



Pre-marital fertility tendency in Dodoma city council, Tanzania

Jacob Paul Nyangusi The University of Dodoma

Abstract

Premarital fertility which is prevalent in sub-Saharan Africa is associated with future marriage breakdown, dropping out of school, illegal abortion, child abandonment, mortality among the new born babies as well as maternal mortality. This study conducted a demographic survey from a sample of 140 females of reproductive age employed in the 22 service providing group companies in the premises of Dodoma City Council. Questionnaire, semi-structured interview and observation were used to collect information from among the respondents. The findings reveal the presence of high premarital fertility so much that, 75 per cent of the respondents have children but 62.9 per cent of them got their first birth before the first marriage. Also, the girls beget the children at an average of 21 years of their age, however, the mean age of the first birth 18.6 years. A number of reasons for this phenomenon were identified. These include poverty, level of education and the level of contraceptive use. The findings suggest the need to scale up government efforts to address premarital fertility in Tanzania.

Paper History

Received: 1 July 2019

Accepted: 11 December 2019

Key Words

Premarital fertility; First birth; First marriage; Dodoma City Council

How to cite this paper:

Nyangusi, J.P. 2019. Pre-marital fertility tendency in Dodoma city council, Tanzania. *Mkwawa Journal of Education and Development*, 3(1): 42-58. DOI: https://doi.org/10.37759/mjed.2019.3.1.3

Contact: College of Humanities and Social Sciences, University of Dodoma, Dodoma, Tanzania. E-mail: nyangusijp@gmail.com





1. Introduction

Pre-marital fertility which is defined as giving birth before a woman's first marriage, is prevalent in sub-Saharan Africa so much that, approximately 12 million girls aged 15-19 give birth annually and 777,000 girls under 15 years give birth each year(Atchison et al., 2019; Obwoge et al., 2020; Odimegwu, Akinyemi, & Wet, 2017). Pre-marital fertility, is associated with reproductive health crises, social and economic tribulations (Emmanuel et al., 2020; Lwelamira & Nyakoki, 2016; Odimegwu et al., 2017; Sheet, 2019). Other consequences include: future marriage breakdown, dropping out of school, illegal abortion, child abandonment, mortality among the new born babies as well as maternal mortality. Several studies (Bongaarts & Casterline, 2013; Emmanuel et al., 2020; Obwoge et al., 2020) show clearly that, pregnancy is the leading cause of death for adolescent females in many developing countries with adolescent mothers twice as likely to die from pregnancy-related complications as mothers aged 20 years and above. Adolescent mothers are more likely to suffer severe complications during delivery, while the children of young mothers have higher levels of morbidity and mortality (N. et al. Andersson, 2012; Odimegwu et al., 2017).

Premarital fertility is naturally a problem, but is more problematic when it occurs to young and unmarried girls because it can limit educational attainment, restrict the skills young women acquire for the work force, limit their capacity to support themselves financially, negatively affect their health and reduce their quality of life (Center for Sustainable Systems, 2013; Nkata, Teixeira, & Barros, 2019; Odimegwu et al., 2017; Thomas & Zuberi, 2012) Several studies have concluded that, sexual activity at an early age, before girls have adequate information on potential health risks such as; self-protection skills or full access to reproductive health services puts girls at an elevated risk of sexual and reproductive health and childbearing problems(Neil et al. Andersson et al., 2012; Nkata et al., 2019; Odimegwu et al., 2017).

In Africa, this phenomenon is not only prevalent but also is on increase (Obwoge et al., 2020; Soura, Lankoande, Compaore, & Senderowicz, 2018). In connection with this situation, certain authors have gone as far as concluding that, ever since premarital virginity has been losing its importance, the number of women who have to bear their children without getting married to the father is on the increase (Darroch,





Woog, & Bankole, 2016; Lwelamira & Nyakoki, 2016; Nations, 2013). Many reasons have been linked to this augmentation as various researchers point out below showing that, the level of premarital fertility is determined by a number of factors including early marriage, the timing and context of first sexual intercourse, the level of contraceptive use and education (Garenne, 2008; Obwoge et al., 2020; Soura et al., 2018; UN, 2013) Others include various cultural factors such as religion, ethnicity and the refusal of abortion (Garenne, 2014; Lwelamira & Nyakoki, 2016; Soura et al., 2018).

In spite of the dangers associated with reproductive health, there are other social-demographic issues attached to population increase. Many poor nations especially in sub Saharan Africa are still struggling to meet the needs of rapidly growing populations amid huge disparities between the rich and the poor (Glinski, 2018; Odimegwu et al., 2017; Thomas & Zuberi, 2012) In addition, more people are vulnerable to food insecurity, water shortages, and weather-related disasters thus undermining their welfare (ILO, 2014; Kiani, Ghazanfarpour, & Saeidi, 2019; Kiliba, 2018a; Nkata et al., 2019; URT, 2018; World Health Organization, 2017).

Tanzania like the rest of African countries and the developing world is boiling in the same pot of pre-marital fertilities. This is because, 14% of girls initiate sex before 15 years of age and 61% do so before 18 years of age(Nkata et al., 2019; URT, 2016) In this case, 75% of all women in Tanzania initiate sex and sexual activities before they are 18 years old. This could be the reason for why Tanzania ranks 17th highest adolescent fertility rate in Africa the fact that has recently been on increase to 27% (Kiliba, 2018b; Sheet, 2019). This fact contributes to a lot of infant, child and maternal health problems including mortality and morbidity (Kiliba, 2018b). It also directly denies the mothers' right to education due to dropping out of school (Kiliba, 2018b; Kirsch & Ryff, 2016; Soura et al., 2018) and so making poverty reduction efforts very difficult. And due to the silent fertility population policy, this phenomenon has contributed to the unnecessary amplified population in the country and its resulting social maladies.

Therefore, to address social maladies such as poverty, hunger, diseases, ignorance, poor housing, and environmental vulnerabilities, we need to start by addressing fertility and basically, premarital fertilities. As Tanzania aspires to become a middle





income economy by 2025, this will be difficult if it still has 27% of population having children before 18 years and 20% have children before marriage (Kiliba, 2018; Agwanda & Amani, 2014). This paper studies the extent of premarital fertility in Tanzania with data from Dodoma City Council. The rationale for doing so is to understand whether efforts to address premarital fertility in the country are paying off. One way of doing this is by looking at whether or not these efforts are reducing incidences of pre-marital fertility.

2. Materials and methods

A combination of both qualitative and quantitative approaches was employed to determine prevalence rate, mean age and the possible reasons for the experienced fertility pattern among the participants of this study. A combination of approaches was necessary because quantitative paradigm was needed to address statistical variables of the study such as; demographic characteristics of the respondents and the extent of the problem. On the other hand, qualitative approach was important in giving the relevant explanations of the extent of the problem.

The study was conducted in Dodoma City Council which is composed of 41 administrative wards with a population of 410,956 persons (National Bureau of Statistics, 2013) and currently 625,000* (Worldometric projection, 2020). Dodoma city council was chosen for by this study because it is one of the areas with the highest teenage pregnancy in the country (Kiliba, 2018a; UNFPA, 2018).

A sample of 140 female employees of reproductive age was randomly enlisted from the different business bands including luxury joints such as Stella pub, maisha club, Cape town bar and club la Azizi; private security companies such as Ndovu, Stemo, Yange yange and Suma JKT; catering services/joints such as CAIN, RIM Group, Taji, Alfa KG, Center Plaza and Chef Asili; and from the cleaning and sanitary companies such as Kireho, Ziwani, Kishengeni, Mazam investment, Care sanitary, PMCL and Neko. All these work within the campus of the University of Dodoma and in the premises of Dodoma city council.

The study enlisted 140 participants so as to attain the sample of at least 20% which is statistically recommended for such kind of study. There were 22 group companies and each group had workers ranging from 27 to 37 making an average of 32 workers. Therefore, the total number of participants was computed as follows:





- ➤ Average number of workers per company (32) X number of companies (22) = 704
- Then 20% of the 704 potential participants was determined and used as study participants i.e. 20 X 704 = 140.8 participants

100

A decision was then made to select 140 participants from the identified companies to comprise.

The participants came from different geographical locations of Dodoma City administrative wards. A good number of them came from the wards surrounding Dodoma city and the University of Dodoma including: Ng'ong'onha, Ntyuka, Makulu, Maili mbili, Nzuguni, Ilazo, Mvumi, Iyumbu, Nkuhungu, Chang'ombe and others as the findings below portray.

Both closed ended questionnaire and factual questions were administered to collect information on quantifiable demographic characteristics of the respondents while semi-structured interview was used to solicit in depth and non-quantifiable information from the interviewees. Since all respondents are youth, living and working in town, they were all conversant in Kiswahili, Tanzania's national language which was used to administer both questionnaire and interview. Written questionnaires were provided to the respondents who filled on their own time and submitted some three days or a week later.

With face to face interview, some of the interviewees were approached during the work time especially those working in security companies. This was only possible when their supervisors granted permission. Others, especially those in cleaning groups were approached during the evening after working hours and those working in pubs were approached in the morning and afternoon before they started working. This is because currently the pubs open in the evening after working hours. The interview was designed so categorically that, majority of the interviewees used less than half an hour for face to face interview. Most interviews took place in the premises of their working stations. Most of the face to face interviews were recorded using a notebook and very few on their own consent were recorded using a mobile phone sound recorder.





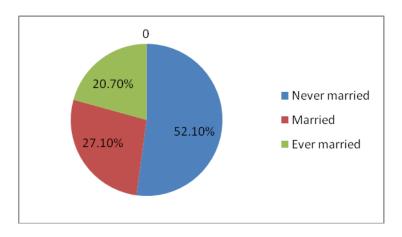
The quantitative data collected were analyzed quantitatively by using Statistical software Package for Social Sciences (SPSS) IBM version 20. The findings were presented using percentages, tables, charts and graphs with a supplement of descriptions and explanations. On the other hand, the qualitative data were analyzed using content analysis and presented using descriptions and explanations as required.

3. Results and discussion

3.1 Demographic characteristics of the respondents

The study was conducted among the female respondents of the reproductive age where the youngest was 18 and the oldest 32 years of age. Their levels of education ranged from no education, primary school, and home craft to ordinary secondary school level. Their marital status show that, only 27.1 per cent are in marriage union, 20.7 per cent were once married and the remaining 52.1 per cent are not married and they have never been married.

Figure 1: Marital status of the respondents



Source: Field data, 2019

3.2 Fertility prevalence

The Total Fertility Rate (TFR) of Dodoma Region is relatively low 2.1 compared to the national average of 2.7 (URT, 2012), and Dodoma has the lowest mean age at first marriage in the country, that is 22.9 years of age. This means, 50 per cent of the people marry before they turn 22 years old.





The findings of this study show that, the fertility rate among the pre married girls is high. This is because, 75 per cent of the respondents have children but 62.9 per cent of these got their first birth before the first marriage. The indigenous use the term "kutumuliwa" to mean that, "impregnated before marriage". In that respect there are only 35 persons (25%) of respondents with no children and who have never given birth. This phenomenon is revealed by the fact that, more than 52 per cent of the first born children live with their grandparents in their home villages. In the face to face interview, one of the interviewees said:

I have two children, one is five years old and another is two years. Both are with their grandmother in the Chang'ombe village (23 years old girl, Nkuhungu, 2019).

This trend is supported by (Mturi & Hinde, 2001; Odimegwu et al., 2017; Soura et al., 2018) who acknowledge that, fertility rate is higher in sub-Sahara Africa than in any other major region of the world. Such occurrence is contributed not only by the Total Fertility Rate of an average of 5.4 children per woman in marriage union, but also by the reasonable number of children born in premarital and extra marital relations.

Concerning the number of children, the study reveals that, 70 participants (50%) have one child, followed by those with no children, 35 (25%), then two children 25 (18%), 7 (4.8%) with three children and 3 participants (2.2 %) with above three children.

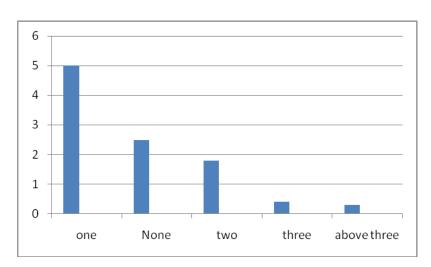


Figure 2: The number of children

Source: Field data, 2019





This trend seems to be contributed to by the age of the respondents and the fact that majority become active contraceptive users after the first child. As Kiliba (2018), World Health Organization (2017) and Garenne (2014) remark, contraception is widely used by married women and women who already had birth, but not as much by adolescents and teenagers who are the most in need.

There are several reasons for this state of affair discussed as follows: First, the family planning programme is not designed for the need of adolescents and pre married girls. The teenagers who go to the clinics are often poorly assisted, if not stigmatised or rejected. Here there is a problem of contraceptive accessibility. Second, there is a problem of knowledge. In Africa, families as well as school teachers are rarely able to speak openly about contraception to young girls. This is the reason they end up providing little and poor advice. Third, young girls have mixed information, and often are so young at first intercourse that they are still unconscious or semi-conscious about their behavior and its consequence. Lastly, gender relations as well as peer pressure are not in favour of young girls. Women often perceive that they cannot refuse advances, or cannot impose the use of condoms to a partner. Several studies have shown that although contraceptive use has been gradually increasing in the recent years from 20 to 27 per cent and now 32, it is basically for the adult female users and not the adolescents (Kiliba, 2018b; Lwelamira & Nyakoki, 2016; UNFPA, 2018).

3.3 The mean age of pre married girls with children

The findings of this study reveal that, the actual minimum age of the respondents was 18 years. This is because the respondents were workers in the service companies where they are not allowed to hire someone below 18 years of age. The maximum age was 32 years while the mean age of the respondents is 22.5 years with standard deviation of 2.921. This shows that, these girls beget the children at an average of 21 years of their age. However, the fact is that the mean age of the first birth is 18.6 years. The interpretation is that, half of the respondents had their first birth before they were 19 years old. Interestingly, the researcher marked the youngest first birth from among the participants at 13 years, a standard six primary school girl.

This finding relatively concur with (UNFPA, 2018; URT, 2016) where the median age at first birth was age 19.5, which means that half of women gave birth for the first





time before age 19.5. Again the findings concur with (Darroch et al., 2016; Kiliba, 2018b) who report that a good number of adolescents in many developing countries have first births before they turn 18 years. (UNFPA, 2018) clearly show that one in three women in Tanzania marries and gives birth before their 18th birthday.

The findings further depict the largest variation in age at first birth by the level of a woman's education, which ranged from 18.7 years among women with no education to 23.0 years among those with at least some secondary education. Extant research has shown that there is a negative correlation between education and fertility in both the first birth and the number of children (Emmanuel et al., 2020; Kiliba, 2018b; Tull, 2019; UNFPA, 2018).

The analysis reveals also that, majority of the participants are young in age since 50 per cent have only one child each and a good number of their children (40%) are between 2 and 4 years old. Majority are not married and are not in marriage union, and even those who are married, 62.9 percent got their first birth before marriage. This is supported by the national report of fertility and nuptuality which reveals that 44% of the pregnancies in Tanzania are begotten by the girls of less than 20 years of age (URT, 2015).

Closely related to that is Adolescent Fertility women aged 15 – 19 who contribute 27 per cent of the total TFR in the country. Teenage pregnancies and fertility has been on increase so that, one in every four female adolescents aged between 15 and 19 years is either pregnant or has the first child. This has ranked Tanzania as the 17th highest adolescent fertility in Africa (Kiliba, 2018a; UNFPA, 2018; URT, 2015)

3.4 Reasons for high premarital fertility

This study also sought to explain the extent of premarital fertility by identifying the reasons which may explain the prevalence of premarital fertility. Several causes were pointed out for this phenomenon as follows. One of the main causes of premarital fertility was identified to be poverty which many participants defined as the absence of income, basic necessity and lack of formal education. For the girls under such circumstances, sex becomes a relieving aspect which in most cases results in pregnancy. Nearly 80 per cent of the respondents pointed out poverty as a contributing factor. One of them from Mapinduzi village remarked saying:





We are a poor family, we have no money, no food and other basic needs....what could I do, my boyfriend was the one helping me and at last he impregnated me (22 years old girl, Mapinduzi, 2019).

Poverty has been earlier pointed out as contributing factor for a high rate of fertility among the adolescents, teenage as well as pre-married girls (Lwelamira & Nyakoki, 2016; UNFPA, 2018). This point is associated with lack of employment where a number of girls stay without occupation. This then pushes them to engage in sexual affairs that result to pregnancies. Some are employed as house girls, food venders and cleaners the activities which encourage sexual affairs with their employers or fellow workers leading to several pregnancies. One of the girls from Manchali village complained that:

I was impregnated by my employer when I was a house girl in Dar es Salaam. What else could I do, that was my boss (24years old girl, Manchali, 2019).

Another factor was low level of contraceptive use especially among the unmarried teenagers. The findings show that, 62 per cent of the respondents use modern contraceptives (condom, pills, injectables, Intra Uterine Devices (IUDs), etc.). This number is high because majority of them already have children. Previous research established the fact that contraception is widely used by married women and women who already had a birth, but not as much by adolescents, teenagers and the premarried women who are the most in need (Garenne, 2014; Kiliba, 2018b; Tull, 2019). The use of contraception may also be a challenging means to avoid a premarital first birth. This is why researchers have pointed out that, the barriers to contraceptives include: the social cost of breaking social rules or preferences, the psychic cost of fears and anxiety surrounding contraceptive use and the method of contraception (Atchison et al., 2019; Obwoge et al., 2020; Sheet, 2019; World Health Organization, 2017). When asked why she didn't use contraceptives to prevent pregnancy, a girl from Mvumi said:

Currently, I use an injectable contraceptive but those days before pregnancy I didn't know and I don't even know how I could avail one (26 years old girl, Mvumi, 2019).

Again, premarital fertility is high because many pregnancies even if unwanted become live births because majority of the girls do not commit abortion. When asked about abortion, many of them said that during their pregnancy they were not aware





of abortion and even those who were aware said that abortion is not encouraged. This is probably related to what (Chakrabarty, 2012; Lwelamira & Nyakoki, 2016) observed that abortion is illegal in most countries in sub-Saharan Africa. Even other demographers had observed earlier that, while highly effective at preventing premarital first births, abortion may also be a problematic means to avoid a premarital first birth as some of them might perform illegal abortion, which can cost their lives (Kiliba, 2018b; Tull, 2019; World Health Organization, 2017). During a face to face interview, a girl from Ng'ong'onha complained saying:

I was very much disappointed when I conceived for the second time while still at home. I wanted to abort but I feared because it is a sin. Even so, my mother was already aware she encouraged me to go on and give birth (25 years old girl, 2019).

Majority of the participants of this study are members of the indigenous tribes of Dodoma region whose traditions, customs, taboos and manners are fertility friendly. This is clearly supported by the fact that, there is no castigation, reprimand, retribution or punishment for those who give birth at home before marriage and the child is received, accepted, taken care of and given birthright. This encourages those who do not have children yet to desire to have some. During the interview, a 19 year old girl from Ntyuka said:

I have no child, but I want to have one.....my parents have no problem with children. Even my sister has two children at home (19years old girl, Ntyuka, 2019).

This point is supported by the findings of the previous studies which have shown that ethnicity was the primary source of differential behavior in premarital fertility, and was much more important than socio-economic factors such as urbanization, education, wealth, or religion (N. et al. Andersson, 2012; Darroch et al., 2016; Garenne, 2008, 2014; Lwelamira & Nyakoki, 2016; Obwoge et al., 2020; Odimegwu et al., 2017).

Apart from the above factors, minimal educational opportunity was pointed out one the factors accounting for higher pre-marital fertility in Dodoma. Most of the victims of premarital fertility are those who did not continue with secondary education. Findings show that, all of those who did not complete primary education had children, followed by standard seven leavers and then those who attended home craft. This is contrary to those who studied secondary school where 28 respondents





(65%) did not have children and among those who had children, 11 respondents out of 15 (73%) got pregnancy in their marriage union. This finding is in line with extant research which has shown that higher education levels inhibit pre-marital fertility (Emmanuel et al., 2020; Ngalinda, 2007; URT, 2015; Wuyts & Kilama, 2014). Indeed, fertility is negatively associated with the educational attainment of the mother because Total Fertility Rate decreases from 7.0 for women with no education or who have attended pre-primary education only to 3.2 for women with tertiary education (UNFPA, 2018; URT, 2016).

Besides, religion has been found to be a supportive factor of premarital fertility, extramarital fertility and fertility in general. Majority of the participants of this study were Christians and few were Muslims. Christianity has been found to be friendly with pre-and extra marital pregnancies because of its theological perspective of pregnancy, non-casuistic ethics and its moral laxity (Atchison et al., 2019; Garenne, 2008; Lwelamira & Nyakoki, 2016; Soura et al., 2018). When asked in the interview, one of them said: "our religion encourages fertility".

Another associated reason is anonymity, where the male part (the father) is hidden by the girl something which contributes to continuation of this manner because if the men were revealed and dealt with accordingly, the situation would have created a kind of discipline. Finally the study revealed that peer group influence contributes to increase in premarital fertility. One of the girls interviewed from Ng'ong'onha said:

...I decided to have one because, it reached a time all my age mates around had children...the rumour started that I was infertile. I felt bad and I decided to beget my child (23 years old girl, Ng'ong'onha, 2019).

4. Conclusion and Recommendations

This paper sought to determine and explain the extent and prevalence of premarital fertility in Dodoma city council. Using both qualitative and quantitative approaches, the paper has shown that premarital fertility pattern in the entire area of Dodoma City Council and its premises is high. This phenomenon is likely to continue as the circumstance seems to be supportive and even the new born babies are most likely to become pre married mothers creating a circle of endless chain. The danger is that this state of affair carries with it long as well as short term impacts. The short term impacts include dropping out of school, illegal abortion, child abandonment and poor child care, mortality among the new born babies, and maternal mortality. The





long term impacts on the other hand are may include increasing marriage instability, prevailing ignorant mothers with limited skills and working capacity and persistence of poverty in the respective area and the nation at large.

Findings of this paper point to the importance of scaling up efforts to support girls' education both secondary and tertiary since higher levels and longer durations of schooling for girls are linked to lower levels of adolescent childbearing (UN, 2013; Emmanuel et al., 2020; Kiliba, 2018; Survey, 2010; Survey et al., 2015; Tull, 2019; UNFPA, 2018; Obwoge et al., 2020; Lwelamira & Nyakoki, 2016).

Since poverty is one of the reasons for premarital escalation, the study recommends, improvement in economic sector to favor investment and employments as it was in "Asian Tigers" (Agwanda & Amani 2014; Obwoge et al., 2020). The study recommends the government to intensify initiatives for teaching reproductive health knowledge and skills from primary school to secondary schools. This includes provision of knowledge and accessibility of family planning and contraceptives among the adolescent and the teenagers so that where ethical conduct has failed, one can still have safe sex.

The government of Tanzania should effectively implement the 17 Sustainable Development Goals (SDG). These goals involve targets like poverty alleviation and eradication of hunger. Again, they insist on investing in the human capital of girls to achieve universal primary education and also, expanding access to reproductive health on improving maternal health. If this is strictly observed, premarital births and the related teenage and adolescent pregnancies can certainly be controlled.





References

- Agwanda, A. & Amani, H. (2014). *Population Growth, structure and Momentum in Tanzania*. Dar es Salaam: UNDP.
- Andersson, N. et al. (2012). Prevalence and risk factors for forced or coerced sex among school-going youth: national cross-sectional studies in 10 southern African countries in 2003 and. https://doi.org/10.1136/bmjopen-2011-000754
- Andersson, Neil et al., Paredes-Solís, S., Milne, D., Omer, K., Marokoane, N., Laetsang, D., & Cockcroft, A. (2012). Prevalence and risk factors for forced or coerced sex among school-going youth: National cross-sectional studies in 10 southern African countries in 2003 and 2007. *BMJ Open*, 2(2). https://doi.org/10.1136/bmjopen-2011-000754
- Atchison, C. J., Cresswell, J. A., Kapiga, S., Nsanya, M. K., Crawford, E. E., Mussa, M., ... Doyle, A. M. (2019). Sexuality, fertility and family planning characteristics of married women aged 15 to 19 years in Ethiopia, Nigeria and Tanzania: A comparative analysis of cross-sectional data. *Reproductive Health*, *16*(1), 1–14. https://doi.org/10.1186/s12978-019-0666-0
- Bongaarts, J., & Casterline, J. (2013). Fertility Transition: Is sub-Saharan Africa Different? *Population and Development Review*. https://doi.org/10.1111/j.1728-4457.2013.00557.x
- Center for Sustainable Systems. (2013). *Social Development Indicators Factsheet*. https://doi.org/CSS08-15
- Chakrabarty, A. (2012). Role of Education and Skill Development for Sustainable Development. *Articles and Case Studies: Inclusive & Sustainable Growth Conference*, 1(2). Retrieved from http://www.ijacp.org/ojs/index.php/ISG/article/view/117
- Darroch, J. E., Woog, V., & Bankole, A. (2016). ADDING IT UP : Costs and Benefits of Meeting the Contraceptive Needs of Adolescents. *New York: Guttmacher Institute*, (May), 1–16.
- Emmanuel, A., Barbara, I., Tolulope, J. D., Temitope, O., Adeusi, J., Lu, Y., & Oppong, J. R. (2020). Fertility knowledge, contraceptive use and unintentional





- pregnancy in 29 African countries : a cross-sectional study. *International Journal of Public Health*, 9. https://doi.org/10.1007/s00038-020-01356-9
- Garenne, M. (2008). Fertility changes in sub-Saharan Africa . *DHS Comparative Reports No. 18* .
- Garenne, M. (2014). Premarital fertility in Namibia: Trends, factors and consequences. (May). https://doi.org/10.1017/S0021932005007261
- Glinski, et al. (2018). Evidence B R I E F: Family Planning. In *Family planning* evidence brief. https://doi.org/10.1016/j
- ILO. (2014). GLOBAL EMPLOYMENT TRENDS 2014: Risk of a jobless recovery?

 Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports/--dcomm/---publ/documents/publication/wcms_233953.pdf
- Kiani, M. A., Ghazanfarpour, M., & Saeidi, M. (2019). Adolescent Pregnancy: A Health Challenge. *International Journal of Pediatrics*, 7(7), 9749–9752. https://doi.org/10.22038/ijp.2019.40834.3444
- Kiliba, E. (2018a). Age at First Birth , Fertility , and Contraception in Tanzania: Annual Report,. UNFPA.
- Kiliba, E. (2018b). UNFPA Annual Report. UNFPA.
- Kirsch, J. A., & Ryff, C. D. (2016). Hardships of the great recession and health: Understanding varieties of vulnerability. *Health Psychology Open*, *3*(1). https://doi.org/10.1177/2055102916652390
- Lwelamira, J., & Nyakoki, S. (2016). Prevalence and Correlates of Pre-Marital Fertility (Childbearing) among Unmarried Female Youths in Chamwino District in Central Tanzania Prevalence and Correlates of Pre-Marital Fertility (Childbearing) among Unmarried Female Youths in Chamwino Distri. *Journal of Social Sciences* 4(2): 159-167, 2012, (March 2012).
- Mturi, A. J., & Hinde, A. (2001). Only Workshop On Prospects For Fertility Decline
 In High Fertility Countries Population Division Department of Economic and
 Social Affairs United Nations Secretariat New York, 9-11 July 2001 fertility
 levels and differences. New York.





- National Bureau of Statistics. (2013). 2012 Population and housing census; Population Distribution by Adminstrative Areas. In *National Bureau of Statistics*. Dar es Salaam: NBS.
- Nations, U. (2013). Opportunities and Constraints to Youth Entrepreneurship:

 Perspectives of Young Entrepreneurs in Swaziland. United Nations, Swaziland,
 (January).
- Ngalinda. (2007). Adolescent pregnancy Unmet needs and undone deeds. Geneva: WHO.
- Nkata, H., Teixeira, R., & Barros, H. (2019). *A scoping review on sexual and reproductive health behaviors among Tanzanian adolescents*. 1–15.
- Obwoge, R. O., Okere, A., Nduku, C., Koech, H., Muruthi, C., Kyalo, N., ... Lulu, R. (2020). Health Related Challenges Among Pregnant Teenagers Attending Narok County Hospital, Narok County To cite this article : 20190302(2), 35–40. https://doi.org/10.11648/j.ijg.20190302.12
- Odimegwu, C. O., Akinyemi, J. O., & Wet, N. (2017). Premarital birth, children's sex composition and marital instability among women in sub-Saharan Africa. *Journal of Population Research*, 34(4), 327–346. https://doi.org/10.1007/s12546-017-9193-4
- Sheet, F. (2019). United Republic of Tanzania. (March), 1-4.
- Soura, A. B., Lankoande, Y. B., Compaore, Y., & Senderowicz, L. (2018). Understanding premarital pregnancies among adolescents and young women in Ouagadougou, Burkina Faso Understanding premarital pregnancies among adolescents and young women in Ouagadougou, Burkina Faso. *Cogent Social Sciences* (*Taylor and Francis*), 4(1), 1–18. https://doi.org/10.1080/23311886.2018.1514688
- Thomas, K. J. A., & Zuberi, T. (2012). Demographic Change, the IMPACT Model, and Food Security in Sub-Saharan Africa. *UNDP Regional Bureau for Africa Working*Paper, (February). https://doi.org/http://dx.doi.org/10.1016/j.mpaic.2009.12.002





- Tull, K. (2019). Evidence on family planning use in young people of Tanzania.
- UN. (2013). Adolescent Fertility since the International Conference on Population and Development (ICPD) in Cairo.
- UNFPA. (2018). Teenage Pregnancy Success story from the field.
- URT. (2010). Tanzania Demographic and Health Survey. In *TDHS*. Dar es Salaam: NBS.
- URT. (2015). Feertility and Nuptuality. Dar es salaam: NBS.
- URT. (2016). Tanzania Demographic And Health Survey. Dar es salaam: NBS.
- URT. (2018). Tanzania Human Development Report. Dar es Salaam: UNDP-ESRF.
- World Health Organization. (2017). Global Accelerated Action for the Health of Adolescents (AA-HA!) Guidance to Support Country Implementation. In *Who*. https://doi.org/License: CC BY-NC-SA 3.0 IGO
- Worldometric Projection (2020). *World Population Prospects: The 2020 Revision*. Available online at: www.Worldometers.info
- Wuyts, M., & Kilama, B. (2014). The Changing Economy of Tanzania: Patterns of Acumulation and Structural Change. In *Repoa*. https://doi.org/10.1007/s13398-014-0173-7.2