# KNOWLEDGE AND ATTITUDE OF MALE STAFF IN A NIGERIAN TERTIARY INSTITUTION TOWARDS INFANT FEEDING

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## ABSTRACT (ARIAL, BOLD, 11 FONT, LEFT ALIGNED, CAPS)

**Aims:**The aim of this study was to assessed knowledge and attitude of Nigerian men working in a tertiary institution toward infant feeding.

Study design: The study was cross sectional in design.

**Place and Duration of Study:**The study was carried out in University of Ibadan, Ibadan, Nigeria between April 2013 and May 2013.

**Methodology:**A pretested, self-administered questionnaire was used to obtain information on the socio-demographic characteristic, knowledge and attitude of 170 male staff of the University of Ibadan regarding infant feeding. Knowledge questions and attitude statements were scored and categorized as adequate or inadequate knowledge; positive and negative attitude. Data was analyzed using descriptive statistics and association between knowledge and attitude was analyzed using chi square test with level of significant set at P<0.05.

**Results:**The mean age of the men was  $41\pm9$  years and a large proportion (87.6%) were married. The respondents were largely (75.9%) non-academic staff. About two-third (67.6%) of the men had poor infant feeding knowledge while three out of then had good knowledge. Most of the men (76.5%) had negative attitude towards infant feeding while only two out of ten men had positive attitude. Three-quarter (75.7%) of men with poor infant feeding knowledge had negative attitude towards infant feeding while only 2 out of every 10 men with adequate infant feeding knowledge had positive attitude towards infant feeding. However, no significant association was reported between the knowledge and attitude of respondents toward infant feeding (P=.72)

**Conclusion:**Poor infant feeding knowledge and negative attitude towards infant feeding exhibited by men is of great concern. It is therefore suggested that male partners, being a major stakeholder of infant feeding should be included in various intervention programs in other to ensure optimum child's growth and development.

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21 22 Keywords: Male, Knowledge, Attitude and Infant feeding

#### 1. INTRODUCTION

Infant and young child feeding practices directly affect the nutritional status of younger children and ultimately impact child survival [1]. Exclusive breastfeeding from birth to 6 months has been shown to be the most effective preventive intervention for ensuring child survival and is estimated to save 13 percent of all deaths in children younger than five [2]. Also, appropriate complementary feeding at 6 months could prevent an additional 6 percent of deaths in this age group [2]. Studies have suggested that engagement of key influencers other than facility-based health workers is critical for promoting adoption of optimal infant and young child feeding practices [3-5]. Infant and young child feeding practices have however been shown to be influenced by household factors, social networks, and modern and health institutions [5]. It is also embedded within traditional relationships in which both relatives and breadwinners have influence and even authority over options and modes of infant feeding [1].

-- obassa ma marata a mana a sa ma 9 [1]

A combination of factors have been indicated to influence infant feeding decisions of mothers, some of which include; knowledge, attitude, societal norms, support from

- 25 partners and family members [6,7]. Mother's perception of father's preference for
- breastfeeding has emerged as a pertinent factor affecting the decision to
- 27 breastfeed, especially in western countries [8-10]. To ensure optimum infant
- 28 feeding, it is essential that mothers receive accurate information on infant feeding as
- 29 well as support from family members especially their partners. Evidence from
- studies has shown that engagement of men can significantly improve infant and
- young child feeding practices [11,12]. The involvement of male partner in ensuring
- optimum feeding for the infant position them as a key stakeholder in infant nutrition.
- 33 In Africa, male partners are found to be primarily responsible for providing financial
- resources for basic household activities, including food; financial and logistical
- 35 resources for health care; and resources for various activities outside the
- 36 household that are critical to family survival [13]. Studies from many African
- 37 countries consistently show that men's knowledge of and involvement in maternal
- and child nutrition and health issues is limited compared to that of women [14-20].
- 39 Partners support during infant feeding especially breastfeeding has been reported in
- 40 previous studies [21,22]. Fathers have been indicated as one of the most influential
- 41 persons to the mother, and they act either as key supporters or deterrents to
- breastfeeding [23,24]. There is however strong evidence that fathers can influence
- the breastfeeding decision [25], breastfeeding initiation [26,27], breastfeeding
- duration [25] and maternal breastfeeding confidence [23,28,29]. They as well
- influence decisions regarding feeding with bottle and weaning [25,30]. Engaging
- 46 male partners in breastfeeding promotion and education, as well as providing
- 47 fathers with knowledge and skills for optimal breastfeeding practices have also been
- shown to positively impact exclusive breastfeeding rates [11,12]. Opportunity for
- 49 fathers to support their partners towards breastfeeding has been associated with
- their understanding of the importance of breastfeeding and the benefits it affords to
- their understanding of the importance of breastreeding and the benefits it afford
- both the baby and the mother [31]. Little information is however available on
- knowledge and attitude of Nigerian men towards infant feeding. This purpose of this study was to assess the knowledge and attitude of male staff in a Nigerian higher

institution of learning towards infant feeding.

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## 2. METHODOLOGY

This cross sectional study was done among male staff of the University of Ibadan. A pretested, self-administered questionnaire was used to obtained information on the socio-demographic characteristic, knowledge and attitude of 170 male participants towards infant feeding. Data on infant feeding knowledge of the respondents was measured through a 12-point knowledge scale. Participants with score of 7 and above were considered as indicating a high level of knowledge while those with scores below 7 were regarded to have poor knowledge. The attitude of the participants on the other hand was assessed through an 8-point attitude scale. A negative attitude was defined as a score below 4 points and below while positive attitude was defined as a score of 4 point and above. Descriptive analysis of the data was carried out using SPSS version 21.

# 3. RESULTS

The socio-demographic characteristics of 170 male staff from the University of lbadan are presented in Table 1. About 14% of the respondents were academic staff while three-quarter (75.9%) were non-academic staff and 10% were technical or laboratory staff.

One-third had been working in the University for less than 10 years while 5 out of 10 had worked between 10 to 19years. One-quarter of the respondents had Ordinary and Higher National Diploma. About 30% had Bachelor degree while 17.6% and 11.2% had Masters and Doctoral degrees respectively. The marital status of the respondents revealed that 87.6% of them were married while 11.2% were single and only 1.2% were widowed. Majority (86.5%) were Christians and only 13.5% were Muslim.

The average age of the respondents was 41±9 years with only 8.8% between 20-29 years while 34.1%, 37.6% and 19.5% were between 30-39years, 40-49years and 50years and above respectively. About 17% had no child while about 27% had one to two children and about half (46.5%) of the respondents had three to four children. Of the 151 married respondents, 6.6% were yet to become father while 4 out of 10 had their youngest to be below 5years of age.

Table 1: Socio-demographic Characteristics of the Respondents

| Variable                   | Frequency | Percentage |  |
|----------------------------|-----------|------------|--|
| Category                   |           |            |  |
| Academic staff             | 14        | 14.1       |  |
| Non-academic staff         | 129       | 75.9       |  |
| Technical/Laboratory staff | 17        | 10.0       |  |
| Duration of working        |           |            |  |
| Below 10 years             | 59        | 34.7       |  |
| 10-19 years                | 78        | 45.9       |  |
| 20-29 years                | 24        | 14.1       |  |
| 30 years and above         | 9         | 5.3        |  |
| Highest educational        |           |            |  |
| qualification              |           |            |  |
| O level                    | 28        | 16.5       |  |
| OND/HND                    | 43        | 25.3       |  |
| BSc                        | 50        | 29.4       |  |
| MSc                        | 30        | 17.6       |  |
| PhD                        | 19        | 11.2       |  |
| Marital status             |           |            |  |
| Single                     | 19        | 11.2       |  |
| Married                    | 149       | 87.6       |  |
| Widowed                    | 2         | 1.2        |  |
| Religion                   |           |            |  |
| Christian                  | 147       | 86.5       |  |
| Islam                      | 23        | 13.5       |  |
| Age of the respondents     |           |            |  |
| 20-29 years                | 15        | 8.8        |  |

| 30-39 years               | 58  | 34.1  |
|---------------------------|-----|-------|
| 40-49 years               | 64  | 37.6  |
| 50 and above              | 33  | 19.5  |
| Mean age (±SD)= 41±9      |     |       |
| years                     |     |       |
| Number of children        |     |       |
| No child                  | 29  | 17.1  |
| 1-2 children              | 46  | 27.1  |
| 3-4 children              | 79  | 46.5  |
| >4 children               | 16  | 9.4   |
| Age of the youngest child |     |       |
| (n=151)                   |     |       |
| Yet to become father      | 10  | 6.6   |
| Below 5 years             | 62  | 41.0  |
| 5-10 years                | 52  | 34.4  |
| Above 10 years            | 27  | 17.9  |
| Total                     | 170 | 100.0 |

Table 2 shows the distribution of the respondents with correct knowledge regarding infant feeding. Majority (93.5%) of the respondents reported breast milk as the first food to be given to infant after birth. About 70% of respondents believe that water or glucose water should not be introduced to the infant in their first few days of life. Also, about 70% believe that breastmilk is more beneficial than the infant formula. Six out of ten male staff of the university disagreed that it is common for mothers to have insufficient milk in their breast while 5 out of 10 respondents also disagreed that mothers who feel they have insufficient breastmilk should feed with infant formula in addition to breastfeeding.

Eighty four percent of the respondents disagreed that mothers should stop breastfeeding sick infant while 61.8% believed that breastmilk alone is sufficient to provide all nourishment for infants in the first six months of life while 22.4% were of the opinion that mothers should ensure that one breast is fully emptied before introducing the second breast during breastfeeding session. About 37% were of the opinion that exclusive breastfeeding may protect mothers from pregnancy in the first few months after birth.

Only 19.4% of the respondents disagreed with the introduction of infant formula to the infants at birth while 57.1% agreed that semi-solid/soft foods should not be introduced to the infants before 6 months. About a quarter (24.1%) of the respondents disagreed abrupt cessation of breastfeeding the moment the baby is introduced to complementary foods

Table 2: Distribution of Infant feeding Knowledge of the Respondents

|                                                                                         |          | Correct knowledge |            |
|-----------------------------------------------------------------------------------------|----------|-------------------|------------|
| Knowledge item                                                                          | Desired  | Frequenc          | Percentage |
|                                                                                         | response | y (N)             | (%)        |
| Breast milk is the first food given to a baby after birth                               | True     | 159               | 93.5       |
| Water or glucose water should be introduced to a baby in the first few days after birth | False    | 123               | 72.4       |

| Infant formula is more beneficial to the baby than the breast milk                                                                       | False | 122 | 71.8 |
|------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|------|
| It is common for mothers to have insufficient milk in their breast                                                                       | False | 102 | 60.0 |
| A mother who feels she has insufficient milk should feed with infant formula in addition to breastfeeding                                | False | 84  | 49.4 |
| Mothers should stop breastfeeding if their baby is ill                                                                                   | False | 143 | 84.1 |
| Breast milk alone (without adding water or other food) is sufficient to provide all nourishment for a baby in the first 6 months of life | True  | 105 | 61.8 |
| Mothers should ensure that one breast is fully emptied before the second breast is offered to the baby during breastfeeding session      | True  | 38  | 22.4 |
| Exclusive breastfeeding may protect mothers from getting pregnant in the first few months after birth                                    | True  | 62  | 36.5 |
| A baby should be fed with infant formula as soon as he/she is born                                                                       | False | 33  | 19.4 |
| Semisolid/soft food should not be introduced before the age of 6 months                                                                  | True  | 97  | 57.1 |
| Breastfeeding should be stopped the moment the baby is introduced to semisolid/soft foods                                                | False | 41  | 24.1 |

Table 3 shows the distribution of the respondents' attitude towards infant feeding. About One-fifth (21.3%) of the men agreed that it is possible for mothers to practice exclusive breastfeeding for six months. In the same way, 23.5% of the men agreed that HIV positive mothers can breastfeed when duly advised by her doctor. A good number of the respondents (74.7%) had appropriate attitude towards when the complementary foods should be introduced to the infants whilst three out of ten men (31.8%) disagreed that herbal teas are beneficial to the health of infants below 6 months. Most of the respondents (95.9%) agreed that it is important to assist their wives in domestic duties to allow them concentrate on child care. Similarly, 83.5% of the men agreed that it is important for mothers to be assisted in feeding the child with complementary foods but only 31.2% agreed that fathers should not be too busy to assist their wives in ensuring that the children are well fed. One out of three respondents (31.2%) disagreed that a father should not be involved in any form of infant feeding.

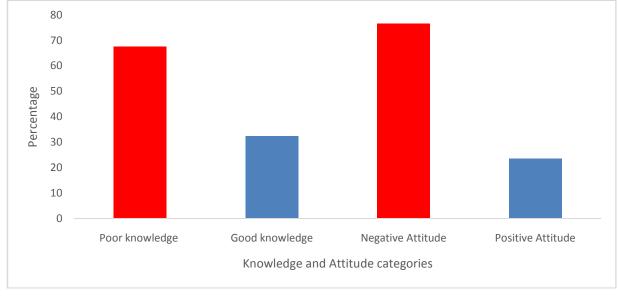
Table 3: Distribution of Infant feeding Attitude of the Respondents

|                                                                |          | Appropriate Attitude |            |
|----------------------------------------------------------------|----------|----------------------|------------|
| Attitude item                                                  | Desired  | Frequency            | Percentage |
|                                                                | response | (N)                  | (%)        |
| It is possible for mothers to practice exclusive breastfeeding | Agree    | 133                  | 21.8       |
| HIV positive mothers can breastfeed if advised by the          | Agree    | 130                  | 23.5       |

| doctors                                                    |          |     |      |
|------------------------------------------------------------|----------|-----|------|
| It is necessary to introduce complementary foods to        | Disagree | 127 | 74.7 |
| infant anytime                                             |          |     |      |
| Herbal teas are beneficial to the health of infants below  | Disagree | 116 | 31.8 |
| 6 months                                                   |          |     |      |
| It is important to assist wife in domestic duties to allow | Agree    | 163 | 95.9 |
| her concentrate on child care                              |          |     |      |
| It is important to assist wife in feeding the child with   | Agree    | 142 | 83.5 |
| complementary foods                                        |          |     |      |
| Fathers are too busy to assist wife in ensuring that the   | Disagree | 53  | 31.2 |
| child is well fed                                          |          |     |      |
| A father should not be involved in any form of infant      | Disagree | 53  | 31.2 |
| feeding                                                    |          |     |      |
|                                                            | •        |     |      |

Figure 1 shows the bar chat distribution of knowledge and attitude categories of the male towards infant feeding. About two-third (67.6%) of the men had poor infant feeding knowledge while three out of 10 had good knowledge. Similarly, most of the men (76.5%) had negative attitude towards infant feeding while only 2 out of 10 men had positive attitude.

Figure 1: Distribution of Knowledge and Attitude Categories of Men towards Infant feeding.



According to Table 4, three-quarter (75.7%) of men with poor infant feeding knowledge had negative attitude towards infant feeding while only 2 out of every 10 men with adequate infant feeding knowledge had positive attitude towards infant feeding. However, no significant association was reported between the knowledge and attitude of male staff in tertiary institution towards infant feeding (P=.72).

Table 4: Association between Infant Feeding Knowledge and Attitude of the Respondents

|                   | Negative attitude | Positive attitude | Total      | Chi-square | <i>P</i> -value |
|-------------------|-------------------|-------------------|------------|------------|-----------------|
| Poor knowledge    | 87(75.7)          | 28(24.3)          | 115(100.0) | 0.13       | .72             |
| Good<br>knowledge | 43(78.2)          | 12(21.8)          | 55(100.0)  |            |                 |

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#### 4. DISCUSSION

Studies have established that father of the baby is one of the most influential persons to the mother, and that they can act as either key supporters or deterrents to infant feeding [23-26]. It is therefore important for fathers to be better prepared to assume their new role as breastfeeding supporters [32]. It was observed from the current study that most of the respondents had poor knowledge towards infant feeding. This finding is in consistent with the study obtained from Uganda [33]. The lowest level of knowledge was observed in the introduction of infant formula to the child. The knowledge of the participants in this study is similar to that of Alvarado and colleagues where low level of knowledge towards infant feeding was reported among prospective fathers [34]. The implication of this could be attributed to the fact that the participants in this study live within the metropolitan city and may easily be exposed to the infant formula, also their socio-economic status may have further influenced their access to breast milk substitutes. In a study on gender perception on infant feeding in Uganda, men were generally unfamiliar with the idea that an infant should be breastfed exclusively for the first six months [33]. The observation made from the current study on the natural birth control (uterine involution) as a result of exclusive breastfeeding is similar to that reported by Alvarado and colleagues in Brazil [34]. Breastfeeding especially exclusively for six months liberates the hormone oxytocin, which stimulates uterine contractions, and thus helping to expel the placenta and to reduce blood loss after child birth [35]. If the mother maintains breastfeeding for a longer period, the subsequent contractions will help her uterus recover its original size. Exclusive breastfeeding for 6 months may hence delay fertility of mothers. In line with the view of men in this study, most men in Uganda were also of the opinion that production of breast milk by mothers is not sufficient and exclusive breastfeeding is not feasible [33]. According to Engebretsen and colleague [33], sickness was reported as one of the major reasons for poor milk production and hence for giving other foods. Most participants in this study were also of the opinion that mothers should halt breastfeeding whenever the baby is ill. Studies have shown that mother's perception of father's preference for breastfeeding has been identified as a pertinent factor affecting the decision of mothers to breastfeed [8-10]. Bentley et al further established that the intention of mother to breastfeed is significantly related to the partner's attitudes towards breastfeeding [36]. Similar to the level of knowledge in this study, the attitudes of most men towards infant feeding were also found to be negative. However the attitudes of the men towards infant feeding as obtained from the current study is in contrast to what was obtained from Brazil [34]. Alvarado and colleagues further

reported that male with positive disposition towards breastfeeding had better

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knowledge and attitudes related to infant feeding than those with less disposition [34]. In a study in China, paternal attitude towards breastfeeding was found to be a determinant of breastfeeding [37] while Littman and Colleagues had also established a strong relationship between father's approval to breastfeed and breastfeeding incidence [38].

In a study by Falnes and colleagues[39], majority of the fathers were of the opinion that infant feeding is a decision to be made by the mother and that father does not get involved as long as the mother feed the infant according to the customary pattern. This is in conformity to the current study where most men were of opinion that father should not be involved in any form of infant feeding and that they are too busy to assist wife in ensuring that the child is well fed. However, in a related study on paternal support for breastfeeding in Western Australia, it was reported that fathers wanted to be involved with parenting and parenthood, but many of them felt they were unprepared and lacked the relevant information to be effective in their parenting role [31]. Susin and Giugliani [11] found that mothers would like more help from their partners regarding the feeding of the infants, but most fathers did not know what they could do to help. Tohotoa and colleagues [31] further reported that fathers believed they need to be knowledgeable on nutrition in infancy especially need for information about difficulties associated with breastfeeding. Inadequate breastfeeding knowledge of the fathers is one of the barriers to effective breastfeeding [31]. The findings from this study revealed that most male partner had poor knowledge and negative attitude towards infant feeding. According to the study among fathers by Ingram and Johnson [40], it was reported that fathers' attitudes to breastfeeding in public and knowing how much milk the baby was getting had the

breastfeeding [31]. The findings from this study revealed that most male partner had poor knowledge and negative attitude towards infant feeding. According to the study among fathers by Ingram and Johnson [40], it was reported that fathers' attitudes to breastfeeding in public and knowing how much milk the baby was getting had the most influence on whether they supported their partner to continue to breastfeed. It is important for the fathers to have basic understanding of infant feeding which will be reflected in their level of knowledge and attitudes in other to adequately equip them as advocates for optimum nutrition in infancy.

### 5. CONCLUSION

In conclusion, this study has shown the level of knowledge and attitudes of men in the University of Ibadan towards infant feeding. Despite working within the higher institution of learning, the men exhibited a poor infant feeding knowledge and negative attitude towards infant feeding. It may however be argued that working in such an academic environment is not a guarantee for good infant feeding knowledge. It is therefore suggested that male partners, being a major gatekeepers of infant feeding should be included in various intervention programs where they will be provided with adequate knowledge and skills for infant feeding in other to ensure optimum child's growth and development and eventually reduces the burden of malnutrition among under five children.

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# ETHICAL APPROVAL (WHEREEVER APPLICABLE)

The protocol for this study was reviewed and approved by the UI/UCH Institution Review Board.

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