conceptualisation of the influence of beliefs, values, and interests has come from outside the field of health policy (Jones et al. 2013). The power and position of actors, including the power dynamics between actors, were important factors shaping the use of evidence.

The fit between actors and the relationships between them was viewed as potentially more important than their individual characteristics, with *trust* being key. *Unequal power* relations between stakeholders (Oborn et al. 2013) alongside the *culture gap*, most frequently referred to between researchers and policymakers, was often noted to be a barrier to good relationships. On the other hand, *long-term relationship building*, *bi-directional interaction*, and establishing *stable network*s – both formal and informal - were argued to be conducive for strengthening the use of evidence in policymaking (Mitchell et al. 2010; Oborn et al. 2013). Whilst the range of networks in relation to mental health policymaking may be restricted in LMICs, those that exist tend to be stronger than for other health policy issues (Mackenzie 2014). It has been proposed that the widespread stigmatisation of mental health has resulted in greater networking among people with lived experience of mental health conditions (Mackenzie 2014). On the other hand, poor *financial investment* in mental health can be a barrier to network activities and existence.

The context in which actors use evidence in mental health agenda-setting

We define context as the setting in which actors make and implement policies, and can include historical, political, economic and socio-cultural factors. Context was widely stated to be important, increasingly so in recent frameworks (Nilsen 2015), although Milat and Li (2017) conclude that '*real-world'* context is still lacking. Few reviews defined context and it appeared to be used as a catch-all. Some divided the concept into levels (Greenhalgh et al. 2004; Moullin et al. 2015). Others cautioned that the boundary is not clearly defined and the interaction between different aspects of context is important (Damschroder et al. 2009). The key factors relating to context identified from the analysis of the reviews are now presented under three levels: micro (individual-level), meso (organisation-level), and macro (systems-level).

Micro-context (individual-level) often lacked detail, possibly because they appear less tangible and more difficult to assess than other contextual factors with regard to policymaking (Damschroder et al. 2009). Due to the potential for stigma-related bias, micro-context in relation to mental health seems an area for greater framework development.

Meso-level (organisation-level) factors centred on two components: *capacity*, covering *resources* and *support*; and *motivation* encompassing *culture* and *leadership* (Graham et al. 2007; Mitton et al. 2007; Moullin et al. 2015; Votruba et al. 2018). Damschroder et al. (2009) reflected on the importance of *interplay* between individuals and organisations and highlighted this as an area needing more work.

The predominant macro-level (systems-level) contextual factors included in the reviews were *political* and *economic* (Almeida & Báscolo 2006; Contandriopoulos et al. 2010). Broader *social* and *cultural* contexts, including language and socio-demographics, were reflected on, but to a lesser extent (Tabak et al. 2012; Votruba et al. 2018). *Technological* context, such as digital connectivity (Tabak et al. 2012), may be important yet

under researched, particularly in relation to LMICs. The influence donor countries exert through development aid was noted in the review focused on mental health in LMICs (Votruba et al. 2018), suggesting an area that may be missing from general health evidence-to-policy frameworks that largely originate from donor rather than recipient countries. Furthermore, mental health is often a cross-sectoral policy issue (Mackenzie 2014) and this may broaden the contexts relevant to include.

The process of mental health agenda-setting in which evidence is used

Policy process is the way in which policies are made and enacted, often conceptualised by the stages heuristic model as the stages of agenda-setting, development or formulation, implementation, and evaluation (Walt et al. 2008). Frameworks rarely focused on agenda-setting (Votruba et al. 2018). The exception was Kingdon's (1984) multiple streams framework (Tabak et al. 2012) where issues rise to the top of the policy agenda when the problem, policy and politics streams converge. Although not solely focused on the role of evidence, the role of evidence in each can be considered. None of the four frameworks used for mental health LMICs identified by Votruba et al. (2018) specifically targeted the agenda-setting stage, pertinent for mental health due to the early stages of many policies.

Nevertheless, the complexity of the policy process was, however, still frequently emphasised. One review noted that newer frameworks gave greater recognition to this complexity (Almeida & Báscolo 2006), although Gold (2009) concluded that frameworks still require greater detail. The *lengthiness* and *unpredictability* of the policy process were reported to present a challenge to the use of evidence (Graham et al. 2007) due to the sustained investment of time and effort required, with no guarantee of a positive outcome. Additionally, many factors are often outside the influence of researchers (Gold, 2009).

Policy processes were seldom the sole explicit focus; and policy and practice frameworks were often grouped together (Tabak et al. 2012). This is an important distinction

as mental health policymaking, and particularly agenda-setting, is influenced by public perception (Bernardi 2021), which for mental health is shaped by stigma.

Multiple terms were used to describe the movement of evidence, which was given greater emphasis than the policy process. Terms such as 'translation' (e.g Graham et al. 2007) suggest a *uni-directional* movement from evidence-to-policy whereas 'exchange' (e.g., Contandriopoulos et al. 2010) implies a *multi-directional* process. Older frameworks more frequently conceptualised the evidence-to-policy process as *uni-directional*, suggesting a 'supplier' and a 'receiver' of evidence (Oborn et al. 2013). Uni-directional models may therefore reinforce power differentials between actors. A bi-directional process, on the other hand, suggests a more equal distribution and transfer of evidence and therefore of power. *Non-linear*, *multi-directional* models emphasise interaction between researchers and policymakers and, in this way, tend to be people-centred (Ward et al. 2009).

Power and politics was a recurring and cross-cutting factor that emerged from the analysis. The process of policymaking, and evidence-to-policy, is inherently political and shaped by the power dynamics between actors (Gore & Parker 2019). Power and politics are closely related concepts; politics can be thought of the exercise of power. For mental health policymaking this is particularly pertinent because people with lived experience of mental health conditions are often marginalised. Approaches that make more diverse kinds of evidence more widely available, can help to redress power inequalities.

Approaches to strengthen the use of evidence in mental health agenda-setting

Approaches are the means used to strengthen the role of evidence in policymaking.The extent to which reviews focused on the means (*strategies*, *efforts*, and *activities*) used to strengthen the role of evidence in policymaking varied. Approaches could be categorised according to: *effort (passive* or *active)*, *direction (push* or *pull)*, and *linkage (linear* or *bi/multi-directional) (*Almeida & Báscolo 2006). The reviews suggested there is unlikely to be a singular best approach (Greenhalgh et al. 2004) due to context, with a

combination likely to be best (Gold 2009). However, there was broad consensus that uni-directional communication was less likely to be successful, possibly due to the importance of interaction and dialogue between stakeholders (Almeida & Báscolo 2006; Contandriopoulos et al. 2010; Mitchell et al. 2010; Ward et al. 2009; Wilson et al. 2010). The limitations of what can be influenced by researchers was also noted (Gold 2009).

Tailoring approaches, including communication, to the intended audience was deemed critical (Almeida & Báscolo 2006; Greenhalgh et al. 2004; Mitton et al. 2007; Wilson et al. 2010). In LMICs, insufficient skill for communicating research has been documented, especially to non-specialist audiences (Murunga et al. 2020). This may be compounded in relation to mental health research because of cultural differences in the understanding of distress and disorder (Mackenzie 2014).

Also important is the person delivering the message (Mitton et al. 2007), and therefore the relationships and trust between and within stakeholder groups (Contandriopoulos et al. 2010; Mitton et al. 2007; Wilson et al. 2010). to create receptivity to the evidence and genuine relationships facilitate evidence generation, sharing, discussion, and use. Given the sensitive nature of mental health, trust between stakeholders is likely to be particularly important, especially when engaging marginalised communities who might be wary of researchers, medical professionals, and policymakers.

Meta-framework for the role of evidence in agenda-setting for mental health policymaking in LMICs

As described in the Introduction, an objective of our review was to propose a meta-framework for the role of evidence in agenda-setting for mental health policymaking in LMICs. The main purpose of this framework is to draw upon the existing knowledge and advance understanding of evidence-informed mental health policy agenda-setting, through highlighting two somewhat neglected aspects: the importance of the context and a distinction between processes and approaches of evidence use.

The use of evidence is multifactorial, and the availability of evidence is not sufficient to ensure its use in agenda-setting. Our framework (Figure 4), therefore differentiates five key inter-related concepts: evidence, actors, process, context, and approach which altogether determine the role of evidence in mental health agenda-setting. The latter concept being key for *strengthening* and not just *understanding* the use of evidence.

Given the focus of this study on the role of evidence, 'use of evidence for mental health agenda-setting' is naturally at the centre of our framework. The use of evidence is further distilled in our framework: the (1) *nature* of evidence on the topic and time for which use it is most suited (for different purposes, audiences, and at different times); how the evidence is (2) *perceived* and whether it is deemed to constitute robust and useful evidence by stakeholders; and the level of (3) *demand* for such evidence by stakeholders and the ease with which it can be *supplied*.

Alongside evidence, the four other key concepts in the framework (actors, process, context and approach) represent barriers and facilitators arising from the environment in which evidence is to be used. *Actors*, *process*, and *approach* form a triangle linked to the factors relating to evidence (perception, supply and demand, and use*)*.

Context, whilst distinct, permeates all other concepts and is therefore displayed as a triangle housing the framework. The outer sides of the triangle denote the three interlinking sub-levels of *context*: *micro* (individuals), *meso* (organisations) and *macro* (systems). The positioning of actors, process, and approach at the corners of the triangle highlights the most pertinent links between these concepts and the sub-levels of context. *Actors* sit at the intersection of *micro* and *meso context* because *actors* engage with agenda-setting as individuals and through their organisational role. *Approach* sits at the intersection of *micro* and *macro context* because *approach* involves individuals seeking to have systemic impact, often through their organisational role. *Process* sits at the intersection of *meso* and *macro*

context because *process* involves organisations, and therefore individuals within these organisation, working within systems.

Arrows, indicating cross-cutting dimensions (beliefs, values and interests; capacity; power and politics; and, trust and relationships) link the five concepts (evidence, actors, process, context, and approach). Whilst initially falling under the five concepts, as the analysis proceeded it became clear these dimensions were apparent under several, if not all, of the concepts. Only the most pertinent links are displayed in the framework; all the concepts link together in complex, myriad ways. Furthermore, all of the concepts are linked through each other, for example capacity influences the approach via actors. The use of double headed arrows indicates the bi-directional influence, which are now explained.

Actors can *perceive evidence* differently due to the nature of their personal, professional and/or cultural positioning with respect to that *evidence*. On the other hand, the ways in which *actors* relate to *evidence*, such as the role they play in the policy process, can also be influenced by their *perception of evidence*. The agenda-setting *process* influences the *demand* for, and consequent *supply* of *evidence*. On the other hand, the *supply* of evidence can also influence the agenda-setting *process*. Appropriate a*pproaches* to strengthening the use of evidence in agenda-setting are influenced by the intended *use of evidence* in agenda-setting. On the other hand, *approach* can also influence how *evidence is used*. Evidence, such as community narratives may, for example, be used to drive interest in mental health policy issues, leading to demands for further evidence.

While *context* influences all aspects of *evidence* in policy agenda-setting, the predominant influence is via the *beliefs, values, and interests* of *actors* as individuals (*micro context*) and through their organisational role (*meso context*). On the other hand, the *beliefs, values, and interests* of *actors* also influences the *context* in which agenda-setting is

undertaken. For mental health, the surrounding stigma can influence public opinion and the level of political attention received.

The extent of *trust,* and nature of the *relationships* between *actors,* influences the extent to which *approach* can be effective in strengthening the *use of evidence*. Some approaches may be dependant upon trusted relationships, for example the use of knowledge intermediaries to share evidence. On the other hand, the kind of *approach* used can influence the extent of *trust* and nature of the *relationships* developed between *actors*. Developing relationships between actors, for example by providing informal networking opportunities, may be an integral component of an approach, The policy *process* is inherently *political* and deciding the *approach* needs to take into account the *power* dynamics at play. On the other hand, the *approach* taken can influence the distribution of *power* in the policy *process*. *Actors' capacity* is a key determinant of their involvement in the policy *process*. On the other hand, involvement in the policy *process* can magnify *actors' capacity* to engage, such as through increasing their experience and skills.

Discussion

In this article, we reported the analysis of (reviews of) frameworks that explain evidence-informed policymaking and proposed a resultant meta-framework for evidence-informed agenda-setting for mental health policies.

Our meta-framework complements the existing body of knowledge, and advances the literature through collating in a novel way a vast body of relevant information. One area we advance the knowledge on evidence-informed policymaking is a deeper understanding of the context of, and approach to, evidence-informed mental health policymaking. For example, that issues such as trust, power and capacity, permeate across the micro, meso and macro levels of the context and can often be intrinsically linked. We also advance the theorisation of evidence-informed policymaking through highlighting the distinction of approach and

process of evidence use, that need to be examined separately, offering useful practical insights for stakeholders working towards strengthening the use of evidence. Effective approaches may incorporate a broader range of activities and actors than is necessarily apparent from a focus on how policies are made and the flow of evidence. The additional focus on how the concepts are linked together offers an insight into the more diverse, and often indirect, ways in which evidence may be used inform health policymaking.

Although frameworks by their nature are a simplification, a criticism is that current frameworks treat the use of health evidence in policy as a 'black box' (Gold 2009). A single framework is unlikely to be able to unpack the required complexity for all contexts and use cases; our framework focuses on some previously underexplored areas. Mental health, including as a policy issue, has been argued to be a 'wicked problem' that is inherently complex (Hannigan & Coffey 2011). Mental health differs from other health policy issues; despite the recent calls for greater integration in research, policy, and practice (Collins et al. 2013), mental health is still often considered separately to physical health, with the aim to deliver mental health services that are as good as those for physical health rather than as part of health services (Naylor et al. 2016). Evidence for mental health is also polarising, with a lack of a global consensus on the classification, cause and treatment of mental health (Mackenzie 2014). In LMICs, these are even more contentions, with further criticisms of top-down impositions of Western models of mental illness (Whitley 2015).

Our meta-framework aims to consider and incorporate some of this complexity through the four cross-cutting dimensions. Reviews have noted the increasing value in including 'software' elements of health systems (e.g., beliefs, values, and interests) alongside their 'hardware' elements (e.g., human and financial resources). However, the social and political context of decision making, the next layer in representing the complexity of health policy and systems (Sheikh et al. 2011) has been identified as the next area of development

for evidence-to-policy frameworks. The four cross-cutting dimensions therefore incorporate the soft factors into the meta-framework, as well as the social and political context to highlight areas for further research.

Key Issues for Mental Health Agenda-Setting in LMICs

According to the findings of this review, we can observe three key issues important in aiding application, and in advancing evidence-informed mental health agenda-setting in LMICs.

First, our findings call for greater attention to be given to informal evidence, evidence based on personal experience, e.g., expert opinion and stakeholder consultations (Mbachu et al. 2016). This echoes calls by other authors for evidence-based health policy research to consider a broader definition of evidence (Oliver et al. 2014). This is a particularly poignant finding for this review as the only framework developed for mental health agenda-setting in LMICs exclusively focuses on formal scientific evidence (Votruba et al. 2020; Votruba et al. 2021).

Our study complements, and extends, the existing EVITA framework for mental health agenda-setting in LMICs (Votruba et al. 2020, 2021) by expanding the scope of our framework to explicitly include informal evidence. Several reviews identified a need to understand how research is combined with other forms of knowledge, with some recognition of tacit (that is difficult to codify) knowledge being important alongside explicit knowledge. However, formal research evidence tended to be the predominant, sometimes implicit, focus. According to the findings of this review, we can observe that a further distinction of explicit knowledge, between formal research evidence, and informal evidence is likely to be useful to capture context-specific experiences which are often undocumented and unpublished but can be equially influential for agenda-setting. For mental health LMIC contexts this is particularly pertinent as formal evidence is often less abundant. Relevant knowledge resides

outside formal channels, for example with individuals and organisations at the grassroots level, thus highlighting the importance of informal evidence. Furthermore, the only framework aimed at mental health agenda-setting in LMICs identified exclusively focuses on formal research evidence.

The limited focus on the role of informal evidence also often extends to policy analysis of existing policies, which often focuses on formal research evidence (Bhugra et al. 2018), presumably due to methodological challenges. Furthermore, because as argued by Greenhalgh and Russell (2009) – research evidence can inform, but not determine, political decision-making, where value based decision about 'what to do' are needed. Informal evidence based on personal experiences may therefore be a key consideration for agenda-setting in LMICs where there are multiple competing demands. Inclusion of more diverse types of evidence does not just broaden the scope of the framework but influences all of the components; the nature of the evidence sits at the centre of the framework. Our framework is suited to a different use case, which is not limited to direct, 'top down' use of evidence, but that also recognises a more 'bottom-up' use of evidence, including by the different policy actors.

Second, our review highlights the importance of communities. Frameworks mostly focus on the 'two communities' of researchers and policymakers, and, increasingly, intermediaries who attempt to bridge this gap (Tantivess & Walt 2008). Policymaker is a broad category and is often used ambiguously (MacKillop et al. 2020); due to the importance of the receivers of evidence highlighted by this review, this term would benefit from distilling.

While we reinforce the importance of capacity and relationships between different policy actors acknowledged elsewhere (e.g. Green & Bennett 2007; Hawkes et al. 2016; Oronje et al. 2019; Votruba et al. 2020), our findings go further and suggest that a broader

range of actors should be considered to maximise fully the use of broader range of evidence to inform policymaking. Our findings also echo the recognised importance of a wide range of stakeholders, for each stage in the policy process, including agenda-setting (World Health Organization 2005). Other scholars have also argued that it is important to consider all relevant mental health policy stakeholders as they may have the potential of introducing policy windows or barriers (Makan et al. 2015).

Nascent frameworks are beginning to include a broader array of actors, including advocacy coalitions and included enactors, or those actors who are engaged in either research, policy processes (Votruba et al. 2020; Votruba et al. 2021). We argue that further broadening the scope of the stakeholders to include those not already engaged to ensure those marginalised are not further excluded in agenda-setting and that any agenda is co-created.

Involvement of a greater range of actors in promoting the use of evidence in agenda-setting would be expected to lead to a more indirect flow of evidence from researchers to policymakers, broadening the range of potential approaches. Recent attention to the importance of communities for strengthening the use of evidence for global health policies has been evoked by the COVID-19 pandemic (AlKhaldi et al. 2021).

Bi-directionality should be a key component of their inclusion in frameworks, given the importance of genuine engagement (Conklin et al. 2010). However, the real world practicalities of such an endeavour are challenging (Tebaldi et al. 2017). Due to the likely differences across actors, the recommendation by Oliver et al. (2014) to understand the daily lives of individuals to understand how they use evidence is likely to be of greater significance.

Widening the range of actors considered in frameworks is particularly important for LMIC settings. As argued by Malekinejad et al. (2018), the role of intermediaries and advocates are especially important for marginalised communities, such as the working poor

and undocumented migrants, who are often neglected in the policy agenda, and hence service delivery. The importance of advocates is compounded for mental health by the stigmatisation that surrounds the topic, and of those affected (Malekinejad et al. 2018). Additionally, in LMICs, a significant proportion of health treatment occurs in the informal sector, including for mental health (Mackenzie 2014), again broadening the range of stakeholders. Furthermore, decentralisation has featured in the health sector reforms of a majority of LMICs (Cobos Muñoz et al. 2017), which has been argued to lead to exponential growth in participation of citizens in decision-making processes, including in Brazil (Suárez 2006).

Different actors, however, often do not have the same power. People with lived experience of mental conditions, recognised as important participants, may face barriers to engaging in policy processes due to their health status (Abayneh et al. 2017). A lack of treatment and support can reduce the motivation and ability of service users to engage (Kleintjes et al. 2010). However, some authors simultaneously caution that the role of communities should equally not be overstated to unduly burden resource constrained groups and people (Tebaldi et al. 2017).

Third, although our results do not directly highlight this, our reflections on the results of our review highlight the importance of distinguishing policy agenda-setting from routine practices such as service delivery. Policy is often grouped with practice by reviews (e.g., Milat & Li 2017) and frameworks. Although interrelated, and changes in practice are ultimate aim of policy change, policy and practice are distinct (Jansen et al. 2010). A criticism levelled at the health evidence-to-policy literature is that policy theory, and knowledge of the policy process, is seldom used (Cairney & Oliver 2017). Frameworks that consider policy and practice could be expected to utilise theory and knowledge related to policy less. Cairney and Oliver (2017) highlight that evidence is valued and used differently in evidence-based policy and evidence-based medicine. In addition, not solely focusing on policy may lead to less

consideration of the different stages of the policy cycle, missing much of the complexity (Oliver et al. 2014). Moreover, a focus on policy will facilitate a greater focus on the political nature of policymaking, and the role of power that is especially pertinent for mental health, that is often shied away from. Our meta-framework, and the accompanying questions we have developed as a guide outlined next, focuses on policy, and specifically on agenda-setting, allowing us to delve deeper into any idiosyncrasies.

Key Considerations for Application of the Framework

Accordingly, from the key issues identified for mental health agenda-setting in LMICs in relation to the meta-framework, a list of five accompanying questions were developed (Table 5). The questions, and suggested considerations, are intended as a guide for thinking about the components identified in the meta-framework (evidence, actors, process, context, and approach) with relevance to mental health agenda-setting in LMICs. They enable more specific application of the framework for the setting to which the framework might be applied.

Study Limitations

Due to the large number of existing frameworks, and the diverse terminology used, it is possible that some relevant reviews, and frameworks, were missed. However, although the reviews differed slightly in their focus, they had broadly similar findings. Due to the large number of frameworks included within the reviews, it was not possible to analyse all of the frameworks individually, and the analysis of the authors of the reviews had to be relied upon. To mitigate this, individual sources were followed up, where needed. The large proportion of shared findings between the reviews also suggested robustness of the analysis of the reviews.

Only English language reviews were included, and consequently some relevant reviews may have been excluded, a limitation exacerbated by most of the included reviews themselves only including frameworks from English language publications. As highlighted

by Almeida and Báscolo (2006), translation can critically alter meaning. Given the low proportion of health research published on LMICs originating from local authors (Busse & August 2020), a trend that has also been observed for mental health (Razzouk et al. 2010), key factors influencing the role of evidence for mental health agenda-setting in LMICs may be overlooked by current frameworks. Furthermore, the position of the authors as researchers and professional actors, albeit with a range of experiences, may have influenced the analysis of the results and the development of the framework. Future work collaborating with stakeholders often marginalised from policymaking and agenda-setting processes, including communities, to refine the framework and thus inform approaches to strengthening the use of evidence for mental health agenda-setting would be beneficial.

Conclusions

Our review has built upon the multitude of evidence-to-policy frameworks by collating the literature in a novel way. Consequently, our resultant meta-framework enables a deeper understanding of the context of and approach to evidence-informed mental health agenda-setting, of which there has been limited attention to date. Only one framework was found that focuses on this aspect, which we build upon and extend. Furthermore, we advance theory by distinguishing between approach and process of evidence use, of use for stakeholders working to strengthen the use of evidence. The current health frameworks were critically analysed from perspective of mental health agenda-setting in LMICs to develop recommendations of how current frameworks could be further developed to be tailored to this specific context. Our expanded focus on what constitutes evidence and who it is used by for mental health agenda-setting in LMICs, in addition to the conventional contribution of formal research, offers unique insights for strengthening the use of evidence. Our expanded focus aims to consider facilitating and accruing the contribution of the context and voices of individuals and stakeholders towards shaping and impacting the policy agenda.

Data Availability

The data underlying this article are available in the article and in its online supplementary material.

Registration and Protocol

The review was not registered, and a protocol was prepared but not published.

References

Abayneh S, Lempp H, Alem A, et al. 2017. Service user involvement in mental health system strengthening in a rural African setting: qualitative study. *BMC Psychiatry*, **17**: 187.

Abimbola S. 2021. The uses of knowledge in global health. *BMJ Global Health*, **6**: e005802.

AlKhaldi M, James N, Chattu VK, et al. 2021. Rethinking and strengthening the Global Health Diplomacy through triangulated nexus between policy makers, scientists and the community in light of COVID-19 global crisis. *Global Health Research and Policy*, **6**: 12.

Allen M. 2017. *The SAGE encyclopedia of communication research methods*. Sage Publications.

Almeida C, Báscolo E. 2006. Use of research results in policy decision-making, formulation, and implementation: a review of the literature. *Cadernos de Saúde Pública*, **22**: S7-S19.

Aromataris E, Fernandez R, Godfrey CM, et al. 2015. Summarizing systematic reviews: methodological development, conduct and reporting of an umbrella review approach. *JBI Evidence Implementation*, **13**: 132-140.

Bardach E, Patashnik EM. 2000. *A practical guide for policy analysis: The eightfold path to more effective problem solving*. Seven Bridges Press, New York.

Barnes JA. 1954. Class and committees in a Norwegian Island parish. *Human Relations*, **7**: 39-58.

Baumgartner FR, Jones BD. 1991. Agenda Dynamics and Policy Subsystems. *The Journal of Politics*, **53**: 1044-1074.

Bennett S, Frenk J, Mills A. 2018. The evolution of the field of Health Policy and Systems Research and outstanding challenges. *Health Research Policy and Systems*, **16**: 43.

Bernardi L. 2021. Mental Health and Political Representation: A Roadmap. *Frontiers in Political Science*, **2**.

Bhugra, D, Pathare, S, Joshi, R, Kalra, G, Torales, J, & Ventriglio, A. (2018). A review of mental health policies from Commonwealth countries. *International Journal of Social Psychiatry*, 64(1), 3-8. doi:10.1177/0020764017745108

Bird, P, Omar, M, Doku, V, Lund, C, Nsereko, JR, Mwanza, J., & MHaPP Research Programme Consortium (2011). Increasing the priority of mental health in Africa: findings from qualitative research in Ghana, South Africa, Uganda and Zambia. Health policy and planning, 26(5), 357–365.

Booth A, Carroll C. 2015a. How to build up the actionable knowledge base: the role of 'best fit' framework synthesis for studies of improvement in healthcare. *BMJ Quality & Safety*, **24**: 700-708.

Booth A, Carroll C. 2015b. Systematic searching for theory to inform systematic reviews: is it feasible? Is it desirable? *Health Information & Libraries Journal*, **32**: 220-235.

Botticelli M. 2019. How stigma thwarts evidence-based and compassionate public policy. Special Series on Stigma and Addiction.. *The Brief Addiction Science Information Source (BASIS).*

Braun V, Clarke V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, **3**: 77-101.

Brownson RC, Chriqui JF, Stamatakis KA. 2009. Understanding evidence-based public health policy. *American journal of public health*, **99**: 1576-1583.

Brunton G, Oliver S, Thomas J. 2020. Innovations in framework synthesis as a systematic review method. *Research Synthesis Methods*, **11**: 316-330.

Buse K. 2008. Addressing the theoretical, practical and ethical challenges inherent in prospective health policy analysis. *Health Policy and Planning*, **23**: 351-360.

Busse C, August E. 2020. Addressing power imbalances in global health: Pre-Publication Support Services (PREPSS) for authors in low-income and middle-income countries. *BMJ Global Health*, **5**: e002323.

Cairney P, Oliver K. 2017. Evidence-based policymaking is not like evidence-based medicine, so how far should you go to bridge the divide between evidence and policy? *Health Research Policy and Systems*, **15**: 35.

Campbell M, Egan M, Lorenc T, et al. 2014. Considering methodological options for reviews of theory: illustrated by a review of theories linking income and health. *Systematic Reviews*, **3**: 114.

Capano G, Malandrino A. 2022. Mapping the use of knowledge in policymaking: barriers and facilitators from a subjectivist perspective (1990–2020). *Policy Sci* 55, 399–428.

Caplan N. 1979. The Two-Communities Theory and Knowledge Utilization. *American Behavioral Scientist*, **22**: 459-470.

Carroll C, Booth A, Leaviss J, Rick J. 2013. "Best fit" framework synthesis: refining the method. *BMC Medical Research Methodology*, **13**: 37.

CASP. 2018. CASP-Critical Appraisal Skills Programme.

Cobos Muñoz D, Merino Amador P, Monzon Llamas L, Martinez Hernandez D, Santos Sancho JM. 2017. Decentralization of health systems in low and middle income countries: a systematic review. *International Journal of Public Health*, **62**: 219-229.

Collins PY, Insel TR, Chockalingam A, Daar A, Maddox YT. 2013. Grand Challenges in Global Mental Health: Integration in Research, Policy, and Practice. *PLOS Medicine*, **10**: e1001434.

Conklin A, Morris ZS, Nolte E. 2010. *Involving the public in healthcare policy: an update of the research evidence and proposed evaluation framework*. RAND.

Contandriopoulos D, Lemire M, Denis J-L, Tremblay É. 2010. Knowledge Exchange Processes in Organizations and Policy Arenas: A Narrative Systematic Review of the Literature. *The Milbank Quarterly*, **88**: 444-483.

Court J and Young, J. 2006. Bridging research and policy in international development: an analytical and practical framework. *Development in Practice*, 16(1), pp.85-90.

Cruz Rivera S, Kyte DG, Aiyegbusi OL, Keeley TJ, Calvert MJ. 2017. Assessing the impact of healthcare research: A systematic review of methodological frameworks. *PLOS Medicine*, **14**: e1002370.

Damschroder LJ, Aron DC, Keith RE, et al. 2009. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science*, **4**: 50.

Gold M. 2009. Pathways to the use of health services research in policy. *Health services research*, **44**: 1111-1136.

Gopalkrishnan N. 2018. Cultural Diversity and Mental Health: Considerations for Policy and Practice. *Frontiers in public health*, **6**: 179-179.

Gore R, Parker. 2019. Analysing power and politics in health policies and systems. *Global Public Health*, 14: 481-488.

Graham ID, Logan J, Harrison MB, et al. 2006. Lost in knowledge translation: Time for a map? *Journal of Continuing Education in the Health Professions*, **26**: 13-24.

Graham ID, Tetroe J, Group KTR. 2007. Some Theoretical Underpinnings of Knowledge Translation. *Academic Emergency Medicine*, **14**: 936-941.

Green A, Bennett S. 2007. *Sound choices: enhancing capacity for evidence-informed health policy*. Geneva, World Health Organization.

Green A, Gerein N, Mirzoev T, et al. 2011. Health policy processes in maternal health: a comparison of Vietnam, India and China. *Health policy*, **100**: 167-173.

Green LW, Ottoson JM, García C, Hiatt RA. 2009. Diffusion Theory and Knowledge Dissemination, Utilization, and Integration in Public Health. *Annual Review of Public Health*, **30**: 151-174.

Greenhalgh T, Robert G, Bate P, Macfarlane F, Kyriakidou O. 2007. *Diffusion of Innovations in Health Service Organisations: A Systematic Literature Review*. Blackwell Publishing Ltd.

Greenhalgh T, Robert G, Macfarlane F, Bate P, Kyriakidou O. 2004. Diffusion of innovations in service organizations: systematic review and recommendations. *The Milbank quarterly*, **82**: 581-629.

Greenhalgh T, Russell J. 2009. Evidence-based policymaking: a critique. *Perspect Biol Med*, **52**: 304-18.

Greenhalgh T, Thorne S, Malterud K. 2018. Time to challenge the spurious hierarchy of systematic over narrative reviews? *European Journal of Clinical Investigation*, **48**: e12931.

Hannigan B, Coffey M. 2011. Where the wicked problems are: The case of mental health. *Health Policy*, **101**: 220-227.

Hasanpoor E, Hallajzadeh J, Siraneh Y, Hasanzadeh E, Haghgoshayie E. 2019. Using the Methodology of Systematic Review of Reviews for Evidence-Based Medicine. *Ethiopian journal of health sciences*, **29**: 775-778.

Hawkes S, Aulakh BK, Jadeja N, Jimenez M, Buse K, Anwar I, Barge S., Odubanjo MO, Shukla A, Ghaffar A. and Whitworth J, 2016. Strengthening capacity to apply health research evidence in policy making: experience from four countries. Health policy and planning, 31(2), pp.161-170.

Hunt H, Pollock A, Campbell P, Estcourt L, Brunton G. 2018. An introduction to overviews of reviews: planning a relevant research question and objective for an overview. *Systematic Reviews*, **7**: 39.

Iemmi, V. 2022. Establishing political priority for global mental health: a qualitative policy analysis. *Health Policy and Planning*, czac046.

Jansen MWJ, van Oers HAM, Kok G, de Vries NK. 2010. Public health: disconnections between policy, practice and research. *Health Research Policy and Systems*, **8**: 37.

Javed A, Lee C, Zakaria H, et al. 2021. Reducing the stigma of mental health disorders with a focus on low- and middle-income countries. *Asian Journal of Psychiatry*, **58**: 102601.

Jones H, Jones N, Shaxson L, Walker D. 2013. Knowledge, policy and power in international development: A practical framework for improving policy. *London: ODI*.

Katz E, Lazarsfeld PF. 1955. *Personal influence: the part played by people in the flow of mass communications*. Free Press, New York, NY, US.

Kingdon JW, Stano E. 1984. *Agendas, alternatives, and public policies*. Little, Brown Boston.

Kivunja C. 2018. Distinguishing between theory, theoretical framework, and conceptual framework: A systematic review of lessons from the field. *International Journal of Higher Education*, **7**: 44-53.

Kleintjes S, Lund C, Swartz L, Flisher A, Consortium TMRP. 2010. Mental health care user participation in mental health policy development and implementation in South Africa. *International Review of Psychiatry*, **22**: 568-577.

Kola, L, Kohrt, BA, Hanlon, C, Naslund, JA, Sikander, S, Balaji, M, Benjet, C, Cheung, EYL, Eaton, J, Gonsalves, P and Hailemariam, M. 2021. COVID-19 mental health impact and responses in low-income and middle-income countries: reimagining global mental health. The Lancet Psychiatry, 8(6), pp.535-550.

Krendl AC, Pescosolido BA. 2020. Countries and Cultural Differences in the Stigma of Mental Illness: The East–West Divide. *Journal of Cross-Cultural Psychology*, **51**: 149-167.

Langlois EV, Becerril Montekio V, Young T, et al. 2016. Enhancing evidence informed policymaking in complex health systems: lessons from multi-site collaborative approaches. *Health Research Policy and Systems*, **14**: 20.

Lewin S, Booth A, Glenton C, et al. 2018. Applying GRADE-CERQual to qualitative evidence synthesis findings: introduction to the series. *Implementation Science*, **13**: 2.

Mackenzie J. 2014. Global mental health from a policy perspective: a context analysis. Overseas Development Institute.

MacKillop E, Quarmby S, Downe J. 2020. Does knowledge brokering facilitate evidence-based policy? A review of existing knowledge and an agenda for future research. *Policy & Politics*, **48**: 335-353.

Makan A, Fekadu A, Murhar V, et al. 2015. Stakeholder analysis of the Programme for Improving Mental health carE (PRIME): baseline findings. *International Journal of Mental Health Systems*, **9**: 27.

Malekinejad M, Horvath H, Snyder H, Brindis CD. 2018. The discordance between evidence and health policy in the United States: the science of translational research and the critical role of diverse stakeholders. *Health Research Policy and Systems*, **16**: 81.

Martin K, Mullan Z, Horton R. 2019. Overcoming the research to policy gap. *The Lancet Global Health*, **7**: S1-S2.

Goldman ML, Druss BG, Horvitz-Lennon M, Norquist GS, Kroeger Ptakowski K, Brinkley A, Greiner M, Hayes H, Hepburn B, Jorgensen S, Swartz MS. 2020. Mental Health Policy in the Era of COVID-19. *Psychiatric Services*, **71**: 1158-1162.

Mbachu CO, Onwujekwe O, Chikezie I, et al. 2016. Analysing key influences over actors' use of evidence in developing policies and strategies in Nigeria: a retrospective study of the Integrated Maternal Newborn and Child Health strategy. *Health Research Policy and Systems*, **14**: 27.

McKibbon KA, Lokker C, Wilczynski NL, et al. 2010. A cross-sectional study of the number and frequency of terms used to refer to knowledge translation in a body of health literature in 2006: a Tower of Babel? *Implementation Science*, **5**: 16.

Milat AJ, Li B. 2017. Narrative review of frameworks for translating research evidence into policy and practice. *Public Health Res Pract*, **27**.

Mills C. 2018. From 'Invisible Problem' to Global Priority: The Inclusion of Mental Health in the Sustainable Development Goals. *Development and Change*, **49**: 843-866.

Mirzoev T, Das M, Ebenso B, et al. 2017. Contextual influences on the role of evidence in health policy development: what can we learn from six policies in India and Nigeria? *Evidence & Policy: A Journal of Research, Debate and Practice*, **13**: 59-79.

Mirzoev T, Green A, Gerein N, et al. 2013. Role of evidence in maternal health policy processes in Vietnam, India and China: findings from the HEPVIC project. *Evidence & Policy: A Journal of Research, Debate and Practice*, **9**: 493-511.

Mitchell SA, Fisher CA, Hastings CE, Silverman LB, Wallen GR. 2010. A thematic analysis of theoretical models for translational science in nursing: Mapping the field. *Nursing Outlook*, **58**: 287-300.

Mitton C, Adair CE, Mckenzie E, Patten SB, Perry BW. 2007. Knowledge Transfer and Exchange: Review and Synthesis of the Literature. *The Milbank Quarterly*, **85**: 729-768.

Montenegro CR, Ortega F. 2020. Thinking beyond implementation: context and culture in global mental health. *BMJ Global Health*, **5**: e004539.

Moullin JC, Sabater-Hernández D, Fernandez-Llimos F, Benrimoj SI. 2015. A systematic review of implementation frameworks of innovations in healthcare and resulting generic implementation framework. *Health Research Policy and Systems*, **13**: 16.

Munthe-Kaas H, Bohren MA, Glenton C, et al. 2018. Applying GRADE-CERQual to qualitative evidence synthesis findings—paper 3: how to assess methodological limitations. *Implementation Science*, **13**: 9.

Murunga VI, Oronje RN, Bates I, Tagoe N, Pulford J. 2020. Review of published evidence on knowledge translation capacity, practice and support among researchers and research institutions in low- and middle-income countries. *Health Research Policy and Systems*, **18**: 16.

Naylor C, Das P, Ross S, et al. 2016. Bringing together physical and mental health: A new frontier for integrated care. The King's Fund.

Newson R, King L, Rychetnik L, Milat A, Bauman A. 2018. Looking both ways: a review of methods for assessing research impacts on policy and the policy utilisation of research. *Health Research Policy and Systems*, **16**: 54.

Nilsen P. 2015. Making sense of implementation theories, models and frameworks. *Implementation Science*, **10**: 53.

O'Brien GL, Sinnott S-J, Walshe V, Mulcahy M, Byrne S. 2020. Health policy triangle framework: Narrative review of the recent literature. *Health Policy OPEN*, **1**: 100016.
Oborn E, Barrett M, Racko G. 2013. Knowledge translation in healthcare: Incorporating theories of learning and knowledge from the management literature. *J Health Organ Manag*, **27**: 412-31.
Oliver K, Lorenc T, Innvær S. 2014. New directions in evidence-based policy research: a critical analysis of the literature. *Health Research Policy and Systems*, **12**: 34.
Omar MA, Green AT, Bird PK, et al. 2010. Mental health policy process: a comparative study of Ghana, South Africa, Uganda and Zambia. *International Journal of Mental Health Systems*, **4**: 24.
Oronje, RN, Murunga VI, & Zulu EM. 2019. Strengthening capacity to use research evidence in health sector policy-making: experience from Kenya and Malawi. *Health Research Policy and Systems*, 17, 1-13.
Paez A. 2017. Gray literature: An important resource in systematic reviews. *Journal of Evidence-Based Medicine*, **10**: 233-240.
Patel V, Saxena S, Lund C, et al. 2018. The Lancet Commission on global mental health and sustainable development. *The Lancet*, **392**: 1553-1598.
Pollock A, Campbell P, Cheyne J, et al. 2020. Interventions to support the resilience and mental health of frontline health and social care professionals during and after a disease outbreak, epidemic or pandemic: a mixed methods systematic review. *Cochrane Database Syst Rev*, **11**: Cd013779.
Razzouk D, Sharan P, Gallo C, et al. 2010. Scarcity and inequity of mental health research resources in low-and-middle income countries: A global survey. *Health Policy*, **94**: 211-220.
Rogers EM. 2010. *Diffusion of innovations*. Simon and Schuster.
Shea BJ, Reeves BC, Wells G, et al. 2017. AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both. bmj, 358.
Sheikh K, Gilson L, Agyepong IA, et al. 2011. Building the Field of Health Policy and Systems Research: Framing the Questions. *PLoS Medicine*, **8**: e1001073.
Smith KE, Joyce KE. 2012. Capturing complex realities: understanding efforts to achieve evidence-based policy and practice in public health. *Evidence & Policy: A Journal of Research, Debate and Practice*, **8**: 57-78.
Smith V, Devane D, Begley CM, Clarke M. 2011. Methodology in conducting a systematic review of systematic reviews of healthcare interventions. *BMC Medical Research Methodology*, **11**: 15.
Tabak RG, Khoong EC, Chambers DA, Brownson RC. 2012. Bridging Research and Practice: Models for Dissemination and Implementation Research. *American Journal of Preventive Medicine*, **43**: 337-350.
Tantivess S, Walt G. 2008. The role of state and non-state actors in the policy process: the contribution of policy networks to the scale-up of antiretroviral therapy in Thailand. *Health Policy and Planning*, **23**: 328-338.
Tebaldi R, Tschöke TW, Castro F. 2017. Bridging health systems@ evidence-policy gap : what role for the Alliance under the 2030 Agenda ?
The Lancet. 2004. The Mexico Statement: strengthening health systems. *The Lancet*, **364**: 1911-1912.
Thompson DS, Fazio X, Kustra E, Patrick L, Stanley D. 2016. Scoping review of complexity theory in health services research. *BMC Health Services Research*, **16**: 87.
Thornicroft G, Sunkel C, Aliev AA, Baker S, Brohan E, El Chammay R, Davies K, Demissie M, Duncan J, Fekadu W, Gronholm PC. 2022. The Lancet Commission on ending stigma and discrimination in mental health. *The Lancet.* 400(10361): 1438-80.
Tomlinson M, Lund C. 2012. Why Does Mental Health Not Get the Attention It Deserves? An Application of the Shiffman and Smith Framework. *PLOS Medicine*, **9**: e1001178.
Torales J, O'Higgins M, Castaldelli-Maia JM, Ventriglio A. 2020. The outbreak of COVID-19 coronavirus and its impact on global mental health. *International Journal of Social Psychiatry*, **66**: 317-320.
United Nations. 2015. Transforming our world: the 2030 Agenda for Sustainable Development.

Votruba N, Grant J, Thornicroft G. 2020. The EVITA framework for evidence-based mental health policy agenda setting in low- and middle-income countries. *Health Policy and Planning*, **35**: 424-439.

Votruba N, Grant J, Thornicroft G. 2021. EVITA 2.0, an updated framework for understanding evidence-based mental health policy agenda-setting: tested and informed by key informant interviews in a multilevel comparative case study. *Health Research Policy and Systems*, **19**: 35.

Votruba N, Ziemann A, Grant J, Thornicroft G. 2018. A systematic review of frameworks for the interrelationships of mental health evidence and policy in low- and middle-income countries. *Health Research Policy and Systems*, **16**: 85.

Walt G, Gilson L. 1994. Reforming the health sector in developing countries: the central role of policy analysis. *Health Policy and Planning*, **9**: 353-370.

Walt G, Shiffman J, Schneider H, et al. 2008. 'Doing' health policy analysis: methodological and conceptual reflections and challenges. *Health Policy and Planning*, **23**: 308-317.

Ward V, House A, Hamer S. 2009. Developing a framework for transferring knowledge into action: a thematic analysis of the literature. *Journal of health services research & policy*, **14**: 156-164.

Wei F. 2008. Research capacity for mental health in low-and middle-income countries: results of a mapping project. *Bulletin of the World Health Organization*, **86**: 908.

Whitley R. 2015. Global Mental Health: concepts, conflicts and controversies. *Epidemiology and psychiatric sciences*, **24**: 285-291.

Williamson A, Makkar SR, McGrath C, Redman S. 2015. How Can the Use of Evidence in Mental Health Policy Be Increased? A Systematic Review. *Psychiatric Services*, **66**: 783-797.

Wilson PM, Petticrew M, Calnan MW, Nazareth I. 2010. Disseminating research findings: what should researchers do? A systematic scoping review of conceptual frameworks. *Implementation kScience*, **5**: 91.

World Health Organization. 2005. *Mental health policy, plans and programmes*. World Health Organization, Geneva.

World Health Organization. 2018. Mental Health ATLAS 2017. Geneva.

World Health Organization, 2021. Evidence, policy, impact: WHO guide for evidence-informed decision-making. Available at: https://apps.who.int/iris/handle/10665/350994 (Accessed 22nd March 2023)

World Health Organization. 2021. Mental Health ATLAS 2020. World Health Organization, Geneva. Available at: https://www.who.int/publications/i/item/9789240036703 (Accessed 22nd March 2023)

World Health Organization. 2022. World Mental Health Day 2022 - Make mental health & well-being for all a global priority. World Health Organization, Geneva. Available at: https://www.who.int/news-room/events/detail/2022/10/10/default-calendar/world-mental-health-day-2022---make-mental-health-and-well-being-for-all-a-global-priority (Accessed 29th January 2023)