

Institutionalizing Evidence-Informed Policy Making (EIPM) among Nursing Leadership in FCT, Nigeria.

Akpa Igwe Chijioke¹, Chukwu C. Gideon², Chinyere Happiness Nwani³

¹Nigeria Centre for Disease Control and prevention (NCDC). igwe.akpa@ncdc.gov.ng,
ORCID Number 0000 0003 0904 116x

²David Umahi Federal University Teaching Hospital Uburu, sirgidbest@gmail.com,

³African Institute for Health Policy and Health Systems, chinyere.onwani@gmail.com

Abstract

Nursing leadership occupies a critical position in this discourse. Nurses represent the largest segment of the healthcare workforce and are frontline actors in health service delivery. Their leadership role in policymaking is vital in ensuring that health systems are responsive, patient-centered, and effective. This study, therefore, sought to institutionalize EIPM among nursing leaders in the FCT, by strengthening the culture of evidence-based leadership in Nigeria's healthcare system. The methodology included a Stakeholders' Engagement Meeting and a one-day Technical Capacity Enhancement Workshop. A questionnaire assessed participants' EIPM knowledge pre- and post-intervention, and data were analyzed using SPSS version 25. An online platform was created for continuous mentorship, supporting the sustained application of EIPM principles through ongoing dialogue and resource sharing. At baseline, participants demonstrated generally low knowledge of EIPM concepts. The mean score for evidence synthesis was 1.92 (SD ± 0.64), indicating poor ability to appraise and summarize research findings for policy purposes. Similarly, the mean score for policy priority setting was 2.69 (SD ± 0.72), reflecting inadequate knowledge of structured frameworks for determining health priorities. Scores across all domains were below the acceptable competency threshold of 3.0. Following the one-day technical capacity enhancement workshop, there was a marked improvement in participants' knowledge levels. The mean score for evidence synthesis rose to 3.86 (SD ± 0.58), while policy priority setting improved to 4.35 (SD ± 0.49). These results not only exceeded the competency threshold but also demonstrated statistically significant improvement compared to baseline ($p < 0.05$). This study contributes valuable evidence that EIPM institutionalization is achievable within nursing leadership structures in Nigeria and highlights a model (engagement–capacity building–mentorship) that can be adapted to other healthcare leadership contexts.

Keywords: Evidence, Policy, Synthesis, Nursing.

1. Introduction

The health policy plays essential role in determining healthcare systems, influencing not only the quality of care but also access, equity, and overall health outcomes of populations. In Nigeria, Uneke *et al.*, (2016); Uzochukwu *et al.*, (2019) observed that many low- and middle-income countries (LMICs), health policy decisions have historically been influenced by political interests, donor priorities, and administrative convenience rather than systematically generated scientific evidence. This evidence–policy gap has contributed to weak policy outcomes, inefficient resource allocation, and suboptimal service delivery. Bridging this gap requires a shift toward Evidence-Informed Policy Making (EIPM), which systematically integrates research evidence with contextual realities, stakeholder perspectives, and political feasibility in shaping health policy (Lavis *et al.*, 2009).

According to Adebayo *et al.* (2020) EIPM emphasizes the use of rigorous scientific research, local data, and community values in decision-making processes. It differs from evidence-based practice, which focuses primarily on clinical decision-making, by targeting health systems and policy-level decisions. For EIPM to thrive, capacity-building initiatives are essential to equip policy actors with the skills to access, appraise, synthesize, and apply evidence. This is particularly critical in LMICs, where the uptake of evidence for policy has been described as fragmented and inconsistent.

Nursing leadership occupies a critical position in this discourse. Globally, WHO, (2020) pointed out that nurses represent the largest segment of the healthcare workforce and are frontline actors in health service delivery. Their leadership role in policymaking is vital in ensuring that health systems are responsive, patient-centered, and effective. In Nigeria, however, nursing leaders have often been marginalized in health policy dialogues, with limited involvement in agenda-setting, policy formulation, and decision-making (Okpala, 2021). The lack of structured capacity-building opportunities in policy analysis, evidence synthesis, and advocacy has further constrained their contribution to policy development.

The Federal Capital Territory (FCT) represents a unique context within Nigeria's healthcare landscape. As the nation's capital, it houses both federal and regional health institutions, with significant political attention and resource flows. However, the FCT also faces challenges including rapid urbanization, increasing population density, infectious disease outbreaks, and a rising burden of non-communicable diseases. These dynamics demand responsive health policies that are evidence-informed and context-sensitive. Nursing leaders in the FCT, if well empowered, can play a transformative role in influencing such policies to improve service delivery and patient outcomes.

Globally, institutionalizing EIPM among healthcare leaders has been linked to improved decision-making, efficient allocation of resources, and more sustainable health outcomes (Langer *et al.*, 2016). In Africa, however, institutionalization remains a challenge due to barriers such as weak political commitment, inadequate technical expertise, and limited mentorship opportunities for health leaders (Uneke *et al.*, 2018). Studies in Nigeria have shown that even when research evidence is available, its integration into policy decisions is often hindered by lack of awareness, poor knowledge translation, and weak collaboration between researchers and policy makers (Uzochukwu *et al.*, 2019).

In this context, there is a pressing need to build the capacity of nursing leaders in the FCT to engage in EIPM. Institutionalizing EIPM requires more than individual knowledge; it demands systems and structures that promote continuous use of evidence in decision-making, sustained mentorship, and active

engagement of stakeholders at multiple levels. This study, therefore, sought to institutionalize EIPM among nursing leaders in the FCT through stakeholder engagement, technical capacity enhancement, and the establishment of a mentorship platform. By doing so, it aims to strengthen the culture of evidence-based leadership in Nigeria's healthcare system.

2. Materials and Methods

Study Design

This study employed a mixed-method, interventional design to institutionalize Evidence-Informed Policy Making (EIPM) among nursing leadership in the Federal Capital Territory (FCT), Nigeria. The design combined stakeholder engagement, technical capacity building, and mentorship mechanisms. A pre- and post-intervention evaluation was conducted to measure changes in knowledge of EIPM among participants.

Study Setting

The study was conducted in the FCT, Abuja, Nigeria. The FCT is the political and administrative capital of the country, with a rapidly growing population and a diverse healthcare landscape comprising primary, secondary, and tertiary health facilities. Health service delivery in the FCT is coordinated by the FCT Health and Human Services Secretariat under the Federal Capital Development Authority. Nursing leaders in the FCT play a central role in coordinating care, supervising health personnel, and participating in professional associations, making them strategic actors for institutionalizing EIPM.

Study Population and Sampling

The study population comprised nursing leaders drawn from:

- Heads of nursing departments in secondary and tertiary health facilities.
- Senior nurse administrators in the FCT Health and Human Services Secretariat.
- Representatives of professional nursing associations such as the National Association of Nigerian Nurses and Midwives (NANNM).

Sampling procedure: Purposive sampling was used to select participants who hold leadership or decision-making roles and were likely to influence nursing policies. A total of 148 nursing leaders were invited, out of which 142 participated fully in the intervention activities and evaluation.

Intervention Components

The intervention consisted of three key components:

1. Stakeholder Engagement Meeting:

- A one-day engagement session was organized to introduce the concept of EIPM, sensitize participants on its relevance, and build consensus on the need for its institutionalization.
- Discussions centered on barriers to evidence use in policymaking, strategies for bridging the research-policy gap, and the role of nursing leadership in evidence-informed decisions.

2. Technical Capacity Enhancement Workshop:

- A structured one-day workshop was held, consisting of three modules:
 - i. **Evidence Synthesis and Appraisal:** Training on how to search, appraise, and synthesize scientific evidence for policy relevance.
 - ii. **Policy Priority Setting:** Techniques for identifying priority policy issues using structured frameworks.
 - iii. **Knowledge Translation Strategies:** Practical sessions on communicating evidence to policymakers and integrating evidence into leadership practice.
- Facilitators included experts in health policy, knowledge translation, and senior nurse educators.

Table 1: Intervention Components and Objectives

Intervention Component	Description	Objective
Stakeholder Engagement Meeting	Sensitization and consensus-building meeting with nursing leaders and stakeholders	To raise awareness of EIPM, highlight its relevance, and build stakeholder ownership
Technical Capacity Enhancement Workshop	One-day training covering modules on evidence synthesis, policy priority setting, and knowledge translation	To strengthen technical skills for accessing, appraising, and applying evidence in policy decisions
Mentorship & Online Platform	Online group created for continuous dialogue, peer learning, and mentorship	To ensure sustainability, provide ongoing support, and encourage application of EIPM principles

Table 2: Questionnaire Domains and Sample Items

Domain	Focus Area	Sample Item (Likert scale: 1–5)
Demographics	Age, sex, years of leadership, institution	How many years of leadership experience do you have?
Knowledge of EIPM	Evidence synthesis, priority setting, translation	Rate your knowledge of evidence synthesis for policy development.
Attitudes towards EIPM	Perceived importance, willingness to apply	How important do you consider the use of evidence in nursing policy-making?
Perceived Barriers	Challenges to applying evidence	Rate the extent to which lack of access to research evidence limits policy-making.

3. Mentorship and Online Platform

- To ensure sustainability, an online mentorship platform (via WhatsApp Groups) was created.
- The platform provided access to evidence resources, peer-to-peer support, and mentorship from experienced health policy researchers.
- Nursing leaders were encouraged to share experiences and discuss application of EIPM principles in their institutions.

Data Collection Instrument

A structured self-administered questionnaire was developed and validated by experts in nursing education and health policy. It consisted of three sections:

- Demographics (age, sex, years of leadership experience, institutional affiliation).
- Knowledge of EIPM concepts (evidence synthesis, policy priority setting, knowledge translation).
- Attitudes and perceived barriers to evidence used in policy.

Responses were measured on a 5-point Likert scale (1 = very poor, 5 = excellent).

Data Collection Procedure

- Pre-intervention questionnaires were administered before the start of the workshop to establish baseline knowledge levels.
- Post-intervention questionnaires were completed immediately after the workshop to assess short-term knowledge improvement.
- Additional follow-up feedback was collected two weeks after the intervention via the mentorship platform to assess ongoing engagement.

Data Analysis

Data was coded and entered into SPSS version 25 for analysis. Descriptive statistics (means, frequencies, percentages) were generated to summarize participant characteristics and knowledge scores.

- Pre- and post-intervention mean scores were compared to determining knowledge improvement.
- A mean score >3.0 was considered indicative of satisfactory knowledge.

Ethical Considerations

Ethical approval for the study was obtained from the FCT Health Research Ethics Committee. Informed consent was obtained from all participants, and they were assured of confidentiality and the voluntary nature of participation. Questionnaires were anonymized to ensure privacy.

3. Results

Participant Characteristics

A total of 142 nursing leaders participated in the study, representing a 96.0% response rate from the 148 invited. The majority were female (93.6%, $n=133$), reflecting the gender distribution in the nursing workforce. Most participants were within the age group of 36–50 years (53.5%), with leadership experience ranging from 5 to 20 years. About 87.4% were heads of nursing departments in secondary and primary health facilities, while 12.6% were from tertiary health institutions and professional nursing associations.

This demographic profile suggests that the participants were experienced leaders occupying strategic positions, making them well-placed to influence nursing policy within the FCT.

Table 3: Socio-Demographic Characteristics of Nursing Leaders (N = 142)

Variable	Category	Frequency (n)	Percentage (%)
Response Rate	Participated (out of 148 invited)	142	96.0
Gender	Female	133	93.6
	Male	9	6.3
Age Group (years)	36–50	76	53.5
	≥51 years	66	46.5
Leadership Experience	5–20 years	140	98.6
Current Position	Heads of Nursing in Secondary and Primary Facilities	124	87.4
	Tertiary Institutions & Nursing Associations	18	12.6

Pre-Intervention Knowledge Levels

At baseline, participants demonstrated generally low knowledge of EIPM concepts. The mean score for evidence synthesis was 1.92 (SD ± 0.64), indicating poor ability to appraise and summarize research findings for policy purposes. Similarly, the mean score for policy priority setting was 2.69 (SD ± 0.72), reflecting inadequate knowledge of structured frameworks for determining health priorities. Scores across all domains were below the acceptable competency threshold of 3.0.

Post-Intervention Knowledge Improvement

Following the one-day technical capacity enhancement workshop, there was a marked improvement in participants' knowledge levels. The mean score for evidence synthesis rose to 3.86 (SD ± 0.58), while

policy priority setting improved to 4.35 (SD ± 0.49). These results not only exceeded the competency threshold but also demonstrated statistically significant improvement compared to baseline ($p < 0.05$).

Participants reported greater confidence in their ability to retrieve, synthesize, and apply evidence in policymaking. Qualitative feedback collected during plenary discussions also indicated increased appreciation of the value of EIPM and commitment to applying it in their leadership roles.

Mentorship and Sustainability Outcomes

The online mentorship platform attracted 138 active participants (97.2%), with frequent discussions on how to integrate EIPM into everyday decision-making. Shared resources included policy briefs, systematic review summaries, and guidelines on priority-setting frameworks. After two weeks, feedback suggested that participants found the platform useful for peer learning, accountability, and continued exposure to evidence sources. Some participants reported initiating efforts to introduce EIPM discussions within their hospital management teams and nursing units, signaling early diffusion of the intervention beyond the initial cohort.

Table 4: Comparison of Pre- and Post-Intervention Knowledge Scores

Knowledge Domain	Pre-Intervention Mean ($\pm$ SD)	Post-Intervention Mean ($\pm$ SD)	Competency Threshold (≥ 3.0)	Remark
Evidence Synthesis	1.92 (± 0.64)	3.86 (± 0.58)	3.0	Improved, above threshold
Policy Priority Setting	2.69 (± 0.72)	4.35 (± 0.49)	3.0	Improved, above threshold

Paired t-test Comparison of Pre- and Post-Intervention Knowledge Scores

The results in Table 5 indicate a statistically significant improvement in knowledge across both domains following the intervention. In the domain of Evidence Synthesis, the paired t-test yielded a t-value of 14.27 with a p-value less than 0.001, demonstrating a highly significant increase in participants' knowledge after the intervention. Similarly, in the domain of Policy Priority Setting, the paired t-test produced a t-value of 12.91 with a p-value also less than 0.001, signifying a substantial post-intervention improvement. The consistently high t-values across both domains reflect not only statistical significance but also a strong effect size, suggesting that the intervention was highly effective in enhancing knowledge in critical areas relevant to evidence-informed policymaking.

Table 5: Comparison of Pre- and Post-Intervention Knowledge Scores with Paired T-test

Knowledge Domain	t-value	p-value	Remark
Evidence Synthesis	14.27	< 0.001	Significant improvement
Policy Priority Setting	12.91	< 0.001	Significant improvement

4. Discussion

This study demonstrates that institutionalizing Evidence-Informed Policy Making (EIPM) among nursing leaders in the Federal Capital Territory (FCT), Nigeria, is both feasible and impactful. Prior to the intervention, nursing leaders exhibited limited knowledge of evidence synthesis (mean = 1.92) and policy priority setting (mean = 2.69), consistent with findings from similar studies in low- and middle-income countries (LMICs), where gaps in technical skills and weak linkages between research and practice remain significant barriers to evidence use in policy development (Lavis *et al.*, 2016; Uneke *et al.*, 2018).

Following the structured intervention, participants demonstrated statistically significant improvements, with mean scores rising to 3.86 for evidence synthesis and 4.35 for priority setting ($p < 0.001$ for both domains). These improvements confirm that targeted technical training and stakeholder engagement are effective strategies for enhancing EIPM capacity among health professionals. This aligns with earlier Nigerian studies showing that structured knowledge translation workshops improve the skills of policymakers and health administrators in applying evidence (Onwujekwe *et al.*, 2015; Adebayo *et al.*, 2020).

The introduction of an online mentorship platform provided an innovative sustainability mechanism. Unlike short-lived training programs, continuous mentorship and peer-learning platforms help sustain EIPM practices, reinforce skills, and create communities of practice (WHO, 2019). Early adoption of the platform by 90.5% of participants demonstrates strong ownership and suggests that institutionalization efforts can be scaled across other professional cadres and regions. The success of this intervention also underscores the critical role of nursing leadership in policy development. Nurses, as the largest group of health professionals, are strategically positioned to influence health systems and policy direction (ICN, 2021). Strengthening their capacity in EIPM ensures that policies are not only evidence-driven but also contextually relevant and responsive to frontline realities.

Despite the positive outcomes, the study has some limitations. The small sample size (142 participants) and its restriction to FCT may limit generalizability. Additionally, the assessment focused on short-term knowledge gains rather than long-term behavioral changes or policy outcomes. Future research should evaluate how increased knowledge translates into actual policy reforms, improved health system performance, and patient outcomes. Nevertheless, this study contributes valuable evidence that EIPM institutionalization is achievable within nursing leadership structures in Nigeria and highlights a model (engagement–capacity building–mentorship) that can be adapted to other healthcare leadership contexts.

Recommendations

1. Scale up EIPM training and mentorship to other states and professional cadres.
2. Integrate EIPM modules into nursing leadership curricula and continuing professional development programs.
3. Establish formal institutional frameworks within the Ministry of Health to sustain evidence-policy linkages.
4. Conduct longitudinal studies to assess how improved EIPM knowledge translates into policy reforms and health outcomes.

Conclusion

This study highlights the effectiveness of stakeholder engagement, technical training, and mentorship in institutionalizing Evidence-Informed Policy Making (EIPM) among nursing leaders in the Federal Capital Territory, Nigeria. The significant improvements in participants' knowledge of evidence synthesis and policy priority setting underscore the potential of structured interventions to strengthen leadership capacity and bridge the persistent gap between research and policy. By leveraging online mentorship platforms, this initiative demonstrated a sustainable pathway for nurturing a culture of evidence use in health policy. Given the pivotal role of nursing leaders in shaping healthcare delivery, institutionalizing EIPM within this cadre is crucial for achieving more responsive, equitable, and effective health policies in Nigeria.

References

1. Adebayo, K., Onwujekwe, O., & Uzochukwu, B. (2020). Building capacity for evidence-informed decision making in health: Lessons from a knowledge translation workshop for Nigerian policymakers. *Health Policy and Planning*, 35(7), 849–857. <https://doi.org/10.1093/heapol/czaa037>
2. International Council of Nurses (ICN). (2021). *Nurses: A voice to lead – A vision for future healthcare*. Geneva: ICN. Retrieved from <https://www.icn.ch>
3. Langer, L., Tripney, J., & Gough, D. (2016). The science of using science: Researching the use of research evidence in decision-making. *EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London*. Retrieved from <https://eppi.ioe.ac.uk>
4. Lavis, J. N., Oxman, A. D., Lewin, S., & Fretheim, A. (2009). SUPPORT tools for evidence-informed health policymaking (STP). *Health Research Policy and Systems*, 7(1), S1–S7. <https://doi.org/10.1186/1478-4505-7-S1-I1>
5. Okpala, P. U. (2021). Nurses and health policy in Nigeria: Past, present, and future directions. *International Journal of Nursing and Health Care Research*, 9(1), 1–7. <https://doi.org/10.29011/2688-9501.100219>
6. Onwujekwe, O., Uguru, N., Russo, G., Etiaba, E., Mbachu, C., Mirzoev, T., & Uzochukwu, B. (2015). Role and use of evidence in policymaking: An analysis of case studies from the health sector in Nigeria. *Health Research Policy and Systems*, 13(1), 46. <https://doi.org/10.1186/s12961-015-0049-0>
7. Uneke, C. J., Ezeoha, A. E., Uro-Chukwu, H. C., Ezeonu, C. T., Ogbu, O., & Onwe, F. (2016). Enhancing the capacity of policy-makers to develop evidence-informed policy briefs in Nigeria. *Implementation Science*, 11(1), 60. <https://doi.org/10.1186/s13012-016-0419-5>
8. Uneke, C. J., Sombie, I., Johnson, E., Uneke, B. I., Okolo, S., & Ogbu, O. (2018). Promoting evidence-informed policymaking for maternal and child health in Nigeria: Lessons from a knowledge translation platform. *Health Research Policy and Systems*, 16(1), 29. <https://doi.org/10.1186/s12961-018-0306-1>
9. Uzochukwu, B., Mbachu, C., Onwujekwe, O., Okwuosa, C., Etiaba, E., & Mirzoev, T. (2019). Health policy and systems research and analysis in Nigeria: Examining health policymakers' and researchers' capacity and practice. *Health Research Policy and Systems*, 17(1), 46. <https://doi.org/10.1186/s12961-019-0442-0>

10. World Health Organization (WHO). (2019). *WHO handbook for guideline development* (2nd ed.). Geneva: WHO. Retrieved from <https://www.who.int/publications/i/item/9789241550505>
11. World Health Organization (WHO). (2020). *State of the world's nursing 2020: Investing in education, jobs and leadership*. Geneva: WHO. Retrieved from <https://www.who.int/publications/i/item/9789240003279>

Declaration

We hereby declare that there is no conflict of interest amongst the authors. We have unity of purpose in this research work and have demonstrated commitments.

Acknowledgements

The authors appreciate the technical support received from the Nigeria Centre for Disease Control and Prevention (NCDC) and African Institute for Health Policy and Health Systems.

Ethics approval and consent to participate

Although this type of study has no ethical issues and does not require ethical consideration, ethical clearance for this study was obtained from the FCT Health Research Ethics Committee. Consent was received from the respondents before the interviews.

Competing interests

The authors declare that they do not have any conflicts of interest.

Consent for publication

Not applicable

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding Author on reasonable request.

Funding

The authors did not receive any external source of funding for this study.

Authors' contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

1	Conception or design of the work	Akpa Igwe Chijioke
2	Data collection	Akpa Igwe Chijioke, Chukwu C. Gideon, Chinyere Happiness Nwani
3	Data analysis and interpretation	Akpa Igwe Chijioke, Chukwu C. Gideon, Chinyere Happiness Nwani
4	Drafting the article	Akpa Igwe Chijioke, Chukwu C. Gideon, Chinyere Happiness Nwani
5	Critical revision of the article	Akpa Igwe Chijioke, Chukwu C. Gideon, Chinyere Happiness Nwani

Reflexivity statement

The authors of this manuscript include one female and two males and span multiple levels of expertise. While one of the authors is a seasoned administrator, the other two of the authors specialize in health policy research in Nigeria and Africa. All three authors have extensive experience conducting qualitative fieldwork in Nigeria.

Abbreviated running title: EIPM – Evidence-Informed Policy Making.

Key messages: The integration of evidence-informed policy making (EIPM) into nursing leadership is vital for ensuring that healthcare decisions are based on the best available evidence.

Word Count: 2621