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# Assessment of 2016 World Health Organization Antenatal Care Policy Domestication and Implementation by Policy Makers and Providers in Ebonyi State, Nigeria

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**Abstract**

*This study aimed to assess the domestication and implementation of the WHO 2016 antenatal care (ANC) policy in Ebonyi State, Nigeria. Specific objectives included evaluating the role of the Ebonyi State Primary Health Care Development Agency (EB- SPHCDA) in adopting the policy, assessing the implementation by healthcare workers, identifying constraints, and determining the impact of interventions. The study employed an intervention design with three phases: baseline, intervention, and post-intervention, targeting 32 key policymakers and 18 healthcare workers from six local government areas (LGAs) selected through multistage sampling. Data collection involved structured questionnaires for policymakers and healthcare workers, supplemented with secondary data from the national DHIS2 database. Interventions included workshops, training, and job aids distribution to improve policy implementation. Results indicated poor domestication of the WHO 2016 ANC policy, with only 15.6% of policymakers agreeing that the policy had been domesticated. Constraints such as insufficient funding, lack of training, and inadequate tools hindered the domestication process. Similarly, only 38.1% of healthcare workers reported effective policy implementation, with the major barriers being insufficient staff, increased workload from eight ANC contacts, and inadequate public awareness. Despite these challenges, post-intervention assessments showed significant improvements, with all participants scoring above the pass mark in post-tests following orientation on the policy. This study highlights the need for improved funding, training, and public awareness to enhance the domestication and implementation of the WHO 2016 ANC policy in Ebonyi State. Further interventions targeting these constraints could facilitate better maternal health outcomes in the state.*

**Keywords:** *Assessment, Antenatal, Domestication, Compliance, Policy Makers.*

## Significance Statement

This article highlighted the major obstacles to implementing the WHO 2016 ANC policy in Ebonyi State, Nigeria. The results show that there is need for increase financing, community sensitization and awareness, and training in order to completely implement the WHO ANC guidelines and better maternal health outcomes in Ebonyi State.

## Introduction

Policy refers to decisions made to implement programs and projects that address the needs of a population (Chigbu and Kolubowei, 2019). Policies aim to improve lives by solving pressing problems, especially for vulnerable groups. However, many government policies fail to move beyond their initial stages, often due to unrealistic goals, lack of target population involvement, and ignoring contextual factors (Ajulor, 2018; Dialoke et al., 2017). Policies only become effective when implemented, requiring resources like workforce, equipment, and finance (Ajulor, 2018). The "Health for All" policy approach has emerged as an effective way to achieve health policy goals, but it requires strong government commitment and proper funding (Greer et al., 2022). Collaboration between all levels of government and community involvement is critical for successful policy implementation and achieving quality health outcomes.

Nigeria's health sector can only improve if primary health care services receive adequate funding and stakeholder engagement. This would allow for better policy monitoring and accountability, leading to effective evaluations and adjustments (Abubakar et al., 2022). Policy domestication involves adapting policies to fit local social and environmental contexts, and requires strong political support and strategic promotion (Ncube et al., 2023). Policy implementation bridges policy goals and outcomes, ensuring objectives are met (Bullock & Levis, 2019).

Antenatal care (ANC) services aim to ensure positive outcomes for both mother and child, addressing risk factors early on (Ali et al., 2020). The 2016 WHO ANC policy replaced "visits" with "contacts," emphasizing active engagement between pregnant women and healthcare providers to improve maternal and child health outcomes (World Health Organization [WHO], 2016). Nigeria's health sector developed guidelines to implement this policy at primary health care facilities (FMOH, 2017). Increasing ANC contacts is expected to reduce maternal deaths by 8 per 1,000 live births (World Health Organization [WHO], 2016), with efforts focused on improving service delivery through training and health system strengthening.

Despite these efforts, Nigeria still faces high maternal mortality rates, with 917 deaths per 100,000 live births in 2020, contributing significantly to global maternal mortality (World Health Organization [WHO], 2020). Reducing maternal deaths aligns with Sustainable Development Goal (SDG) 3.1, which seeks to lower maternal mortality to less than 70 per 100,000 live births by 2030 (Ekpenyong et al., 2019). Improved antenatal care services are key to achieving this goal (Alibhai et al., 2022), as positive ANC experiences encourage adherence to the WHO policy of early initiation and consistent care throughout pregnancy (Fagbamigbe and Idemudia, 2017).

Health policies need full domestication and implementation at primary health care centers, as outlined in the 1978 Alma Ata declaration, to achieve universal, affordable, and accessible healthcare. Despite past ANC policies, many were not adapted or implemented effectively in Nigeria (Dialoke et al., 2017). Maternal mortality remains a significant issue, largely due to inconsistent ANC attendance (Ogbemigbe and Onukwe, 2018). Addressing this requires not only policy formulation but effective domestication and implementation by both policymakers and healthcare workers.

## Research Objective

This study assessed the domestication and implementation of the 2016 World Health Organization antenatal care policy by policymakers and healthcare providers in Ebonyi State, Nigeria. Specifically, it aimed to:

1. Evaluate the domestication of the WHO 2016 ANC policy by the State Primary Health Care Development Agency (SPHCDA) in Ebonyi State.
2. Assess the implementation of the WHO 2016 ANC policy by healthcare workers in Ebonyi State.
3. Identify constraints to the policy's domestication and implementation.
4. Determine the impact of interventions on the policy's domestication and implementation among policymakers, healthcare workers, and pregnant women.

## Specific Objectives

1. To assess the domestication of the latest WHO 2016 ANC policy by the State Primary Health Care Development Agency (SPHCDA) in Ebonyi State, Nigeria.
2. To assess the implementation of the WHO 2016 ANC policy by health care workers in Ebonyi State, Nigeria.
3. To identify constraints to the domestication and implementation with the policy in Ebonyi State.
4. To determine the effect of interventions on the domestication and implementation of the WHO 2016 ANC policy among policymakers, healthcare workers, and pregnant women.

## Materials and Methods

### Study Area

The research was conducted in Ebonyi State, located in the southeast geopolitical zone of Nigeria. Created in 1996 from parts of Abia and Enugu States, it comprises 13 Local Government Areas (LGAs), organized into three senatorial zones: Ebonyi Central, Ebonyi North, and Ebonyi South. Of these, five LGAs are urban: Abakaliki, Afikpo North, Ebonyi, Ezza South, and Ohaozara. The state has 3 tertiary hospitals, 14 general hospitals, and 782 primary health centers (PHCs), with 520 public health facilities managed by trained staff employed by the government. This study focused on 171 public PHCs selected by the government, representing each of the state's 171 political wards.

### Study Population

The study targeted health policymakers at Ebonyi State Primary Health Care Development Agency (EB-SPHCDA), health workers managing the 171 selected ward health centers, and pregnant women attending antenatal care (ANC) at these facilities.

### Inclusion and Exclusion Criteria

Directors and program officers of EB-SPHCDA who consented, as well as health workers available during the study, were included. Those absent or ill during the study period were excluded.

### Study Design

An intervention study was conducted in three phases: baseline, intervention, and post- intervention.

### Sample Size and Sampling Technique

A total population study was conducted for 32 key policymakers and officers in charge of 18 health centers. A multistage sampling method was used to select participants. Six LGAs were chosen randomly from the three senatorial zones, and 18 PHCs were selected from these LGAs.

### Data Collection

Two sources of data were used: structured questionnaires for policymakers and health workers. The questionnaires were adapted and validated, with a Cronbach alpha coefficient of 0.84. Six research assistants were trained to collect data from participants through self-administered questionnaires, supervised by state trainers. Data collection lasted six weeks. Secondary data from the national DHIS 2 database were used to compare baseline (pre-intervention) and end-line (post-intervention) results regarding ANC visits.

## Intervention

Three interventions were conducted to improve ANC policy implementation:

1. A one-day workshop for 32 EB-SPHCDA personnel on WHO's 2016 ANC policy.
2. A one-day training for officers-in-charge of the selected 18 health centers, focusing on ANC recommendations and respectful maternity care.
3. Distribution of job aids on ANC policy to the 18 PHCs for use in educating pregnant women.

## Data Management and Analysis

Data were analyzed using IBM SPSS Statistics version 25. Mean scores were used to assess policy domestication and implementation, with a cut-off mean score of 3.0. Chi- square or Fisher's exact tests and binary logistic regression were used to analyze constraints to policy implementation. Pre-test and post-test scores were compared to evaluate the effectiveness of the interventions.

## Ethical Considerations

Ethical approval was obtained from Ebonyi State University Research Ethics Committee. Participants provided written informed consent, and confidentiality was ensured by anonymizing data.

## Results

The results obtained from the data analysis with their interpretations are presented below. A total of 32 and 18 questionnaires for policymakers and health workers respectively, were distributed and retrieved, giving a response rate of 100% for each category.

**Table 1:** Socio-demographic data of health policy makers:N=32

| Demographic Data | No of Participants | Percentage (%) |
|---|---|---|
| Age group | | |
| 30-39 | 1 | 3.1 |
| 40-49 | 6 | 18.8 |
| 50-59 | 25 | 78.1 |
| Sex | | |
| Male | 15 | 46.9 |
| Female | 17 | 53.1 |
| Highest Qualification | | |
| CHEW/CHO | 2 | 6.3 |
| B.Sc. | 13 | 40.6 |
| M.Sc./MPH | 14 | 43.8 |
| Nursing/ Midwifery | 1 | 3.1 |
| MBBS | 1 | 3.1 |
| EHO | 1 | 3.1 |
| Duration in current position (years) | | |
| 1-5 | 16 | 50.0 |
| 6-10 | 12 | 37.5 |
| 11-15 | 2 | 6.3 |
| 16 & above | 2 | 6.3 |
| Years of working experience | | |
| 1-5 | 2 | 6.3 |
| 6-10 | 3 | 9.4 |
| 11-15 | 1 | 3.1 |
| 16 & above | 26 | 81.3 |

**Source:** Field Work, 2021.

Policy Maker's Domestication of the WHO 2016 ANC Policy

Table 1 shows the demographic characteristics of the ANC policymakers at the state and LGA levels. The highest proportion of the respondents 25 (78.1%) was in the age range of 50-59 years. Majority were female (53.1%). The highest proportion (43.8%) had attained a master's degree qualification. Most (50.0%) have spent 1-5 years in their current position and a majority of them (81.3%) had working experience of 16 years & above.

**Table 2:** Domestication of 2016 WHO antenatal care policy in Ebonyi State N=32

| Items | SD | D | DK | A | SA | Weighted Mean Score | Standard deviation | %positive Response | Decision |
|---|---|---|---|---|---|---|---|---|---|
| The Policy is adapted to the local context | 19 | 6 | 3 | 3 | 1 | 1.78 | 1.16 | 12.5 | Disagreed |
| EB-SPHCDA* leadership have submitted a bill to institutionalize the 2016 WHO** ANC Policy | 18 | 6 | 2 | 3 | 3 | 1.97 | 1.38 | 18.8 | Disagreed |
| EB-SPHCDA staff orientation on the 2016 WHO ANC*** policy | 19 | 6 | 2 | 4 | 1 | 1.81 | 1.20 | 15.6 | Disagreed |
| The Policy is available at EB-SPHCDA | 18 | 8 | 4 | 2 | 0 | 1.69 | 0.93 | 6.3 | Disagreed |
| EB-SPHCDA conducts regular Supportive supervision of HWs to ensure implementation | 10 | 12 | 2 | 5 | 3 | 2.34 | 1.34 | 25.0 | Disagreed |
| Summary | 84 | 38 | 13 | 17 | 8 | 1.92 | 1.02 | 15.6 | Disagreed |

*Ebonyi State primary health Care Development Agency **World Health Organization ***Antenatal care

Key: SA (Strongly Agree), A (Agree), DK (Don't Know), D (Disagree), SD (Strongly Disagree) Disagreed (Mean value < cut off point of 3.0), positive response (strongly agree + agree)

**Source:** Field Work, 2021

Table 2 shows poor domestication of the policy as indicated by the low overall mean score (mean score of 1.92 < cut off point of 3.0), with only 15.6% of the study participants that agreed the policy have been domesticated. Furthermore, all the discrete variables were poor, with mean scores <3.0. However, the highest mean scores were noted for the variables "EB-SPHCDA conducts regular Supportive supervision of HWs to ensure implementation" (mean value = 2.34), with 25.0% positive response and "EB- SPHCDA leadership have submitted a bill to institutionalize the 2016 WHO ANC Policy" (mean value = 1.97), with 18.8% positive response.

**Table 3:** Constraints to the domestication of 2016 WHO ANC policy in Ebonyi State N=32

| Items | SD | D | DK | A | SA | Weighted Mean Score | Standard deviation | %positive Response | Decision |
|---|---|---|---|---|---|---|---|---|---|
| EB-SPHCDA provided updated and simplified job aids | 19 | 5 | 4 | 3 | 1 | 1.81 | 1.18 | 12.5 | Disagreed |
| There is sufficient funding for EB- SPHCDA to operationalize the policy | 21 | 6 | 4 | 3 | 1 | 1.66 | 1.13 | 12.5 | Disagreed |
| There is improved supply chain management for the implementation of the ANC model | 5 | 7 | 3 | 12 | 5 | 3.16 | 1.37 | 53.1 | Agreed |
| There is a sufficient number of trained/skilled HWs*in PHCCs** to implement the ANC model | 12 | 6 | 2 | 6 | 6 | 2.63 | 1.60 | 37.5 | Disagreed |
| There is appropriate equipment in PHCCs** | 12 | 6 | 2 | 6 | 6 | 2.00 | 1.02 | 12.5 | Disagreed |

*Health Workers **primary Health Care Centres

Key: SA (Strongly Agree), A (Agree), DK (Don't Know), D (Disagree), SD (Strongly Disagree) Agreed (Mean value => cut off point of 3.0), Disagreed (Mean value < cut off point of 3.0), positive response (strongly agree + agree)

**Source:** Field Work, 2021

Table 3 shows the constraints to the domestication of the 2016 WHO antenatal care policy. Constraints reported by more than two-third (87.5%) of the participants included the non-provision of updated and simplified job aids with all key information for implementation of the new ANC by SPHCDA, insufficient funding for SPHCDA to operationalize the new policy in PHCCs in the state, insufficient number of trained/ skilled health workers in each facility to implement the new ANC policy, and that PHCCs do not have appropriate tools and diagnostic equipment to implement the components of the eight ANC contacts (mean values < 3.0 cut-off point). Fifty-three percent of the respondents agreed that improved supply chain management required for the implementation of the ANC model is not a constraint; (mean=3.16, SD=1.37).

## Results on the implementation of the 2016 WHO ANC Policy in Ebonyi State

Eighteen (18) copies of questionnaires were administered to eighteen officers in charge of the selected primary health care centers for the study. All were returned filled and fitted for analysis, giving a response rate of 100%.

**Table 4:** Socio-demographic data of the participants (Health Workers) N=18

| Demographic Data | No of Participants | Percentage (%) |
|---|---|---|
| Age group | | |
| 30-39 | 3 | 16.7 |
| 40-49 | 10 | 55.6 |
| 50-59 | 5 | 27.8 |
| Sex | | |
| Female | 18 | 100 |
| Highest qualification | | |
| CHEW* | 12 | 66.7 |
| B.Sc** | 5 | 27.8 |
| Nursing/Midwifery | 1 | 5.6 |
| Cadre | | |
| CHEW* | 11 | 61.1 |
| CHO*** | 7 | 38.9 |
| Duration in current position (years) | | |
| 1-5 | 8 | 44.4 |
| 6-10 | 4 | 22.2 |
| 11-15 | 3 | 16.7 |
| 16 & above | 3 | 16.7 |
| Years of working experience | | |
| 6-10 | 2 | 11.1 |
| 16 & above | 16 | 88.9 |
| Location of health facility | | |
| Urban | 2 | 11.1 |
| Rural | 16 | 88.9 |

*Community Health Extension Worker **Bachelor of Science ***Community Health Officer

**Source:** Field Work, 2021

Table 4 shows the demographic characteristics of the participants in the study. All the respondents (100%) were female and the highest proportion of them (55.6%) were between 40-49 years. The highest proportion of them (66.7%) have a CHEW certificate as the highest qualification. A majority (61.1%) were in JCHEW/SCHEW cadre, while (38.9%) were

in the Cadre of Community Health Officer. Most of them (44.4%) have spent 1-5 years in their current position and 88.9% had 16 years & above working experience. The highest proportion of the study participants (88.9%) had their health facilities located in rural areas.

**Table 5:** Implementation of 2016 WHO antenatal care policy in Ebonyi State N=18

| Items | SD | D | DK | A | SA | Weighted Mean Score | Standard deviation | %positive Response | Decision |
|---|---|---|---|---|---|---|---|---|---|
| Include information on "at least eight contacts" in ANC** health talk | 8 | 7 | 0 | 0 | 3 | 2.06 | 1.43 | 16.7 | Disagreed |
| ANC schedules are up to eight times | 8 | 7 | 0 | 2 | 1 | 1.94 | 1.21 | 16.7 | Disagreed |
| Visit clients at home to provide ANC contacts | 14 | 3 | 0 | 1 | 0 | 1.33 | 0.77 | 5.6 | Disagreed |
| Provide ANC service to clients at 12 weeks GA*** | 0 | 1 | 1 | 1 | 15 | 4.61 | 1.04 | 88.9 | Agreed |
| Women that give birth in this PHCC* achieved eight contacts" | 6 | 4 | 1 | 5 | 2 | 2.61 | 1.50 | 38.9 | Disagreed |
| ANC** contacts with pregnant women are frequent | 6 | 6 | 0 | 2 | 4 | 2.56 | 1.62 | 33.3 | Disagreed |
| "Eight ANC contacts" is convenient for practice | 2 | 2 | 2 | 5 | 7 | 3.72 | 1.41 | 66.7 | Agreed |
| Summary | 44 | 30 | 4 | 16 | 32 | 2.69 | 1.08 | 38.1 | Disagreed |

*Primary Health Care Centre **Ante Natal Care ***Gestational Age

Key: SA (Strongly Agree), A (Agree), DK (Don't Know), D (Disagree), SD (Strongly Disagree), Agreed (Mean value => cut off point of 3.0), Disagreed (Mean value < cut off point of 3.0), positive response (strongly agree + agree).

**Source:** Field Work, 2021

Table 5 shows poor implementation of the policy as indicated by the low overall mean score (mean score of 2.69 < cut off point of 3.0), with only 38.1% of the study participants that agreed the policy is being implemented. Furthermore, majority (5) of the discrete variables were poor, with mean scores <3.0, except two with the highest mean scores. They are, "provide ANC service to clients at 12 weeks GA" (mean value = 4.61), with 88.9% positive response and "eight ANC contacts is convenient for practice" (mean value = 3.72), with 66.7% positive response.

## Discussion of Results

This study assessed the 2016 ANC policy domestication and implementation by policymakers and health providers in Ebonyi State, Nigeria. This study showed that the 2016 WHO ANC policy is yet to be domesticated (mean score = 1.92) in Ebonyi State. The policy implementation (mean score =2.69) by healthcare providers.

## Domestication of the latest WHO 2016 ANC policy

Same as a study done in Nigeria by Fagbamigbe and Idemudia (2017), this study found that the 2016 WHO ANC policy is not yet contextualized by the health policymakers at the State and LGA levels in Ebonyi State. This could be attributed to the ignorance of the health policymakers on the existence of the new ANC policy since its emanation in 2016 due to no dissemination and orientation meeting on the new policy by the national-level health policymakers to the sub-national levels. This study, the same as a study done in Ghana (Ekhokuenetale et al., 2021) also showed that no bill, relative to the 2016 WHO ANC policy is submitted to the state house of assembly for institutionalization. This could be attributed to the inefficiency and poor capacity of the state health policymakers to commence the process of policy domestication that included contextualization of the new ANC policy to fit local content and context. The same with another study done in Nigeria (Fagbamigbe and Idemudia, 2017), this study showed that the state health policymakers were not oriented or trained in regard. This could be attributed to the non- consideration of the importance of this step by national health policymakers. Same as a study done in the Benin Republic by Ekholuenetale et al. (2020), this study showed that the 2016 WHO ANC Policy document is not available in SPHCDA. This could be attributed to a lack of funding at the national level to print and distribute to states due to the non-consideration of providing orientation and cascades during the policy formulation stage.

## Implementation of the WHO 2016 Policy by Health Care Workers

This study showed that healthcare providers at the health facilities do not include information on the new recommendation of at least eight ANC contacts according to the 2016 WHO ANC policy during health talks on ANC clinic days. This could be because they are not aware, consequent to not having received any training/orientation on the new policy. This is the same as a study done in Nigeria by Ekholuenetale et al, (2020). The same as finding from a National Demographic Health Survey conducted in Nigeria, (NDHS 2018), this study showed that healthcare providers do not adhere to the ANC schedule according to the 2016 WHO ANC policy in booking ANC appointments for pregnant women. This could be attributed to their unwillingness to spend complete expected work hours in the health facility and/or with pregnant women. This study, the same as a study done in Kenya, (Chewya et al.,

2018) also showed that healthcare providers do not conduct home visits to provide ANC services to pregnant women. This could be because they are yet to learn the modalities of ANC "contact" through requisite training. The same as a study done in Malawi (Manda-Taylor et al, 2017), this study showed that most women that give birth in the health facility do not achieve eight ANC contacts. This could be because of dislodged and disorganized information on ANC contacts given to the clients by the health care providers during ANC clinic that translated to lesser attendance. This study also showed that healthcare providers do not make adequate ANC contacts with pregnant women who registered for ANC. This is the same as a study done in Nigeria- (El-khatibz et al., 2020). This could be attributed to the nonchalant attitude of healthcare providers to duty. Contrary to a study done in Malawi by Manda-Taylor et al. (2017), this study showed that healthcare providers offer ANC services to pregnant women that present at 12 weeks of gestational age. This could be attributed to their familiarization with focused antenatal care (FANC) booking or schedule that have the first ANC visit to be at 12 weeks GA but not later than 16 weeks GA through training, knowledge, and practice.

### Effect of Interventions on the Domestication

This study showed that the orientation of state and LGA-level health policymakers on the 2016 WHO ANC policy provided a shared understanding of the policy content, as well as expected roles and responsibilities in ensuring the success of the policy is achieved. Same as a study done in Nigeria by Okonufua et al. (2020). This could be attributed to the excitement of learning about the policy which provided a sense of belonging to the state level policy makers.

### Effect of Interventions on the Implementation

This study showed the same as a study done in Kenya and Namibia (Do et al., 2017) that capacity-strengthening interventions such as training and orientation of healthcare providers on new health policies increase their knowledge, as well as the capacity to implement it. This could be attributed to the satisfaction of gained new knowledge and capacity and, the confidence of acquiring the "technical-know-how" on the beneficiaries (health care providers).

## Summary of Findings, Conclusion, And Recommendations

### Summary of Findings

This study assessed the 2016 World Health Organization antenatal care policy domestication and implementation by policymakers and health care providers in Ebonyi State, Nigeria. The findings of the study revealed that the 2016 WHO ANC policy is yet to be domesticated in Ebonyi State. Healthcare providers do not conduct ANC services according to 2016 WHO ANC policy recommendations. Thereby, the policy implementation is poor.

### Conclusion

This study showed that the State health policymakers are ignorant of 2016 WHO ANC policy in Nigeria. Consequently, the critical preliminary procedures needed to ensure the domestication of 2016 WHO ANC policy in Ebonyi State, Nigeria is yet to be realized by the health policymakers. The policy is yet to be adapted to fit into the local context (Mean=1.78, SD=1.16), and no relative bill is submitted to the State House Assembly for the institutionalization of the policy Ebonyi State (Mean=1.97, SD=1.38). The state-level health policymakers were not given orientation or trained on the new policy (Mean=1.81, SD=1.20). 2016 WHO ANC policy document is not available in EB-SPHCDA (Mean=1.69, SD=0.93). A major constraint to policy domestication is the lack of funding for policy operationalization (Mean=1.66, SD=1.13).

The 2016 WHO ANC policy recommendations are not implemented by healthcare providers in Ebonyi State Nigeria. This is evidenced by the research findings that showed that health workers do not schedule ANC booking up to eight times (contacts) for pregnant women (Mean=1.94, SD=1.21). During ANC clinic health talks, healthcare providers do not include information on the recommendation that pregnant women are required to make at least eight ANC contacts with a healthcare provider in a pregnancy course (Mean=2.06, SD=1.43). Health workers do not make regular contact and home visits to pregnant women (Mean=1.33, SD=0.77). However, healthcare providers regard eight ANC contacts as convenient and achievable (Mean=3.72, SD=1.41). Constraints to implementation of the 2016 WHO ANC policy by the health care providers in Ebonyi State, Nigeria included that they have not received any form of capacity strengthening efforts, such as training regarding the policy from the State Primary Health Care Development Agency and State Ministry of Health (Mean=2.94, SD=1.63). Also, the insufficient number of trained staff in the health facility in Ebonyi State results in fatigue and demoralization in attending to pregnant women (Mean=2.67, SD=1.65). Another constraint is that the 2016 WHO ANC policy recommendation increases health care provider's workload in the health facility (Mean value of 3.28 > cut-off point of 3.0) and yet does not increase the internally generated revenue (IGR) of the health facility (Mean=2.28, SD=1.49). However, the healthcare providers agreed that eight ANC contacts can generate provider-client satisfaction (mean value of 4.11 > cut-off point of 3.0).

### Recommendations

The study highlighted that there is an urgent need to intensify programs and strategies that will incorporate holistic orientation of all 2016 WHO ANC policy stakeholders including the health care providers in other to achieve the expected target and goal. It is also important for policymakers to prioritize budgeting for policy operationalization accompanied by resource mapping and mobilization from the planning stage. This will ensure the availability of funding for the policy operationalization at all levels that includes orientation/training, hiring of an adequate number of skilled staff, and making available appropriate tools that will facilitate implementation. In addition, is the very crucial inclusion and involvement of all relevant stakeholders at all stages of the policy cycle. This will ensure policy acceptance and community participation that will translate to timely domestication and successful implementation. The

significance of this is that it will promote implementation science through policy translation into action instead of making policies that constitute an implementation burden.

FMoH and SMoH should practice planning and budgeting for new health policies as part of their plan to sustain "Health for All" plans and interventions in response to Sustainable Development Goal (SDG) 3.

Federal Ministry of Health and partner's should prioritize orientation meetings on the WHO 2016 ANC policy for state policymakers to provide the impetus for cascade to LGA, health facility, and community levels, targeting beneficiaries.
The Federal Ministry of Health should prioritize printing and dissemination of the policy document to the state's Ministry of health and supervise further distribution to health facilities.
Ebonyi State Primary Health Care Development Agency (EB-SPHCDA) should conduct a policy dialogue to discuss the policy relative to contextualization and then prepare a bill that will be submitted to the State House of Assembly for passage into law.

EB-SPHCDA should implement training on the policy and recommendations for health workers and ensure sustained routine supportive supervision of health workers to ensure quality implementation.

Health workers should include key messages on the latest ANC schedule during health education when conducting ANC clinics for pregnant women.

## Policy Implications

Implications for National Health Policy makers in Nigeria. The study suggested the need for national-level policymakers to develop a budget during the policy formulation phase that will facilitate readily available funds for new policies. This will enable the implementation of crucial preliminary activities that includes wide dissemination of new policies and implementation of orientation meeting for the state-level health policymakers and all other relevant stakeholders.

## Declaration

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


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## 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 (igweakpa3@gmail.com).


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## 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.

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