The International Code of Marketing of Breastmilk Substitutes: Are Implementers in Southern Nigeria Adequately Informed?

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Authors’ contributions

This work was carried out in collaboration among all the authors. The authors ARN, GKE and NO prepared the proposal and materials for the advocacy meetings and coordinated the meetings. Author ARN administered the questionnaires and collated the responses. Authors ARN and GKE conceptualized the paper and prepared the drafts while Author NO read and approved the final manuscripts. All sections of the paper were worked on collaboratively by all the authors. The authors also collaborated in funding the cost of publication of the article.

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ABSTRACT

Background: The knowledge about the International Code of Marketing of Breastmilk Substitutes and relevant subsequent World Health Assembly (WHA) Resolutions (the Code), its implementation and enforcement are essential in promoting, protecting and supporting breastfeeding, especially exclusive breastfeeding for the first six months of life and optimal infant and young child feeding. Violations by various stakeholders remain a perennial problem within and outside Nigeria with the main reason being lack of information of the Code and its relevance to child survival, growth and development.

Aims: To share the findings from data collected during the sensitization of stakeholders on the International Code of Marketing of Breastmilk Substitutes in four States in the UNICEF Rivers Field Office, southern Nigeria.

Study Design: Prospective study.

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1. INTRODUCTION

The International Code of Marketing of Breast Milk Substitutes and the subsequent relevant World Health Assembly (WHA) Resolutions (the Code) is a set of recommendations to regulate the marketing of breast milk substitutes, feeding bottles, teats and related products [1]. From the 2018 Baby Friendly Hospital Initiative (BFHI) Fact Sheet “The Code applies to breast milk substitutes or any food being marketed otherwise represented as a partial or total replacement for breastmilk. This includes (a) Infant formula, (b) Follow-up formula (also referred to as ‘follow-on milk’), (c) Growing-up milk, (d) Any other milk for children 0 < 36 months, (e ) Any other food or liquid (such as cereal, jarred food, infant tea, juice and mineral water) that is represented as suitable to be fed to infants less than six months of age. The Code also covers feeding bottles and teats” [2]. Since adoption in 1981 with the aim to contribute “to the provision of safe and adequate nutrition for infants, by the protection and promotion of breastfeeding, and by ensuring the proper use of breast milk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution” (Article 1), the provisions of the Code have been updated through the subsequent relevant World Health Assembly Resolutions [1,3]. The Code requires babies to be exclusively breastfed for the first 6 months of life and there after continue with breast milk and other foods till the child is aged at least 24 months. However, if a baby is not breastfed, for whatever reason, he/she should be fed safely on the best available nutritional alternative. To further strengthen the implementation of the Code, the 2018 Revision of the Baby Friendly Hospital Initiative’s Ten Steps to Successful Breastfeeding included the Code in Article 1. [2,4].

Compliance with the requirements of the Code has remained poor although improving as shown by the 2018 Code Status Report which shows that out of 194 countries, only 136 had some form of legal measures in place covering all, many or few provisions of the Code [5]. However, though the Code has existed for nearly forty years and has been adopted in different countries, its knowledge has remained poor, resulting in its poor implementation and enforcement. Consequently, inappropriate marketing of breast milk substitutes has continued with less than 40% of children being exclusively breastfed in their first six months of life globally [5].

Nigeria was signatory to the International Code and the relevant subsequent WHA Resolutions, and produced its first regulations in 1986 and the Regulations 2005 which covers most provisions of the Code in 2005 [6,7]. However, the implementation, enforcement and monitoring of compliance with these legal instruments are suboptimal as evidenced by the persistence of aggressive marketing by infant food manufacturers and distributors and violations by stakeholders [8]. The government also appointed a regulatory agency, the National Agency for Foods and Drugs Administration and Control (NAFDAC) to handle Code-related issues [7,8]. Consequently, the Baby Friendly Hospital Initiative Committee of the University of Port

Keywords: International code of marketing of breastmilk substitutes; ignorance and ownership of the code; Southern Nigeria.
Harcourt Teaching Hospital as part of its contributions towards optimal infant and young child nutrition organized a sensitization of stakeholders on the Code to secure their commitment to its implementation in Nigeria.

2. MATERIALS AND METHODS

The University of Port Harcourt Teaching Hospital (UPTH), in addition to training health manpower and research, provides tertiary health care services in Rivers State and its environs. Since designation as Baby Friendly in 1993, it has continued to contribute to optimal infant and young child feeding practices in Rivers State and Nigeria through the activities of its Baby Friendly Hospital Initiative (BFHI) Committee. The Committee was established in response to the directive by the Federal Ministry of Health (FMoH) that all teaching hospitals should implement the BFHI in line with the Innocenti Declaration of 1990, to execute the hospital’s commitment to optimal infant and young child nutrition by ensuring the hospital remains Baby Friendly through the promotion, protection and support of breastfeeding and adequate complementary feeding [9].

As part of the strategies to promote optimal Infant and Young Child Feeding (IYCF) practices, the BFHI Committee of the UPTH organized stakeholders’ sensitization workshops on the Code in four States in southern Nigeria with funding and support from the United Nations Children’s Fund (UNICEF) Rivers Field Office and the Governments of Akwa Ibom, Bayelsa, Delta and Rivers States [10]. In each State, a 2-day Advocacy/Sensitisation Meeting on the International Code of Marketing of Breast Milk Substitutes, the relevant subsequent WHA Resolutions, and the Control of Marketing of Breast Milk Substitutes and Related Products and Practices Regulations 2005 was done. The meetings held between September 4th and October 30th, 2017, and had the following objectives:

- To create awareness of the benefits of breastfeeding as a recommended Infant and Young Child Feeding Practice and secure the commitment of stakeholders for its promotion, protection and support.
- To create awareness of the International Code of Marketing of Breast Milk Substitutes, the relevant Subsequent WHA Resolutions and the Nigeria’s “Control of Marketing of Breast Milk Substitutes and Related Products and Practices Regulations 2005” among stakeholders and their roles in the implementation/enforcement and compliance monitoring of these instruments.
- To distribute the Code and related Instruments to the stakeholders so as to give them access to printed copies.
- To secure the commitment of stakeholders for the promotion/enforcement/implementation and compliance monitoring of the Code and the related legal instrument.

The Expected Outcomes of these meetings were that:

- Stakeholders will become aware that breastfeeding is a key recommended Infant and Young Child Feeding Practice and commit themselves to its promotion, protection and support.
- Stakeholders will become aware of the Code and the related legal instruments and their roles in their implementation/enforcement and compliance monitoring.
- Stakeholders will have access to the printed copies of the Code and the related legal instruments.
- Stakeholders will be motivated to commit themselves to the implementation/enforcement and compliance monitoring for the Code and the related legal instruments.

The long-term expectation was that implementation of the Code and its related legal instruments will contribute to optimal infant and young child nutrition in each State and therefore a reduction in the level of malnutrition among under-fives.

Stakeholders in each State included Medical Directors of Tertiary Health Facilities and Health Management Boards, Local Government Council Area’s (LGA) Medical Officers of Health, Tutors and Trainers at Health training institutions, State and LGA Nutrition Officers, Permanent Secretaries in the Ministry of Health, representatives of Health professional associations, Community/Religious Leaders and the Media. They were formally invited to the meeting.

After registration each participant received and completed the pre-test and then received the meeting materials. The self-administered questionnaire explored the knowledge of the participants on the different Articles of the Code
and the subsequent Relevant WHA Resolutions, the Nigerian Regulations 2005 and the roles of the participants in their implementation. Completed questionnaires were marked using a sample answer sheet. A mark was awarded for each correct response and no mark was deducted for wrong responses. After marking by a facilitator, the Director of the meeting reviewed each script and entered the scores. Questions that were not properly answered were discussed during the lectures. The same questionnaire was used for the post test.

During the meeting, lectures on breastfeeding and its advantages, various aspects of the International Code, the subsequent relevant WHA Resolutions, the Nigerian Code related instruments and the roles of the Stakeholders in their implementation and enforcement were delivered by a team of resource persons who had been trained on the Code, participated in the development of the Nigerian Code related documents and assist with monitoring and enforcement of compliance with the Code. Each participant was given a set of the Code related materials for keeps. These materials were: (a) International Code of Marketing of Breast milk Substitutes and Subsequent WHA Resolutions 2016 [11], (b) Frequently Asked Questions on the Code 2017 Edition [1], and (c) Control of Marketing of Breast Milk Substitutes and related products and Practices Regulations 2005 [7]. The pre and post test scores were entered in an Excel Spread Sheet, analysed and presented in tables. Statistical analysis was done using the Chi-square ($\chi ^2$) test with significance level set at a p value < 0.05.

3. RESULTS

Out of a total of 369 invitees, 296 (80.2%) attended the sensitisation meetings in all the States. Of 237 (80%) participants from the three States with complete results, 167 and 153 wrote the pre- and post-tests respectively (Table 1). The scores for the Bayelsa State participants were misplaced and therefore the State was excluded from the final analysis. However, the Bayelsa State participants scored higher in the post test than the pre-test as was observed for the other States.

From the 90% and 98.7% participants who had not read the International Code and the Nigerian Regulations 2005 respectively before the meeting, the proportion of those who had not read these documents reduced to less than 10% at the end of the meeting. The differences in the pre and post test scores for all questions including the knowledge of various aspects of the Code such as when it was launched, number of articles, its aim and the scope improved significantly at post-test, as well as the knowledge of other aspects of the Code (p<0.05) (Tables 2 and 3).

4. DISCUSSION

Although readily accessible on internet and crucial to the promotion of optimal Infant and Young Child Feeding practices, majority of the stakeholders in the four States did not possess copies of the Code and the National Regulations 2005. They also had not read these documents although they all had responsibilities for the promotion of optimal Infant and Young Child Feeding practices. This suggests that they will not optimally discharge their responsibilities towards the promotion, protection and support of optimal infant and young child feeding through the implementation and enforcement of the Code and Regulations 2005. It was therefore not surprising that the 2017 Stretching the Rules and Breaking the Code reported various violations of the Code among health workers in Nigeria and in other countries [12,13].

| Table 1. Dates of Meetings and number of participants who took pre- and post- test in each State |
| State | Dates of workshop | No of participants | Pre-test (n (%)) | Post-test (n (%)) |
|-------|------------------|--------------------|-----------------|-----------------|
| Akwa Ibom | 30th – 31st Oct 2017 | 90 | 79 (87.8) | 72 (80) |
| Bayelsa | 27th – 28th Sept 2017 | 59 | - | - |
| Delta | 16th – 17th Oct 2017 | 54 | 36 (66.7) | 21 (39) |
| Rivers | 4th – 5th Sept 2017 | 93 | 52 (56) | 60 (64.5) |
| Total | - | 296 | 167 | 153 |

Internationally, the recognition of the need to provide information on the Code including monitoring the status of compliance led to the establishment of “the International Baby Food Action Network (IBFAN), a coalition of 273 citizen groups in 168 developing and industrialized nations”, working “for better child.”
Table 2a. Participants’ performance at the Pre-test for the various questions (n=167)

| Questions                                                                 | Correct answer/Yes | Wrong answer/No |
|---------------------------------------------------------------------------|--------------------|-----------------|
|                                                                            | Akwa Ibom n=79     | Delta n=36      | Rivers n=52    | Akwa Ibom n=79 | Delta n=36 | Rivers n=52 |
| 1. Have you read the International Code of Marketing of Breast Milk Substitutes? Yes/no | 12                 | 8               | 9              | 67             | 28          | 43          |
| 2. When was the International Code of Marketing of Breast Milk Substitutes adopted? | 10                 | 16              | 15             | 69             | 20          | 37          |
| 3. How many Articles does the Code have?                                  | 5                  | 7               | 4              | 74             | 29          | 48          |
| 4. What is the aim of the Code?                                           | 41                 | 18              | 7              | 38             | 18          | 45          |
| 5. List the items covered by the scope of the Code                         | 10                 | 10              | 5              | 69             | 26          | 47          |
| 6. List five groups of people who should implement the Code                | 58                 | 26              | 14             | 21             | 10          | 38          |
| 7. List five groups of people who should monitor compliance with the Code  | 60                 | 24              | 12             | 19             | 12          | 40          |
| 8. The WHA Resolutions relevant to the Code have equal legal status with the Code and form part of the Code: Yes/ no | 48                 | 23              | 35             | 31             | 13          | 17          |
| 9. Have you read the Nigeria’s Regulations 2005 on the Marketing of Designated Products? Yes/ no | 7                  | 4               | 5              | 72             | 32          | 47          |
| 10. What does Code Violation mean?                                        | 30                 | 11              | 21             | 49             | 25          | 31          |
| 11. What is conflict of Interest?                                         | 9                  | 1               | 6              | 70             | 35          | 46          |
| 12. List one provision of the Code you have been able to implement        | 32                 | 11              | 7              | 47             | 25          | 45          |

Table 2b. Participants’ performance at the Post-test for the various questions (n=153)

| Questions                                                                 | Correct answer/Yes (%) | Wrong answer/No (%) |
|---------------------------------------------------------------------------|------------------------|---------------------|
|                                                                            | Akwa Ibom n=72         | Delta n=21         | Rivers n=60    | Akwa Ibom n=72 | Delta n=21 | Rivers n=60 |
| 1. Have you read the International Code of Marketing of Breast Milk Substitutes? Yes/no | 66                    | 19                 | 53             | 4              | 2           | 7           |
| 2. When was the International Code of Marketing of Breast Milk Substitutes adopted? | 65                    | 20                 | 57             | 7              | 1           | 3           |
| 3. How many Articles does the Code have?                                  | 69                    | 20                 | 55             | 3              | 1           | 5           |
| 4. What is the aim of the Code?                                           | 60                    | 19                 | 55             | 12             | 2           | 5           |
| 5. List the items covered by the scope of the Code                         | 46                    | 13                 | 19             | 26             | 8           | 41          |
| 6. List five groups of people who should implement the Code                | 70                    | 20                 | 31             | 2              | 1           | 29          |
| 7. List five groups of people who should monitor compliance with the Code  | 71                    | 21                 | 58             | 1              | 0           | 2           |
| 8. The WHA Resolutions relevant to the Code have equal legal status with the Code and form part of the Code: Yes/ no | 67                    | 18                 | 57             | 5              | 3           | 3           |
| 9. Have you read the Nigeria’s Regulations 2005 on the Marketing of Designated Products? Yes/ no | 69                    | 18                 | 45             | 3              | 3           | 15          |
Table 3. Participants’ combined performances of pre- (n=167) and post-tests (n=153) for the various questions

| Questions                                                                 | No of participants with (%) | χ²      | P-value |
|---------------------------------------------------------------------------|-----------------------------|---------|---------|
| 10. What does Code Violation mean?                                        |                             |         |         |
| Akwa Ibom: n=72 Delta: n=21 Rivers: n=60                                  |                             |         |         |
| Correct answer/Yes (%)                                                   | 63 (17.3%)                  | 16 (8.5%) | 39 (90%) | 9 (17.3%) | 5 (9.5%) | 21 (8.5%) | 176.10 | 0.0000* |
| Wrong answer/No (%)                                                      | 138 (90%)                   | 13 (8.5%) | 15 (90%) | 5 (9.5%) | 21 (8.5%) | 176.10 | 0.0000* |
| 11. What is conflict of Interest?                                         |                             |         |         |
| Akwa Ibom: n=72 Delta: n=21 Rivers: n=60                                  |                             |         |         |
| Correct answer/Yes (%)                                                   | 47 (17.3%)                  | 17 (8.5%) | 44 (90%) | 4 (8.5%) | 16 (8.5%) | 44 (8.5%) | 151.95 | 0.0000* |
| Wrong answer/No (%)                                                      | 126 (82.3%)                 | 11 (7.2%) | 25 (90%) | 4 (8.5%) | 16 (8.5%) | 44 (8.5%) | 151.95 | 0.0000* |
| 12. List one provision of the Code you have been able to implement:      |                             |         |         |
| Akwa Ibom: n=72 Delta: n=21 Rivers: n=60                                  |                             |         |         |
| Correct answer/Yes (%)                                                   | 57 (15.6%)                  | 16 (5.2%) | 39 (90%) | 15 (47.7%) | 5 (15.6%) | 21 (68.9%) | 228.24 | 0.0000* |
| Wrong answer/No (%)                                                      | 132 (84.4%)                 | 13 (44.8%) | 15 (10%) | 5 (15.6%) | 21 (68.9%) | 13 (44.8%) | 228.24 | 0.0000* |

*: Responses that were significant
health and nutrition through the promotion of breastfeeding and the elimination of irresponsible marketing of infant foods, bottles and teats. The Network helped to develop the WHO/UNICEF Code of Marketing of Breast milk Substitutes and is determined to see marketing practices everywhere change accordingly”. The IBFAN established the International Code Documentation Centre (ICDC) with focus on the implementation and monitoring of the International Code”. The ICDC keeps track of Code measures worldwide and has produced many documents to enhance the knowledge of health workers about the Code and its implementation status. These documents were published in different editions and languages.

They include:

- International Code of Marketing of Breast milk Substitutes and relevant WHA resolutions (3 Editions).
- Protecting Infant Health, A Health Workers’ Guide to the International Code of Marketing of Breastmilk Substitutes (11 Editions).
- Breaking the Rules, Stretching the Rules (11 Editions) with latest published in 2017 and provides information on Code violations from 2014-2017.
- Code Essentials (2 Editions)

Code Essentials 1– Code provisions, annotated with interpretations and clarifications by subsequent WHA resolutions.

Code Essentials 2– Code with guidelines for Policy Makers and Drafters.

Code Essentials 3– Responsibilities of Health Workers under the Code.

Code Essentials 4– Guide for Regulators and Compliance Staff.

- The Code Handbook, A Guide to Implementing the International Code of Marketing of Breastmilk Substitutes (2 Editions)
- State of the Code by Country -11 Editions.
- IBFAN-ICDC FACT SHEET BFHI and the Code.

It is therefore essential that all health workers who provide services for mothers and their children be given appropriate information and training to enable them understand their roles and responsibilities towards the implementation of the Code. This is more so as the Revised Ten Steps to Successful Breastfeeding now includes the Compliance with the Code as the first of the Ten Steps and requires that the health workers to be trained in the skills to implement the Code [4].

“Conflict of interest” is said to arise “whenever activities or relationships compromise the loyalty or independent judgment of an individual who is obligated to serve a party or perform certain roles”. It has been repeatedly discussed in various documents related to the Code [2]. In the WHA Resolution 69.9, it was finally laid to rest by the prohibition of all forms of sponsorships and support to health workers by manufacturers and distributors of products covered under the scope of the Code [5,11]. There are two broad types of conflicts of interest: (a) conflicts between an individual’s obligations and their financial or other self-interest; (b) conflicts resulting from an individual’s divided loyalties, dual roles or conflicting duties, sometimes referred to as conflicts of commitments...”. Thus, with the poor knowledge of the stakeholders about conflict of interests, the implementation of this aspect of the Code will not only remain poor but violations will be aided by these stakeholders expected to enforce the Code. It is therefore not surprising that globally and in Nigeria, the exclusive breastfeeding rate for 6 months has remained low with the risk of not attaining the global target of at least 50 percent by 2025 if status quo is allowed to remain [14,15]. However, the improvement in the performance at the post tests, ownership of the Code and related materials and decreased incidences of violation in affected States observed after this meeting suggest that capacity building for Code implementation can impact on its implementation and monitoring. This is expected to contribute to the compliance with the Ten Steps to Successful Breastfeeding and therefore improve the nutrition, growth and development of under-fives [16-18]. The need to train health workers on the Code as prescribed in the Revised Ten Steps and ensure access to related materials cannot be emphasized. Consequently, policy and decision makers are here called on not only to provide a budget line for nutrition but to also create within this budget, a budget for Code related activities which should include sustaining the activities of the International Code Documentation Centre, provision and distribution of Code-related materials and training of stakeholders on various aspects of the Code.
5. CONCLUSION

Ignorance and non-possession of copies of the Code contributed to the violations and poor implementation of its provisions. Improved compliance with the Code requires creation of awareness of the Code and its ownership by stakeholders. Besides, institutionalisation of teachings on the Code as required in the Revised Ten Steps to Successful Breastfeeding will enhance its implementation.

6. LIMITATIONS OF THE STUDY

The major limitation is that the stakeholders were representatives of different categories of policy makers, managers, trainers and implementers of nutrition programmes in the States. A study of a larger pool of the implementers at the different levels will provide additional details for capacity development for improved practices.

DISCLAIMER

The stakeholders voluntarily completed the questionnaires. They had number Codes which was not revealed to any other person but was used to link the pre- and post-test performances.

Similar results have been obtained in other training sessions but the current one is being published because participants are from the four sites studied and the results will provide the evidence required for increased attention to the Code as part of Nutrition promotion programmes.

CONSENT

As per international standard or university standard verbal informed participant consent was collected by the authors.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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