

# BMJ Open Stakeholder perceptions of current practices and challenges in priority setting for non-communicable disease control in Kenya: a qualitative study

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## ABSTRACT

**Objective** To explore the stakeholders' perceptions of current practices and challenges in priority setting for non-communicable disease (NCD) control in Kenya.

**Design** A qualitative study approach conducted within a 1-day stakeholder workshop that followed a deliberative dialogue process.

**Setting** Study was conducted within a 1-day stakeholder workshop that was held in October 2019 in Nairobi, Kenya.

**Participants** Stakeholders who currently participate in the national level policymaking process for health in Kenya.

**Outcome measure** Priority setting process for NCD control in Kenya.

**Results** Donor funding was identified as a key factor that informed the priority setting process for NCD control. Misalignment between donors' priorities and the country's priorities for NCD control was seen as a hindrance to the process. It was identified that there was minimal utilisation of context-specific evidence from locally conducted research. Additional factors seen to inform the priority setting process included political leadership, government policies and budget allocation for NCDs, stakeholder engagement, media, people's cultural and religious beliefs. **Conclusion** There is an urgent need for development aid partners to align their priorities to the specific NCD control priority areas that exist in the countries that they extend aid to. Additionally, context-specific scientific evidence on effective local interventions for NCD control is required to inform areas of priority in Kenya and other low-income and middle-income countries. Further research is needed to develop best practice guidelines and tools for the creation of national-level priority setting frameworks that are responsive to the identified factors that inform the priority setting process for NCD control.

## INTRODUCTION

The latest global estimates indicate that 41 million deaths (71% of all deaths) that occurred in 2016 were due to non-communicable diseases (NCDs).<sup>1</sup> Low/middle-income countries (LMICs) currently face multiple challenges in prioritising strategies for NCD control in the context of a double disease burden<sup>2–4</sup> with limited

## Strengths and limitations of this study

- Purposive and snowball sampling techniques in the recruitment of stakeholders ensured multisectoral representation.
- Reporting of this study outlines all the steps followed, consistent with best practice for stakeholder-engaged research.
- Time and funding constraints limited the stakeholder recruitment to a limited timeframe of 1 month.

resources. It is estimated that NCDs account for 50%–70% of all hospital admissions and up to 50% of all inpatient mortality in Kenya.<sup>5</sup> Amidst limited resources within the Kenya health system, choices that lead to optimal health for the available budget need to be made. The priority setting process allows for choices to be made on how formulated strategies for the control of NCDs are ordered, and how resources are allocated between competing strategies or interventions.

In Kenya, there is a growing body of literature on priority setting in health. Some studies have focused on the description and evaluation of the priority setting process specific to healthcare services at the hospital level.<sup>6–10</sup> Other studies have looked at priority setting at the subnational/regional or county level.<sup>11 12</sup> Studies that look at priority setting at the national level are lacking. The national level is charged with the creation of an enabling environment for integration of the prevention and control of NCDs into the national health planning processes and broader development agenda.<sup>5</sup> While the county governments in Kenya are entrusted with healthcare service delivery roles, the central government (national level) retains responsibility for the health policy formulation and regulatory roles.<sup>13</sup> Our study focused



on priority setting at the policy formulation level for NCD control.

In theory, priority setting for NCD control is framed as a systematic approach to resource allocation. However, in practice, it is a complex, context-dependent process<sup>14 15</sup> that often takes place implicitly.<sup>216</sup> Consequently, we sought to investigate priority setting for NCD control within its real-life context through engaging stakeholders who are known to participate in policymaking at the national level. We aimed to explore the stakeholders' perceptions of current practice in priority setting for NCD control in Kenya. In particular, the following questions guided our study: (1) what currently informs the decisions and choices for health in priority setting for NCD control in Kenya? (2) what are the perceived challenges in the current practice? and (3) what could be done better in priority setting for NCD control policies and strategies? In this paper, we report on the stakeholder engagement process that was carried out through a 1-day workshop. Our study was carried out as part of a larger study that applied the assessing cost-effectiveness (ACE) approach to priority setting in NCD control in Kenya. This comes at a critical time in the Kenya's NCD policy development cycle and the Ministry of Health (MoH) was gearing up to review the National Strategy for the Prevention and Control of NCDs (2015–2020).<sup>5</sup> This policy has been the main blueprint that has guided the nation's response to NCDs. Disease-specific policies have also been developed. For example, the National Cancer Control Strategy (2017–2022),<sup>17</sup> National Diabetes Strategy (2010–2015),<sup>18</sup> Tobacco Control Action Plan (2010–2015)<sup>19</sup> and National Nutrition Action Plan (2012–2017),<sup>20</sup> among others.

The policies operate under the Kenya Health Policy 2012–2030<sup>21</sup> which provides an emphasis on the need to halt and reverse the rising trend and burden of NCDs in the country. This is in line with the constitution of Kenya 2010,<sup>22</sup> the country's development plan, Vision 2030<sup>23</sup> and the 5-year 'Big Four Agenda action plan'<sup>24</sup> conceptualised by the current president of Kenya.

The important contribution of this research was the documentation of the stakeholders' experiences in priority setting in the Kenyan context and their reflections on how the process can be more evidence-based.

## METHODS

### Study design

This was a stakeholder-engaged research study<sup>25</sup> which allowed researchers to address specific research questions while engaging stakeholders. The ACE approach aims to define areas of action where the greatest health gains can be achieved for available resources while engaging stakeholders.<sup>26 27</sup> As such, stakeholder engagement is part of the due process in the ACE approach. In this paper, we report on the first stakeholder engagement process where we used a qualitative study approach. We conducted this study within a 1-day stakeholder workshop and a group process that followed the deliberative dialogue process<sup>28</sup>

## Box 1 Description of potential stakeholders

### Overall description

A team looking at preventive and early intervention strategies for non-communicable disease (NCD) control; focusing on diseases or risk factors such as obesity. Or people involved in choosing the public health interventions to implement at any point in time—priority setting either due to budget or any other considerations.

### Description of stakeholders

- ▶ Head of Division NCDs, Ministry of Health (MoH), Kenya.
- ▶ Head of Health Promotion Unit, MoH, Kenya.
- ▶ Standards and Quality Assurance directorate, MoH.
- ▶ A member (or members) from any health advisory committees recommended by the MoH Heads of divisions above.
- ▶ Other MoH officials—representatives from various divisions who would be involved in making choices of what interventions to implement and in what order. For example, officers from, health economics, data and statistics.
- ▶ Representatives from other relevant agencies such as—Kenya Medical Research Institute, health economics body.
- ▶ Representatives from influential and credible bodies that the MoH would recommend.
- ▶ Representatives from civil society.
- ▶ Medical Research Council representative.
- ▶ An officer from the treasury who interacts with the health budget or activities.
- ▶ A health counterpart in the Ministry of Planning, Ministry of Education, Science and Technology.
- ▶ External partners for example, WHO health representative overseeing NCD control or health promotion.
- ▶ Academic experts in health systems management and health economics drawn from universities in Kenya.

was applied. The workshop session aimed to explore the stakeholders' perceptions of current practices and challenges in priority setting for NCD control in Kenya. We considered this the most appropriate approach because our investigation was exploratory.<sup>29</sup> We checked the reporting of this paper against the Standards for Reporting Qualitative Research.<sup>30</sup> We considered stakeholders as individuals or groups who are responsible for health-related decisions.<sup>31</sup>

### Stakeholder recruitment process

We targeted various decision-makers who are involved in the health policymaking process in Kenya. The recruitment was done from the national policymaking level. Purposive and snowball sampling techniques were applied. To capture a variety of perspectives and holistic view, respondents were chosen from various institutions with a multisectoral representation of decision-makers. We considered that; the public would be effectively represented by stakeholders from civil society organisations. The recruitment process was guided by a description of potential stakeholders as outlined in [box 1](#).

We shared the description of stakeholders with two identified stakeholders, one from the MoH and another from the University of Nairobi, Kenya. With the assistance of these two stakeholders, potential participants

that fit the descriptions given were identified by name and their official contact details supplied to us. The MoH stakeholder supplied us with a list of main policymakers, development assistant partners, and other key individuals involved in NCD control in Kenya. We also conducted online searches for information of the persons in roles that fit our stakeholder description and acquired their email addresses through official ministry and organisation websites. For some stakeholders, we contacted their colleagues in the various institutions to help us get in touch with them. Email communication was sent out to all identified individuals explaining to them what the purpose of the study was, requesting their participation, giving details of their role in the study and emphasising the voluntary and confidential nature of participation. The components of the email communication material were part of the ethics review and approval for this study. Stakeholders obtained approval from their organisations to participate in the workshop. For the identified stakeholders who did not respond to the initial email communication, follow-up was done through phone calls and emails. We were able to reach every identified stakeholder. A snowball method ensued with assistance from stakeholders from two leading civil societies involved in decisions for health in Kenya. A total of 36 initial invite emails were sent out. Out of this, 35 stakeholders confirmed their willingness to participate in the study. One stakeholder gave a tentative confirmation sighting a busy schedule as the main hindrance for participation. Email communication and an e-flier were sent to the 36 stakeholders inviting them to the stakeholder engagement process set to take place through a 1-day workshop. The stakeholders were invited without prior knowledge of their specific views on the study topic. A total of 23 of the invited stakeholders confirmed their attendance, out of these, 14 stakeholders were in attendance. An additional invited stakeholder attended the workshop but had not confirmed attendance prior to the workshop bringing the total of participants to 15. We achieved and surpassed our target of the minimum number of stakeholders that we had purposed to work with. This target had been set to 13, largely guided by the description of stakeholders (see [box 1](#)). The target was set by the research team. This was informed by a literature review process that enabled us to identify key stakeholders in the health sector in Kenya. We aimed to get at least one representative for every description given in [box 1](#).

### Stakeholder engagement process

The 1-day workshop was held in October 2019 in Nairobi, Kenya. We conducted the workshop in English. On arrival, each participant filled out a registration form. Participation was voluntary, stakeholders read through the informed consent form and each signed a copy.

The stakeholders were divided into three subgroups with an average of five members per subgroup with each subgroup seated at one round table. The group sitting was informed by arrival time. As participants arrived, they

were guided to occupy the tables proximal to the podium. During the workshop discussions, members at each table made up a subgroup. Participants were asked to discuss the questions presented, record their discussions on flip charts and present their responses to the whole group at the workshop. The discussions followed a deliberative dialogue process. In priority setting, the deliberative dialogue process is applied as a way of involving multiple stakeholders while balancing their opinions, values, needs and criteria.<sup>28</sup> Informed by the work of various authors, Campbell<sup>28</sup> defines deliberative dialogue as ‘a process of collective and procedural discussion where an inclusive and representative set of stakeholders consider facts from multiple perspectives, converse with one another to think critically about options, and through reasoned argument refine and enlarge their perspectives, opinions, and understandings’.

Before the workshop date, in-depth briefing sessions had been held with five stakeholders to discuss the engagement process and workshop moderation. These stakeholders together with the overall workshop facilitator helped to ensure that the discussions were participatory, inclusive, interactive and transparent ensuring that the voice and opinion of every participant were accommodated. This enabled standardisation and allowed for quality control. Two authors of this manuscript (LK-B, MNW) were physically present at the workshop. MNW carried out this study as part of her PhD candidature. LK-B is an academic expert in health systems management, a senior researcher and highly skilled in session facilitation. A third author (LV) provided oversight of the entire process and joined in virtually for a session with the participants. The Day’s programme is presented as online supplemental file 1 to this manuscript.

From each subgroup, the stakeholders appointed someone to moderate the discussion, and another person was appointed to record the subgroup’s discussion points. Each subgroup then presented their discussions to the broader group eliciting more dialogue from the broader group with additional new ideas and views emerging. For quality purposes, this larger discussion session was facilitated by one of the authors (LK-B). In these deliberations, the participants were given the right to withdraw any statement that they may have wanted to withdraw. Once all the three subgroups had presented their discussion points and agreement on opinions and ideas raised by all stakeholders was achieved, we considered this our level of saturation for the workshop. The entire dialogue lasted for about 80 min. A consensus was reached on various points and a summary written out on the flip chart by the facilitating stakeholder. To complement this recording, the researcher who was present at the workshop and the workshop assistant took down notes. Additionally, with consent from the participants, the discussions were audio-recorded.

**Table 1** Category of questions addressed in this qualitative study

Question category	Category description	Objectives of this study
Contextual	Identifying the form and nature of what exists. For example, identifying what perceptions are held, the nature of people's experience, elements that operate within a system, the needs of the study population	To explore the stakeholders' perceptions of what currently informs the decisions and choices for health in priority setting for NCD control in Kenya
Evaluative	Appraising the effectiveness of what exists. For example, appraising what affects the successful delivery of a programme or service, how objectives are achieved, barriers to systems operating, how experiences affect subsequent behaviour	To identify challenges perceived in the current priority setting practice for NCD control in Kenya
Strategic	Identifying new theories, policies, plans, or actions. For example, identifying types of services required to meet needs, actions needed to make a service or programme more effective, how a system can be improved, strategies required to overcome a defined problem	To identify what actions are needed to improve the process of priority setting for NCD control in Kenya

NCD, non-communicable disease.

### Data processing

Framework analysis was used to systematically sift, chart and sort data according to key issues and themes for data analysis.<sup>32</sup> We adopted the analysis process as described by Ritchie and Spencer.<sup>32</sup> This involved familiarisation with the data, identification of a thematic framework, indexing, charting, mapping and interpretation. This approach is recommended for studies seeking to answer a variety of applied policy research questions. Ritchie and Spencer<sup>32</sup> divide the research questions into four categories. Guided by their work, we adopted specific categories for our research questions as outlined in [table 1](#).

The workshop discussions were transcribed verbatim. The initial transcription was done by a third party. Two authors (MNW, LK-B) verified the validity of the transcription by listening to the audio recordings and comparing them with the transcripts. One author (MNW) did the necessary updates and corrections to the transcripts, conducted the initial framework analysis. This was checked by another author (LK-B). MNW wrote out the first version of the manuscript. All authors reviewed the first manuscript, provided critical feedback on the ongoing data analysis and reviewed successive versions of the manuscript.

The trustworthiness of our findings was enhanced by reading the transcriptions and workshop notes multiple times. In addition, during the workshop, the presentations to the larger group in the presence of all participants allowed the participants to check, confirm or correct what was presented and put on record. A report of the workshop was shared with all stakeholders before the publication of this manuscript for their review and confirmation of the main findings.

Through rereading the transcripts and workshop notes, we familiarised ourselves with the data collected to help us gain an overview of the data. We noted key ideas and recurrent themes that emerged. Applying the emerging themes, we classified the data into a thematic framework. Although the discussions were guided by the

original research questions that generally shaped the emerging themes, we investigated the data for any additional themes. We kept refining the thematic framework at the later stages of analysis. We then applied a numerical system to index; identifying the portions of the data that corresponded to each theme.<sup>32</sup> The numerical system identifies portions of data by subgroup, abbreviated as "GP" or by stakeholder abbreviated as "SH", followed by the theme that the data portion corresponds to and a final number that gives the specific numeric label given for each data portions presented. For example, GP 2-1.1 stands for first data portion under theme 1 presented by subgroup 2. The data portions were taken from direct quotes from the respondents' discussions. We arranged the indexed data portions in charts of the themes drawn from the thematic framework. The numerical system presented does not in any way identify the study participants. Finally, in the mapping and interpretation stage, we analysed the key characteristics as laid out in the charts and this guided our interpretation of the data set.

### Patient and public involvement

Patients or the public were not involved in the design, or conduct, or reporting, or dissemination plans of our research

### RESULTS

A total of 15 participants were present. In [table 2](#), we present the names of the organisations represented by the stakeholders who were present at the 1-day workshop and those who were absent with an apology.

We captured the stakeholders' perceptions of what currently informed the decisions and choices for health in priority setting for NCD control in Kenya, their perceived challenges in the priority setting process, and the stakeholders' proposals of what can be done better in the priority setting process for NCD control. We present this information in five main thematic areas that emerged

**Table 2** Summary of stakeholders engaged for the study by institution representation

Representation of stakeholders who attended the workshop	Additional institution representation of stakeholders who confirmed their willingness to participate in the study but were absent from the workshop
<ol style="list-style-type: none"> <li>1. NACOSTI (National Commission for Science, Technology, and Innovation)</li> <li>2. School of Nursing, University of Nairobi, Kenya</li> <li>3. Ministry of Health (MoH), Kenya—Immunisation Department</li> <li>4. MoH—Health Systems Department</li> <li>5. Kenya Red Cross</li> <li>6. The Non-Communicable Diseases Alliance Kenya</li> <li>7. Institute of Diplomacy and International Studies, University of Nairobi, Kenya</li> <li>8. Kenya National Commission on Human Rights</li> <li>9. Strathmore University, Kenya</li> <li>10. Kiambu County Health, Kenya</li> <li>11. Dental School, University of Nairobi, Kenya</li> <li>12. Mater Hospital, Kenya</li> <li>13. Personal consultant in Public Health—supply chain management</li> <li>14. Kenyan Network of Cancer Organisations</li> <li>15. Oncology Nursing Chapter—Kenya</li> </ol>	<ol style="list-style-type: none"> <li>1. Standards and Quality Assurance directorate, MoH, Kenya</li> <li>2. Tobacco Control Division, MoH, Kenya</li> <li>3. NCDs Division, MoH, Kenya</li> <li>4. Universal Health Coverage, Presidential Advisory &amp; Strategy Unit</li> <li>5. Executive Office of the President</li> <li>6. WHO—NCDs Unit in Kenya</li> <li>7. PharmAccess Kenya</li> <li>8. Personal Consultant—Psychologist</li> <li>9. Swedish Workplace Programme, SWP</li> <li>10. A former head of Preventive and Promotive Health Services</li> </ol>

from our framework analysis of the data gathered. A summary of the identified themes and main findings is outlined in [box 2](#).

### External factors

#### Donor funding

Stakeholders reported that decisions and choices are greatly informed by external donor funding received in the country. They emphasised that often, the health interventions selected for implementation tended to be the donor-driven ones.

... the external donor funding. It really influences our priorities here. (GP 2–1.1)

Especially in ... choosing the interventions ... you find that some of the interventions are donor driven. (GP 1–1.1)

Influence from donor funding was perceived as a challenge in the priority setting process because the donor's agenda would always be given priority.

The stakeholders proposed that less reliance on donors for funding in health would improve the priority setting process for NCD control in Kenya.

... we should have less reliance on donors because you find that whenever we rely more on donors, they will always push the agenda towards their side. (GP 1–3.3)

#### Influence from external stakeholders

Stakeholders acknowledged that choices were made based on the external stakeholders or influencers involved in the country's decision making for health. This included international bodies, with WHO named as an example in the discussion. They perceived that decisions made in the country are in line with what the international agencies like WHO push for.

... in choosing the interventions other stakeholders are also involved in decision making. These include international partners. (GP 1–1.5)

we have to make choices based on the external influencers. What the World Health Organization pushes here ... then we have to make those decisions. (GP 2–1.5)

## Box 2 Summary of findings

### Themes and main findings

- ▶ External factors.
  - Donor funding.
  - Influence from external stakeholders.
- ▶ National leadership factors.
  - Political influence.
  - Ministry of health policies and plans.
  - Available financing for non-communicable disease (NCD) control.
- ▶ The burden of disease factor.
  - Presence of disasters.
  - Priorities are driven by a high focus on the treatment of NCDs.
- ▶ Technical factors.
  - Health professionals' participation in the priority setting process.
  - Stakeholder engagement.
  - Media.
  - Surveillance and research.
- ▶ People and equity factors.
  - Experiences and needs of the prominent people in society.
  - Religious and cultural influences.
  - Influences from the general public.

## National leadership factors

### Political influence

Stakeholders recognised that some of the choices are made because of political goodwill and other political considerations. In the discussion, the respondents called them *political choices*. An example was given of the 'Big Four Agenda action plan' conceptualised by the current president of Kenya.<sup>24</sup> This is an accelerated 5-year plan formulated to fast track the achievement of the country's development blueprint, Vision 2030.<sup>23</sup> The plan has four key pillars with the Universal Health Coverage pillar being one of them. The stakeholders agreed that this plan currently plays a role in making choices for public health investment in the country.

Political goodwill. Some of the choices are made because of the political aspects. (GP 1–1.2)

The political choices we make. Like now we must make ... health choices, under the big four, so that we will inform our public health investment. (GP 2–1.2)

The stakeholders identified political bias as a perceived challenge in the priority setting process. In this discussion, political bias was linked to politicians prioritising health issues that affected the prominent people in society.

... a disease will get more focus if somebody who was prominent suffered from it. (GP 1–2.10, 2.11)

As a way forward, the stakeholders expressed their desire to see the politicians prioritising good health for all, at all times.

### Ministry of health policies and plans

There was a consensus that the MoH in Kenya was heavily involved in making choices for health. The stakeholders agreed that the national health strategic plan guides decisions on investments hence influencing choices for health.

The Ministry of Health is heavily involved ... in choosing the interventions for NCD control in Kenya ... (GP 1–1.7)

... What our national strategic plan says guides our public investment ... in health. (GP 2–1.6)

However, some challenges related to the policies and plans were highlighted. It was perceived that policymakers being out of touch with reality posed a challenge to the priority setting process. Further, some policies, particularly those on prevention were unclear, and existing good policies were often not implemented.

Policy makers being out of touch with reality, sometimes policy makers can be making a policy in an office somewhere and yet what is happening on the ground is quite different. (GP 1–2.6)

lack of clear policies to guide on prevention. (GP 3–2.8)

policies and strategies ... the implementation of the same is wanting (GP 2–2.8)

if implemented all the policies that we have, I think we would solve most of the problems that we have. (GP 3–2.8, 3.10)

... or we implement using the wrong methodologies (GP 3–2.8)

As a way forward, the stakeholders stated that there was a need for clear policies that guided the prevention of NCDs. Proper policy implementation was also required for the existing policies.

### Available financing for NCD control

The stakeholders noted that the availability of finances informed the country's priorities.

financing is something that really determines what can be put as a priority. (GP 1–1.11)

... One issue that informs the decisions and choices for health in Kenya is funding ... (GP 2–1.1)

The financial constraints in the health sector were identified as a great challenge in priority setting for NCD control.

We have financial constraints in the health sector ... (GP 2–2.3)

As a way forward, the stakeholders strongly proposed that there was a need to invest more in health. This was supported by the statement below.

... the country should invest more in health. (GP 1–3.2)

## Burden of disease factor

### Presence of disasters

Stakeholders perceived that the choices for health in the country were also informed by disasters. Where a disaster was present, it was seen that the strategies to contain the disaster would be prioritised and supported through the allocation of funds. An example given here was the recent call on the Kenya Government to declare Cancer a 'national disaster'.

We move towards where the disaster is. For example, cancer and especially when that disaster affects the elite in the country. (GP 2–1.3)

Similarly, the stakeholders highlighted that often decisions were reactionary, responding to immediate needs. This was a challenge that manifested in unprepared systems for NCD control in Kenya.

reactionary approaches and interventions, most of the time we wait until there is a problem ... we wait for disasters to happen and then we address them. We are not objective in the way we do our things, but we react, (GP 3–1.12)

... we have unprepared systems. (GP 3–2.14)

As a way forward, the stakeholders affirmed that there was need for a proactive approach to NCD control in Kenya.

... we should stop this habit of being reactive and become proactive in our interventions. (GP 3–3.4)

#### Priorities driven by a high focus on the treatment of NCDs

The stakeholders highlighted that often decisions were driven by a greater focus on treatment for NCDs as opposed to prevention.

... in prevention and control interventions, the priority in this is on treatment and not prevention. (GP 3–1.12)

Stakeholders felt that forces from the pharmaceutical industry push the priorities for NCD control towards a greater focus on treatment rather than prevention. This was identified as a great influence on choices for health made in Kenya.

... we have the pharmaceutical industry which also is ... more driven towards or focused on treatment rather than prevention. (GP 1–1.8)

Stakeholders said that there was a need to prioritise preventive measures in NCD control and advocate for public health measures right from the grass-root level.

we need to start to prioritize our prevention measures ... for NCD control. (GP 3–3.4)

we need to advocate for proper public health interventions starting from the grassroots ... the information doesn't trickle to the grassroots level and this is a big challenge in public health. (GP 3–3.1, 3.11)

#### Technical factors

##### Health professionals' participation in the priority setting process

Though the stakeholders acknowledged health professionals played a key role in the decisions and choices for health in priority setting for NCD control, they stated that professionals were not adequately engaged in the process.

... Professionals are not adequately engaged. ... That is something we need to strengthen. (GP 2–2.1)

In other instances, some of the professionals engaged were perceived as looking at personal interests first.

Some professionals are also driven by greed. So, you find what matters to them is their pocket more than what they want to provide for the public health. (GP 2–2.2)

To improve the priority setting process for NCD control, the stakeholders proposed that efforts should be made to fully engage the health professionals. They mentioned that there is need to build capacity among the professionals to encourage specialisation. They perceived that specialisation would enable the professionals to guide the priority setting process in a holistic, comprehensive

manner. All health practitioners were also called on to be patriotic and diligent in their service to the nation.

... we need to also build capacity, train people, professionals in certain areas, specializations, we need to promote specializations. Specialization is very important ... in the priority setting process. (SH 3–3.9)

Health practitioners- the first thing they should do is really love this country, and everything that they do should first be for the people of Kenya, so they need to be patriotic (GP 2–3.7)

#### Stakeholder engagement

Stakeholder engagement in decisions and choices for health in priority setting for NCD control in Kenya was considered critical. Stakeholders noted that there was limited integration of stakeholder engagement in the priority setting process. The composition of the stakeholders too was discussed in depth. It was concluded that there was need to have a multisectoral representation of stakeholders and look at a systems approach to health to enhance interaction and mutual support among the system components. This would ensure that there were harmonious policies in all the sectors that contribute to health, for example, the agricultural sector, the energy sector, built environment.

Furthermore, it was reported that in instances where stakeholders were engaged, often only people in top levels of management were involved. This leaves out representation from operation levels of management who are considered as being more in touch with realities at the implementation level. An emphasis on the involvement of representatives from the grassroots level was made.

there is limited integration of stakeholder forums. So, like what is happening here in this workshop\* is one of those rare things that we have to inform the public health. Note the word integrated so that it's not just about the professional medics speaking to themselves. (GP 2–2.9)

... if you take an issue like obesity and then maybe overweight, it is about nutrition, it is diet ... food is produced in agriculture but health is in the ministry of health ... sometimes ... policies exists but sometimes there is no harmony, you find that there is a policy in agriculture and there is another policy in health, ... there is conflict, like the GMO'S, people in agriculture are advocating for it but the people in health they are not for it ... but where is evidence? in the traditional medicine, there are some things which are in environment, under the ministry of environment, ... how do we utilize them in the medicine on the other side, so those kind of policies, I think there is a lot of disharmony and this creates a lot of confusion. (SH 3–3.5)

... we need to have harmonious policies and we need to look at systems approach, the systems support each other. The actions I have today as public health,

how does it affect agriculture, how does it affect the energy sector? (SH 2–3.5)

More often than not when we are called into these stakeholder workshops, we tend to focus on top level managers, ... and it is very rare we involve the top operation managers, those are the guys who are in touch with reality, they are actually the best people in practice and policy. (SH 2–2.9, 3.15)

### Media

Stakeholders reported that the national media informed choices for health through an advocacy role.

the issues in the media like cancer receive quite a lot of highlight and people get more interested in it and it can even drive the politicians to do something about it (GP 1–1.9)

While the information found in various media platforms was viewed as largely informative, it was noted that there was a lot of misinformation flowing from these sources.

We are really bombarded by media, internet and especially google, google is so famous among the Kenyans and ... it is really doing us harm and you find people calling it doctor google because doctor google 'has all the answers to our problems and to our issues'. (GP 3–2.5)

### Surveillance and research

Stakeholders reported that information gained through surveillance and research was one of the aspects that informed choices made.

There is research. The data that comes in from the system also, so it can be used to make choices (GP 1–1.10)

At times we make our choices based on scientific evidence (GP 2–1.10)

Additional key points were put across on how the use of scientific evidence to inform the decisions and choices for health in priority setting for NCD control in Kenya could be enhanced. Stakeholders strongly proposed that public health initiatives should be informed by evidence from research conducted in the country. It was noted that a substantive amount of research had taken place in Kenya, but it was perceived that the findings were not being used to inform policy. The stakeholders argued that these results were shelved away, and the context-specific findings are not used to inform our policies.

... when we take on public health initiatives, they should be evidence based and they should be informed by data and the research that has been conducted in this country, for this country. (GP 2–3.6)

... we have a lot of research that has taken place in this country a lot of research is in the shelves, so that when the policy makers sit down to make the policies,

they are not addressing the recommendations on the research that has been carried out in the country. If these are married together, it would be possible to address even the cultural issues because they are there in the researches that have been carried out, so that we are not sitting in an office and doing the policies without taking these findings in to consideration. A lot of money has been spent in research in this country and unfortunately, we are not utilizing the results from this. (SH 4–3.14)

A stakeholder present gave an example of research that she had conducted and submitted her report to the required national research body. She testified that indeed, she had not received any feedback indicating that her report had been reviewed and possibly, findings considered for implementation in Kenya. To this, stakeholders strongly acknowledged that there was need to use research results from studies conducted in the country.

... we need to utilize the research results which we have in this country to inform the decisions and choices for health in priority setting. (SH 2–3.14)

### People and other equity factors

#### Experiences and needs of the prominent people in society

As a standalone emerging theme, the experiences of the prominent people in the society were seen to have a strong influence on the priority setting process. Stakeholders perceived that often a disease would be given priority when it affected the prominent people in the country.

... we have seen it especially with cancer when it has affected our key people, cancer was still there by the way even before \*(name of prominent person 1 diagnosed with cancer and recently deceased), and \*(name of prominent person 2 diagnosed with cancer and recently deceased) and the others. ... people were not shouting because it is affecting the low people. But now it has become a problem of everybody so we are reacting to it whereas we could have done prevention before it went to such a magnitude. (GP 3–1.3)

We also move towards where the disaster is for example cancer and especially when that disaster affects the elite in the country. (GP 2–1.3)

... Sometimes ... you see maybe a disease will get more focus if somebody who was prominent suffered from it. (GP 2–1.10)

This was perceived as a great challenge because this attention to the disease or health need would be coming in too late in the day. This would often be after many people in the general population have suffered from these ailments for prolonged periods without timely preventive and control health measures. Like in the identified challenge of political bias, the stakeholders expressed the need for prioritising health for all, at all times. These



discussions brought to light the need for health equity in Kenya.

### Religious and cultural influences

Stakeholders recognised that religious and cultural influences determined what choices for health were made. An example was given of the recent debates on the human papillomavirus vaccine in Kenya.<sup>33</sup> These public debates involving religious leaders and public health practitioners had impacted on the government's immunisation programme.

... religious influences ... also determine ... what choices we make in our public health. Like recently, we had the issue with the HPV vaccine. where the public health says this and the religious leaders—say another. (GP 2–1.4)

Additional statements were given to further explain the perceived religious and cultural influences.

Culturally- there are some public health issues that people will not respond to because of culture or religious issues. (GP 2–2.4, 2.7)

there is a time ... public health conflicts with the cultural health, and religious health, that is where people would say, you know culture or religious group does not allow us to go to hospital ... (SH 1–2.4, 2.7)

... some cultural practices negate public health interventions, so we have also to look at that ... and for a long time we have added up between the cultural medicine and conventional medicine, you know the herbalists ... (SH 1–2.4)

The stakeholders indicated that perceived conflicts between public health and people's religious and cultural practices paused a great challenge for health. It was proposed that prioritised NCD control interventions should be in tandem with cultural practices and religious beliefs. The stakeholders proposed that public health practitioners should seek to educate and engage the public on health matters. They should also endeavour to tap from the wealth in cultural practices that promote public health. There was input given to the effect that practitioners of conventional medicine may not want the 'cultural medicine' to work since they may fear that they would lose their roles in society.

... so, we need to make sure that whatever interventions we have are actually in harmony with the cultural practices and religious beliefs. (SH 2–3.12)

... there is a lot of wealth in culture, in medicinal public health perspective that seems to be second guessed by the mainstream ... (SH 2–3.13)

... some doctors ... are using 'cultural medicine' but are not going to speak about it because if everyone tries this and it works ... there is a complain there. (SH 2–3.13)

### Influences from the general public

The stakeholders reported that the general public had great potential to inform the decisions and choices for health in priority setting for NCD control in Kenya. However, several perceived challenges were highlighted and an in-depth discussion of what could be done better to enable general public participation in the priority setting process ensued.

The stakeholders perceived that majority of the general public lacked knowledge on health matters. There was a lot of inaccurate information too that informed personal opinions and hence compromised the decisions made by the general public. The health-seeking behaviour was also affected by the existing levels of awareness on health issues.

We have inadequate awareness and information. People have a lot of information, but they have the wrong information and especially in health. (GP 3–2.5)

We are really bombarded by media, internet and especially google, google is so famous among the Kenyans and google has all the answers to 'all' the problems and including the health issues and it is really doing us harm and you find people calling it doctor google because doctor google has 'all' the answers to our problems and to our issues. (GP 3–2.5)

... which also ties with lack of knowledge. Our people may not be aware of certain issues that they should look at. (GP 1–2.5)

One major issue, we have a very ignorant citizen group when it comes to health issues. we are really vulnerable to the public health practitioners ... even basic health is lacking in terms of information. (GP 2–2.2)

Various proposals of what can be done better to have the general public fully engaged in the priority setting process for NCD control in Kenya were tabled. These included advocacy at the grassroots level, increased awareness on health and, implementation of integrated health education systems.

We need to better engage the affected people and create awareness in the public ... (GP 1–3.1)

... we need to have an integrated health education system so that teaching about or learning about health should have happened in any and every forum. We can have it in church so as we are improving on our spiritual growth; we also improve in our health understanding. health discussions and dialogue should be everywhere, they should be common. (GP 2–3.1)

## DISCUSSION

In our study, we aimed to explore the stakeholders' perceptions of current practice in priority setting for NCD control in Kenya. In particular, we looked at what

currently informed the decisions and choices for health in priority setting for NCD control, what were the perceived challenges in the current practice, and what could be done better. Stakeholders identified several factors as informing the decisions and choices for health in priority setting for NCD control. These included external factors such as donor funding, external stakeholders such as WHO, internal factors such as political leadership, government policies and budget allocation for NCDs, stakeholder engagement, evidence from surveillance and research, media, people's cultural and religious beliefs. All these factors, apart from external stakeholders such as WHO, were seen to pose various challenges to the priority setting process in Kenya. Various recommendations on actions that would address the identified challenges and improve the priority setting process were also presented. Below, we discuss the main findings of this study.

A notable finding in our study was that donor funding was perceived as having a great influence on the priority setting process. This finding was consistent with several studies where authors found that the donors' priorities and values influenced a nation's priority setting process.<sup>2 16 34</sup> In an evaluation of priority setting for NCD control in Uganda, stakeholders indicated that there was a misalignment between the stated priorities in the policy documents and the donor funding allocated to NCDs.<sup>2</sup> In the same study, stakeholders lamented that despite wide stakeholder involvement, major players, such as development aid partners (DAPs) were still able to exert influence on the process and the selection of priorities. The East Africa NCD Alliance Post-2015 initiative also identified misalignment between DAPs' priorities and country priorities as a key barrier that is stalling local action to control NCDs.<sup>35</sup> In our study, stakeholders expressed a desire to see less reliance on donors for funding in health in order to improve the priority setting process for NCD control in Kenya. Regrettably, this may not be realised in the immediate future due to the existing financial constraints in the country. Insufficient resources within the health sector have been identified as an ongoing hindrance to the implementation of prioritised interventions for NCD control.<sup>2 35 36</sup> While seeking to increase resources, the Kenya government has implored all development partners to use the National NCD Strategic plan to align their priorities and support the country in its efforts to lower the burden of NCD.<sup>5</sup> Since the LMICs are often the beneficiaries of donor aid, for them to succeed in the fight against NCDs, there is an urgent need for donor aid to better support NCDs as a global priority area.<sup>2</sup>

Another main finding was that utilisation of context-specific evidence derived from the findings from locally conducted research was minimal. In the study by Essue and Kapiriri<sup>2</sup> stakeholders also indicated a need for evidence on effective local interventions for NCD control. Research findings from other settings, especially high-income countries were often not directly transferrable in the LMICs. Additionally, for priority setting to fully address all values of a society, it requires

optimal tools and processes that draw on the best local evidence.<sup>2</sup> Regarding evidence from surveillance, our findings showed that there was notable progress towards enhancing surveillance on NCDs in Kenya and the timely dissemination of the findings to the decision-makers and the general population. This finding is corroborated by a benchmarking report on responses to NCDs in East Africa that highlighted the improvement of surveillance and monitoring of NCDs in East Africa.<sup>35</sup> Further, in the current national NCD control plan, the Kenya government commits to integrating NCDs and their risk factors into the existing national household surveys.<sup>5</sup> This would enable all to grasp the magnitude of the NCD burden in the country and thereby enhance evidence-based priority setting for NCD control.

Our findings also indicated that the national leadership played a key role in priority setting for NCD control. The NCD National Strategic plan 2015–2020<sup>5</sup> has put in place a rigorous process to prioritise NCD prevention and control in government agenda. In a framework for evaluating success in priority setting in LMICs, Kapiriri and Martin<sup>36</sup> found alignment of health priorities to existing government strategies as appropriate. Nonetheless, our findings also indicated that political bias was a hindrance to the decision-making process. Similarly, in their studies, Kapiriri and Martin<sup>36</sup> and Essue and Kapiriri,<sup>2</sup> found that in the implicit priority setting processes, the political bias would weigh in and influence the selection of priority areas and implementation of priorities. Good political leadership and accountability would ensure that NCD related priorities were appropriately identified, implemented.<sup>2</sup>

We also found that often a disease would be given priority when it affected the prominent people in Kenya. This finding concurs with Essue and Kapiriri<sup>2</sup> who found that often the media in Uganda would call for increased action on NCD control in response to cases of *high-profile deaths* from NCDs. From a human rights perspective, the constitution of Kenya 2010<sup>22</sup> states that every citizen has the right to the highest attainable standard of health constitution. The NCD strategic plan is firmly rooted in this. The creation of an inclusive, equitable, healthy nation where policymakers prioritise health for all<sup>37</sup> should be a paramount consideration in the priority setting process. Additionally, it is essential to adopt an equity-based approach in addressing the unequal distribution of social determinants of health attributed to the occurrence of NCD.<sup>5</sup>

Our final main finding was the perceived conflict between public health and people's religious and cultural values. This was seen to negatively impact the priority setting process for NCD control. This result is consistent with a finding by Bukachi *et al*,<sup>16</sup> and Kapiriri and Martin<sup>36</sup> who in their respective studies found that cultural contexts and public values were important measures of successful priority setting. Priority setting decisions involve social value judgments. Meaning, judgments made based on the moral or ethical values of any society; particularly, respect

for cultural beliefs.<sup>16 38</sup> Kapiriri and Martin<sup>36</sup> suggest that consideration of cultural and religious factors can be objectively verified by; determining the number and characteristics of members from the general public represented in the priority setting process and what role they play, and the number and characteristics of policy documents articulating public values and number of decisions where public values are explicitly discussed and considered. Also, the authors propose that decisions and rationales applied in the priority setting process should always be available to the public with clear provisions made for deliberation, revision of decisions if new evidence emerges, and clear appeal process. Such strategies would ensure open dialogue, and this may perhaps provide insight on how to best consider multiple religious and cultural values in the priority setting process.

Other findings in our study included the finding that decisions and choices for health made in the country were influenced by various international agencies such as the WHO. For example, the national NCD strategic plan has been adapted from the global NCD action plan 2013–2020<sup>39</sup> that aims to reduce global premature mortality from NCDs by 25% by 2025. In the Essue and Kapiriri<sup>2</sup> study, they found that aligning national priorities with global priorities set by the WHO supported efforts to get NCDs on the national policy agenda. In Kenya, though progress is noted in the translation of various international declarations and priorities into national priorities, full implementation of these priorities remains a challenge.<sup>35</sup>

Our results also showed that there was inadequate stakeholder involvement in decisions and choices for health in priority setting for NCD control. Particularly, there lacks a multi-sectoral representation of stakeholders in the process and adequate engagement of health professionals and the general public. The involvement of all relevant stakeholders has been identified as a measure of successful priority setting for NCD control.<sup>5 36</sup> Often, it is observed that health professionals are hesitant to participate in the priority setting process due to a lack of clear rationales and processes at the national level or due to a lack of implementation of prioritised policies and interventions.<sup>34</sup> Regarding the general public, empowering them with accurate knowledge of health matters builds in them the capacity to make informed choices for health and participate in the priority setting for NCD control.<sup>35</sup>

### Strengths and limitations

Purposive sampling has inherent selection bias hence generalisability of the results is limited. Despite this limitation, the views expressed in this study relating to the current practice and desired action for the improvement of the priority setting process could be relevant to other settings, particularly, other LMICs. For this study, the selection of participants was limited to stakeholders involved in making decisions for health in Kenya at the national, policymaking level. However, by carefully incorporating stakeholders from several civil society organisations, we

considered that the public would be effectively represented. Due to time and funding constraints on the project, the stakeholder recruitment was done within a limited timeframe. Further, due to the nature of work for the recruited stakeholders, work commitments made it difficult for some of them to attend our workshop. We received several apologies on the eve and the morning of the workshop day. Nevertheless, we did meet our targeted number of attendees and we achieved great representation from multiple sectors involved in priority setting for NCD control in health. Our findings are as a result of rich deliberative dialogues presented by key policymakers who devoted their time for the entire duration of our workshop.

The audio recording done in the workshop was captured at a low volume and had some background room noise. This presented a challenge in the transcription process. To ensure that all conversations were transcribed, the transcription was reviewed by three people, two of whom are authors of this paper (MNW and LK-B). Though the discussions within the smaller groups were not audio-recorded, we do not consider this to have interfered with the accurate recording of the discussions that took place. We used workshop notes from the subgroup scribes. These were on flipchart recordings for two subgroups and in a PowerPoint presentation for one subgroup. A report of the workshop was shared with all stakeholders before publication of this manuscript. Since this was an exploratory study, we did not develop a practical guide or tool to further inform the priority setting process for NCD control in Kenya. However, we are confident that our findings provide a basis for a better understanding of the current dynamics that may influence the success of priority setting for NCD control. These findings form a good basis for the acknowledgement of what is working well in practice, and what needs to be improved on. Documentation of current practice is an initial critical step towards the possible improvement of existing processes or possible introduction of new strategies for priority setting.

### Conclusion

Our exploratory study provides a glimpse of the reality of the priority setting process for NCD control in Kenya. Our findings show that the priority setting process for NCD control in Kenya is greatly influenced by the interests of donors. Additionally, the utilisation of context-specific scientific evidence on effective local interventions for NCD control is required to inform areas of priority.

The findings are important in facilitating the development of feasible and context-specific improvement of priority setting processes in Kenya and other LMICs.

There is a need for further research on existing priority setting frameworks at the national level to assess how responsive these frameworks are to these factors that are seen to inform the priority setting process for NCD control. More context-specific research on each of the identified factors is essential.

Ultimately, the goal is to ensure that the best choices are made to determine priorities for the control of NCDs. Best decisions for health will not only halt the rising NCD burden but they will also reverse the rising trend.

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