

Factors Affecting Children Immunization among Rural Famers in Ondo State, Nigeria.

Abstract

The health of any child depends greatly on immunization against certain diseases especially at the early stage of development. Adequate immunization of children serves as a means of preventing them from possible childhood diseases and various health challenges. The study examined factors affecting children immunization programme among rural farmers in Ondo state. Simple random sampling was used to collect data from 90 respondents. Descriptive statistics and inferential statistics were used in analysing the data. The study revealed that 92.2 percent of the respondents were females. The mean age was 45 years and 63.5 percent were above 40 years. About 76.7 percent were married, 73.6 percent had formal education and 70 percent were farmers by primary occupation. The study also showed that the respondents were aware of children immunization from different sources which include media sources, personal knowledge, rallies and campaigns, while very few respondents were not aware. The study indicated that the respondents agreed that factors such as; access to information/media, mother's educational level, farmers age, gender, farmers experience, availability of drugs and vaccines to a great extent influences the acceptance of children immunization while factors such as Inadequate capital, fear of side effects and unwanted/teenage pregnancy contributes tremendously to the rejection of children immunization. Furthermore, the chi square result shows there was a significant relationship between the socio-economic characteristics of the respondents and responds to children immunization. The study therefore recommended that

24 *maternal education should be advocated as a strategy to educate parents on the importance of*
 25 *children immunization so also is the need to intensify awareness on the benefits of child*
 26 *immunization.*

27 **Introduction**

28 The need for children immunization cannot be over emphasized, this is because children
 29 immunization help prevent certain diseases that are common with children especially at their
 30 early stage of development. Immunization coverage in most parts of the developing world
 31 Nigeria inclusive has remained low, thereby contributing to high mortality and morbidity among
 32 children. Important among reasons for this low coverage are problems arising from knowledge,
 33 attitude and perception regarding vaccination (Kabir, *et al.*, 2005). In Nigeria, children
 34 immunization is found to be generally low and this limited coverage may be attributable to
 35 factors such as lack of proper planning, decreasing motivation of health workers, poor quality of
 36 immunization services and low demand for services from the community (Arulogun and Obute,
 37 2007). Despite the fact that major childhood diseases have been identified by modern
 38 technology, yet, children from African countries die in large number from attack of these
 39 diseases because of the deep rooted beliefs and attitudes of the people concerning childcare and
 40 behavioural practices in health strategies. The Yoruba perceptions about the aetiology of most
 41 childhood diseases are a great hindrance to public health programmes and intervention by the
 42 government of Nigeria (Adegoke, 2008). Although several programmes to increase
 43 immunization rates have been developed and implemented but the question still remains that
 44 why do parents not immunize their children? It is from this foregoing that the study examined the
 45 factors affecting children immunization among rural famers' households in Ondo State

46

47 **Objectives**

48 The main objective of the study was to examine the factors affecting children immunization
49 among rural famers in Ondo State, Nigeria. The specific objectives were to:

- 50 i. describe the socio economic characteristics of the respondents
- 51 ii. determine respondents' awareness about children immunization
- 52 iii. examine respondents' perception about factors influencing acceptance of children
53 immunization in the study area.

54 **Research Hypothesis**

55 Ho: there is no significant relationship between the socio-economic characteristics of the
56 respondents and children immunization.

57 **Justification of the Study**

58 It is important to examine the perception of rural households on children immunization.
59 This will enable researchers and policy makers to know the perception of parents with regards to
60 children immunization and this will help in organizing sensitization programs that will prepare
61 the minds of parents towards children immunization. It will help policy makers, health workers
62 and researchers as it will provide basis for further research and development of health policies
63 and extension information package to enhance children immunization in the study area.

64 **Methodology**

65 The study area is Ondo State. Ondo State is an agrarian state and besides farming, the
66 inhabitants are engaged in various other occupations such as trading, manufacturing and
67 commerce, but people in the riverine areas are predominantly fisher folks. Multi-stage sampling

technique was used for data collection. In the first stage, one (1) Local Government Area (LGA) was randomly selected from each of the three (3) geo-political zones of the State, making a total of three LGAs. In the second stage, three rural communities were selected from each of the Local Government Areas making a total of nine communities to be selected across the three local government areas. In the third stage of the sampling, ten respondents were randomly selected from each of the rural communities making a sum total of (90) ninety respondents across the three local government areas selected. Primary data was collected and used. Well structured, validated and pre-tested questionnaire containing open -ended and closed- ended questions, focus group discussion and interview schedule were used to collect primary data from the respondents.

Results and Discussion

Respondents' Socio- Economic Characteristics

Figure 1 below presents the socio economic characteristics of the respondents, from the Figure, 92.2 percent of the respondents were females. This might be due to the fact that the topic cuts across children immunization which is majorly a woman's responsibility to ensure that their children are immunised this was done to get appropriate answers and valid statements which the men may not be aware of or certain about. The mean age was 45 years and 24.7 percent and 23.5 percent were between the age categories of 30-39 years and 40-49 years respectively. This implies that the respondents in the study area were still in their active age, full of strength and vigour to carry out the laborious activities of farming. The study revealed that 76.7 percent of the respondents were married and had a mean household size of 8 with about 74.4 percent of them having a household size of about 6-10 persons. The marital status has influence on the level understanding one has as regards to children health related issues. The kind of household size

distribution among the respondents in the study area indicates that the majority of the rural farmers have a fairly large household which is a good source of family labour in the study area.

The figure shows that majority (85.6 percent) of the respondents are literate having one form of formal education or the other while only 14.4 percent had no formal education. It is expected that with such level of education that respondents should understand the need for children immunization. This educational level also shows that most of the rural farmers do not proceed to tertiary institutions which may be due to inadequate funds or not been able to meet the required qualifications of entering a university. This corroborates with the findings of Owolabi and Okunlola, 2014 that most farmers in rural areas do not go beyond secondary school. Education is a factor that could aid adoption of innovation or programme by the respondents because education influences adoption of innovation or programme as it gives the farmer opportunity to obtain information from many sources since he could read and write (Okunlola 1994). About 70 percent of them were farmers by primary occupation with majority (77.9 percent) having a farm size of 0.1-5.0 hectares and about 82.1 percent of them had a farming experience of more than 5 years. This support the assertion that most people in the rural areas of Nigeria are engaged in farming as a means of ensuring their livelihood but with scattered and small farm lands (Owolabi and Okunlola, 2014).

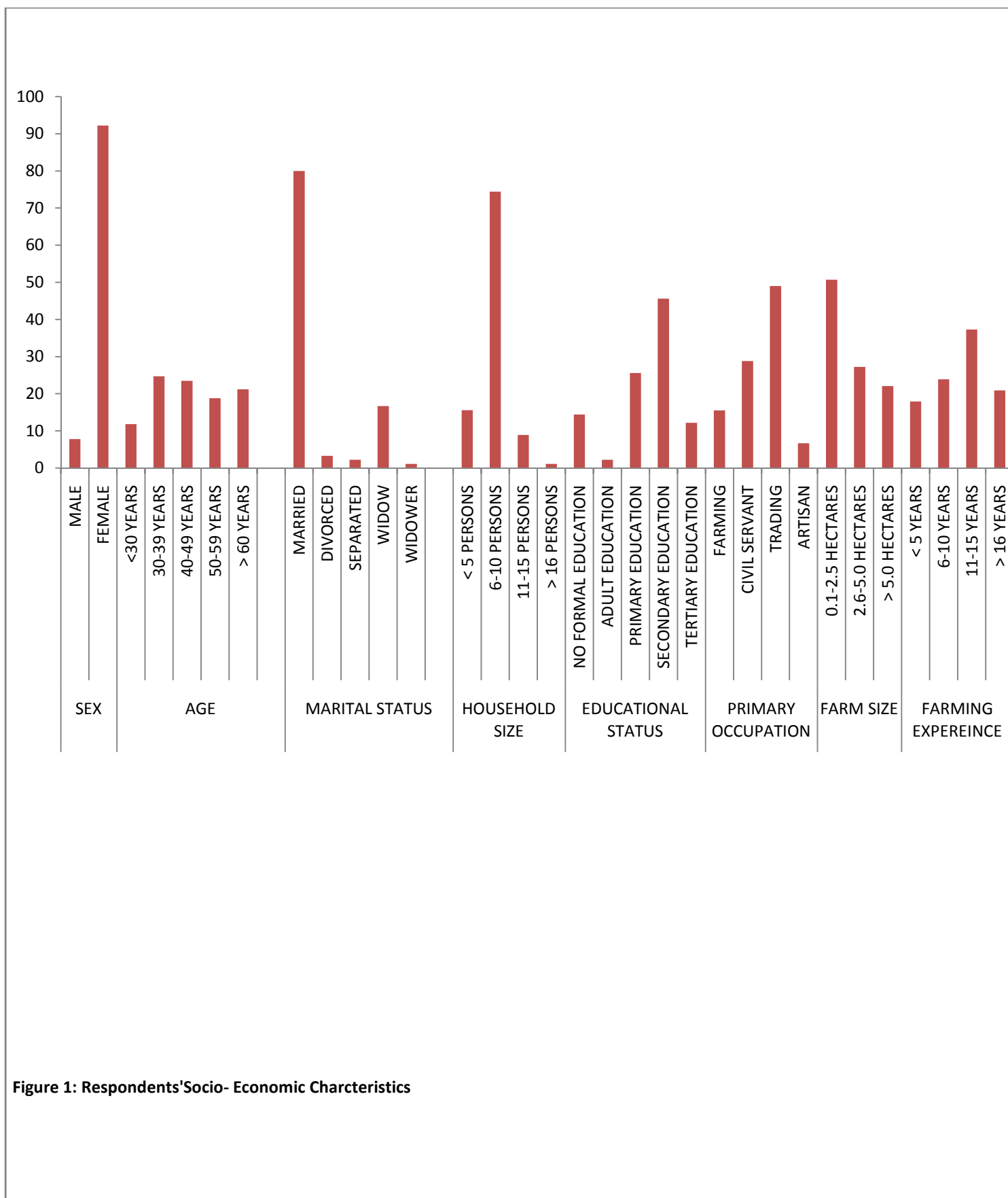
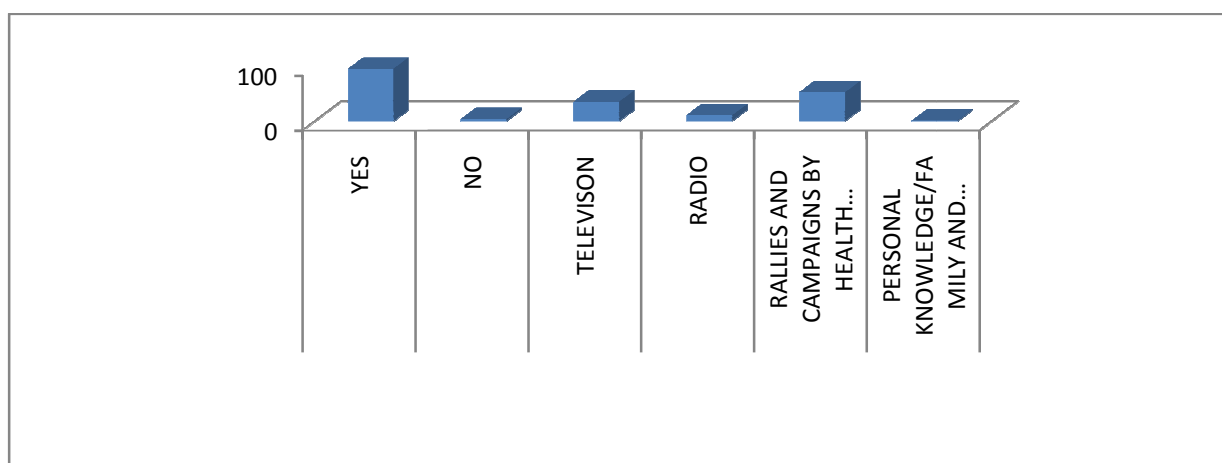


Figure 1: Respondents' Socio- Economic Characteristics

109 Awareness and Sources of Awareness of Respondents about Children Immunization.

110 Ninety six percent of the respondents interviewed during the focused group discussion
 111 attested that they were aware of children immunization. This implies that the respondents in the
 112 study area were aware of immunization programme this may be due to the fact that majority
 113 (76.7 percent) of them were married and could as a result would have had reasons to immunize
 114 their children at one time or the other. The literacy level of the respondents could have also
 115 contributed to the awareness; this is because awareness about new innovations or programmes
 116 increases with the level of education (Akinwalere , 2012). The results from the study revealed
 117 that respondents' sources of information ranges from rallies and campaigns by health workers
 118 /NGOS (53.3 percent), television (36 percent), radio (11 percent) to personal knowledge/family
 119 and friends (1.7 percent). This result contradicts the assertion that immunization coverage in
 120 Nigeria has remained low (Kabir, *et al.*, 2005). The findings supports the findings of
 121 Abdulraheem *et al.*, 2011, that the main sources of information about children immunization
 122 include health workers town announcers, radio, family members and friends



123
 124 **Figure 2: Awareness and Sources of Awareness of Respondents about Children**
 125 **Immunization.**

126 **Respondents' Perception of Factors Influencing Children Immunization**

127 The study revealed that the respondents agreed that ignorance about basic benefits of
 128 immunization ($\bar{X}$: 4.15), access to information ($\bar{X}$: 4.11), lack of opportunity to be immunized
 129 ($\bar{X}$: 4.03), levels of mother's education ($\bar{X}$: 4.01), farmers' age ($\bar{X}$: 3.81), gender ($\bar{X}$: 3.41),
 130 ($\bar{X}$: 4.01), experience ($\bar{X}$: 3.56), availability of drugs ($\bar{X}$: 3.93), and fear of side effects ($\bar{X}$: 3.79)
 131 are major factors influencing their acceptance of children immunization. This trend corroborates
 132 with the assertion of Abduraheem *et al.*, 2011, that various reasons that account for mothers'
 133 incomplete vaccination of their children include long waiting time at the health facility, lack of
 134 vaccine on the appointment day, absence of personnel at the health facility, child ill-health at the
 135 time of immunization, lack of information about the days for vaccination, forgetting the days of
 136 immunization, long distance walking, mother's illness on the day of vaccination, social
 137 engagements, lack of money, schooling mothers, parents objection, disagreement or concern
 138 about immunization safety.

Lack of opportunities to be immunized (4.03), Fear/rumour (3.95) of side effects, ignorance about benefits of vaccination (4.15), lack of vaccines Lack of understanding of the need for multiple doses (3.97), lack of vaccines/supplies (3.75), lost of immunization cards(3.84) are the major constraints to children immunization. The study showed that the respondents were undecided on whether cost of immunization (3.09), health workers' attitude (3.47), culture (2.97) and past bad experience of health programmes influence respondents acceptance of children immunization, The study further indicated that respondents were undecided on whether difficult access (3.18), poverty/inadequate capital (2.72), attitudes of health workers (3.33), long waiting time (3.36) and limited autonomy for women to leave the house at will are constraints to children immunization.

Table 1: Respondents' Perception of Factors Influencing Children Immunization

S/N	Factors	SA	A	UD	D	SD	Mean	Remark
i.	Distance of health centres/hospitals/health workers to	12 (15.2)	49 (62.0)	5 (6.3)	11 (13.9)	2 (2.5)	2.73	U

community								
ii.	Access to information	23 (31.1)	39 (52.7)	9 (12.2)	3 (4.1)	-	4.11	A
iii.	Level of mother's education	19 (25.0)	42 (55.3)	12 (15.8)	3 (3.9)	-	4.01	A
iv.	Age of farmer	16 (21.9)	35 (47.9)	15 (20.5)	6 (8.2)	1 (1.4)	3.81	A
v.	Former experiences at health facility/outreach, leading to fears, negative expectations, and lack of trust	7 (9.5)	14 (18.9)	25 (33.8)	21 (28.4)	7 (9.5)	2.91	U
vi.	Child being too sick, too weak for vaccination/fatalism	1 (1.1)	12 (15.8)	24 (31.6)	29 (38.2)	10(13.2)	2.54	U
vii.	Lack of opportunities to be immunized.	15 (19.0)	56 (70.9)	3 (3.8)	5 (6.3)	-	4.03	A
viii.	Fear/rumour of side effects	21 (26.9)	41 (52.6)	7 (9.0)	9 (11.5)	-	3.95	A
ix.	Ignorance about basic benefits of immunization.	21 (29.2)	41 (56.9)	10 (13.9)	-	-	4.15	A
x.	Lack of understanding of need for multiple doses, when and where to return, and that immunization protects against certain specific diseases.	20 (27.4)	34 (46.6)	17 (23.3)	1 (1.4)	1 (1.4)	3.97	A
xi.	Restricted/inconvenient hours, difficult access.	8 (12.5)	19 (29.7)	20 (31.3)	11 (17.2)	6 (9.4)	3.18	U
xii.	Poverty/inadequate capital	8 (11.3)	14 (19.7)	9 (12.7)	30 (42.3)	10 (14.1)	2.72	U,
xiii.	Health worker attitudes and behaviour; charges (official and unofficial).	7 (10.9)	24 (37.5)	19 (29.7)	11 (17.2)	3 (4.7)	3.33	U
xiv.	Long waiting time before been attended to at the immunization centres.	9 (12.9)	25 (35.7)	21 (30.0)	12 (17.1)	3 (4.3)	3.36	U
xv.	Lack of vaccines/ supplies.	12 (17.4)	36 (52.2)	14 (20.3)	6 (8.7)	1 (1.4)	3.75	A
xvi.	Lost/ unavailable immunization cards.	21 (28.0)	32 (42.7)	12 (16.0)	9 (12.0)	1 (1.3)	3.84	A
xvii.	Limited autonomy for women even to make the decision to leave the house hinders immunization.	1 (1.3)	10 (13.2)	29 (38.2)	28 (36.8)	8 (10.5)	2.57	U
xviii.	Religion.	5 (6.7)	4 (5.3)	21 (28.0)	37 (49.3)	8 (10.7)	2.48	D

159 **Source : Field Survey,2013.**< 1.5 = strongly disagree; 1.5 – 2.49 = disagree; 2.5 - 3.49 = Undecided; 3.5 – 4.49 = agree; 4.5 – 5 = Strongly
160 agree

161

Chi Square Analysis of the Relationship between the Socio-Economic Characteristics of the Respondents and Children Immunization.

The chi square analysis showed that gender, marital status, education and primary occupation of the respondents have significant relationship with immunization of children. This implies that gender, marital status, education and primary occupation influence the decision of respondents to immunize children. This finding agrees with the assertion that respondents' socio economic characteristics influence people's perception about a program or innovation (Alfred 2001).

Table Chi Square Test Result

Variable	Calculated Chi-Square	df	Tabulated Chi Square	Decision
Gender	64.178	1	3.841	Significant
Marital Status	187.778	4	9.488	Significant
Education Level	76.8	5	11.070	Significant
Primary Occupation	50.281	3	7.815	Significant

$\alpha = 0.05$

Conclusion

The study has established that the farmers in the study area were aware of children immunization and the farmers have embraced the programme as a means of ensuring and improving the health status of their children especially at the early period of child development.

Recommendations

1. Maternal education should be advocated as a strategy to educate parents on the importance of children immunization.
2. Government should see to the provision of more primary healthcare facilities in the rural areas to ensure adequate coverage of and accessibility to the health facilities.
3. There is a need to intensify awareness on the benefits of child immunization since it has been found to combat various infectious diseases and strengthens essential antibody system of the children. This could be achieved through awareness campaigns and enlightenment programs by effective participation of government, NGOs, religion leaders and mass media.
4. The no payment for immunization should continue.

Reference

- Abdulraheem I. S., Onajole A. T., Jimoh A. A. G., and Oladipo A. R (2011). Reasons for Incomplete Vaccination and Factors for Missed Opportunities among Rural Nigerian Children *Journal of Public Health and Epidemiology Vol. 3(4), pp. 194-203, April 2011* Available online at <http://www.academicjournals.org/jphe> ISSN 2141- 2316 ©2011 Academic Journals
- Alfred, S.D.Y (2001): Socio Economic and Psychological Factors Affecting the Adoption of Agricultural Innovation by Farms Household in Kogi State, Nigeria (Unpublished Ph.D.Thesis) University of Ibadan , Nigeria.
- Arulogun, O., S & Obute., J. A. (2007). Parents' Awareness and Perception of the Polio Eradication Programme in Gombe Local Government Area, Gombe State. *International Journal of Health Promotion and Education*. Pp 15-18.
- Kabir, M., Iliyasu, Z., Abubakar, I.S., and Gajida, A.U. (2006). Knowledge, perception and Beliefs of Mothers on Routine Childhood Immunization in a Northern Nigerian village. Pp 9-15.
- Owolabi K.E and Okunlola J.O (2014): Utilization of indigenous knowledge in controlling cocoa pests and diseases in Ekiti State, Nigeria (Unpublished Master's Thesis) submitted to the

- 202 Department of Agricultural Extension and Communication Technology, School of
203 Agriculture & Agricultural Technology, Federal University of Technology, Akure.