
Article:
Mirzoev, T orcid.org/0000-0003-2959-9187, Das, M, Ebenso, B orcid.org/0000-0003-4147-0968 et al. (6 more authors) (2017) Contextual influences on the role of evidence in health policy development: what can we learn from six policies in India and Nigeria? Evidence and Policy, 13 (1). pp. 59-79. ISSN 1744-2648

https://doi.org/10.1332/174426415X14454407579925

Evidence & Policy

Contextual influences on the role of evidence in health policy development: what can we learn from six policies in India and Nigeria?

--Manuscript Draft--

Manuscript Number:	EVIDPOL-D-15-00010R2
Full Title:	Contextual influences on the role of evidence in health policy development: what can we learn from six policies in India and Nigeria?
Article Type:	Research Article
Keywords:	Context; Evidence-informed health policy; Africa; Asia
Corresponding Author:	Tolib Mirzoev, PhD, MD, MA, PGCertLTHE University of Leeds LEEDS, UNITED KINGDOM
First Author:	Tolib Mirzoev, PhD, MD, MA, PGCertLTHE
Order of Authors:	Tolib Mirzoev, PhD, MD, MA, PGCertLTHE
	Mahua Das
	Bassey Ebenso
	Benjamin Uzochukwu
	Bindiya Rawat
	Lucie Blok
	Giuliano Russo
	Bang-on Thepthien
	Reinhard Huss
Abstract:	This study explored macro, meso and micro-level influences on the role of evidence in the development of six health policies in India and Nigeria. Macro-level influences included adoption of international agreements, movement towards evidence-informed policymaking, committed country leadership and resource environment. At meso level, national actors drove policy processes with support from the international actors. Micro-level influences included individual values, interests and evidence preferences. Factors at three levels are interrelated. Greater understanding of contextual influences can provide a platform for adapting to, or managing, these influences to improve evidence-informed nature of health policymaking.
Order of Authors Secondary Information:	
Funding Information:	Seventh Framework Programme (BE) (261389) — Not applicable

Introduction

Evidence-informed health policymaking is important (Green and Bennett, 2007; Moat and Lavis, 2013; Flitcroft et al., 2011; WHO, 2012). Synonymous with a concept of evidence-based policymaking which is centred on justification of policy decisions (Dobrow et al., 2004), evidence-informed health policymaking "aims to ensure that decision making is well-informed by the best available… evidence... [through] the systematic and transparent access to, and appraisal of, evidence as an input into the policy-making process" (Oxman et al., 2009 p.1). Evidence, defined as '… facts or testimony in support of a conclusion, statement or belief' (Rychetnik et al., 2004), can take different forms, both formal (such as published research) and informal (such as personal experiences or opinions). An important consideration is that evidence alone does not make policy decisions (Oxman et al., 2009). These decisions are made by policy actors and the degree to which evidence informs these decisions is influenced by the context of policymaking (Walt and Gilson, 1994).

Frameworks exist to help explore the role of evidence in health policymaking (Lavis et al., 2009; Mirzoev et al., 2013; AHPSR, 2004; Green and Bennett, 2007; Hanney and Gonzalez-Block, 2009; Hanney et al., 2003). There is, however, limited understanding of key facilitators and constraints that influence the role of evidence in health policymaking, particularly in low and middle income countries. Greater understanding of such contextual influences can help policy actors to either build on facilitators, or take account of constraints, to ensure that policymaking is evidence-informed. This study contributes to improved understanding of the contextual influences on the use of evidence in health policy development.

The context, an important component of health policy analysis (Walt and Gilson, 1994), is often seen as a determinant of evidence-informed health policymaking (Green and Bennett, 2007; Moat and Lavis, 2013; Flitcroft et al., 2011; WHO, 2012). Often defined broadly as 'combination of different influences on a policy', context can facilitate or constrain the use of evidence in health policy decisions. However, due to the multiplicity of theoretical frameworks and perspectives (e.g. Dobrow et al., 2004; ODI, 2004; Pawson and Tilley, 1997; Ricketts, 2010; Evans, 2001; Hudson and Lowe, 2009), there is little agreement in the literature as to what exactly constitutes context for evidence-informed health policymaking. Furthermore, only a handful of empirical studies have explored contextual influences on evidence-informed health policy

development in different countries (de Savigny et al., 2012; Hutchinson et al., 2011; Ricketts, 2010), despite a growing interest in improving the understanding of facilitators and constraints to evidence-informed health policymaking in different contexts.

The main objective of this paper is to identify and analyse different contextual influences which affected the role of evidence in development of six health policies in India and Nigeria. We analyse both facilitators and constraints and in doing so, we adapt a three-tier interpretation of context comprising individual, organisational and system issues. Testing the utility of this framework represents another, more implicit, objective of this paper. We do not analyse in detail policy contents or processes, nor assess the evidence used (or not) for policy development. Instead, we answer a broad question: which key contextual factors facilitated or constrained the use of evidence in developing six health policies in India and Nigeria, as perceived by the key policy actors? This paper should be of interest to academics, policymakers and other national and international actors interested in greater understanding of key facilitators and constrains to evidence-informed health policymaking.

How is the context understood in the literature?

Different frameworks can help understand the context and its implications on evidence-informed health policy processes (e.g. Dobrow et al., 2004; ODI, 2004; Pawson and Tilley, 1997).

The RAPID framework, proposed by the Overseas Development Institute (ODI), defined context as being largely something 'external' i.e. the political environment (politics and policymaking) within which institutions work. This political context, which is seen by the authors as being separate from the other external influences (such as socio-economic and cultural issues and donor policies), affects production of different types of evidence to inform policy decisions and shapes potential relationships between two key groups of policy actors: policymakers and researchers. This relationship ultimately determines whether research evidence is used in policy decisions (ODI, 2004).

Dobrow et al defined context as including "*…all factors within an environment where a decision is made"* (Dobrow et al., 2004 p.209). The authors suggested distinguishing between external and internal contexts. Internal context is understood as the environment in which a policy decision is *made* and includes factors

such as the purpose of a particular policy decision, actors' participation and roles as well as the process of decision-making itself. The proposed definition of external context includes the environment within which a decision is *applied* and includes political, disease-specific and extra-jurisdictional factors (Dobrow et al., 2004).

Probably the most detailed structured framework, suggesting a three-tier distinction between macro, meso and micro levels of context, was used by different scholars (e.g. Ricketts, 2010; Evans, 2001; Hudson and Lowe, 2009) in their policy analyses. Although all these authors interpreted macro and micro contexts similarly (macro-level being largely system-wide culture, politics and system characteristics and micro-level comprising mainly individual attitudes, behaviours and relationships), their understanding of meso-level factors differed. Meso context was interpreted as either organisations or policy actors (Ricketts, 2010), wider networks (Evans, 2001) or policy processes (Hudson and Lowe, 2009).

Pawson and Tilley, in outlining their theory of realist evaluation, defined context as an environment which can facilitate or constrain the transformation of specific mechanisms into the outcomes. They argued that "*… it is the contextual conditioning of causal mechanisms which turns (or fails to turn) causal potential into a causal outcome*" (Pawson and Tilley, 1997 p.69). This interpretation implies a combination of individual, organisational and systemic contextual factors which influence the relationship between mechanisms and outcomes.

Reflecting on these frameworks, the RAPID framework appears to offer the narrowest interpretation of context. The distinction between external and internal contexts offered by Dobrow et al is useful though the actors' roles and policy processes (internal context) are often seen as separate components, for example in Walt's and Gilson's policy triangle (Walt and Gilson, 1994). Flexibility of Pawson and Tilley's framework allows the identification of the relevant 'parts' of context that determine the link between mechanisms and outcomes. A three-tier distinction appears to be the most comprehensive way of defining context, although there is a need to clarify the 'boundaries' between different levels and specifically what constitutes meso-level context.

Empirical studies exploring context also exist in the literature. Examples of health policy analyses that focused specifically on identification and assessment of context include: implementation of a voucher scheme for malaria prevention in Tanzania and Ghana (de Savigny et al., 2012), development of cotrimoxazole prophylaxis national policy in Malawi, Uganda and Zambia (Hutchinson et al., 2011) and development of Jamaica's national policy for disabled persons (Ricketts, 2010). However, there are only a handful of published structured analyses of different contextual influences. This may indicate that context was not a primary focus of analysis in most studies: for example, out of these three studies only Ricketts comprehensively explored macro, meso and micro-level influences on development of the national policy in Jamaica. All scholars agreed, however, that there is a growing interest in, and need for, improving the understanding of different contextual influences on evidence-informed health policymaking within and between the different countries. Better understanding of contextual influences can strengthen the role of evidence in health policy processes, including policy responses to scaling up of health programmes (de Savigny et al., 2012; Walt and Gilson, 1994; Dobrow et al., 2004).

Methods

India and Nigeria, despite their difference in population size (1.2 billion and 169 million respectively) and in country contexts, such as greater role of civil society in India and greater influence of international organisations in Nigeria, present interesting similarities. Both are amongst the most populous countries in their respective continents, have a growing private sector and are lower-middle income countries (World-Bank, 2014). Both countries have three-tier organisation of health system and a decentralized Federal structure with States, while implementing nationally-set policies, being able to address own priorities through formulating State-level policies. Comparing these two countries allowed us to see which aspects of context are more general or cross-contextual and which are distinct for a particular country. We also felt that comparative analysis approach would allow us to identify particularly influential factors, including potential relations between these, which would not be visible within a single-country study.

We used a case study approach, to enable investigating a phenomenon within its real-life context (Crowe et al., 2011; Patton, 1990). In this project, we defined a case study as an issue - for which policy has been formulated - representing health services (HIV/AIDS, Maternal and Child Health, Non-Communicable

Disease), health-related issue (Tobacco Control) or a health system's component (Human Resources). In each country, three case studies were selected corresponding to: a) an area of international prominence, b) a generally neglected area and c) an aspect of the health system. This enabled comparing health policies of different technical and social nature, in recognition that the nature of policy issue can affect health policy processes (Green et al., 2011), and thus generate findings which are more representative of the country context as compared with focusing on just one area. The choice of prominent, neglected and health systems areas was guided by their likely differences in availability of resources and technical complexity, which affect availability, quality and accessibility of evidence to inform policy development. In each case study, one specific policy was identified (shown in Table 1), on the basis of: existence of a policy document, policy development being within the last 10 years (to limit recall bias) and interest from the Ministry of Health. The decision to focus on one specific policy within each case study was guided by the need to maintain the depth of analysis, while allowing for comparison between the three policies of different nature.

Table 1 here

The study was guided by a conceptual framework, shown in Figure 1. An overarching assumption was that decisions are always informed by some knowledge, whether it is a methodologically-rigorous research or a particular experience. Therefore, our interpretation of evidence was not confined to research only but included both formal (e.g. published research, policy evaluation reports, HMIS data analyses) and informal (media reports, personal experiences) types (Rychetnik et al., 2002; Dobrow et al., 2004).

Figure 1 here

We understand the role of evidence in health policymaking as the interrelationship between *evidence processes* and *policy processes* (Mirzoev et al., 2013), shown as a shaded area in the figure. Stages of evidence processes include: generation (i.e. when evidence is produced, for example research conducted), dissemination (i.e. when evidence such as research results are presented to key actors) and use (i.e. when policy decisions are informed by evidence) (Sutcliffe and Court, 2006; Dobrow et al., 2004). Stages of policy processes include agenda-setting (i.e. when a policy issue is formally recognised by the government),

development (i.e. when a policy document is drafted, consulted, revised and approved as a formal government policy) and implementation (i.e. when a policy is implemented and evaluated) (Buse et al., 2005b; Brewer and deLeon, 1983; Lasswell, 1956). Different stages of evidence processes can exist within one stage of policy process (e.g. evidence generation, dissemination and use can all occur within agenda-setting stage of policy process) or cut across more than one stage.

Different policy actors, such as the government, private sector, academia and donors, determine the relationship between the evidence processes and the policy processes, through their roles in both processes. Different actors are likely to have own interests, differing powers, values, agendas and practices (Tantivess and Walt, 2008; Walt and Gilson, 1994; Gaventa, 2005; Walt, 1994), including different perceptions of what constitutes robust evidence for specific policy decisions guiding their preferences for specific evidence. These characteristics of policy actors are likely to shape their roles in evidence and policy processes.

All the above are influenced by context (Ricketts, 2010; Evans et al., 2001; Hudson and Lowe, 2009; Walt and Gilson, 1994). Drawing on Dobrow et al (2004), we define context as any macro, meso or micro influences on the role of evidence in health policymaking. In our analysis, we deployed a three-tier interpretation of context. We understand macro-level context as systems issues such as national and international political environments, resources and culture, meso-level context as organisational practices and roles in policy processes, and micro-level context as policy actors' individual interests, preferences and values.

As shown in Table 2, data for this qualitative study was collected in each country using two methods: document reviews and in-depth interviews. Document reviews covered policy documents and published and unpublished literature surrounding this specific policy and other relevant policies (such as wider reproductive health or national health reforms). In-depth interviews were conducted with five groups of policy actors: policymakers, members of civil society organisations, health service providers, development partners and academics. The interviewees were purposefully selected, to represent the views of key policy actors involved, directly or indirectly, in health policy processes. During interviews, participants were asked to reflect on: their understanding of evidence as a concept, which specific evidence informed policy

development, roles of different policy actors in evidence and policy processes, and key contextual influences on role of evidence in health policy development. All interviews were audio-recorded and transcribed for analysis.

Table 2 here

Framework approach, involving stages of familiarisation with the data, coding of data using a unified coding tree, indexing, charting, mapping and interpretation (Ritchie and Spencer, 1994), was used in conducting the analysis of data from each country, aided by using NVivo v10. This approach was selected to allow exploring pre-determined themes from the conceptual framework, while leaving space for emergence of further analytical topics from the data. During analysis, findings from interviews were continuously triangulated with results of document reviews. Separate reports from India and Nigeria were used for conducting cross-country comparative analysis.

Ethics approvals were obtained from the Ethics Review Committees at the Faculty of Medicine at the University of Leeds, the University of Nigeria Teaching Hospital and the Institute of Public Health, Bangalore, India.

Results

In reporting results, we start with an overview of selected key features of six health policies, as a background for the analysis of contextual influences. Analysis of contextual influences on evidence-informed health policy development is then structured by macro, meso, and micro levels, and is followed by identification of potential relations across these three levels.

Key features of six health policies in the two countries

Health policymaking in both India and Nigeria is typically a prerogative of the national level (Federal Government), although States also have flexibility to develop own health policies. Table 3 outlines selected key features of health policy development within the six studied policies.

Table 3 here

In each country, health policy development processes followed a standard protocol i.e. a procedure, set out by the national Government, for development and approval of public policies. Although such procedure existed in each country, we found that policy actors in Nigeria were more aware of such protocol, compared to India. Situational analysis was conceptually perceived as a separate stage of health policy processes in Nigeria. This contrasted with what we found in India, where situational analyses were routinely conducted (e.g. in NACP-III) but were not perceived as a separate stage of policy processes.

In each case study, health policy development process was led by Ministry of Health (MOH), who typically commissioned studies, convened thematic working groups and developed draft policy documents for consultation. Analysis of data from both documents and interviews revealed that involvement of civil society was greater in India. One respondent reflected that:

> *In NACP III, sex worker community and representatives were invited and they themselves spoke about what is right or wrong for them and made suggestions for what should be there in the programme from their perspective. Their voices and opinions were heard… (CSO representative, India)*

However, visibility of academics (within both evidence and policy processes) was emphasised as being important in Nigeria; for example different respondents reflected that the International Centre for Oral Health generated evidence to inform development of OH policy.

In India, we found two particularly distinctive features of policy development. The first was exclusion of development partners from the ASHA policy (the respondents felt this was to allow space for national actors to discuss own priorities without external influences). The second feature was development of NTCP with no direct involvement of tobacco industry and with no support from development partners (other than the WHO) which contributed to limited consultations in the development of this policy.

The study respondents felt that health policy development in all six case studies was generally well-informed by different sources of evidence. The use of national surveys and academic publications were referred to in most (five out of six) policies, followed by data from health management information systems. International policies and publications were also referred to, though only in selected policies such as NTCP in India and HRH in Nigeria. In Nigeria, mostly formal types of evidence were reported as being

used, whereas respondents from India referred to the use of both formal and informal evidence. This finding was also supported by review of documents which revealed references to mostly formal evidence types in Nigeria, and to both formal and informal evidence in India. One specific example of informal evidence, referred to in all health policies in India is personal experiences.

Different technical and social nature of three health policies in each of India and Nigeria is evident in their policy aims, actors involved as well as types of evidence used in policy development. As mentioned earlier, the choice of six policies representing three different case study areas allows us to compare influences across multiple policies in each country and to identify country-specific and more general issues.

Our analysis reveals that different contextual factors influenced role of evidence in policy development in all six policies in India and Nigeria. One respondent reflected that although evidence was seen as being important, policies are often driven by different contextual influences:

> *Evidence definitely played a part... While it is one of the most crucial things, it is not "the thing" because there is a lot, which is happening in the environment that also influences the shape and the design of a program… It could be at the national level or international level… it could be political compulsions… there would be pressures... (Development Partner, India)*

Different macro, meso and micro-level contextual influences on the role of evidence in health policy development can be discerned from our analysis, which are summarised in Table 4.

Table 4 here

The next three sections report macro, meso and micro contextual influences in more detail.

Macro-level influences

Our analysis of documents and interview data revealed four national and international macro-level influences: 1) adoption of international agreements by national governments, 2) global movement towards evidence-informed policymaking, 3) changes in national leadership and existence of reforms, and 4) country's resource environment. Each of these is set out in more detail next.

First, adoption of different international agreements and policies by governments in India and Nigeria was perceived to have catalysed development of respective policies. According to the different respondents, influence of Millennium Development Goals (MDGs) adopted in 2000, was most noticeable in the development of ASHA, IMNCH and NACP-III case studies, perhaps reflecting the focus of health-related MDGs on maternal and child health and HIV care.

Our analysis also revealed some country-specific examples of influences of adoption of international agreements and policies. In India, the decision to use community health workers to strengthen Primary Health Care (PHC) as part of the ASHA policy development was perceived by the respondents to reflect a revival of the Alma Ata Declaration, adopted in 1978, which encouraged governments to protect and promote health of all people through strengthening PHC. In NTCP policy, documents and interview data indicated that ratification of Framework Convention on Tobacco Control guided the implementation of this Framework through provision of dedicated resources to tobacco control. In Nigeria, an important facilitator of evidence-informed IMNCH policy development, identified through both document review and interviews, was ratification of African Union's (AU's) Maputo Plan of Action (POA) in 2006 for reducing maternal and child mortality in Africa:

> *Nigeria has signed onto all declarations to protect women and children, and to empower women, including the Child Health Act... and the IMNCH strategy evolved from the Maputo plan of action which is an AU plan of action for Africa for addressing maternal, new-born and child health (Development Partner, Nigeria).*

At the same time, the Nigerian Government received a grant from the International Partnership for Maternal, New-born & Child Health. This grant was perceived by different respondents as being another catalyser of evidence generation for IMNCH policy development.

Second, a global movement towards evidence-informed policies and practices emerged as an important influence across the case studies particularly in Nigeria. This phenomenon was not described as such in the documents and was only identified through interviews. This was perceived to have catalysed the national

awareness of the need to develop comprehensive, evidence-informed policies and plans of action, as one respondent reflected:

> *[I] remember the period the IMNCH strategy was developed was the era of evidence-based medicine, and obviously all professionals bought into it. Everybody was therefore driven by evidence in the country, and we needed to ensure that everything we did had evidence… (Policymaker, Nigeria).*

Third, an important national macro-level influence, identified by most respondents and documents, relates to changes in national leadership and health reforms which provided opportunities for developing evidence-informed health policies. In Nigeria, political transition provided the Minister for Health with a mandate to include recommendations for developing IMNCH and HRH policies in the health sector reform agenda, and subsequently commission situational analyses to inform policy development. In India, the inclusion of Common Minimum Programme (CMP) in the election manifesto of the United Progressive Alliance (UPA) government heralded government's commitment to developing evidence-informed NACP-III and ASHA policies. Following the UPA manifesto, HIV/AIDS became high priority with highest political functionaries leading HIV control efforts through creation of National Council on AIDS. In case of the ASHA policy, the government was committed to rejuvenate a failing health system and improve PHC. Guided by this political mandate, ASHA policy was developed as an example of a 'pro-people' development intervention. This policy was developed, despite the initial resistance from the MOH, following government lobbying by members of civil society organizations (CSOs) using both formal and informal evidence. One civil society representative reflected that:

> *This rediscovery of ASHA by UPA was a political masterstroke… in two senses. One, that… [improving] hospital based care… would have taken them at least 20 years… and so without bothering for what bureaucracy said or what the usual World Bank experts said, they went for this kind of indigenous solution, which the NGO sector in India and the social sector were amply providing evidence [for]. And secondly, it was a masterstroke [because]… community health workers did not re-emerge because some international organization promoted it. (CSO, India)*

Fourth, country's resource environment was identified by respondents in all case studies as an important contextual influence on the role of evidence (for example, determining the likelihood of commissioning studies). An interesting statement was made in India where one respondent reflected that the fact that India was becoming an emerging economy, also acted as an influence for government to act on priority health issues to avoid international embarrassment:

> *…the Prime Minister… has spoken… of the 'national shame' factor…, he seemed to be less concerned about the actual death and destruction due to poor health… and rather the international shame that is going to come due to it… I mean though for years, children and women were dying in the country that was not a concern. But as an emerging world power, it is now embarrassing to sit in a G20 group with so many women and children dying back home. (CSO, India)".*

In Nigeria, availability of resources particularly from development partners was seen as a prerequisite for evidence generation. In India, we also found that provision of resources by influential organisations (e.g. government-commissioned studies for NACP-III) can improve chances of evidence being used in policy processes.

Conversely, we found that where resources are not available, it can prohibit the use of evidence in health policy development. One example of this, emerged from both documents and interview data, is the NTCP policy development in India in which government, following limited resources for policy development (i.e. number of experts in the field or support from different development partners), was unable to ensure consultative policy development thus limiting the types of evidence brought in by different policy actors.

Meso-level influences

At meso level, our analysis of documents and interviews found two broad factors that affected the role of evidence in the two countries: 1) pivotal role of different national organisations in driving evidence-informed health policy development, and 2) involvement, and relative roles, of international organisations. Each is set out next.

First, different organisations played important roles in health policy development and utilisation of evidence in all case studies. Although the MOH typically drove policy processes, there were examples of other influential government and non-government actors who enhanced evidence use in these processes.

In India, the National AIDS Control Organisation (NACO) led process of NACP-III preparations. The NACO officials had an ongoing relationship with national and international NGOs and development partners. The involvement in policy development process of CSOs, who are typically implementers of nationally-set policies, was thought to be particularly instrumental. This allowed for greater range of evidence, including formal and informal types, to be communicated to policymakers and subsequently used in health policy development. An interesting statement was made by a policymaker in India, who mentioned that resource constraints for the implementation of NACP-III, identified as one macro-level contextual influence earlier, were not a barrier for policy development:

> *When we were about to start the [NACP-III] planning process, we did ask the government whether there is… a cash envelope. We were told there is none. We were not hamstrung by any indication that you have to limit yourself to this much. There was flexibility available. (Policymaker, India)*

In Nigeria, analysis of data from both documents and interviews indicated that the Oral Health Institute (OHI) in Jos and the related International Centre for Oral Health (ICOH) were referred to as a 'go-to' place in relation to evidence for oral health during development of OH policy. These research institutes have generated and disseminated evidence on oral health, drawing on data from government's health management information system, dental clinics and generating own primary data. In addition, a well-coordinated and participatory policy process enabled development of evidence-informed OH policy:

> *…the availability of updated research findings, the sustained passion for the formulation of the policy, and the effective team of the various agencies,…the ministry, including the Inter-country centre for Oral Health, the regulatory bodies… the Dental technologists… nurses… [all] worked as a team... (Researcher, Nigeria)*

Our analysis showed that close collaboration between different actors, combined with participatory and evidence-informed policy development, have provided an opportunity for the OH policy to be approved following five previous unsuccessful attempts.

Second, involvement, and relative roles, of international organisations emerged as an important meso-level influence. Both documents and interviews revealed that in addition to influences from national actors, different development organisations (e.g. WHO and UNFPA) and major financial institutions (e.g. the World Bank) were perceived as being important in developing evidence-informed health policies in India and Nigeria. These organisations provided both financial and technical support to evidence-informed policy development, encouraging generation and dissemination of evidence.

Relative roles of international organisations and governments, however, differed between the two countries. Roles of international agencies was seen by respondents to be particularly influential in Nigeria; for example, the WHO was regarded as being instrumental in providing international evidence for the HRH policy (through the dissemination of the World Health Report 2006) and the IMNCH policy (through the identification of Lancet publication series which focused on maternal, neonatal and child health). Involvement of WHO was also perceived as being politically important in securing the ultimate approval of the OH policy by the Federal Government, as one respondent reflected:

> *I think the involvement of the WHO is quite important because that gives some kind of leverage to acceptance… So I mean, if we really did not have the WHO approval and directive, may be oral health may be lost in between other competing forces… I think that facilitated the approval... (Academic, Nigeria)*

The Government of India exerted greater control over who can be involved in health policy development: for example, both documents and interviews indicated that development partners were deliberately excluded from ASHA policy development to ensure that the role of Accredited Social Health Activists would stem from the actual needs and not be influenced by external agendas from development partners. It appears, however, that this exclusion did not affect the breadth of evidence used in informing this policy development in India. On the contrary, there was a perception in Nigeria that development partners can

often promote their 'preferred' evidence, such as the studies, which received their financial or technical support as compared to perceived low-quality of evidence from the government health management information system (HMIS).

Micro-level influences

At micro level, we found two influences on the role of evidence in health policy development: 1) dedication and commitment of different individuals, and 2) individual values, perceptions and interests, including actors' perceptions of what constitutes robust evidence for health policy development. Each is set out next.

First, our analysis of documents and interview data revealed that dedication and commitment of individuals, regarded as policy champions, formed important influence on evidence-informed health policy development, often through shaping roles of their respective organisations. For example, in India, the NACP-III policy development witnessed the leadership of two consecutive Director Generals (DGs) of the National AIDS Control Organisation (NACO). While one of them initiated the process, his successor finalised the policy and got it approved by the Cabinet. Very few respondents felt that this change of leadership constrained the policy process. In contrast, the DG who initiated the NACP-III preparation process was perceived by most respondents to be a visionary and a dynamic person, who laid strong emphasis on consultation, community participation and evidence-informed policy development:

> *The passion of that leader was very, very apparent. The groups, which we could have missed, were there because of the leader. So yes, leader makes a difference (Development Partner, India).*

The successor DG NACO, according to the respondents had all capabilities of an able administrator and a good leader. Both these individuals, referred to by the respondents as policy champions, drove policy development process at different stages and had complementary personal characteristics, which together ensured wide utilisation of evidence through the application of participatory policy development.

Similarly, in Nigeria, personal commitment of the former Minister of Health, which was aligned with country's health reform agenda, was thought to have catalysed the development of evidence-informed HRH policy. In another case study from Nigeria, Director of Oral Health at the Federal Ministry of Health was described as a charismatic leader who spearheaded OH policy development. According to respondents,

the Director regarded OH policy as a personal agenda to be accomplished during their tenure in the office and this, coupled with other influences such as funding from donors, presence of dedicated research institutes and participatory and evidence-informed nature of policy development, catalysed evidence generation and ultimately brought this policy into existence.

Second, another group of micro-level influences relates to values, perceptions and interests of individuals who were involved in evidence and policy processes in the two countries. This finding was not evident in documents and was identified only through in-depth interviews. Different policy actors had their own, and often different, understanding of what constitutes characteristics of robust evidence for health policy development. We can discern seven such characteristics from our data in both India and Nigeria: availability, comprehensiveness, context-specificity, scientific rigour, relevance for policy issue, being of national scale and timeliness. The quote below, related to the IMNCH policy in Nigeria, indicates that where evidence is perceived as robust, policy actors are more likely to use it and may even actively seek such evidence to inform their policy decisions:

> *…the Lancet series was important because it focused on all the aspects [of maternal, neonatal and child health]. We had a comprehensive document. In fact regarding the child survival series, we were told of its forthcoming publication at an African regional conference, so I accessed it on the internet as soon as it was published (Policymaker, Nigeria)*

We did not find any major differences in actors' perceptions of robust evidence between India and Nigeria. Our analysis revealed that perceptions of specific attributes of robust evidence reflect backgrounds, values and interests of respective individuals. For example, members of CSOs particularly emphasised context-specificity of evidence; policymakers preferred evidence of the national scale and of practical applicability, and academics cited methodological rigour as a key characteristic of robust evidence.

Our analysis also suggests that these individual evidence 'preferences' are likely to shape practices and roles of these individuals (and their respective organisations, especially if these individuals are in leadership roles) in evidence-informed policy development. One example of such link relates to a perception by many policy actors, particularly international agencies in both countries, of government HMIS data as being lower

quality, as compared to for example population surveys which are more associated with scientific rigour of research methodologies. This perception can lead to commissioning of costly one-off assessments, as was the case with surveys informing five out of six policy development processes in India and Nigeria.

Interrelations between the three levels

Our analysis shows multiple, and potentially complex, interrelations between the macro- meso- and micro-levels. One example of micro-meso interrelationship relates to a case when the DG of NACO, being a visionary and a dynamic policy champion, catalysed consultative organisational practice of the NACO. Macro-meso interrelationship can be evident in potential implications of macro-level resource environment on degree of actors' participation in health policy development, as one respondent reflected in relation to OH policy development:

> *…many more stakeholders would have been involved. Like I said, because of constraints such as funds and time, though the group was quite eager to complete the process it was quite difficult getting people to attend the meetings… (Development Partner, Nigeria)*

A similar example was found in India, where resource constraints for developing NTCP policy meant that the MOH was unable to convene a technical working group and, therefore, this policy was developed through limited consultation thus limiting breadth of evidence brought in by different policy actors.

In our analysis, we did not find any clear indication of a possible hierarchy of importance between macro, meso and micro-level influences on the role of evidence. In contrast, respondents reflected that a combination of different contextual influences across all three levels, such as '*…the availability of updated research findings, the sustained passion for the formulation of the policy, and the effective team of the various agencies...' (Researcher, Nigeria)* is typically required to ensure evidence-informed policymaking.

Discussion

Our findings suggest that context forms an important set of influences on evidence-informed health policy development, which is consistent with other similar studies (Dobrow et al., 2006; Hutchinson, 2011; Hutchinson et al., 2011; Mirzoev et al., 2013). Although most influences reported by our respondents appear to be facilitators, we also found that similar factors can both strengthen or undermine the role of

evidence: for example, availability of resources can facilitate generation of evidence, whereas resource constraints were referred to as a barrier to actors' involvement thus limiting communication of evidence in both Nigeria and India. At the same time, we found that lack of resources for policy implementation does not necessarily deter continuity of policy development, as was the case with NACP-III policy in India.

Contextual influences were identified at each of the three levels in both countries. At macro level, four influences were identified. While three out of four macro-level influences are similar to those reported elsewhere (de Savigny et al., 2012; Ricketts, 2010), global movement towards evidence-informed policies is a phenomenon which emerged from our analysis and which we could not locate in the current literature. Similarly to existing literature (Walt, 1994; Tantivess and Walt, 2008), meso-level contextual influences appear to reflect relative roles and power relations of different actors, as well as their mandates in health policy processes. Micro-level influences relate to individual experiences and values of policy actors, which can shape their roles and practices in generating, disseminating and using evidence in policy decisions, as found elsewhere (Mirzoev et al., 2013; Burchett et al., 2012; Tomson et al., 2005).

While all contextual influences reported earlier were evident in data from both countries, manifestation of influences were context-specific perhaps reflecting unique contexts of India and Nigeria. For example, our findings indicate that collaboration between different policy actors facilitated the use of evidence in health policy development. In India, this collaboration was between policymakers and prominent civil society as illustrated in ASHA policy, whereas in Nigeria such collaboration was mostly between policymakers, research institutions and international organisations as shown in findings from the OH policy.

Our analysis suggests that contextual influences represent a complex interplay between factors across macro, meso and micro levels (for example, individual preferences can determine organisation's practices). This finding is consistent with results from other studies (de Savigny et al., 2012; Ricketts, 2010) and is potentially mirroring the complexity and 'messiness' of health policymaking described in the literature (Barker, 1996; Walt, 1994; Buse et al., 2005a). For example, greater awareness, and use, of government policy procedure combined with evidence preferences from powerful donors can lead to greater use of formal evidence, as we found in Nigeria. From another perspective, influential civil society can catalyse greater use of informal evidence (such as personal experiences) through advocacy, as we found in India. Of

course, we do not suggest that if powerful civil society existed in Nigeria it would be a determinant of greater use of informal evidence or that greater influence of donors in India would lead to more use of formal evidence. Such possible hypotheses for future studies emerged from our improved understanding of the actors' roles and powers, emphasising the interrelations between context, processes and actors (Dobrow et al., 2004; Walt and Gilson, 1994).

In our study we did not find any indication of a possible hierarchy of importance of contextual influences at macro, meso and micro levels. This is consistent with findings from similar studies, which also did not report any relative importance between the different contextual influences (de Savigny et al., 2012; Ricketts, 2010; Hutchinson et al., 2011). We found, however, that combinations of different facilitators are often required to ensure evidence-informed health policy development: for example, availability of resources to generate evidence and appropriate expertise to interpret evidence should be complemented by political commitment to use evidence in policy decisions.

As shown earlier, our review of available literature revealed that there is little consensus as to what exactly constitutes the context. The interpretations of context appear to represent a continuum, with one end being only 'external' issues such as political environment (ODI, 2004) and the other end comprising both internal and external issues including decision processes and actors involved (Dobrow et al., 2004). A three-tier framework used in our paper, adapted from the literature (Ricketts, 2010; Evans, 2001; Hudson and Lowe, 2009), has allowed us to structure our assessment and reporting of findings. We recognise, however, that none of literature-based frameworks, including our own, provide detailed methodological guidance on how to identify and prioritise different contextual factors. This may reflect the inherent complexity and messiness of policymaking and the resultant methodological challenge to understanding how the different elements (actors, processes, contents and processes) are intertwined (Walt et al., 2008; Walt and Gilson, 1994). Theory-driven approaches, such as realist evaluation, can help identify specific contextual factors through examining their relations with mechanisms and outcomes of an intervention in a Context-Mechanism-Outcome (C-M-O) cycle (Pawson and Tilley, 1997). However, application of theory-driven evaluations in comparative analyses such as our study is likely to be resource-consuming. Comparing

relative strengths of different methodological approaches, including theory-driven evaluations, in conducting comparative policy analyses represents a possible question to explore in future research.

Our findings, similar to existing literature (Dobrow et al., 2006; de Savigny et al., 2012), suggest that greater understanding of context at macro, meso and micro levels by different policy actors can improve their recognition of complexity of multiple influences on evidence-informed policymaking. Arguably, this can inform actors' practices in either adapting to the factors that cannot be controlled (e.g. macro-context) or managing some influences (e.g. awareness raising to change perceptions of robust evidence), in order to enhance the evidence-informed nature of health policymaking.

Four policy implications emerge from our findings. First, alignment of national policies with key international agreements can help secure interest and engagement of different actors and ensure availability of technical and financial support for evidence production, dissemination and use. Second, appropriate resource framework, combined with political commitment and involvement of dedicated institutions for generating and disseminating evidence, can ensure timely national production of good-quality evidence on specific policy issues. Third, improved awareness of different actors' evidence preferences by decision-makers can inform their effective engagement with relevant actors for evidence production and dissemination. Last, systematic identification of policy champions can facilitate creation of gateways for communicating evidence to inform policy decisions.

We acknowledge two potential limitations of our study. First, in our relatively small-scale study, we focused only on three specific policies in each country. Therefore, we are cautious of generalising our findings to other policies within the two countries and to other similar countries, and conducting larger-scale similar studies may be a useful to wider generalisations. Second, we focused on identification of perceptions of key policy actors and, for example, whilst we looked for references in policy documents to specific evidence, we did not systematically compare evidence which was available around a particular policy issue versus what has been stated by respondents. The rationale for this approach was driven by the exploratory nature of our study, and comparisons of available versus stated evidence can be considered in future research.

Conclusion

This paper analysed contextual influences on the role of evidence in the development of six health policies in India and Nigeria. In exploring this, we also improved our understanding of health policy processes, involvement of actors and their perceptions of the types of evidence used in policy decisions. Our findings indicate that context at macro, meso, and micro levels can facilitate or constrain the role of evidence, and factors at all three levels are interrelated. Greater understanding of different contextual influences can provide a platform for adapting to, or managing, these influences in order to enhance evidence-informed nature of health policymaking.

References

AHPSR. 2004. *Strengthening health systems: the role and promise of policy and systems research.* Geneva: WHO, Alliance for Health Policy and Systems Research.

Barker, C. 1996. *The Health Care Policy Process.* London: Sage Publications.

Brewer, G. and deLeon, P. 1983. *"The foundations of policy analysis".* CA: Brooks/Cole;. Monterey.

Burchett, H.E.D. et al. 2012. Perceptions of the usefulness and use of research conducted in other countries. *Evidence & Policy: A Journal of Research, Debate and Practice.* **8**(1), pp.7-16.

Buse, K. et al. 2005a. *Making Health Policy.* London: Open University Press.

Buse, K. et al. 2005b. *"Making health policy"* Milton Keynes, UK Open University Press.

Crowe, S. et al. 2011. The case study approach. *BMC Medical Research Methodology.* **11**(1), p100.

de Savigny, D. et al. 2012. Introducing vouchers for malaria prevention in Ghana and Tanzania: context and adoption of innovation in health systems. *Health Policy and Planning.* **27**(suppl 4), pp.iv32-iv43.

Dobrow, M.J. et al. 2006. The impact of context on evidence utilization: A framework for expert groups developing health policy recommendations. *Social Science & Medicine.* **63**(7), pp.1811-1824.

Dobrow, M.J. et al. 2004. Evidence-based health policy: context and utilisation. *Social Science and Medicine.* **58**(1), pp.207-217.

Evans, D.B. et al. 2001. Comparative efficiency of national health systems: cross national econometric analysis. *British Medical Journal.* **323**(7308), pp.307-310.

Evans, M. 2001. Understanding Dialectics in Policy Network Analysis. *Political Studies.* **49**(3), pp.542-550.

Flitcroft, K. et al. 2011. Getting evidence into policy: The need for deliberative strategies? *Social Science & Medicine.* **72**(7), pp.1039-1046.

Gaventa, J. 2005. *Reflections on the Uses of the 'Power Cube' Approach for Analyzing the Spaces, Places and Dynamics Of Civil Society Participation and Engagement.* Sussex: Institute of Development Studies, University of Sussex.

Green, A. and Bennett, S. eds. 2007. *Sound Choices: Enhancing Capacity for Evidence-Informed Health Policy. AHPSR Biennual Review.* Geneva: WHO, Alliance for Health Policy and Systems Research.

Green, A. et al. 2011. Health policy processes in maternal health: A comparison of Vietnam, India and China. *Health Policy.* **100**(2-3), pp.167-173.

Hanney, S. and Gonzalez-Block, M. 2009. Evidence-informed health policy: are we beginning to get there at last? *Health Research Policy and Systems.* **7**(1), p30.

Hanney, S. et al. 2003. The utilisation of health research in policy-making: concepts, examples and methods of assessment. *Health Research Policy and Systems.* **1**(1), p2.

Hudson, J. and Lowe, S. 2009. *Understanding the Policy Process: Analysing Welfare Policy and Practice.* second ed. Policy Press.

Hutchinson, E. 2011. The development of health policy in Malawi: the influence of context, evidence and links in the creation of a national policy for cotrimoxazole prophylaxis. *Malawi Medical Journal.* **23**(4), pp.109-14.

Hutchinson, E. et al. 2011. National policy development for cotrimoxazole prophylaxis in Malawi, Uganda and Zambia: the relationship between Context, Evidence and Links. *Health Research Policy and Systems.* **9**(Suppl 1), pS6.

Lasswell, H. 1956. *"The decision process".* MD: University of Maryland Press: College Park.

Lavis, J. et al. 2009. SUPPORT Tools for evidence-informed health Policymaking (STP). *Health Research Policy and Systems.* **7**(Suppl 1), pI1.

Mirzoev, T. 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**(4), pp.493-511.

Moat, K.A. and Lavis, J.N. 2013. 10 best resources for … evidence-informed health policy making. *Health Policy and Planning.* **28**(2), pp.215-218.

ODI. 2004. *Bridging Research and Policy in International Development. An analytical and practical framework. Briefing paper. October 2004.* [Online]. [Accessed 14 March]. Available from: http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/198.pdf

Oxman, A. et al. 2009. SUPPORT Tools for evidence-informed health Policymaking (STP) 1: What is evidence-informed policymaking? *Health Research Policy and Systems.* **7**(Suppl 1), pS1.

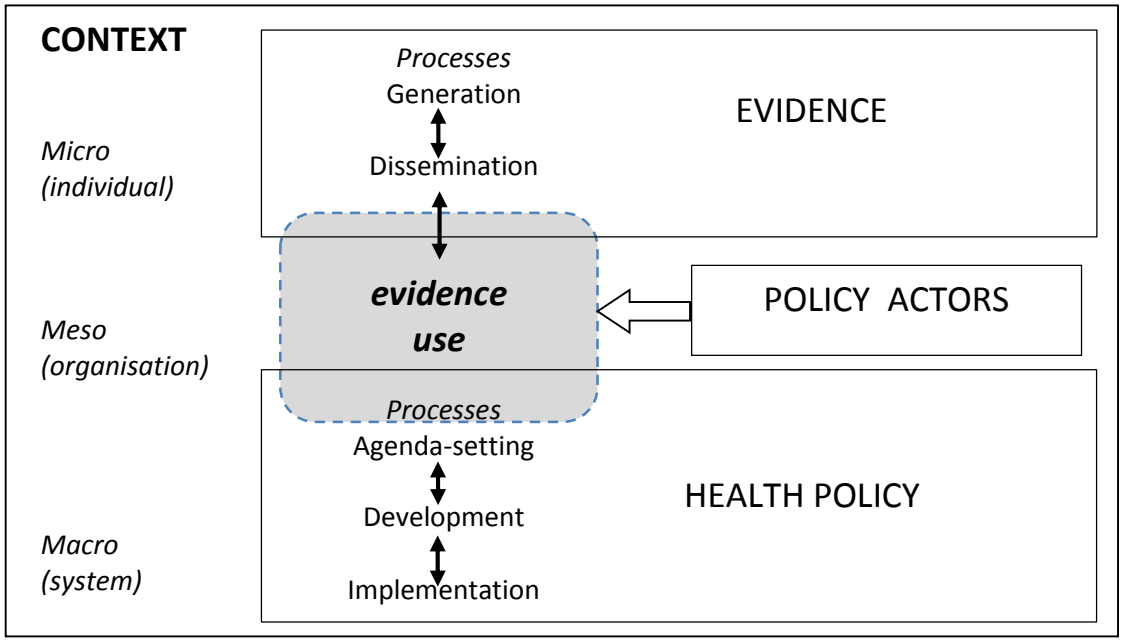
Patton, M.Q. 1990. *Qualitative Evaluation and Research Methods.* SAGE Publications, Inc.
Pawson, R. and Tilley, N. 1997. *Realistic Evaluation.* London: SAGE Publications.
Ricketts, J.A. 2010. The making of Jamaica's 'National Policy for Persons with Disabilities 2000': macro, meso and micro factors. *Disability & Society.* **25**(5), pp.551-564.
Ritchie, J. and Spencer, L. 1994. Qualitative data analysis for applied policy research. In: Bryman, A. and Burgess, R. eds. *Analyzing Qualitative Data.* New York: Routledge.
Rychetnik, L. et al. 2002. Criteria for evaluating evidence on public health interventions. *Journal of Epidemiology and Community Health.* **56**(2), pp.119-127.
Rychetnik, L. et al. 2004. A glossary for evidence based public health. *Journal of Epidemiology and Community Health.* **58**(7), pp.538-545.
Sutcliffe, S. and Court, J. 2006. *A Toolkit for Progressive Policymakers in Developing Countries.* London: Overseas Development Institute.
Tantivess, S. and 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**(5), pp.328-338.
Tomson, G. et al. 2005. Decision-makers and the usefulness of research evidence in policy implementation - a case study from Lao PDR. *Social Science and Medicine.* **61**(6), pp.1291-1299.
Walt, G. 1994. *Health policy: an introduction to process and power.* Johannesburg, London: Zed Brooks, Witwatersrand University Press.
Walt, G. and Gilson, L. 1994. Reforming the health sector in developing countries: the central role of policy analysis. *Health Policy and Planning.* **9**(4), pp.353-370.
Walt, G. et al. 2008. 'Doing' health policy analysis: methodological and conceptual reflections and challenges. *Health Policy and Planning.* **23**(5), pp.308-317.
WHO. 2012. *Changing Mindsets - Strategy on Health Policy and Systems Research.* Geneva: World Health Organization.
World-Bank. 2014. *Data: Featured Indicators.* [Online]. [Accessed 22-04-2014]. Available from: http://data.worldbank.org/indicator/SP.DYN.TFRT.IN/countries

ACKNOWLEDGEMENT

The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under Grant Agreement No 261389. The authors also wish to acknowledge contributions from the EVAL-HEALTH project to this publication.

Figure

Figure 1: Conceptual framework for the study



Table

Table 1: Case studies selected in each study country

CASE STUDY	INDIA	NIGERIA
Area of international prominence	National AIDS Control Programme 2007 *(NACP-III)*	Integrated Maternal, Neonatal and Child Health strategy 2007 *(IMNCH)*
Neglected area	National Tobacco Control Programme 2007 *(NTCP)*	Oral Health Policy 2012 *(OH)*
Health systems issue	Accredited Social Health Activists programme 2005 *(ASHA)*	Human Resources for Health Policy 2006 *(HRH)*

Table 2: Data collection methods for each case study

Method / respondent	India				Nigeria			
	NACP-III	NTCP	ASHA	Total	IMNCH	OH	HRH	Total
Document reviews	*26*	*62*	*20*	*108*	*11*	*6*	*10*	*27*
Interviews total, including:	17	11	13	41	10	9	12	31
Policymakers	*3*	*4*	*2*	*9*	*4*	*3*	*6*	*13*
CSOs	*5*	*2*	*7*	*14*	*1*	*2*	*2*	*5*
Health staff	*3*	*0*	*2*	*5*	*1*	*1*	*1*	*3*
Development-partners	*3*	*1*	*1*	*5*	*2*	*1*	*2*	*5*
Academics	*3*	*4*	*0*	*7*	*2*	*2*	*1*	*5*

Table 3: Key features of health policy development within six case studies

	India			Nigeria		
	NACP-III	**NTCP**	**ASHA**	**IMNCH**	**OH**	**HRH**
Approval year	2007	2007	2005	2007	2012	2006
Policy aim	To address emerging HIV epidemic	To reduce tobacco consumption	To use community health workers to improve PHC services	To reduce maternal, child and neonatal morbidity and mortality	To improve oral health	To improve equitable distribution of health workforce
Evidence used	• National survey • Programme data, reports • Working group reports • Personal experiences • Academic papers	• International Policy Framework • National survey • Working group reports • Personal experiences • Academic papers	• National survey • Programme data, reports • Consultation and TWG reports • Personal experiences • Academic papers	• Situational analysis, State HMIS and DHS data • Lancet MCH series • Existing policy documents	• Survey by ICOH • Secondary data from dental clinics • Academic papers • Policy documents from other countries	• WHO report 2006 • National baseline survey • Aggregation of existing data • Academic papers • Policies from other countries
Actors involved	• Led by MOH and DG NACO • CSOs were active • Academics were consulted • International support	• Led by MOH • Other involved actors included WHO, other ministries and CSOs	• Led by MOH • Other ministries involved • CSOs were active • Academics were consulted	• Led by MOH • Academics involved • International support • CSOs role limited	• Led by MOH • ICOH role in evidence generation • International support • CSOs role limited	• Led by MOH • Academics involved • International support • CSOs role limited
Other key features	Followed clear international priority	• No international finance support • Tobacco industry excluded	• Initial reluctance from MOH but CSOs lobbied government • Development partners excluded	Followed clear international priority	Approved following 5 unsuccessful attempts	Follow-on from national health policy and health reform documents

Table 4: Contextual influences on the role of evidence in health policy development in India and Nigeria

Level of Context	Key influences
Macro	• adoption of international agreements by national governments, • global movement towards evidence-informed policymaking, • changes in national leadership and existence of reforms, and • country's resource environment
Meso	• pivotal role of different national organisations in driving evidence-informed health policy development, and • involvement, and relative roles, of international organisations
Micro	• dedication and commitment of the individuals, and • individual values, perceptions and interests, including actors' perceptions of what constitutes robust evidence for health policy development