## **Original Article**





www.jehp.net DOI: 10.4103/jehp.jehp\_103\_17

## Promoting evidence-informed policymaking through capacity enhancement in implementation research for health researchers and policymakers in Nigeria: A cross-sectional study

Chigozie Jesse Uneke, Abel Ebeh Ezeoha, Henry Chukwuemeka Uro-Chukwu

## Abstract:

**BACKGROUND:** Capacity constraints on implementation research among policymakers and researchers are a major challenge to the evidence to policy link. This study was designed to bring together senior policymakers and researchers in Nigeria to consider issues around research-to-policy interface and enhance their capacity on implementation research.

**METHODS:** The design was a cross-sectional study. A 3-day joint implementation research workshop was held for policymakers and researchers using World Health Organization/TDR Implementation Research Toolkit. Assessment of participants' capacity for evidence-informed policymaking and knowledge on implementation research was done using a 5-point Likert scale questionnaire. A postworkshop key informant interview was also conducted.

**RESULTS:** A total of 20 researchers and 15 policymakers participated in the study. The interaction/partnership between policymakers and researchers was generally rare in terms of priority-setting process, involvement as coinvestigators, and executing strategies to support policymakers' use of research findings. The mean ratings (MNRs) recorded mostly ranged from 1.80 to 1.89 on the 5-point scale. Researchers were rarely involved in the generation of policy-relevant research that satisfies policymakers' needs with MNR very low at 1.74. The MNRs for capacity to acquire, assess, and adapt research were generally considerably higher among researchers (3.16–3.82) than policymakers (2.27–3.20). There was a general consensus that the training tremendously improved participants' understanding and use of implementation research.

**CONCLUSION:** Policymakers and researchers are increasingly recognizing their need to work with each other in the interest of the health systems. There is a need to create more capacity enhancement platforms that will facilitate the interface between them.

#### **Keywords:**

Evidence-informed, implementation research, policymakers, policymaking, researchers

## Introduction

In most low- and middle-income countries (LMICs), health outcomes are generally poor and the health systems

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

are underperforming. One of the major challenges associated with the poor health outcome and weak health systems in the LMICs is the lack of capacity to adequately translate research evidence into day-to-day practice.<sup>[1]</sup>

How to cite this article: Uneke CJ, Ezeoha AE, Uro-Chukwu HC. Promoting evidence-informed policymaking through capacity enhancement in implementation research for health researchers and policymakers in Nigeria: A cross-sectional study. J Edu Health Promot 2018;7:28.

Department of Health Policy and Knowledge Translation, African Institute for Health Policy and Health Systems, Ebonyi State University, Abakaliki, Nigeria

## Address for correspondence:

Prof. Chigozie Jesse Uneke, African Institute for Health Policy and Health Systems, Ebonyi State University, PMB 053, Abakaliki, Nigeria. E-mail: unekecj@yahoo. com

Received: 01-08-2017 Accepted: 07-01-2018

Restricted research capacity (especially in implementation research) has been identified as one of the constraints to addressing health-care priorities in LMICs.<sup>[1,2]</sup> Despite abundant evidence of lifesaving interventions, there is little understanding of how to deliver and implement those interventions effectively.<sup>[3]</sup>

Implementation science has been defined as "the study of methods to improve the uptake, implementation, and translation of research findings into routine and common practices (the 'know-do' or 'evidence to program' gap)."<sup>[4]</sup> Implementation research has the potential to address implementation bottlenecks, identify optimal approaches for a particular setting, and promote the uptake of research findings: ultimately, leading to improved health care and its delivery.<sup>[1,5]</sup>

According to World Health Organization (WHO), implementation research is particularly appropriate to integrate policymakers to research efforts through appropriate mechanisms.<sup>[6]</sup> One of such mechanisms that is very essential in the promotion of implementation research is the establishment of collaboration platform which will enhance interaction between policymakers and researchers. In a recent study, Peters *et al.* argued that good implementation research is collaborative research, and often most useful where implementers (policymakers) have played a part in the identification, design, and conduct phases of the research undertaken.<sup>[3]</sup>

Several reports have shown that the coming together of researchers and policymakers in this way can ensure that the knowledge generated is valid and aligned with the health need of the society.<sup>[3,6,7]</sup> This study was designed to bring together policymakers and researchers to consider issues around research-to-policy interface and to enhance their capacity in action research.

#### Methods

#### Study design and participant mapping

The study design was a cross-sectional assessment of policymakers' and researchers' capacity for evidence-informed policymaking and knowledge/skill on implementation research. The study was a subnational one which took place in Ebonyi State, Southeastern Nigeria. Participant mapping process was initiated to identify key policymakers and researchers who are relevant to this study. Following consultation with the office of the commissioner for Health of Ebonyi State Nigeria, a list of twenty senior and middle-level policymakers principally directors, heads of units, and program managers was identified and invited to participate in the study. Similarly, consultation with the office of the Director of Research in Ebonyi State University Nigeria was undertaken, and twenty principal investigators of various health-related research projects were identified and invited to participate in this study.

## **Profile of participants**

A total of 35 individuals (15 policymakers and 20 researchers) participated in the implementation research workshop. Of the 15 policymakers, 9 (60%) were females, 11 (73.3%) were 45-year-old and above, 11 (73.3%) occupied the position of director in the Ministry of Health, and up to 13 (86.7%) had more than 5 years of experience in policymaking. Of the 20 researchers who attended the workshop, 11 (55%) were females, 19 (95%) were at least aged 35 years, and 18 (90%) had more than 5 years of experience as researchers at the university level.

### Implementation research workshop

All the mapped-out policymakers and researchers were invited to a joint researchers and policymakers workshop for capacity enhancement on implementation research in April 2016. Of the 20 policymakers invited, 15 (75%) attended while all the 20 researchers invited attended. The workshop was a 3-day event and was held at Ebonyi State University. The duration of the workshop each day was 5 h. The workshop was organized in accordance with the steps outlined in the WHO/TDR Implementation Research Toolkit-Facilitators Guide (downloaded from: www.who.int/tdr/publications/topics/ir-toolkit). Among the major objectives of the workshop were to enhance participants' capacity to understand and conduct implementation research. The participants learned how to identify barriers to implementation and formulate the research question; make their case for funding; set up a study design and appropriate methodologies; plan for project (budget, personnel, timelines, monitoring, and evaluation); collect, analyze, and present research information; develop a dissemination plan; and monitor and evaluate research project. The WHO/TDR Implementation Research Toolkit-Workbook, facilitators guide, and workshop session slides were used for the training, and these were downloaded from the WHO website: www. who.int/tdr/publications/topics/ir-toolkit. The seven modules taught included (i) introduction and basic orientation, (ii) contextualizing implementation research issues, (iii) developing an implementation research proposal, (iv) planning to conduct the research, (v) Data analysis and presentation, (vi) dissemination of research findings, and (vii) monitoring and evaluation.

Two different sets of 5-point Likert scale questionnaires were administered at the workshop. The first was the self-assessment framework for implementation research cycle steps; it was validated and proven to be reliable and was from the WHO/TDR Implementation Research Toolkit-Facilitators Guide;<sup>[1]</sup> and this was used to assess comparatively the skill of policymakers and researchers regarding implementation research cycle. The second questionnaire also validated and proven to be reliable and was developed from the self-assessment tool produced by the Canadian Health Services Research Foundation (http://www.cfhi-fcass.ca/Libraries/ Documents/SAT-Self-Assessment-Tool.sflb.ashx) and focused on the use of evidence for policymaking and assessed the following:

- a. Knowledge and involvement in implementation research and its use for policymaking
- b. Knowledge about the availability and usefulness of evidence
- c. Interaction/partnership with policymakers/ researchers on use of evidence produced by researchers
- d. Individual knowledge of policymaking process
- e. Individual capacity for the use of evidence
- f. Acquisition of research evidence relevant to policymaking
- g. Assessing the validity, quality, and applicability of research evidence for policymaking
- h. Adapting the format of the research results to provide information useful for policymaking
- i. Application of evidence in decision-making relevant to policymaking.

## **Postworkshop interviews**

A telephone interview was conducted with a total of 22 participants (11 researchers and 11 policymakers) a few days after the implementation research workshop. Each interview lasted about 10 min. Participants were asked to comment on the impact of the workshop on their knowledge of implementation research and on the need for the partnership between researchers and policymakers. Their comments were noted.

## Data analysis

The data collected through the questionnaire were analyzed using the methods developed at McMaster University Canada by Johnson and Lavis.<sup>[8]</sup> The analysis is based on mean rating (MNR). For instance, the figures represent Likert rating scale of 1–5 points, where 1 = grossly inadequate, 2 = inadequate, 3 = fairly adequate, 4 = adequate, and 5 = very adequate. In terms of analysis, values below three points were considered low, whereas values ranging from 3–5 points considered high. The responses from the interview were analyzed using Giorgi's phenomenological approach,<sup>[9]</sup> which was further described by Albert *et al.*<sup>[10]</sup> The analysis followed the following steps: (i) going over all the textual data to gain an overall impression; (ii) identifying all comments that appeared noteworthy to the research, extracting these meaning units; and (iii) independent abstracting of the meaning units, followed by discussion and consensus.

## **Ethical consideration**

The ethical clearance for this study was obtained from the University Research Ethics Committee of Ebonyi State University, Nigeria. All works were performed according to the international ethical principles for medical research involving human subjects.<sup>[11]</sup>

## Results

## Knowledge and involvement in implementation research and its use for policymaking

Compared to the policymakers, the researchers had more knowledge and understanding about implementation research and the value/importance of evidence from implementation research for policymaking (with mean rating MNRs ranging from 3.11 to 3.63) [Table 1]. The researchers' institutions were also more involved in the promotion of implementation research than the policymakers (MNRs 2.95 vs. 2.60) [Table 1].

## Interaction/partnership with policymakers/ researchers on use of evidence

The interaction/partnership between policymakers and researchers was generally rare in terms of priority-setting

Table 1: Response of policymakers and researchers to questions on knowledge and involvement in implementation research and its use for policymaking in Ebonyi State, Nigeria

Parameter assessed	Mean rating policymakers	Mean rating researchers	Mean difference	Percentage mean difference
Knowledge about implementation research	2.93	3.11	0.18	6.1
Understanding about the value and importance of evidence from implementation research for policymaking	2.87	3.63	0.76	26.5
Participation in implementation research training workshop (s) in the past	2.87	2.32	0.55	23.7
Extent involved in a joint capacity enhancement training in implementation research with policymakers in the past	3.00	2.21	0.79	35.7
Extent involved as a researcher in implementation research with policymakers in the past	2.53	2.37	0.16	6.8
Adequacy of awareness of the value of implementation research in your institution	2.73	2.63	0.10	3.8
Level of effort your institution makes to promote and support implementation research	2.60	2.95	0.35	13.5

process, involvement as coinvestigators, provision of assistance with undertaking research, provision of assistance with interpreting research findings, designing and executing strategies to support the policymakers' use of the findings, acquiring existing research evidence, and assessing the quality and local applicability of existing research evidence [Table 2]. The MNRs ranged from 2.07 to 2.53 for policymakers and 2.05–2.42 for the researchers. The interaction through legislative committee testimonies and government-sponsored expert committees or public hearings was even rarer as the MNRs indicated 1.80 for policymakers and 1.58 for the researchers [Table 2].

## Knowledge of policymaking process, evidence availability, and capacity for the use of evidence

Researchers were rarely involved in the generation of policy-relevant research, especially those that will satisfy the requirements of policymakers as shown by the very low MNR of 1.74 [Table 3]. However, both the researchers and the policymakers had adequate knowledge and understanding about meaning of policy, policy context, stakeholders' and various actors' involvement in policymaking, policymaking process, and priority setting/policy agenda in policymaking. The MNRs for the policymakers ranged from 3.27 to 3.73, while the MNR of researchers ranged from 3.21 to 3.79. However, the policymakers appeared to have more understanding about the meaning of policy briefs and what policy dialog is than the researchers (MNRs 3.47, 3.53 vs. 2.63, 2.95). Both policymakers and researchers agreed that the available research evidence had little practical policy application with MNRs, respectively, showing 3.07 and 2.79 out of 5-point scale [Table 3]. The participants all had some knowledge and understanding about sources of evidence used for policymaking, types of evidence that can be used for policymaking, and what evidence is in policymaking context. The MNRs for these parameters were, however, higher for the researchers (3.78–3.88) compared to the policymakers (2.87–3.47) [Table 3].

## Acquisition, assessing, and adapting of research evidence relevant to policymaking

The knowledge and capacity of researchers to acquire, assess, and adapt research evidence relevant to policymaking were generally considerably higher than those of the policymakers. Comparatively lower MNRs (range 2.07–3.07) were recorded for policymakers

Table 2: Response of policymakers and researchers to questions on interaction/partnership with policymakers/researchers on the use of evidence for policymaking in Ebonyi State, Nigeria

Parameter assessed	Mean rating policymakers	Mean rating researchers	Mean difference	Percentage mean difference
Interaction as part of a priority-setting process to identify high-priority policy issues for which research is needed?	2.80	2.42	0.38	15.7
Interaction as part of research about high-priority policy issues that they commissioned?	2.47	2.05	0.42	20.5
Interaction as part of research about high-priority policy issues with which they were involved as a coinvestigator?	2.27	2.32	0.05	2.2
Interaction to provide assistance with undertaking research about high-priority policy issues	2.53	2.32	0.21	8.3
Interaction to provide assistance with interpreting the findings from research about high-priority policy issues	2.20	2.21	0.01	0.5
nteraction to provide assistance with designing and executing strategies to support policymakers' use of the findings from research about high-priority policy issues	2.07	2.21	0.14	6.7
Interaction to obtain assistance with acquiring existing research evidence about high-priority policy issues	2.53	2.26	0.27	11.9
nteraction to obtain assistance with assessing the quality and ocal applicability of existing research evidence about high-priority policy issues	2.33	2.21	0.12	5.15
nteraction to obtain assistance with presenting existing research evidence about high-priority policy issues to other policymakers in a useful way	2.40	2.00	0.40	20.0
nteraction through legislative committee testimonies and government-sponsored expert committees or public hearings?	1.80	1.58	0.22	13.9
nteraction through policy dialogs designed to discuss high-priority policy issues and how research evidence can inform how to address these issues	2.53	1.79	0.74	41.3
Interaction through research conferences?	2.80	2.89	0.09	3.2
Interaction through informal conversations with personal contacts?	2.87	3.37	0.50	17.4
Interaction through long-term partnerships (e.g., through an advisory board)	2.13	2.56	0.43	20.2

## Table 3: Response of policymakers and researchers to questions on knowledge of policymaking process, availability and usefulness of evidence, and capacity for use of evidence for policymaking in Ebonyi State, Nigeria

Parameter assessed	Mean rating policymakers	Mean rating researchers	Mean difference	Percentage mean difference
Extent involved in the generation of policy-relevant research in your institution	3.50	1.74	1.76	101.1
Level of knowledge of the meaning of policy	3.50	3.68	0.18	5.1
Understanding of policy context?	3.53	3.68	0.15	4.2
Knowledge about stakeholder's and various actor's involvement in policymaking	3.73	3.79	0.06	1.6
Level of understanding of policymaking process	3.47	3.37	0.10	3.0
Understanding of the meaning of priority setting/policy agenda in policy making	3.27	3.21	0.06	1.9
Level of understanding of the meaning of a policy brief	3.47	2.63	0.84	31.9
Level of understanding of what a policy dialog is	3.53	2.95	0.58	19.7
Level of your knowledge on the role of researchers in policymaking	2.87	3.47	0.60	20.9
Agreement that policymakers consider that the available research evidence had little practical policy application	3.07	2.79	0.10	3.6
Agreement that policymakers consider that the available quantitative empirical research evidence was not helpful in policymaking about health systems	2.47	2.68	0.21	8.5
Agreement that policymakers consider that the available research evidence lacked credibility	2.13	2.00	0.13	6.5
Agreement that policymakers consider that the available qualitative empirical research was helpful in policymaking about health systems	4.00	3.42	0.60	17.5
Agreement that policymakers consider that the available conceptual (i.e. nonempirical) research evidence was not helpful in policymaking about health systems	2.30	2.50	0.20	8.7
Understanding of what evidence is in policymaking context	3.47	3.88	0.41	11.8
Knowledge on the types of evidence that can be used for policymaking	2.87	3.83	0.96	33.4
Level of knowledge on the sources of evidence used for policymaking?	3.07	3.78	0.71	23.1
Capacity to identify/select relevant evidence for policy making	3.00	3.33	0.33	11.0
Ability to adapt (extract, synthesize, and present) evidence used for policy making	2.93	3.33	0.40	13.6
Ability to transform evidence into policy useable form	2.87	3.06	0.19	6.6

than researchers (3.16–3.42) in terms of their knowledge and understanding about initiating/conducting research relevant to policymaking, access and use existing research evidence, evaluate and appropriate the quality/reliability of research methodology, and to identify relevant similarities and differences between research evidence [Table 4].

## Self-assessment framework for implementation research cycle steps

The outcome of the self-assessment framework for implementation research cycle showed generally very low MNRs for both researchers and policymakers in terms of skill sets, although the MNRs from the researchers were higher than those of the policymakers [Table 5]. The MNRs for capacity to define and contextualize implementation research issues, develop implementation research proposal, plan to execute implementation research, analyze implementation research data, communicate implementation research findings and feeding them back into the health system, and monitor/evaluate the project were generally <3 points on the scale of 5 points. The MNRs range for these parameters was 2.06–3.17 for researchers and 1.58–2.17 for policymakers [Table 5].

## Outcome of interview of policymakers and researchers

A total of 22 participants (11 policymakers and 11 researchers) were interviewed. Concerning the impact of the workshop on their knowledge of implementation research, the researchers noted that the training has made them to learn how to tailor research toward policy and make it more applicable to addressing societal challenges. There was a general consensus among them that the training has tremendously improved their understanding of how to develop and execute implementation research. Some of the direct quotes from the participants are as recorded below. One of the researchers from the university gave the following comment:

"Policymakers want to be guided and getting closer to the researchers will help to sort out miscommunication."

Another researcher commenting on the partnership between the university and health ministry stated thus:

Parameter assessed	Mean rating policymakers	Mean rating researchers	Mean difference	Percentage mean difference
Adequacy of present knowledge about initiating/conducting research relevant to policymaking	2.87	3.42	0.55	19.2
Ability to access and use existing research evidence relevant to policymaking	3.07	3.37	0.30	9.8
The skill to evaluate and appropriate the quality of research methodology	2.43	3.16	0.73	30.0
The skill to evaluate the reliability of specific research evidence and to compare research methods and results	2.31	3.28	0.97	42.0
The skill to identify relevant similarities and differences between research evidence	2.27	3.21	0.94	41.4
The skill to evaluate the differences in the research evidences in the context of your organization	2.47	3.35	0.88	35.6
Present research results concisely in accessible language	2.60	3.79	1.19	45.8
Synthesize in one document relevant research as well as information and analysis from other sources	2.79	3.44	0.65	23.3
Link the research results to key issues and provide recommendations	2.79	3.82	1.03	36.9
Use of charts, tables, graphs, pictogram, bullet/power point presentations, etc.	3.20	3.79	0.59	18.4

## Table 4: Response of policymakers and researchers to questions on acquisition, assessing, and adapting of evidence for policymaking in Ebonyi State, Nigeria

"The two institutions involved i.e., the university and the health ministry should have a formal agreement for communication between researchers and policymakers."

Another researcher interviewed observed the importance for policymakers to be involved in research undertaken by researchers and noted that:

"Getting the policymakers and implementers to be part of research is a welcome development and makes for easier research implementation."

Speaking on the impact of the meeting a researcher was of the opinion that:

"The workshop was a meeting point/bridge for researchers and policymakers and created an avenue to table problems and create solutions."

-Researcher

On the other hand, a policymaker noted that:

"The workshop has contributed in opening my eyes to the need for the gap to be bridged and the need for policymakers to accommodate researchers in policy process."

Another policymaker also observed that: "There is need for team effort promotion among policymakers and researchers with emphasis on the collaboration and its importance."

Speaking on the need for the gap to be bridged between researchers and policymakers, a policymaker noted that:

"Researchers need to be carried along on policymakers' activities and there is need to bridge the communication gap."

On the issue of the partnership sustenance, a policymaker stated thus:

"To enhance sustenance, the partnership, should be domesticated in the Ministry of Health primarily; as well as the university and volunteerism should be adopted so as to eliminate the idea of allowances/monetary gain."

## Discussion

The outcome of this study suggests that a joint training workshop for policymakers and researchers can be a useful strategy for the improvement of their knowledge and understanding of implementation research and evidence to policy process. Gathoni and Godbolt<sup>[12]</sup> in a recent report noted that meetings like this can enhance the capacity of policymakers, researchers, and other stakeholders in evidence-informed policymaking. Findings from a previous study in Nigeria<sup>[13]</sup> underscored the need to bring researchers and policymakers under a common meeting point for the purpose of building partnership linkages which is a very critical component of the evidence-to-policy process. In the study, it was a consensus among the participating policymakers and researchers that collaboration between them was needful so as to align researchers more specifically to operational problems inherent in the health systems.<sup>[13]</sup> This was consistent with the report of Green and Bennett,<sup>[14]</sup> who noted that a key factor that can bridge the gaps in evidence to policy process is sufficient contact and interaction between researchers and policymakers.

To the best of our knowledge, this is the first study in Nigeria where an implementation research workshop was jointly organized for policymakers and researchers. The outcome of the self-assessment framework for implementation research cycle showed generally very low

# Table 5: Outcome of participants response to the self-assessment framework for Implementation research cycle steps - among researchers and policymakers at the implementation research training workshop in Ebonyi State, Nigeria

Skill sets	Some awareness	Understanding	Knowledge	Skills	Competence	MNRR	MNRP	Percentage mean difference
Defining and Contextualizing IR issues	We rely on our subjective views of context	We are aware of the distinctive context of IR and its range/ scope	We share a partial view of the real IR context and are filling gaps in what we know about the fuller context	We have a full factual understanding of context and are developing adaptation skills	We integrate contextual factors into all steps in the IR process/cycle to identify solutions and adapt IR approaches	2.89	1.58	82.9
Developing an IR proposal	We are familiar with research proposal components	We can distinguish specific requirements of IR proposals and projects	We have completed our IR proposal and have identified funding	We are learning more about proposal development as we implement our project and ongoing M and E	We are able to guide other project teams to use good practices in proposal development	3.17	1.83	73.2
Planning to execute IR	We have never planned IR research, so learning as we go	planning	Able to apply planning principles to our own project	We are conducting our research according to good planning principles and practices	We are working with considerable planning and are able to mentor others	2.67	1.92	39.1
Analyzing IR data	We are new to research and/or data management	We are aware of different data collection methods and distinguish quantitative and qualitative approaches	We apply appropriate research and data methods in our work	We possess specific data analysis skills	We are able to readily translate IR data into action and policy recommendations	2.61	2.17	20.3
Communicating IR findings and feeding them back into the health system	We regularly publish research results in specialized journals	We are familiar with and competent in end-of-project results dissemination	We consider dissemination and communication issues in the first meetings with key stakeholders	throughout the	We harness multiple opportunities for dissemination synergy and cooperation among project stakeholders and team	2.06	1.88	18.0
Monitoring and evaluating the project	We are new to M and E of IR	We are aware of the benefits and requirements of effective M and E	We understand what needs to be monitored and evaluated at the different stages of our project	We use M and E data from the project to conduct periodic reviews	We build M and E into all stages of proposal development, project execution, and adaptation	2.67	2.08	28.4

MNRR=Mean rating for researchers, MNRP=Mean rating for policymakers, IR=Implementation research, M=Monitoring, E=Evaluation

MNRs for both researchers and policymakers in terms of skill sets. This was not a surprise because implementation research is a relatively new and somewhat neglected field, although interest in it is growing, largely in recognition of the contribution, it can make to maximize the beneficial impact of health interventions.<sup>[3]</sup> In a recent review on policymakers' engagement initiatives to promote evidence-informed policymaking in Nigeria, Uneke *et al.*<sup>[15]</sup> identified training workshop as a major strategy for the engagement, but none was focused on

implementation research. We incorporated training on implementation research in this study to enhance the capacity of the participants, particularly the policymakers for the systematic uptake of findings from research and other evidence-based practices into policymaking and routine practice. According to WHO,<sup>[6]</sup> implementation research is increasingly being recognized as one of the most important interfaces between the availability of tools, strategies, and interventions and their use within health systems and control programs.

As indicated in previous studies,<sup>[1,5]</sup> participants in this study unanimously agreed that implementation research has the potential to address implementation bottlenecks, identify optimal approaches for a particular setting, and promote the uptake of research findings: ultimately, leading to improved health care and its delivery. According to the WHO, implementation research is particularly appropriate to integrate policymakers to research efforts through appropriate mechanisms.<sup>[6]</sup> One of such mechanisms that is very essential in the promotion of implementation research is the establishment of collaboration platform which will enhance interaction between policymakers and researchers. Peters et al. had argued that good implementation research is collaborative research, and often most useful where implementers (policymakers) have played a part in the identification, design, and conduct phases of the research undertaken.<sup>[3]</sup>

Findings from this study showed that the participants had adequate knowledge and understanding about meaning of policy, policy context, stakeholders' and various actors' involvement in policymaking, policymaking process, and priority setting/policy agenda in policymaking. This outcome was not unexpected but consistent with findings from similar previous assessments conducted in Nigeria.<sup>[13,16,17]</sup> Furthermore, knowledge of best practices in the policymaking process is on the increase globally, especially among policymakers. There are also several recent reports that have shown that there is an increasing recognition worldwide of the importance and necessity of the use of more rigorous processes to ensure that health policymaking and routine practice are evidence informed.<sup>[17-20]</sup>

In this study, there was a general agreement among the participants that interaction and partnership between policymakers and researchers was rare. To many of the participants, this was the first time they were participating in a joint policymakers and researchers workshop. Generally, opportunities for policymakers and researchers to meet together, interact with each other and to consider issues that will facilitate research-topolicy link such as priority-setting process, participating as coinvestigators in research, etc., are practically nonexistent. A previous study argued that there is the existence of very real incompatibilities between scientists and policymakers.<sup>[21]</sup> This "gap" problem between the researchers and policymakers is widespread in Nigeria as in other parts of LMICs and is affecting the evidence to policy link, as reported by previous studies.<sup>[13,22]</sup>

The need to bridge this gap, therefore, cannot be overstated. It is imperative for mechanisms to be initiated that will promote frequent interactions between policymakers and researchers. The comments of some of the participants in this study attested to their desire to work together. Evidence abound from a number of studies showing that it is only by coming together in this way that policymakers and researchers can address their differences and work together in the interest of the health systems.<sup>[13,21-23]</sup> According to the WHO report on implementation research,<sup>[6]</sup> to more effectively implement evidence-based policy, policymakers and researchers should learn together and work in partnership. The report further noted that steps should be taken to increase the demand for research use and knowledge translation through sustainable partnerships and mechanisms including knowledge translation platforms at the country level (national, provincial, and district levels) that promote the early involvement of policymakers and serve as the basis for capacity-strengthening activities.<sup>[6]</sup>

A main limitation of this study is the weakness of the self-assessment technique which we used to assess the capacity for evidence-informed policymaking and implementation research. The weakness of this technique has been highlighted by Deans and Ademokun,<sup>[24]</sup> who noted that being able to critically recognize and understand one's own gap in skills and knowledge is a difficult process which takes guided thought. Furthermore, Haahr *et al.*<sup>[25]</sup> added that self-assessments are subject to self-esteem bias, may be unreliable, and are difficult to validate. The more robust study design is recommended for future studies.

## Conclusion

Two important lessons can be drawn from this study. First, in the promotion of evidence-informed policymaking, policymakers and researchers remain the most important actors in the process. It is gladdening that both parties are increasingly recognizing their need to work with each other in the interest of the health systems. There is, therefore, a dire need to create more platforms that will facilitate the interface between them. Second, capacity enhancement in implementation research is imperative to both researchers and policymakers as this capacity will enable them to acquire the necessary skill to drive the evidence to policy link. More implementation research training programs are needed for both researchers and policymakers.

## Acknowledgments

Authors are grateful to all the policymakers, researchers, and other stakeholders in MNCH in Nigeria who participated in this study.

## Financial support and sponsorship

This investigation received financial support from the UNCICEF/UNDP/World Bank/WHO Special

Programme for Research and Training in Tropical Diseases (WHO/TDR) (Reference 2015/B40427).

### **Conflicts of interest**

There are no conflicts of interest.

## References

- World Health Organization. Implementation research toolkit-Workbook. World Health Organization on Behalf of the Special Programme for Research and Training in Tropical Diseases. Geneva, Switzerland: World Health Organization; 2014.
- Travis P, Bennett S, Haines A, Pang T, Bhutta Z, Hyder AA, et al. Overcoming health-systems constraints to achieve the millennium development goals. Lancet 2004;364:900-6.
- Peters DH, Tran NT, Adam T. Implementation research in health: A practical guide. Alliance for Health Policy and Systems Research. Geneva, Switzerland: World Health Organization; 2013.
- Padian NS, Holmes CB, McCoy SI, Lyerla R, Bouey PD, Goosby EP, et al. Implementation science for the US president's emergency plan for AIDS relief (PEPFAR). J Acquir Immune Defic Syndr 2011;56:199-203.
- MEASURE Evaluation. Fundamentals of Implementation Research. U.S. Agency for International Development (USAID); 2012. Available from: http://www.betterevaluation.org/sites/ default/files/MS-12-55.pdf. [Last accessed on 2017 Jul 30].
- World Health Organization. Implementation research for the control of infectious diseases of poverty. World Health Organization on Behalf of the Special Programme for Research and Training in Tropical Diseases. Geneva, Switzerland: World Health Organization; 2011.
- Rathgeber EM. Research Partnerships in International Health Capitalizing on Opportunity. Ottawa, Carleton University: University of Ottawa; 2009.
- Johnson NA, Lavis JN. Procedures Manual for the "Evaluating Knowledge-Translation Platforms in Low- and Middle-Income Countries" Study. Hamilton, Canada: McMaster University Program in Policy Decision-Making; 2009.
- 9. Giorgi A, editor. Sketch of a psychological phenomenological method. In: Phenomenology and Psychological Research: Essays. Pittsburgh, Pa: Duquesne University Press; 1985. p. 8-22.
- 10. Albert MA, Fretheim A, Maïga D. Factors influencing the utilization of research findings by health policy-makers in a developing country: The selection of Mali's essential medicines. Health Res Policy Syst 2007;5:2.
- WMA Declaration of Helsinki. Ethical Principles for Medical Research Involving Human Subjects; 2017. Available from: https://www.wma.net/policies-post/wma-declaration-of-hels inki-ethical-principles-for-medical-research-involving-human-s ubjects/. [Last accessed on 2017 Jul 30].
- Gathoni N, Godbolt S. Working Together to Achieve HIFA 2015: a Perspective from two HIFA 2015 Supporting Organizations. AHILA Congress; 2015. Available from: http://www.ecommons. aku.edu/cgi/viewcontent.cgi?article=1024&context=librari es. [Last accessed on 2017 Jul 30].

- Uneke CJ, Ezeoha AE, Ndukwe CD, Oyibo PG, Onwe F. Promotion of evidence-informed health policymaking in Nigeria: Bridging the gap between researchers and policymakers. Glob Public Health 2012;7:750-65.
- Green A, Bennett S. Sound Choices: Enhancing Capacity for Evidence-Informed Health Policy. Geneva, Switzerland: World Health Organization; 2007.
- Uneke CJ, Sombie I, Keita N, Lokossou V, Johnson E, Ongolo-Zogo P, *et al.* An assessment of policymakers' engagement initiatives to promote evidence informed health policy making in Nigeria. Pan Afr Med J 2017;27:57.
- Uneke CJ, Ezeoha AE, Uro-Chukwu H, Ezeonu CT, Ogbu O, Onwe F, *et al.* Enhancing the capacity of policy-makers to develop evidence-informed policy brief on infectious diseases of poverty in Nigeria. Int J Health Policy Manag 2015;4:599-610.
- Uneke CJ, Sombie I, Keita N, Lokossou V, Johnson E, Ongolo-Zogo P, *et al.* An assessment of national maternal and child health policy-makers' knowledge and capacity for evidence- informed policy-making in Nigeria. Int J Health Policy Manag 2016;6:309-16.
- Uneke CJ, Sombie I, Keita N, Lokossou V, Johnson E, Ongolo-Zogo P, *et al*. An assessment of maternal, newborn and child health implementation studies in Nigeria: Implications for evidence informed policymaking and practice. Health Promot Perspect 2016;6:119-27.
- Uneke CJ, Sombie I, Keita N, Lokossou V, Johnson E, Ongolo-Zogo P, et al. Improving maternal and child health policymaking processes in Nigeria: An assessment of policymakers' needs, barriers and facilitators of evidence-informed policymaking. Health Res Policy Syst 2017;15:48.
- Langlois EV, Becerril Montekio V, Young T, Song K, Alcalde-Rabanal J, Tran N, *et al.* Enhancing evidence informed policymaking in complex health systems: Lessons from multi-site collaborative approaches. Health Res Policy Syst 2016;14:20.
- Choi BC, Pang T, Lin V, Puska P, Sherman G, Goddard M, et al. Can scientists and policy makers work together? J Epidemiol Community Health 2005;59:632-7.
- 22. Uzochukwu B, Onwujekwe O, Mbachu C, Okwuosa C, Etiaba E, Nyström ME, *et al.* The challenge of bridging the gap between researchers and policy makers: Experiences of a health policy research group in engaging policy makers to support evidence informed policy making in Nigeria. Global Health 2016;12:67.
- 23. Gollust SE, Seymour JW, Pany MJ, Goss A, Meisel ZF, Grande D, *et al.* Mutual distrust: Perspectives from researchers and policy makers on the research to policy gap in 2013 and recommendations for the future. Inquiry 2017;54:1-11.
- Deans F, Ademokun A. Investigating Capacity to Use Evidence; 2013. Available from: http://www.inasp.info/uploads/filer\_ public/2013/07/04/investigating\_capacity\_to\_use\_evidence. pdf. [Last accessed on 2017 Jul 30].
- Haahr JH, Shapiro H, Sørensen S. Defining a Strategy for the Direct Assessment of Skills. Danish Technological Institute; 2004. Available from: http://www.pedz.uni-mannheim./ edz-b/gdbk/04/defining\_strategy\_final.pdf. [Last accessed on 2017 Jul 30].