













Research Article

Cross-Sectional Analysis of Demographic Factors Influencing Health Research Utilization in Nigeria

Michael Avwerhota^{1,*} , Ebenezer Obi Daniel^{2,3} , Oladayo Olarinre Avwerhota⁴ , Taiwo Aderemi Popoola⁵ , Israel Olukayode Popoola⁶ , Adebanye Adetutu Ogun⁷ , Ahmed Mamuda Bello³ , Michael Olabode Tomori³ , Aisha Oluwakemi Salami³ , Celestine Emeka Ekwuluo⁸ , Olukayode Oladeji Alewi³ , Aremu Bukola Janet³ 

¹Department of Public Health, Atlantic International University, Hawaii, United States of America

²Department of Public Health, Swansea University, Swansea, United Kingdom

³Department of Public Health, Texila American University, Georgetown, Guyana

⁴Department of Biostatistics, Faculty of Public Health, University of Ibadan, Ibadan, Nigeria

⁵Department of Research, Smartnovation Limited, Birmingham, United Kingdom

⁶Department of Epidemiology and Community Health, University of Ilorin, Ilorin, Nigeria

⁷Department of Policy, Governance, Liaison, and Support, International Organization for Migration, Abuja, Nigeria

⁸Department of Health and Nutrition Sector, International Medical Corps, Kyiv, Ukraine

Abstract

Health research utilization is essential for evidence-based policymaking and the implementation of effective health interventions. This cross-sectional study analyzes demographic factors influencing the utilization of health research in Nigeria, focusing on public health professionals and policymakers. The study employed a cross-sectional descriptive design and used a purposive sampling method to recruit participants from various public health and health policy platforms. Data was collected through a structured questionnaire administered via Google Survey. The study reveals a predominant participation of female respondents (56.5%) and a mean participant age of 41.5 years, with a significant concentration in the 41-50 years age group. The majority hold a master's degree in public health (58.5%), reflecting the high academic qualifications within the sector. Despite this, the perceived utilization of research findings is overwhelmingly poor, highlighting a substantial gap between research production and practical application. The study finds significant relationships between age and perceptions of research utilization, suggesting that mid-career professionals may have different views on the challenges and opportunities for integrating research into health policy. These findings underscore the need for targeted strategies to enhance the practical application of health research, emphasizing the importance of improving access to research findings and ensuring their relevance to local contexts. This research contributes to understanding the barriers to effective knowledge translation and suggests avenues for fostering a more evidence-based approach to public health in Nigeria.

Keywords

Demographic Factors, Health Research Utilization, Public Health Professionals, Policymakers, Evidence-Based Policy-Making, Knowledge Translation

*Corresponding author: hecorn2000@gmail.com (Michael Avwerhota)

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1. Introduction

Health research utilization is a cornerstone of effective public health practice, providing the foundation for evidence-based policymaking and the implementation of interventions aimed at improving population health outcomes. The process of integrating research findings into health policies and practices is multifaceted and influenced by various demographic factors. This introduction explores these factors in depth, highlighting how they shape the use and application of health research by public health professionals and policymakers.

Public health professionals and policymakers rely on a robust body of research to inform decisions and strategies. The utilization of health research is essential for designing interventions that are not only effective but also equitable and sustainable. However, despite the abundance of health research available, its application in real-world settings often falls short. One of the significant barriers to effective health research utilization is the accessibility of research findings. Studies have shown that access to research publications is unevenly distributed, with professionals in low- and middle-income countries facing substantial barriers compared to their counterparts in high-income countries [1]. This disparity can be attributed to a lack of resources, such as subscription-based journal access and insufficient infrastructure for disseminating research findings [2].

Moreover, the translation of research into practice requires not only access to information but also the ability to critically appraise and apply it appropriately. Educational background and training play a crucial role in this regard. Public health professionals with advanced degrees and specialized training in epidemiology or biostatistics are more likely to utilize research effectively [3]. Conversely, those with limited training may struggle to interpret complex research findings, which can hinder their ability to incorporate evidence into practice.

Another critical factor influencing health research utilization is the relevance of research findings to the local context. Research conducted in high-income countries often dominates the literature, which may not always be applicable to low- and middle-income settings due to differences in disease burden, healthcare infrastructure, and sociocultural factors [4]. For instance, a study on the effectiveness of a particular intervention in a well-resourced urban area in Europe may not be directly translatable to a rural setting in sub-Saharan Africa. This lack of contextual relevance can discourage the use of research findings, as public health professionals and policymakers seek solutions that are tailored to their specific needs and circumstances [5].

The engagement of public health professionals in the research process itself can also enhance the utilization of health research. When professionals are involved in identifying research questions, designing studies, and interpreting results,

they are more likely to value and apply the findings [6]. Collaborative research efforts that include local stakeholders can ensure that the research addresses pertinent issues and produces actionable insights. Furthermore, involving policymakers in the research process can help bridge the gap between evidence and policy, fostering a culture of evidence-based decision-making [7].

Demographic factors such as age, gender, and ethnicity significantly influence health research utilization. Younger professionals, often more comfortable with digital technology, may have better access to online research databases and are more adept at using advanced search tools to find relevant studies [8]. Gender can also play a role, as women in some settings may face additional challenges in accessing education and professional development opportunities that are crucial for effective research utilization [9]. Ethnicity and cultural background can impact the interpretation and acceptance of research findings, particularly if the research does not consider the specific cultural context of the target population [10]. Socioeconomic status is another critical factor, as individuals from lower socioeconomic backgrounds may have fewer opportunities for higher education and professional training, limiting their ability to engage with and apply health research [11].

The integration of health research into policy and practice is further influenced by the organizational environment and the availability of supportive infrastructure. Institutions that prioritize evidence-based practice and provide resources such as access to research databases, training in research methods, and opportunities for continuous professional development are more likely to see higher levels of research utilization [12]. Leadership within public health organizations also plays a pivotal role in fostering a culture of research utilization. Leaders who champion the use of evidence in decision-making can influence their teams to value and apply research findings, creating an environment where evidence-based practice is the norm [13].

The dissemination of research findings is another critical aspect of health research utilization. Traditional methods of dissemination, such as publication in peer-reviewed journals, may not reach all relevant stakeholders, particularly those in resource-limited settings. Innovative dissemination strategies, including open-access publishing, policy briefs, and knowledge translation platforms, can help bridge this gap. Additionally, the use of digital and social media can enhance the reach and impact of research findings, making them more accessible to a broader audience [14].

2. Method

2.1. Study Design

The study employed a cross-sectional descriptive design.

This approach was chosen to gather data on the utilization of research findings in health within Nigeria, to identify perceived barriers to such utilization, and to develop recommendations for improving the use of research findings in health.

2.2. Sampling Technique

A purposive sampling method was utilized to recruit participants from various public health professional and health policy maker platforms. This method was selected to focus on individuals with specific characteristics relevant to the study, namely, those involved in public health research and the utilization of research findings for health policy and intervention development. Given the unknown and potentially uneven distribution of these professionals, purposive sampling was deemed appropriate.

2.3. Data Collection

Data was collected using a structured questionnaire administered via Google Survey. The questionnaire was designed to capture quantitative data on several aspects, including:

- 1) Demographic characteristics of respondents
- 2) Perceived utilization of research findings in health
- 3) Effective systems for the dissemination and utilization of research findings
- 4) The importance of utilizing research findings
- 5) Challenges and barriers to the utilization of research findings
- 6) Recommendations for improving the utilization of research findings

The questionnaire was pre-tested for validity and necessary adjustments were made before full deployment. The survey link was distributed through various public health and related social media and email platforms, inviting voluntary participation from public health professionals and health policy makers across Nigeria.

2.4. Ethical Considerations

To ensure ethical compliance, the study adhered to the following guidelines:

Anonymity and Confidentiality: No names or contact information were requested from participants, ensuring their anonymity. Collected data was kept confidential and securely stored with password protection.

Informed Consent: Participants were informed about the study's purpose in a language they could easily understand, and their consent was obtained. Participation was voluntary, with respondents free to withdraw at any stage without any coercion.

Voluntary Participation: Respondents were not coerced into participating and were informed that they could withdraw at any time.

Data Protection: All collected information was kept confidential and protected from unauthorized access.

These measures were in place to comply with scientific principles and international ethical guidelines for research involving human subjects.

3. Result

3.1. Socio-Demographic Characteristics of Respondents

Table 1 shows that there are more females (56.5%) than male (43.5%) respondents. Participants mean age was 41.5. There were more respondents (30.1%) from age group 41 to 50years followed with age group 31 to 41years (28.1%), 51-60years (20.1%), 21-30years (18.9%), and age group 61years and above (2.8%).

Majority, (58.5%) had master's degree in public health while 13.7% had Doctorate degree in Public Health, 6.7% had bachelor's degree in public health and 21.1% had non-public health degree. Majority of the respondents (78.1%) are from the Public Health Professional work area while 21.9% are from the Health Policy maker work area.

Table 1. Socio-demographic characteristics of the research participants N=402.

Socio-demographic characteristics	No of respondents	Percent (%)
Sex		
Male	175	43.5
Female	227	56.5
Total	402	100
Age		
21-30 years	76	18.9
31-40 years	113	28.1

Socio-demographic characteristics	No of respondents	Percent (%)
41-50 years	121	30.1
51-60 years	81	20.1
61 years & above	11	2.8
Total Mean age was 41.5	402	100
Educational Level		
Bachelor Public Health	27	6.7
Master's in Public Health	235	58.5
Doctorate in Public Health	55	13.7
Non-Public Health Degree	85	21.1
Total	402	100
Work Area		
Public Health Professional	No of respondents	Percent (%)
Public Health Professional	314	78.1
Health Policy Maker	88	21.9
Total	402	100

3.2. Participants Perception of Whether Research Findings Are Being Utilized in Heath in Nigeria

From table 2, Out of the total 175 male respondents, 28.0% indicated that research findings are being utilized in heath in Nigeria, while 27.0% of the total 227 female respondents indicated that research findings are being utilized in heath in Nigeria. Chi square value is 0.528 and p value is 0.768, showing no significant relationship between gender and participants perception of whether research findings are being utilized in heath in Nigeria.

More proportion (36.0%) of those aged 51-60years and 21-30years alike, indicted that research findings are being utilized in heath in Nigeria, than those aged 31-40years (30.0%), 41-50years (16.0%) and those aged 61 and above (18.0%), Chi square value is 18.377 and p value is 0.019,

showing significant relationship between age group and participants perception of whether research findings are being utilized in heath in Nigeria.

More proportion (33.0%) of those with bachelor's degree in public health indicted that research findings are being utilized in heath in Nigeria, followed by those with doctorate degree in Public Health and non-Public Health degree alike (31.0%), followed with those with master's degree in public health (25.0%). Chi square value is 4.669 and p value is 0.587, showing no significant relationship.

Also, 29.0% of the total 314 respondents who are in the Public Health Professional work area indicated that research findings are being utilized in heath in Nigeria than those in the Health Policy work area (23.0%). Chi square value is 2.645 and p value is 0.267, showing no significant relationship between work area and participants perception of whether research findings are being utilized in heath in Nigeria.

Table 2. Participants Perception of whether research findings are being utilized in heath in Nigeria.

Participants Perception of whether research findings are being utilized						
Demographic Variables	Yes	No	Not Sure	Total	X ²	P-value
Sex						
Male	49 (28%)	77 (44%)	49 (28%)	175 (100%)	0.528	0.768
Female	62 (27%)	94 (42%)	71 (31%)	227 (100%)		
Total	111	171	120	402		

Participants Perception of whether research findings are being utilized						
Demographic Variables	Yes	No	Not Sure	Total	X ²	P-value
Age						
21-30 years	27 (36%)	25 (33%)	24 (31%)	76 (100%)	18.377	0.019
31-40 years	34 (30%)	52 (46%)	27 (24%)	113 (100%)		
41-50 years	19 (16%)	61 (50%)	41 (34%)	121 (100%)		
51-60 years	29 (36%)	27 (33%)	25 (31%)	81 (100%)		
61 years & above	2 (18%)	6 (55%)	3 (27%)	11 (100%)		
Total	111	171	120	402		
Educational Qualification						
Bachelor Public Health	9 (33%)	10 (37%)	8 (30%)	27 (100%)	4.669	0.587
Master's in Public Health	59 (25%)	99 (42%)	77 (33%)	235 (100%)		
Doctorate -Public Health	17 (31%)	27 (49%)	11 (20%)	55 (100%)		
Non-Public Health Degree	26 (31%)	35 (41%)	24 (28%)	85 (100%)		
Total	111	171	120	402		
Work Area						
Public Health Professional	91 (29%)	135 (43%)	88 (28%)	314 (100%)	2.645	0.267
Health Policy Maker	20 (23%)	36 (41%)	32 (36%)	88 (100%)		
Total	111	171	120	402		

3.3. Participants Perceived Level of Utilization of Research Findings in Health in Nigeria

From figure 1, majority of participants (69.4%) perceived the level of utilization of research findings in health in Nigeria to be poor (45.5%) and very poor (23.9%).

In table 3, More proportion of females (25.6%) indicated very poor as their perceived level of utilization of research findings in health in Nigeria than the male respondents (21.7%). Chi square value is 1.765 and p value is 0.779, showing no significant relationship between gender and perceived level of utilization of research findings in health in Nigeria.

More proportion of age group 61 years & above (45.5%) indicated very poor as their perceived level of utilization of research findings in health in Nigeria more than those of aged 31-40 years (26.5%), 41-50 years (24.8%), 51-60 years (23.5%), and 21-30 years (15.8%). On the other hand, more proportion of age group 41-50 years (57.9%) indicated poor as their perceived level of utilization of research findings in health in Nigeria more than those of aged 51-60 years (43.2%), 31-40 years (41.6%),

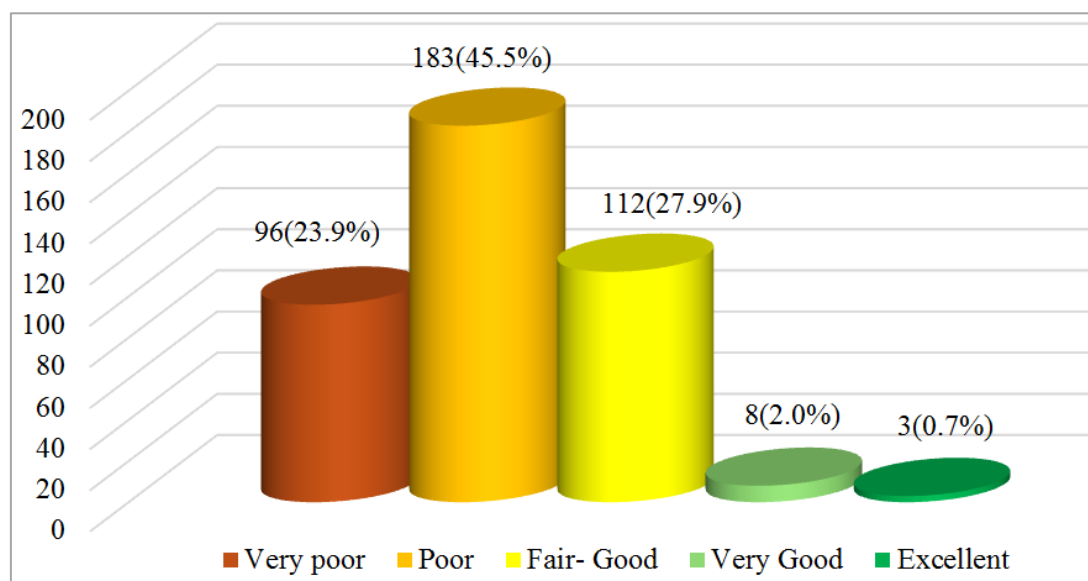
21-30 years (36.8%) and 61 years & above (27.3%). Chi square value is 31.345 and p value is 0.012, showing significant relationship between age group and perceived level of utilization of research findings in health in Nigeria.

Also in table 3, More proportion of respondents with Doctorate in Public Health (30.9%) indicated very poor as their perceived level of utilization of research findings in health in Nigeria than those with Bachelor Public Health (25.9%), Master's in Public Health (25.5%) and those with Non-Public Health Degree (14.1%). Chi square value is 13.418 and p value is 0.339, showing no significant relationship between Educational Qualification and perceived level of utilization of research findings in health in Nigeria.

More respondents in the work area of Health Policy Maker indicated poor as their perceived level of utilization of research findings in health in Nigeria than those in the work area of Public Health Professionals (43.0%). Chi square value is 4.468 and p value is 0.346, showing no significant relationship between work area and perceived level of utilization of research findings in health in Nigeria.

Table 3. Participants Perceived Level of utilization of research findings in health in Nigeria.

Participants Perceived Level of utilization of research findings in health in Nigeria								
Demographic Variables	Very poor	Poor	Fair Good	Very Good	Excellent	Total	X ²	P-value
Sex								
Male	38 (21.7%)	80 (45.7%)	52 (29.7%)	3 (1.7%)	2 (1.1%)	175 (100%)	1.765	0.779
Female	58 (25.6%)	103 (45.4%)	60 (26.4%)	5 (2.2%)	1 (0.4%)	227 (100%)		
Total	96	183	112	8	3	402		
Age								
21-30 years	12 (15.8%)	28 (36.8%)	31 (40.8%)	4 (5.3%)	1 (1.3%)	76 (100%)	31.345	0.012
31-40 years	30 (26.5%)	47 (41.6%)	34 (30.1%)	2 (1.8%)	0 (0%)	113 (100%)		
41-50 years	30 (24.8%)	70 (57.9%)	18 (14.9%)	2 (1.7%)	1 (0.8%)	121 (100%)		
51-60 years	19 (23.5%)	35 (43.2%)	26 (32.1%)	0 (0%)	1 (1.2%)	81 (100%)		
61 years & above	5 (45.5%)	3 (27.3%)	3 (27.3%)	0 (0%)	0 (0%)	11 (100%)		
Total	96	183	112	8	3	402		
Educational Qualification								
Bachelor Public Health	7 (25.9%)	16 (59.3%)	3 (11.1%)	1 (3.7%)	0 (0%)	27 (100%)	13.418	0.339
Master’s in Public Health	60 (25.5%)	101 (43.0%)	67 (28.5%)	5 (2.1%)	2 (0.9%)	235 (100%)		
Doctorate -Public Health	17 (30.9%)	21 (38.2%)	17 (30.9%)	0 (0%)	0 (0%)	55 (100%)		
Non-Public Health Degree	12 (14.1%)	45 (52.9%)	25 (29.4)	2 (2.4%)	1 (1.2%)	85 (100%)		
Total	96	183	112	8	3	402		
Work Area								
Public Health Professional	78 (24.8%)	135 (43.0%)	91 (29.0%)	7 (2.2%)	3 (1.0%)	314 (100%)	4.468	0.346
Health Policy Maker	18 (20.5%)	48 (54.5%)	21 (23.9%)	1 (1.1%)	0 (0%)	88 (100%)		
Total	96	183	112	8	3	402		

**Figure 1.** Participants Perceived Level of utilization of research findings in health in Nigeria.

4. Discussion

4.1. Socio-Demographic Characteristics of Respondents

The study's findings, as presented in Table 1, reveal a predominance of female respondents (56.5%) compared to males (43.5%), with the mean age of participants being 41.5 years. This gender distribution aligns with trends observed in the public health sector where females often outnumber males, particularly in academic and policy-making roles [15]. The age distribution shows a higher concentration of respondents in the 41-50 years age group (30.1%), followed by those in the 31-40 years range (28.1%), which suggests that mid-career professionals are the primary participants. This could indicate a robust engagement in continuous professional development among these age groups [16]. Educationally, a significant majority (58.5%) of respondents hold a master's degree in public health, with a smaller percentage (13.7%) having attained a Doctorate in Public Health, reflecting the high level of academic qualification typically required in the field [17]. Interestingly, 21.1% of the participants possess non-public health degrees, indicating a diverse educational background among public health workers, which is beneficial for interdisciplinary approaches in health policy and practice [18]. The professional background of the respondents predominantly consists of Public Health Professionals (78.1%), compared to Health Policy Makers (21.9%), suggesting a potentially greater focus on the practical application of public health research among the survey population. This demographic distribution underscores the importance of targeted strategies for improving research utilization across different educational and professional cohorts within the public health domain [19].

4.2. Participants Perception of Whether Research Findings Are Being Utilized in Health in Nigeria

The findings from the research shows that research findings appear not to be utilized in health in Nigeria. Majority of the respondents are of the opinion that research findings are not utilized to improve the health and wellbeing of people. Meanwhile out of the few participants who indicated that research findings are being utilized in health in Nigeria, there is significant relationship between age group and participants perception of whether research findings are being utilized in health in Nigeria. This is in line with research carried out by Walugembe DR et al. and Hanney SR et al. [20, 1].

4.3. Participants Perceived Level of Utilization of Research Findings in Health in Nigeria

Finding from this research indicated that the level of utili-

zation of research findings in health in Nigeria, is poor. Majority of participants perceived the level of utilization of research findings in health in Nigeria to be poor. This is in concordance with [21, 22] and also in line with [23]. There is a significant relationship between age group and perceived level of utilization of research findings in health in Nigeria.

5. Conclusion

The study reveals critical insights into the socio-demographic characteristics and perceptions of public health professionals and policymakers regarding the utilization of research findings in Nigeria. The predominance of female respondents and the concentration of participants in mid-career stages highlight a trend towards gender diversity and continuous professional development in the sector. Despite the high educational qualifications of the respondents, with a significant number holding Master's and Doctorate degrees, the perceived level of research utilization in health is overwhelmingly poor. The findings indicate a substantial gap between research production and practical application in improving health outcomes, aligning with previous studies that underscore systemic barriers to effective knowledge translation. The significant relationship between age and perception of research utilization suggests that younger and mid-career professionals may have different views on the challenges and opportunities for applying research in health policy and practice. These insights emphasize the need for targeted strategies to enhance the integration of research findings into health initiatives, fostering a more evidence-based approach to public health in Nigeria.

Abbreviations

ASPPH	Association of Schools and Program of Public Health
FHI360	Family Health International
LMICs	Low- and Medium-Income Countries
NGO	Non-Governmental Organization
WHO	World Health Organization

Conflicts of Interest

The authors declare no conflicts of interest.

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