

Impact of teenage pregnancy on farming households' welfare: empirical evidence from southwest, Nigeria

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ABSTRACT

Teenage pregnancy and rural households' welfare are inextricably linked and its spate is more prevalent, especially in the rural area where education and family planning information seems to be insufficient. The occurrence of this anti-cultural attitude among teenagers has plunged many youths into marital life they never prepared for which results in unsettled homes or sole existence as single parents which is a lifestyle that affects their lives financially, emotionally, and psychologically. This study was carried out in southwest Nigeria by purposively selecting Osun and Oyo States and using a multistage sampling technique to select a total of 174 respondents which comprise 81 pregnant and 93 non-pregnant teenagers. Socioeconomic characteristics, factors determining teenage pregnancy and household welfare, and perceived effects of teenage pregnancy were analyzed using descriptive statistics, and endogenous switching regression. Results obtained revealed that pregnant and non-pregnant teenagers had an average age of 16.4 years and 15.8 years respectively, an average of 7 members and 3 members apiece while their average monthly allowances were ₦4,250.00 and ₦11,342.00. Results further revealed that years of education and parental care had an inverse and significant relationship with teenage pregnancy while the dependency ratio influenced teenage pregnancy directly. The majority (98.3%) of the respondents agreed strongly that teenage pregnancy resulted in total abandonment of formal education and reduces welfare. The hypothesis suggested that there is a significant relationship between teenage pregnancy and welfare in the study area. It was recommended among others that parents should support their teenagers morally and financially.

Keywords: Farming, rural households, teenage pregnancy, welfare

INTRODUCTION

Teenage pregnancy is the conception by girls between the ages of thirteen and nineteen which is an undesirable phenomenon (Melgosa, 2001; Kost *et al.*, 2010). World Bank Organization (1997) defined teenage pregnancy as the age bracket of between 10 and 19 years when the secondary sex characteristics appear. Melissa (2012) and Mollborn (2007) aptly accentuated the period as the second decade of life when a person is in the second genital stage of development. In the same vein, Ukekwe (2001) also described teenage pregnancy as the most important period in human life which if not properly handled could lead to the most disastrous consequences later in life, especially among females who are on the receiving end.

Despite the fact that procreation is preceded by pregnancy, teenage pregnancy was described and condemned by (Kapp *et al.*, 1980; Gordon, 1983; Rojas, 1989; Skyes, 2000; Nwosu, 2005) in expressing it as a condition in which a female carries in her womb the young before it is born but agreed that pregnancy is better to occur at the appropriate time and in wedlock which was adjudged as culturally acceptable but decried pre-marital sex that may result in a pregnancy which always results in putting themselves into the responsibility they inadequately prepared. The teenage pregnancy effect was described as inflicting untold pains on the mother and cited the aftermath of unprepared pregnancy leading to numerous cases of school dropout; maternal mortality and morbidity, infertility, abortion and

children being abandoned in gutters, dustbins, latrines, and other deadly places are clear manifestations of the malady of teenage pregnancies (Fadeyi, 1978; Ukekwe, 2001; Onuzulike, 2003).

Agriculture plays a significant role in the economic development of Nigeria contributing an average of 23% to the Gross Domestic Product of the country (National Bureau of Statistics, 2021; Guardian, 2022). Idachaba (2004) and Akinyosoye (2005) described agriculture as the primary foundation of economic growth and development. Farm activities are time bound and the labour required in achieving production goals is neither age nor gender biased. The productive capacity of farmers in the production, processing, and marketing of farm products most especially among farm households practicing subsistence agriculture and characterized by the use of family labour requires full participation which could be affected when any member of the household is hindered in one way or the other (Adegeye and Dittoh, 1986; Adesimi, 1988). Rojas (1989) condemned teenage pregnancy as being a source of hindrance to the economic, academic, and social performance of teenagers which is considered a hindrance to farming labour performance in the agricultural sector as it precludes them from giving their best to seasonal production season.

Arising from the foregoing, it is evident that numerous cases of teenage pregnancy are prevalent in the urban where there is relative unavailability of medical facilities and advice relative to the rural communities where these opportunities are lacking, the situation is bound to be worse. Based on this, critical findings into the situation of teenage pregnancy on the rural dwellers and its effect on their welfare is a gap to be identified and bridged to intensive findings which will be of policy relevance and reverse the trend of the effect on the people. This study hopes to answer the following questions: what are the socioeconomic characteristics of the respondents? What factors determine teenage pregnancy and farm households' welfare in the study area? The main objective of the study was to assess the socioeconomic drivers of teenage pregnancy among rural farm households in southwest Nigeria while the specific objectives are to: describe the socioeconomic characteristics of teenagers in the study area;

identify determinants of teenage pregnancy and examine the perceived effects of teenage pregnancy on rural households in the study area. The study was built on the null hypothesis that: H_0 : There is no significant relationship between teenage pregnancy and rural households' welfare

MATERIALS AND METHODS

Study Area

The study area was southwest Nigeria which comprises six (6) states: Ogun, Oyo, Ekiti, Lagos, Osun, and Ondo States. It is bounded in the North by the middle-belt, in the East by Delta and Edo State, in the West by Benin Republic, and in the South by the Atlantic Ocean. The area cuts across ecological zones such as mangrove swamps, rainforests, guinea savanna, and derived savanna. It is majorly a Yoruba-speaking area, although there are different dialects even within the same state. The population of Southwest is 27,581,992 (National Population Commission, 2006). The weather conditions vary between two distinct seasons, the rainy season (March-November) and the dry season (November-February). The dry season brings the harmattan dust; cold dry winds from the northern deserts blow into the southern region. Southwest Nigeria has the highest number of large cities (about 39%) relative to the other existing five zones in the country. The rural part of the area is large and this affords the zone the opportunity to practice farming on a small, medium, and large scale. Also, there are many primary, secondary, and tertiary institutions in the area and this opportunity enhances the high literacy level in the area.

Sampling technique

A multistage sampling procedure was employed in the selection of the respondents. The first stage was the purposive selection of Osun and Oyo states (Fig. 1) from the Southwest Nigeria based on high concentration of teenagers in their rural communities. Random selection of five local government areas (LGAs) from each state was the second stage while the third stage was the purposive selection of five towns from Osun and Oyo states due to prevalence of prominent rural communities alongside presence of massive population of teenagers. The fourth sampling stage was the use of snowballing in selecting 100 pregnant teenagers from the ten villages and towns with 10 from each town

through contact with the nearest Maternity Centre which eventually led to the final sampling of 81 respondents due to some biased responses. Similarly, 100 non-pregnant teenagers were also randomly selected from the same 10 communities with 10 from each due to an inconsistent supply of data. A total of 174 respondents were finally selected and used in the final analysis (Table 1).

Data collection

Data used for this study was from primary source. Copies of well-structured and pre-tested

questionnaire were administered to collect data from the respondents with the service of trained enumerators. Other instruments used in collecting data were camcorder for image capturing and cell-phone for voice-recording while interview schedule complemented the data collection strategy. Among the key variables in the data collected were: age, farming experience, household size, number of teenage mothers, monthly income, household expenditure, gender, educational level, years of education, and marital status among others.

Table 1: Detailed sample population for the study

States	LGAs	Town	Pregnant Teenagers	Final Sample	Non-Pregnant Teenagers	Final Sample
Osun	Ila	Ila Orangun	10	8	10	10
	Ejigbo	Olla	10	9	10	8
	Boripe	Iragbiji	10	8	10	10
	Ife North	Ipetumodu	10	7	10	9
	Ifelodun	Ikirun	10	9	10	10
Oyo	Iwajowa	Ijio	10	8	10	9
	Irepo	Kisi	10	7	10	10
	Oriire	Iluju	10	8	10	8
	Itesiwaju	Okaka	10	9	10	10
	Kajola	Isemi-Ile	10	9	10	9
Total	-	-	100	81	100	93

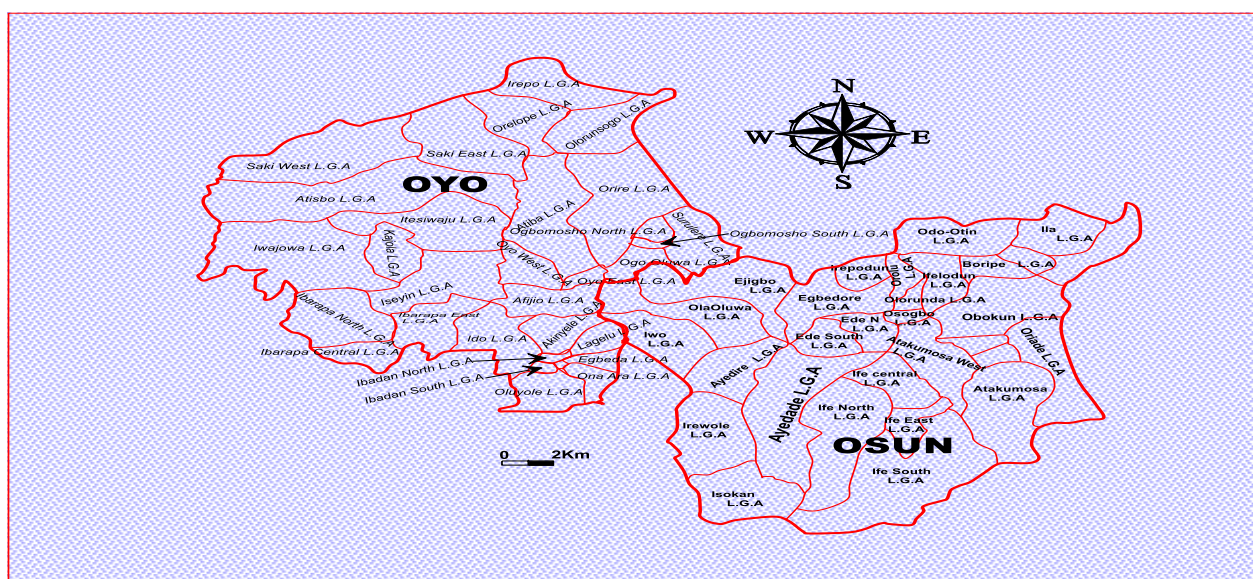


Figure 1: Map of the Study Area

Source: Ministry of Lands, Osun and Oyo States (2019)

Statistical analysis

Switching regression model on impact of teenage pregnancy welfare was performed. The probit regression was first used to determine the factors that affect the teenage pregnancy condition of the respondents sampled while switching regression model was used to correct for sample selection bias which may arise from other interventions that provided multiple statuses to teenagers in addition to pregnancy (Lee 1978, Madalla, 1983). Empirical applications of this model to agriculture include studies by Feder *et al* (1990); Goetz (1993); Fuglie and Bosch (1995) and Freeman *et al* (1998). In using the Switching regression model, separate regression equations are used to model the welfare of groups of teenagers' condition on a specified criterion functions.

The teenage pregnancy condition of the teenagers is described by an unobservable welfare function of a vector of exogenous household socioeconomic and pregnancy status variables. The relationship between pregnancy status and the vector of the explanatory variable is specified as I^*

$$I^* = \delta Z_i + \mu_i \dots\dots \text{Eq. 1}$$

Where;

Z is a vector of exogenous variable δ is a vector of parameters and μ_i is a random disturbance term that is distributed with zero mean and constant variance δ^2 .

I , which is the indicator of teenager's status not observed, but responses from survey is used to determine those households whose household's expenditure (proxy for welfare), that is,

$$I^* > 0$$

These responses are used to define the criterion function which is observable dichotomous variable I_i

Where;

$$I = 1 \text{ if } I^* = \delta Z_i + \mu_i \geq 0 \dots\dots \text{Eq. 2}$$

$$I = 0 \text{ otherwise}$$

The dependent variable in the first stage probit equation is teenager's status condition (Pregnant or otherwise). The variable takes a value of 1 if a teenager is pregnant and 0 if otherwise. The explanatory variables are continuous and binary. Probit maximum likelihood estimates are used to estimate the parameter δ in equation (2). It is assumed that $\text{var}(U_i) = 1$, since δ is estimable only up to a scale factor. Following from Feder *et al* (1990) and Freeman (1998), the welfare of the two groups of farmers is modelled by a reduced form equation specified by:

$$Y_{1t} = \beta_1 X_{1t} + U_{1i} \text{ if } i = 1 \dots\dots \text{Eq. 3}$$

and,

$$Y_{2t} = \beta_2 X_{2t} + U_{2i} \text{ if } i = 0 \dots\dots \text{Eq. 4}$$

Where;

β_1 and β_2 are vector parameters

X_{1i} and X_{2i} are vectors of exogenous variables defined in equation 4.

U_{1i} and U_{2i} are random disturbance terms

Y_{1i} and Y_{2i} are the monthly expenditure function for teenagers with and without pregnancy.

Ordinary least square (OLS) method is used to estimate the parameters β_s equation (2). The random disturbance terms U_{1i} , U_{2i} and U_i are assumed to have trivariate normal distribution with zero mean and non-singular covariance matrix. Maximizing the bivariate probit likelihood function is feasible but time consuming to a two-stage estimation method is used to estimate the systems of equations (1) and (2). The conditional expected values of the error terms U_1 and U_2 in equation (2).

Where;

ϕ and Φ are the probability density function and the cumulative distribution function respectively. The ratio $\frac{\phi}{\Phi}$ evaluated at $\delta^1 z_i$ for each 1 is the inverse mills ratio. For convenience, define

$$\lambda_{1i} = \phi(i\delta^1 z_i) / \Phi(\delta^1 z_i) \text{ and } \dots\dots \text{Eq. 5}$$

$$\lambda_{2i} = \phi(i\delta^2 z_i) / \Phi(\delta^2 z_i)$$

These terms are included in the specification of equation 5 to yield

$$Y_{1t} = \beta_1 X_{1i} + \sigma_{1u} \lambda_{1i} + e_{1i} \text{ if } I = 1 \dots\dots \text{Eq. 6}$$

$$Y_{2t} = \beta_1 X_{2i} + \sigma_{2u} \lambda_{2i} + e_{2i} \text{ if } I = 0 \dots\dots \text{Eq. 7}$$

Where;

e_{1i} and e_{2i} , the new residuals have zero conditional means. These residuals are however heteroskedastic. Therefore, estimating equation (5) by weighted least square (WLS) rather than OLS would give efficient estimates.

Thus the two stage estimation procedure that is used to estimate the model proceeds as follows: In the first stage, probit maximum likelihood is used to obtain an estimate of δ from equation (2). By substituting the estimated values of δ for δ ; estimates are obtained for λ_{1i} and λ_{2i} from equation (4). The second stage (equation 5) is estimated by WLS using the estimated value λ_{1i} and λ_{2i} as instruments for λ_{1i} and λ_{2i} respectively.

Test of Hypothesis

In the determination of the relationship between teenage pregnancy and rural households' welfare, t-test statistics were employed. T-test is

amenable to the testing differences between only two numbers which are summary measures of continuous variables; it handles both small and large samples (Rangaswamy, 1995; Spiegelet *al.*, 2009). The tool is stated as follows

$$t = \frac{X_1 - X_2}{S_{x_1x_2} \cdot \sqrt{\frac{2}{n}}}$$

Where;

$$S_{x_1x_2} = \sqrt{\frac{1}{2}(S_1^2 + S_2^2)}$$

$S_{x_1x_2}$ is the grand standard deviation, 1= group one, 2 = group two. The denominator of t is the standard error of the difference between two means. For the significance testing, the degree of freedom for this test is 2n-2 where n is the number of respondents in each group.

RESULTS AND DISCUSSION

Socioeconomic characteristics of the respondents

The results presented in Table 2 reveal that pregnant and non-pregnant counterparts have average ages of 16.4years and 15.8years respectively indicating that both are mature for farm labour considering their productive capacity at the age attained. This finding conforms to Mahtab (2010) who reported that 17% of girls in least developed countries are married by their fifteenth birthday and consequently suffer a range of acute negative emotional, physical and psychological impacts due to their immaturity. Educational levels of pregnant teenagers were dominating at the primary school level while the non-pregnant category clustered around the secondary school. It could be inferred from this result that teenage pregnancy retards education or completely abandon it. This finding agrees with Envuladu, *et al.* (2016) who reported in a study conducted in Plateau State, Nigeria that 82.4% of married girls suspended schooling during the course of their education.

The majority of teenage respondents were married while their non-teenage counterparts were mostly single. Being single enhances an ample opportunity to concentrate on their endeavours maximally whether education or farming activities which would be otherwise in

the case of their married mates as marital life involves a high level of additional commitments. This result agrees with Akonor (2021) who reported in his study that pregnant teenagers in their marital homes have slow rate of progress in the pursuit of their life ambitions due to distractions. The households with teenage pregnancy cases had an average of 7 members while their counterparts have 3 members. Teenage pregnancy household is numerically favorable to farm activities but the level of contribution and concentration on farming activities in terms of giving the required man-day labour matters a lot and this may not be a deficiency on the part of non-pregnant teenagers as maximum labour contribution will be made undistracted. Pregnant teenagers were found to source income mostly from friends and also from self while the sources of their counterparts who are non-pregnant were mostly from their parents. It could be inferred that the care of non-pregnant teenagers still remains the responsibilities of their parents while pregnant teenagers' responsibilities are left in the hands of their supposed husbands who may not be financially enough to cater for their adequate needs. The monthly allowance of pregnant and non-pregnant respondents was the respective of ₦4, 250.00 and ₦11, 342.00. The reason for the lower allowance of the former compared to the latter due to frequent and productive access to farming activities which provided frequent and timely income. Shortage of information on family planning saw 84.6% being bereft pregnant teenagers bereft of information on family planning and the like while overwhelming 77.4% of non-pregnant counterparts having access to health centres for medical advice. This result associates with the submission of Nyarko (2015) where he established that the majority of pregnant teens are bereft of sufficient information on access and correct use of contraceptive. Pregnant teenagers were far away from functional healthcare centres by an average distance of 1.25km while it was 0.72km in the case of non-pregnant status. A wide distance from functional healthcare centres where advice could be sought on parental planning discourages attendance by the respondents. About 32% of pregnant

teenagers who were highest advanced lack adequate family planning education as the main reason for their present status while 60.2% of non-pregnant counterparts imputed being in that condition to lack of good parental care.

Table 2: Socioeconomic characteristics of pregnant teenagers

Variable	Pregnant Teenagers(n=81)		Non-Pregnant Teenagers(n=93)	
	Frequency	Percentage	Frequency	Percentage
Age(in years)				
≤14	17	20.9	31	33.3
15-17	54	66.7	52	55.9
>17	10	12.4	10	10.8
<i>Mean Value</i>	16.4 years		15.8 years	
Educational Level				
No formal Education	2	9.5	9	9.7
Attempted Primary	5	6.2	8	8.6
Primary	61	75.3	17	18.3
Attempted Secondary	3	3.7	4	4.3
Secondary	10	12.3	45	48.4
Tertiary	-	-	10	10.7
Marital Status				
Single	29	35.8	84	90.3
Married	39	50.7	9	9.7
Divorced	8	22.3	-	-
Widow	5	6.2	-	-
Household Size(No.)				
≤4	7	23.5	47	50.5
5-6	24	29.6	20	21.5
>6	50	61.7	26	28.0
<i>Mean Value</i>	7 members		3 members	
Income Source				
Self	23	35.8	5	5.4
Parents	5	13.7	59	63.4
Neighbors	18	22.2	12	12.9
Friends	35	43.3	17	18.3
Total Monthly Allowance(in Naira)				
≤5,000	53	65.4	25	26.9
6,000-10,000	8	9.9	18	19.3
11,000-15,000	15	18.5	12	12.9
>15,000	5	6.2	38	40.9
<i>Mean Value</i>	N4,250.00		N11,342.00	
Information on Family Planning Education				
Yes	11	13.6	72	77.4
No	70	86.4	21	22.6
Distance to Nearest Functional Healthcare Centre				
≤0.5km	8	9.9	9	9.7
0.6km-1km	13	16.1	63	67.7
1km-2km	21	25.9	6	6.5
>2km	39	48.1	15	16.1
<i>Mean Value</i>	1.25km		0.72km	
Reason for Present Status				
Lack of parental care	15	18.5	56	60.2
Peer influence	23	28.4	19	20.4
Lack of family planning education	26	32.1	-	-
Inordinate ambition	4	4.9	-	-
Parental pressure	13	16.1	18	19.4
		100.0		100.0

Table 3: Determinants of teenage pregnancy and household's welfare using endogenous switching regression model

Variable	Coefficient	Std Error	z	p>/z/
(A) Household exp ₁				
Constant	-1.6894***	0.4307	-3.92	0.000
Age	-0.07104	0.0613	-1.16	0.247
Age ²	0.0037	0.0025	1.48	0.138
Monthly Income	0.0000***	1.91e ^{-0.6}	21.43	0.000
Education year ²	0.0111	0.0601	0.18	0.854
Dependency ratio	2.28e ⁻⁰⁶	1.5e ⁻⁰⁶	1.51	0.130
HHexp ₂				
Constant	0.9608	3.0663	0.31	0.754
Age	-0.3002	0.3440	-0.87	0.383
Ages ²	0.0078	0.0096	0.81	0.417
Monthly Income	0.0001***	2.63e ⁻⁰⁶	12.5	0.000
Education year ²	-0.0349	0.0888	-0.39	0.694
Dependency ratio	1.45e ⁻⁰⁶	2.47e ⁻⁰⁶	0.58	0.556
(B) Teenage Preg.2				
Age	0.2681	0.6491	0.41	0.680
Age ²	-0.0059	0.0208	-0.29	0.776
Monthly Income	-0.0000	0.0000	-1.44	0.151
Education year ²	-1.6722***	0.4719	-3.54	0.000
Dependency ratio	0.0001*	0.0001	1.69	0.091
Parental care ²	-4.6110***	1.2519	-3.68	0.000
No of friends	-0.1003	0.2850	-0.35	0.725
Inst1	-1.0174***	0.0764	-13.33	0.000
Inst2	-0.5806***	0.0677	-8.58	0.000
r1	0.1886	0.3970	0.48	0.635
r2	-0.2701	0.2064	-1.31	0.191
Sigma ₁	0.3615	0.0276		
Sigma ₂	0.5595	0.0378		
rho ₁	0.1864	0.3832		
Rho ₂	-0.2637	0.1920		

Note: *** and * are significant levels at $p \leq 0.01$ and 0.10 , respectively

Determinants of teenage pregnancy and household's welfare

The report of welfare selection equation was reported in the section of the output headed "Teenage Pregnancy". The results of the welfare (Household expenditure) regression in the teenage pregnancy sector are reported in the "HHexp₁" section and the welfare (Household expenditure) regression in the teenage pregnancy is outputted in the "HHexp₂" section. Table 3 presents the determinants of teenage pregnancy and households' welfare among the farming household in the area under study. The log-likelihood (135.920; $p < 0.001$)

indicated that the model used for the analysis was fit and appropriate. The correlation coefficients rho₁ and rho₂ are positive and negative respectively, but significant only for the correlation between the sector choice equation and the public sector wage equation. Since rho₂ is positive and significantly different from zero, the model suggests that individual teenagers who are not pregnant had higher welfare (household expenditure) in that sector than a random individual from the sample would have attained, and those who have teenage pregnancy do no better or worse than a random individual. The variables sigma, /lns₁,

$\ln s_2$, r_1 , and r_2 are ancillary parameters used in the maximum likelihood procedure. σ_1 and σ_2 are the square-roots of the variances of the residuals of the regression part of the model and $\ln s_1$ is its log. r_1 and r_2 are the transformations of the correlation between the errors from the two equations.

The age of the respondents, monthly income, years of education, dependency ratio, and number of friends were factors modeled in determining the cause of teenage pregnancy in the study area. However, years of education, dependency ratio, and parental pressure were found to be significant either positively or negatively. Years of education were found to be negatively significant at 1%. A unit increase in the years of education leads to 0.0349 decrease in the probability of occurrence of teenage pregnancy among households in the study area. This result is suggestive of the fact that, when education is advanced, there will be sufficient information and awareness for the teenagers on medical steps to be taken in averting early pregnancy which can unavoidably affect their ambition, either in their farm productivity or academic work. This result corroborates the finding of Bennet, *et al.* (2017) who asserted that teenagers with low level education fall victims of teenage pregnancy while some with advanced education are not.

The dependency ratio of the respondents had a positive influence on the incidence of teenage pregnancy. A unit increase in dependency ratio leads to a 0.0001 unit increase in the probability of occurrence of teenage pregnancy among the respondents. This result suggests that, with an increase in dependence of teenagers on their parents without thinking out of the wood to provide for themselves through engaging in some income-generating activities, there may be a problem of funds insufficiency. Parental care was found to negatively influence teenage pregnancy and was very significant at 1%. A unit increase in parental care leads on average to 4.6110 decreases in the probability of occurrence of teenage pregnancy in the study area. It could be inferred from this result that, if parental care for teenagers is taken as the primary duty of parents, teenagers will learn how to evade the ugly act of premature sex and preclude the shameful consequence of teenage pregnancy. This result concurs with Kaplan (2013) who in his finding ascertained that most

of the teenage mothers recount their experiences of pregnancy period and attribute the cause to paucity of funds and lack of enough parental care. Monthly income was very significant at 1% and positively influences household expenditure which is the proxy for household welfare of the respondents in the study area. A unit increase in the monthly income of farm households, on average, leads to a 0.0001 increase in the welfare of the respondents. With an increase in welfare, it is believed that the purchasing power will increase, and so, welfare will also trend positively.

Perceived effects of teenage pregnancy among rural farm households

The perceived effects of teenage pregnancy among rural farming households are presented in Table 4. Reduction in farm labour (98.3%) suggests that the number of man-days labour on the farm for the season will decrease. Insufficient family finance (87.2%) suggests that occurrence of teenage pregnancy in the farm households will result in more population and resultant increase in household expenditure, alternatively, it adds to family labour in the long-run. Poor moral care for children (85.1%) was rated third. Teenage mothers possess insufficient home training due to their early exit from their parents' domain; this makes them unprepared for marital home and responsibilities. Abandonment of formal education (84.5%) is also a major perceived effect as a pregnant teenager will be denied stay in class once she experiences status transition of this nature based on the rules and regulations of primary and post primary schools in Nigeria. Consequent upon suspension of a teenager from school, the period she is absent from school leads to loss of school years (81.0%) which in some cases will not be regained. Teenage pregnancy also leads to additional expenses for farm households (71.8%) as members of household have increased leading to insufficient household needs and unnecessary competition for resources. Prevalence of early separation and divorce (63.8%) remains a critical effect of teen pregnancy if the status results in marriage. The couples being unarmed or have insufficient experience of cohabiting, there may be misunderstanding from time to time which may lead each party going their separate ways. Contraction of venereal disease (58.6%) is associated with teenage pregnancy as two strange parties coming together sexually

without comprehensive of their previous lifestyles come together, this can result in serious and incurable infections which may even terminate the relationship dead or alive.

Table 4: Perceived effects of teenage pregnancy among rural farming households

Effect	Frequency	Percentage	Rank
Loss of school years	141	81.0	5th
Reduction in farm labour	171	98.3	1st
Contraction of venereal diseases	102	58.6	8th
Abandonment of formal education	147	84.5	4th
Additional expenses to the farm households	125	71.8	6th
Prevalence of early separation and divorce	111	63.8	7th
Poor moral care for children	148	85.1	3rd
Insufficient family finances	153	87.9	2nd

****NB:** Multiple responses allowed

Table 5: Test of Hypothesis

Variable	Test Value=0			
	t	df	Sig.(2-Tail)	Mean Diff.
Teenage Pregnancy	19.607***	173	0.000	0.6897
Household Expenditure	28.033***	173	0.000	44.17.93

*** Significant at $p \leq 0.01$

Test of Hypothesis

The result of the t-test employed to measure the relationship between teenage pregnancy and the welfare of the respondents using household expenditure as a proxy is presented in Table 5. The t-values for teen pregnancy (19.607; $p < 0.01$) and household expenditure (28.033; $p < 0.01$) revealed that the two variables were found to be significantly different from zero. Therefore, the null hypothesis was rejected while the alternative hypothesis that there is a significant relationship between pregnancy and household expenditure was accepted. It could be inferred from this result that, rural households with low welfare status will always record more cases of teenage pregnancy in them. This result agrees with the finding of Ritcher and Mlambos (2015) who reported that the inability of parents to provide basic needs for teenage girls in the household will probably result in seeking help from strange sources to satisfy their needs, which may lead to sexual demand in return.

CONCLUSIONS AND RECOMMENDATIONS

Teenage pregnancy and welfare in the study area are inversely related, meaning that there is no significant relationship between the two. With an increase in the incidence of teenage pregnancy within a household, there is a decrease in the welfare of the rural households,

due to more population and lesser income, and in turn, a high dependency ratio. Based on the findings in the foregone, the following recommendations were made:

- (i) Information dissemination on family planning should be given more priority by the government, non-government organizations, and other medical stakeholders.
- (ii) Teenagers' activities should be well-monitored by parents, most especially, in the area of choice of friends and the source of money and other gifts available to their wards must be investigated.
- (iii) It should be made mandatory for parents to inculcate discipline in their children and ensure that moral care is given to them from infancy to teenage and possibly beyond.
- (iv) Government and other related stakeholders should ensure health facilities are made available within the reach of the rural households for advice, treatment, and information dissemination.
- (v) Planned Parenthood Federation of Nigeria (PPFN) with its mandate in the prevention of unwanted pregnancy should, through advocacy programmes give guidance to the teenagers alongside consequences of teenage pregnancy.

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