

EFFECTIVE BIRTH CONTROL AS A CATHOLICON TO SOCIAL ILLS AND SUSTAINABLE DEVELOPMENT: BIOLOGY STUDENTS VIEW

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ABSTRACT

This study examined the extent to which biology students view biology and effective birth control as catholicon to social ills and sustainable development at Federal College of Education (Special), FCE and Emmanuel Alayande College of Education Oyo, Oyo State, Nigeria. A descriptive survey design was employed. The study used a sample size of one hundred (100) comprising of NCE I and NCE II biology students of both targeted schools. The questionnaire instrument was designed and used to elicit information from respondents. Data collected were subjected to descriptive and inferential statistical analysis. The results showed that, biology students perceived that lack of birth control is a contributing factor to social ills in Nigeria; that effective birth control will help curb population explosion and national social ills and that birth control will enhance sustainable development. From the results, a conclusion was drawn and recommendations provided.

Keywords: Effective Birth control, Biology, Social ills, Sustainable Development.

Background of the Study

The Nigeria nation as at today, is greatly faced with a lot of social problems such as security challenge, lack of conservation of resources, corruption, youth unemployment, poverty, health challenges, environmental pollution, educational instability, to mention but a few. These all pose challenges to its progressive sustainable development.

Sustainable development is the organizing principle for meeting human development goals while at the same time sustaining the ability of nature systems to provide the nature resources and ecosystem services upon which the economy and society depend. The desired result is a state of society where living conditions and resources use continue to meet human needs without undermining the integrity and stability of the natural system (Wikipedia, 2019).

Sustainability as put by Mensah and Casto (2004) is the process suggested to improve the quality of human life within the limitations of the global environment. It involves solutions for improving human welfare that does not result in degrading the environment or impinging on the well-being of other people. The concept of sustainability has become the current answer to absolving the world of its environmental and economic crises in the 21st century. As developing nations struggle with issues of over population, disease and political conflict, developed countries also have to deal with problems such as infrastructure deterioration, pollution and unlimited urban expansion with limited resources and as such, the word sustainability has become a global buzz word as a potential solution for the many international, regional, and local problems facing the society today.

According to (Sharrock and Jackson 2016), the proposed 2030 Sustainable Development Agenda and associated Sustainable Development Goals (SDGs) which were developments to succeed the Millennium Development Goals (MDGs) and were adopted in 2015 by the international community through the United Nations. The agenda aims at seventeen goals and the first 3 goals are: to end poverty in all its forms everywhere; to end hunger, achieve food security improved nutrition and promote sustainable agriculture; to ensure healthy lives and promote well-being for all at all ages. One good way out to pursuing these goals is birth control. According to Amoni (2013), a high birth rate (large population or large family size) in Nigeria is directly proportional to the level of crime being witnessed in the nation.

Birth control is often inter-used with the word Family Planning. For this paper, it aims at small family size and child spacing excluding abortion. Population increase if not accompanied by a corresponding increase in other factors of production can lead to overpopulation which in turn can result in adverse social negative challenges. For example, overcrowding, poor health, environmental pollution, unemployment, poverty, starvation, insecurity, high drop-out rate, lack of education and high level of illiteracy.

As opined by Adedeji (2013), responsible parenthood involves among others, planning the size of the family, spacing children, taking care of the elderly and knowledge of physiology of human reproduction. While it is believed that a person has the right to decide how many

children he/she would want to have, having fewer and longed spaced birth, promote the health of the mother and the child. This also afford women more opportunities for sharing social and economic responsibilities. Fewer children mean more food for each child, and more time for parents to spend with their children, proper education, thus, better citizenry and sustainable developments.

Birth control through family planning is an important factor for improving maternal health. It also benefits the development opportunities of entire countries. It is more difficult for parents with very many children to provide for all of them and to send them to school. Yet, without a school education, the young generation lack important prerequisites enabling them later to feed their own family. And if women can decide the time of a pregnancy, they also have better chances to themselves train for a professional qualification, generate their own income and play an equal role in society. Therefore, birth control would enhance sustainable development in the sense that when a woman can pursue additional education and paid employment, families can invest more in each child. Children with fewer siblings tend to stay in school longer than those with many siblings. Leaving school in order to have children has long time implications for the future of these girls, as well as the human capital of their families and communities.

An analysis by Radio Nigeria in May, 2018, places emphasis on the following:

- (a) Access to voluntary Family Planning service is central to quality life, women empowerment and key for poverty reduction. According to experts, investing in Family Planning is investing in the health and right of women and couples in Nigeria.
- (b) That achieving Sustainable Development Goals by 2030 is greatly dependent on how well the sexual and reproductive rights of women and young people are safeguarded.
- (c) Research has indicated that women who adopt Family Planning are healthier and at lower risk of infant and maternal death.
- (d) Towards this end, Family Planning programmes have been identified as key to reducing maternal and infant death by 33 percent and 20 percent.
- (e) To protect the lives of women and children, the present administration has promised to invest heavily on Family Planning. According to the Minister of Health, Professor Isaac Adewole, government having realized the significance of Family Planning to national development promised to distribute six million dollars to each state through loans to purchase Family Planning consumables.
- (f) Nigeria's current population of over 180 million is alarming and the only way to curtail this is to ensure voluntary safe and cheaper access to Family Planning.

Family planning is widely recognized as one of the most cost-effective health interventions. Decades of research have demonstrated that modest investments in family

planning can save lives and dramatically improve maternal and child health. There is a growing push in the development community to reprioritize family planning because of the cross-cutting role it plays in achieving broader development goals, including the Millennium Development Goals (MDGs) and poverty reduction (PRB 2019 Report).

Family planning slows unsustainable population growth which drains resources from the environment and national and regional development efforts (WHO, 2019). Health wise also, both early and late motherhood have increased risks. Young teenagers face a higher risk of complications and death as a result of pregnancy (Wikipedia, 2019). It is worthy of note also, that reproductive risks increase with age.

Education is central to sustainable development. Biology focused education, when linked to real world situation because of the many advances in humankind's understanding of the basic processes and components of life has relevant societal issue (Teng, 2012). Human beings are major accelerators in the development of material or natural resources and therefore have direct implication on sustainable development around the globe. Biology is an interesting subject that has been intriguing scientific minds for several centuries. Despite exponential developments in technology, over the past few centuries, the origin of life on earth is still one of the biggest mysteries yet to be unraveled (Prerna, 2016). The importance of biology and biology education for solving social problems and sustainable national development cannot be overemphasized.

Statement of the Problem

As indicated by the Nigerian Health Minister above, the current population of the nation is alarming. This is so, partly due to religious factors. The issue of population regulation is however sensitive especially in Africa. Again, reproductive issues are personal issues. Nonetheless, birth control still stands out as a concrete solution to social problems of poverty, starvation, unemployment, education distortion, corruption, insecurity and all the likes. This study therefore sets out to find out the extent to which biology students view effective birth control as a catholicon to social ills and sustainable development at Federal College of Education (Special), and Emmanuel Alayande College of Education both at Oyo, Oyo State, Nigeria.

Purpose of the Study

Science, particularly biology education is vital to all life intricacies and sustainable development. Birth control is totally biological, therefore for effective application of biological knowledge to solving life problems, the teaching and learning of biology as a subject must be tailored towards achieving this all important purpose in the students and the nation in general.

Research Questions

Do biology students view lack of birth control as contributing factor to social ills?

Do biology students view birth control as means of curbing population explosion and national social ills?

Do biology students view birth control as pivotal to sustainable development?

Hypotheses

There is no significant association between birth control and social ill.

There is no significant association between population explosion and social ill.

There is no significant association between birth control and sustainable development.

Methodology

Research Design: The study employed a descriptive survey design.

Population of Study: The population for this study consisted of all NCE biology students of Federal College of Education (Sp) and Emmanuel Alayande College of Education, Oyo.

Sample and Sampling Techniques: Random sampling technique was used. A total number of hundred (100) were selected amidst NCE I and NCE II biology students who were on ground at time of this study at both schools.

Research Instrument: To elicit information from respondents, a questionnaire instrument was used. It was constructed with the following items:

A. Do biology students view lack of birth control as contributing factor to social ills?

1	Birth control can breed mistrust and insecurity and poverty in the society.
2	Lack of birth control or family planning could result in over-crowding, starvation and in health.
3	Lack of birth/population control contributes to high rate of school dropout, child trafficking and illiteracy.
4	Family planning has nothing to do with a family financial challenges and social and mental in health.
5	Birth control or good family planning has nothing to do with a person's' family economy, quality of education and shelter and moral upbringing.
6	A child moral upbringing has nothing to do with family planning or birth control.
7	Family planning or birth control where not embraced contributes to robbery, killing, corruption, poor Education and Mortality of the people.
8	Birth control/family planning/population control is one good remedy to coping with over population and other present social challenges of the Nigeria Nation.
9	Family planning will breed mistrust amidst couples if allowed

B. Do biology students view birth control as means of curbing population explosion and national social ills?

10	Having fewer and longer spaced birth will not promote mothers and child health as well enhance the family social and economic responsibility
11	Birth control eradicates food shortage, scarcity and poverty in the society.
12	A responsible husband and life should plan the size of this family, space children and enable them give quality parenting and thus, help national building.
13	Birth control should not be religion bias, social or economic bias.
14	When a family size is small and well-spaced under the present scourge of poverty, it will cut down on teenage pregnancy and teenage parenthood which draws back on development.
15	If Nigeria must stem the space of violence in the nation and level of illiteracy, the citizenry must look into ways of controlling the population rise.
16	It is better for a family to think of quality of life for children than quantity of children in planning their family.
17	Birth control can be effective if the citizens have the knowledge that security in old age is more likely from a few healthy well educated children than many poor children.

C. Do biology students view birth control as pivotal to sustainable development?

18	Having fewer and longer spaced birth will not promote mothers and child health as well enhance the family social and economic responsibility
19	Birth control eradicates food shortage, scarcity and poverty in the society.
20	A responsible husband and life should plan the size of this family, space children and enable them give quality parenting and thus, help national building.
21	Birth control should not be religion bias, social or economic bias.
22	When a family size is small and well-spaced under the present scourge of poverty, it will cut down on teenage pregnancy and teenage parenthood which draws back development.
23	If Nigeria must stem the space of violence in the nation and level of illiteracy, the citizenries must look into ways of controlling the population rise.
24	It is better for a family to think of quality of life for children than quantity of children in planning their family.
25	Birth control can be effective if the citizens have the knowledge that security in old age is more likely from a few healthy well educated children than many poor children.

The 4- point Likert Scale (Strongly Agreed - SA; Agree - A; Disagree - D and Strongly Disagree - SD) was used. Data collected were subjected to descriptive and inferential statistical analysis and results tabulated.

Results

Descriptive Statistics

Frequency Table

Table 1 - Gender of Respondents

Gender	Frequency	Percent	Valid Percent	Cum. Percent
MALE	20	20.0	20.0	20.0
Valid FEMALE	80	80.0	80.0	100.0
Total	100	100.0	100.0	

From the total of 100 respondents in the study, 20 (20%) of them are male while the remaining 80 (80%) are females.

Table 2 - Respondents Academic Level

Level	Frequency	Percent	Valid Percent	Cum. Percent
PART 1	47	47.0	47.0	47.0
Valid PART 2	53	53.0	53.0	100.0
Total	100	100.0	100.0	

47 (47%) of the respondents are in Part (NCE) I while the remaining 53 are in Part (NCE) II.

Inferential Statistics

Table 3: Hypothesis 1

H₀: there is no significant association between birth control and social ill.

H₁: there is a significant association between birth control and social ill.

Table 3 - Chi-square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.853 ^a	6	.001
Likelihood Ratio	27.707	6	.000
Linear-by-Linear Association	14.703	1	.000
N of Valid Cases	100		

a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .22.

Decision 1

Since the Pearson asymptotic significant (2-Sided) value of 0.001 is less than the alpha value of 0.05 and the Pearson Chi-square value of 23.853 is greater than the tabulated value of chi-square at 6 degrees of freedom, the null hypothesis is therefore rejected and it was concluded that there is a significant association between birth control and social ill.

Table 4: Hypothesis 2

H₀: there is no significant association between Population explosion and social ill

H₁: there is a significant association between Population explosion and social ill

Table 4 - Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.013 ^a	4	. 0 0 7
Likelihood Ratio	12.809	4	. 0 1 2
Linear-by-Linear Association	11.204	1	. 0 0 1
N of Valid Cases	1 0 0		

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is .77.

Decision 2

Since the Pearson asymptotic significant (2-Sided) value of 0.007 is less than the alpha value of 0.05 and the Pearson Chi-square value of 14.013 is greater than the tabulated value of chi-square at 4 degrees of freedom the null hypothesis is therefore rejected and it was concluded that there is a significant association between population explosion and social ill.

Table 5: Hypothesis 3

H₀: there is no significant association between Birth Control and sustainable development

H₁: there is a significant association between Birth Control and sustainable development

Table 5 - Chi-Square Tests

	Value	D f	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.565 ^a	9	. 0 1 0
Likelihood Ratio	15.036	9	. 0 9 0
Linear-by-Linear Association	4.003	1	. 0 4 5
N of Valid Cases	1 0 0		

a. 12 cells (75.0%) have expected count less than 5. The minimum expected count is .02.

Decision 3

Since the Pearson asymptotic significant (2-Sided) value of 0.010 is less than the alpha value of 0.05 and the Pearson Chi-square value of 21.565 is greater than the tabulated value of chi-square at 9 degrees of freedom, the null hypothesis is therefore rejected and it was concluded that there is a significant association between birth control and sustainable development.

Concluding Remarks

From the findings above, the biology students perception indicates that birth control if effectively carried out would provide solutions to the social menace confronting the nation and thus help boost sustainable development. This agrees with the position of the World Health Organisation (WHO) that family planning slows unsustainable population growth which drains resources from the environment and national and regional development efforts (WHO, 2019).

Recommendation

In view of the above, it is recommended as follows:

1. Concerted efforts of Governmental and Non-Governmental Agencies will be needed to create greater awareness among the populace of need for birth control.
2. Family planning education should be intensified in the rural areas.
3. Necessary legislation may need to be put in place towards population control.
4. Family and Reproductive Health Education should be incorporated into the school curriculum at all levels.
5. Opportunities for gainful employments should be provided for the entire citizenry especially the youths.

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