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Prevalence and Correlates of Pre-Marital Fertility (Childbearing) among Unmarried Female Youths in Chamwino District in Central Tanzania

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Abstract: Fertility/childbearing among non-married female youths has been associated with several social problems to a female youth, as well as both social and health problems to a child (newborn). This study was carried out in Chamwino district in Central Tanzania between July to August, 2010 with the aim of identifying correlates of pre-marital fertility/childbearing among non-married female youths in a study area. Specific objectives of the study were to determine the extent of sexual and other risky behaviours and fertility among non-married female youths in the study area; identification of socio- demographic, and behavioral factors that are associated with pre- marital fertility among non-married female youths in the study area. This was a cross-sectional study that involved 202 non-married female youths aged between 12-24 years from four randomly selected villages from four randomly selected wards with one village from each ward. Data were analyzed for descriptive statistics such as frequencies and percentages; as well as Binary Multiple Logistic Regression for identification of factors associated with pre- marital fertility using Statistical Package for Social Sciences (SPSS) version 12. Results of this study indicated sexual practices, risky behaviours and hence pre-marital fertility/ childbearing among non-married female youths in a study population existed at a substantial rate, with 75% of study participants reported to had ever had sex, and nearly a quarter (24%) of those who had ever had sex indicated to had ever given birth. Likelihood (chances) of having pre-marital fertility among non-married female youths increased with increase in age (Odds ratio (OR = 14.9-19.80, $p<0.01$), increased with being from polygamous family (OR = 4.9, $p<0.05$), decreased by been living with both parents in most of the time (OR = 0.04, $p<0.05$); and decreased with religious affiliation being protestant (OR = 0.16, $p<0.05$) compared to the counterparts. The likelihood also decreased with being from other ethnic groups other than Gogo (OR = 0.10, $p<0.05$), increased with use of alcohol (OR = 5.4, $p<0.05$), increased with if had ever received money or material gift in exchange for sex (OR = 11.5, $p<0.05$), and if had close friends that are sexually active (peer pressure) (OR = 3.2, $p<0.05$) compared to the counterparts. Furthermore, having secondary education and above were associated with decreased odds of having pre-marital fertility compared to primary education or none (OR = 0.08, $p<0.01$). Family type (i.e. living in nucleus or extended family) had no significant influence on odds for reporting pre- marital fertility (OR = 1.3, $p>0.05$). Based on these findings, recommendations to reduce prevalence of pre-marital fertility among non-married female youths in the study area have been indicated.

Key words: Fertility, pregnancies, reproductive health, sexuality, youths

INTRODUCTION

Unwanted pregnancies and early fertility/childbearing (adolescent motherhood) among unmarried female youths have been one of the major health and social problems facing developing world, specifically Sub-Saharan Africa. Pre-marital fertility has been associated with a number of social problems to female youths. These include, among others, education and job termination, stigmatization (i.e., abandonment by family/society) and loss of self- esteem and hence perpetuation of poverty trap and cycle (Wellings *et al*., 1997; Ilika and Anthony, 2004). Studies have also indicated adolescent motherhood (early births) to pose serious problems to a newborn. Apart from increased chance of infant/child mortality, as a result of stigmatization (abandonment by family) and hence lack of support from family, lack of income generating activity by teenage mother as well as inherent inability of very young mothers to take care their newborn (Passino *et al*., 1993; Yako, 2007; Abdullah *et al*., 2007; Atuyambe, 2008), children born to these mothers usually lack proper care including proper nutrition and hence malnutrition, a situation which can lead to impaired cognitive ability to the children. Furthermore, due to lack of support from

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family and lack of income by adolescent mother, children of these mothers can also miss schools and hence increased number of street children in urban areas (Musoke, 1996; Namwata *et al*., 2011). In order to device effective intervention to curb the above problems, knowledge on the factors responsible for pre-marital fertility/ childbearing among non-married female youths is important. Scant information exists on the above aspects in most parts of Tanzania, particularly in rural areas. Therefore, based on this background, this study aimed at identifying correlates for pre-marital fertility among non-married female youths in central area of Tanzania, by taking a case of Chamwino District. Specifically, the study intended at determining the extent of sexual and other risky behaviours and fertility among non-married female youths in the area; and identification of socio-demographic, and behavioral factors that are associated with pre-marital fertility among non-married female youths in the study area.

METHODOLOGY

Study area: This study was carried in four randomly selected villages from four randomly selected wards out of 28 wards of Chamwino District in Central Tanzania, with one village from each ward. The District is among six district of Dodoma region in Central Tanzania. The district is located between latitude 4 and 8° South and longitude 36 and 37° East. The district covers an area of 7870 km^2 with a population of 260, 841 people (URT, 2008). The area is semi-arid which receives annual rainfall of between 500 to 800 mm. The dominant ethnic group is *Gogo* involved in both crop and livestock production.

Study design: This study was carried out in the study area between July to August, 2010. The study involved a cross-sectional survey in four randomly selected villages from four randomly selected wards of Chamwino district with one village from each ward. The villages include *Nzari*, *Mahamha*, *Mvumi makulu* and *Muungano*. The study involved 202 non-married (i.e., never married) female youths aged between 12 to 24 years from 202 randomly chosen households (i.e., one individual per household). Nearly equal numbers of individuals (i.e., around 50 non-married female youths per village) were selected from each village. During sampling, incase a household was found to have no non-married female youth, a household was replaced by another nearby household chosen at random. Furthermore, if a household was found to have more than one non-married female youth, only one non-married female youth chosen at random was considered for interview. Sample size was estimated using the following formula (Amin, 2002).

$$n = \frac{(Z_{\alpha/2})^2 P(1-P)}{\lambda^2}$$

where by n = sample size; P=percentage of non-married female youths in the area that had ever given birth ; λ=maximum error; since P was not known for the study population, its value was assumed to be 50% as it ensures maximum sample size (Nwankwo and Nwoke, 2009). By assuming confidence interval of 95% for the estimated population proportion, maximum error of 10% and design effect of 2 (Kisinza *et al*., 2008) that is n×2 and non response rate of 5%, a final sample was calculated to be 202 individuals.

Data for this study was collected using a pre-tested semi-structured questionnaire. Pre-testing of questionnaire was done in villages not involved in this study. During data collection, informed verbal consent was directly asked from the respondent before interview for respondents aged 18 and above. For respondents aged below 18 years, informed verbal consent was asked from their parents/ guardian before interview.

Conceptual framework: In this study it was conceptualized that demographic, social environment and behavioral variables indirectly influence pre-marital fertility through its influence on sexual behaviours of non-married female youths, and these sexual behaviours in turn directly influence pre-marital fertility (i.e., proximate determinants) (Onuoha, 1992; Palamuleni, 1997; Fitaw *et al*., 2003). These demographic variables included age, education level, and religion affiliation. Social environment variables included living arrangement (whom mostly been living with), type of marriage by parents, family type, ethnicity (cultural environment) and peer pressure. Behavioral variables included alcohol consumption and if ever received money or material gift in exchange for sex. Sexual behaviours (risky sexual behaviours) which were thought to influence pre-marital fertility directly following the influence of demographic, social environment and behavioral variables on them included engagement in sexual activity (sexual intercourse), non-use of contraceptives such as condoms, and having multiple sexual partners. Relationship between these variables is summarized in the Fig. 1;

Statistical analysis: Data were analyzed for Descriptive Statistics such as Frequencies and Percentages using Statistical Package for Social Sciences (SPSS) version 12. Furthermore, SPSS program was also used to run a Binary Multiple Logistic Regression Analysis to identify factors that are significantly associated with pre-marital fertility among non-married female youths in a study population using the following model (Maddala, 1983; Hosmer and Lemeshow, 2000; Agresti, 2002).

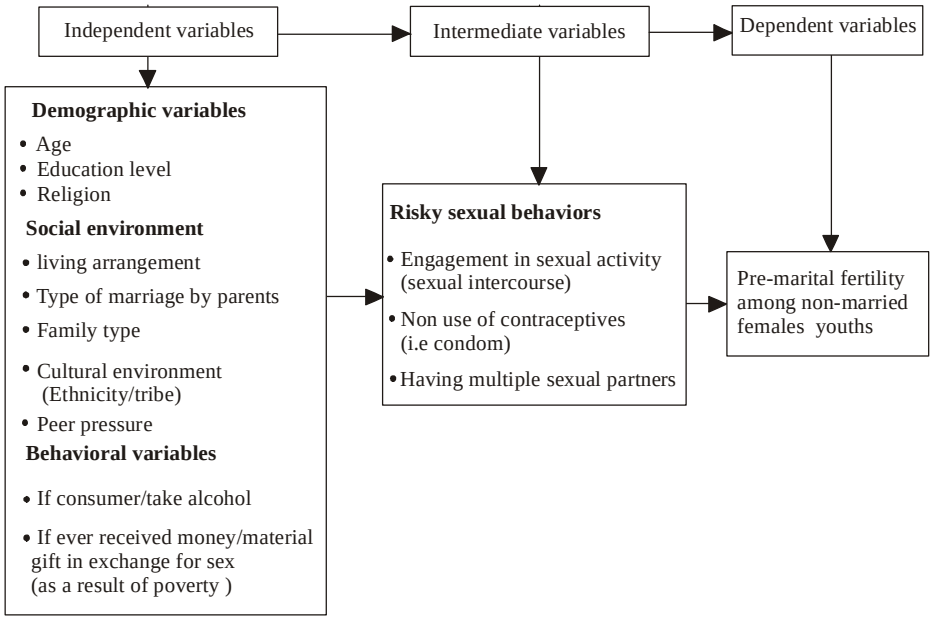

Fig. 1: Conceptual framework (Fitaw *et al*., 2003)

$$1n\left(\frac{p}{1-p}\right) = \alpha + \sum_{i=1}^{n} \beta_i X_i$$

whereby p is a probability of had ever give birth (ever had pre-marital fertility); α and β are estimated regression coefficients, and X_i are various explanatory variables.

Odds ratio (OR) for determining the effect of various categories of explanatory variables on likelihood of pre-marital fertility by a non-married (i.e., never married) female youth were estimated by computing Exp (β) for each variable (Hosmer and Lemeshow, 2000).

Variables used in this analysis were "If had ever given birth" (binary)(1 = Yes, 0 = No), a dependent variable; Independent (explanatory variables) included; Age of respondent in years with three categories (1 = <15, 2 = 15-18, 3 = >18); Education level of respondent with two categories (1 = Primary or none, 2 = Secondary and above); Religion affiliation with three categories (1 = Catholic, 2 = Protestant, 3 = Moslem); Ethnicity (tribe) with two categories (1 = *Gogo*, 2 = Others); Type of marriage by parents with two categories (1 = Monogamy, 2 = Polygamy); Whom mostly been living with/living arrangement with three categories (1 = Single parent, 2 = Both parents, 3 = Others); Family type with two categories (1 = Nucleus, 2 = Extended); If ever received money or material gift in exchange for sex with two categories (1 = No, 2 = Yes); If close friends are sexually active with two categories (1 = No, 2 = Yes); If use alcohol with two categories (1 = No, 2 = Yes). During analysis, first category for each explanatory variable was used as a reference category. Based on literature, in this study it was hypothesized that likelihood of pre-marital fertility among non-married female youths increase with increase in ages, having lower education level, type of marriage by parents being polygamous, living with single parents or relatives or friends, living in extended family, being from *Gogo* ethnic group, having close friends that are sexually active, if ever received money or material gift in exchange for sex (as a result of poverty), and if use alcohol; and decrease by a religion affiliation being protestant.

RESULTS AND DISCUSSION

Socio-demographic characteristics of respondents: Socio-demographic variables are among important factors influencing sexual practices and consequently fertility among youths (Fitaw *et al*., 2003; Maria, 2007; Okonta, 2007; Seifu *et al*., 2006). Results from Table 1 indicate nearly half (48%) of total respondents aged between 15-18 years, with around 35% aged more than 18 years, reflecting overwhelming majority of respondents were in sexually active age (Okonta, 2007; Bankole *et al*., 2007) and hence more likely to engage in sexual activity leading to pregnancies and fertility among them. Similar to other studies done on youths in other parts of Tanzania (Lema *et al*., 2008; Zakayo and Lwelamira, 2011), more than 95% of respondents had at least primary education with more than a quarter (28%) having secondary education, a situation which reflects good literacy level by a study population and hence more likely to poses good ability to

Table 1: Socio-demographic characteristics of respondents (n = 202)

Variable	Frequency	Percent
Age (years)		
<15	35	17.3
15-18	97	48.0
>18	70	34.7
Highest level of school attended		
None	5	2.5
Primary	141	69.8
Secondary or higher	56	27.7
Religious affiliation		
Catholic	52	25.7
Protestant	134	66.3
Moslem	16	7.9
Ethnicity (tribe)		
Gogo	153	75.7
Others	49	24.3
Whom mostly been living with (living arrangement)		
Single parent	55	27.2
Both parents	123	60.9
Others (guardian, friend)	24	11.9
Type of marriage by parents		
Monogamy	150	74.3
Polygamy	37	18.3
Not applicable (N/A)	15	7.4
Family type at home		
Nucleus family	138	68.3
Extended family	64	31.7

Table 2: Sexual and other risky behaviours

Variable	Frequency	Percent
If ever had sex (n = 202)		
Yes	152	75.2
No	50	24.8
If ever experienced sex, number of lifetime sexual partners (n = 152)		
One	115	75.7
Two	21	13.8
Three and more	16	10.5
If ever experienced sex, consistency of condom used (n = 152)		
Always use	62	40.8
Sometimes/occasionally use	39	25.6
Never used	51	33.6
If ever received money/ material gift in exchange for sex (n = 152)		
Yes	33	21.7
No	119	78.3
If use alcohol (n = 202)		
Yes	50	24.8
No	152	75.2
If close friends are sexually active (engage in sexual activity frequently) (n = 202)		
Yes	59	29.3
No	143	70.8

process information such as HIV/AIDS prevention packages and other sexual and reproductive health promotion materials (Mgabo *et al*., 2010). Result from Table 1 also reveal that most of the respondents were Protestants accounting for 66% of total respondents, followed by Catholic which account for 26%; very few (less than 10%) of the respondents were Moslem. Variations in religion affiliation among study participants observed in this study may results into noticeable differences in religious ideology/beliefs among them (Odimegwu, 2005; Madise *et al*., 2007), which could consequently influencing their perception on sexual activity and overall sexual and reproductive health issues, including pre-marital pregnancies and fertility. Socio-cultural differences resulting from differences in ethnicity/tribe between individuals could also be important variables influencing perceptions, beliefs, attitudes and practices towards issues related to sexual and reproductive health including adolescents' pregnancies and motherhood by an individual (Sunmola *et al*., 2002; Okonta, 2007; Ikamari, 2008; Garenne and Zwang, 2008). Although majority of study participants were *Gogo* (75%), a dominant ethnic group in the area, however, there was a substantial proportion of respondents (a quarter) that were coming from other tribes (i.e., *Hehe*, *Kagulu*, *Nyamwezi*), indicating existence of ethnic diversity in a study population and hence there could be differences in socio-cultural beliefs and practices related sexual and reproductive health issues. Parental control has been indicated to be one of the important factors that influencing youths' sexual activity (Abu and Akerele, 2006; Kumi-Kyereme *et al.,* 2007; Kabiru and Ezeh, 2007; Zakayo and Lwelamira, 2011), as well as risks of early pregnancies and adolescents motherhood. Results from Table 1 indicate considerable proportion of respondents were living in environment in which parental control could sometimes be minimal and hence increased chances of engaging in sexual activities, leading to youths/adolescents pregnancies and motherhood. About 39% of study participants, that is nearly four in very ten unmarried female youths were living with either a single parent, or other relatives or friends; 18%, that is nearly one in every five unmarried female youths were living in polygamous family, and nearly one-third (32%) were living in extended families.

Sexual and other risky behaviours among study participants: Results from Table 2 indicate three-quarter (75%) of total respondents had ever experienced sex, indicating majority of unmarried female youths in a study population were sexually active. Furthermore, prevalence of risky sexual behaviours and other risky behaviours among unmarried female youths in a study population were also at a substantial rate, a situation which predisposes them to the risk of early pregnancies, early motherhood and sexually transmitted diseases (STDs). Of the study participants who had ever experienced sex, nearly a quarter of them (24.3%) had multiple sexual partners, with only 41%, that is around 4 in every 10 unmarried female youths that had ever experienced sex used condom consistently, and around one- third of them (34%) never used it in all sexual encounters (Table 2). Existence of multiple sexual partners and low or non-use of condom by a significant proportion of youths were also reported in previous studies done in other parts of

Tanzania as well as other parts of Africa (Seifu *et al*., 2006; Kibombo *et al*., 2007; Lema *et al*., 2008; Zakayo and Lwelamira, 2011). Furthermore, 22%, that is around two in very ten unmarried female youths that had ever experienced sex, had ever had received money or material gift in exchange for sex, a situation which reflect existence of transactional sex among unmarried female youths in a study population. Similarly, around a quarter (24.8%) of all study participants indicated to consume alcohol, while 29% (nearly one-third) had close friends who are sexually active (Table 2). Studies have indicated alcohol intake increases likelihood of an adolescent/youth to engage in risky sexual behaviours such as unprotected sex and hence increased chances of early pregnancies and motherhood and increased risk of acquiring STDs (Setshed and de la Monte, 2011; Tegang *et al*., 2011). Furthermore, as a result of peer pressure, adolescent/youth with close friends that are sexually, she/he is also more likely to engage sexual activity (Seifu *et al*., 2006), and hence increased likelihood of risks associated with early engagement in sexual activity such as adolescent motherhood and associated problems.

Prevalence of pre-marital fertility/childbearing among study participants: Consequences of pre-marital fertility to female youths as well as its effect to the newborn are well documented (Wellings *et al*., 1997; Ilika and Anthony, 2004; Abdullah *et al*., 2007; Atuyambe, 2008). Findings from Table 3 indicate a considerable proportion of respondents (unmarried female youths), which is nearly a quarter (24.3%), had ever given birth. Furthermore, age at first birth by half of respondents (53%) that had ever given birth was 18 years and below, a situation which indicates existence of adolescent motherhood in a study population at a substantial rate. This is an undesirable trend in a study population. It can also be noted from Table 3 that about 12% of unmarried female youths that had ever given birth, that is around one in every ten, had given birth at the age of 15 years and below, implying very young age at first birth by a noticeable proportion of respondents, a trend which threatens lives of female youths in a study population. Evidence from past studies indicate chances of maternal and infant mortalities increases with decreasing age of mother, and likelihood for such events are very high for very young mothers (Ilika and Anthony, 2004; Atuyambe, 2008). Number of births ever had by majority of respondents (84%) was one (1).

Correlates of pre-marital fertility among unmarried female youths in a study population: This study was also interested in identifying socio-demographic and behavioral factors associated with increased chance of pre-marital fertility (pre-marital childbearing) among non-married female youths in a study population. This was done through Binary Multiple Logistic Regression Analysis. Results are presented in Table 4. Effect of most of the explanatory variables on pre-marital fertility considered in this analysis was on expected direction.

Results indicate that increased age was associated with increased likelihood of pre-marital fertility. Non-married female youths aged 15 years and above were 15 to 20 times more likely to have ever given birth compared

Table 3: Prevalence of pre-marital fertility/childbearing among female youths in a study population

Variable	Frequency	Percent
If ever given birth (N = 202)		
Yes	49	24.3
No	153	75.7
Age at first birth (N = 49)		
≤15	6	12.3
16-18	20	40.8
>18	23	46.9
Number of births ever had (N = 49)		
1	41	83.7
2	6	12.3
3 and above	2	4.0

Table 4: Results for binary multiple logistic regression analysis for reporting birth (dependent variable) against various socio-demographic and some behavioral variables

Predictor	β	Standard error (S.E)	Wald-statistic	Odds ratio (or)Exp (β)	Sign.
Age (years)					
<15 (Ref.)					
15-18	2.99	1.16	6.62	19.80	**
>18	2.70	0.87	9.62	14.94	**
Education level attained					
None or primary (Ref.)					
Secondary and above	-2.50	0.98	6.57	0.08	**
Religion affiliation					
Catholic (Ref.)					
Protestant	-1.82	1.37	1.76	0.16	*
Moslem	0.30	1.26	0.06	1.35	NS
Ethnicity (tribe)					
Gogo (Ref.)					
Others	-2.26	1.17	3.76	0.10	*
Type of marriage by parents					
Monogamy (Ref.)					
Polygamy	1.60	0.75	4.53	4.92	*
Whom mostly been living with (living arrangement)					
Single parent (Ref.)					
Both parents	-3.34	1.49	5.06	0.04	*
Others (guardian, friend)	-0.75	1.38	0.30	0.47	NS
Family type					
Nucleus (Ref.)					
Extended	0.26	1.4	0.03	1.30	NS
If ever received money/ material gift in exchange for sex					
No (Ref.)					
Yes	2.44	1.19	4.23	11.48	*
If close friends are sexually active					
No (Ref.)					
Yes	1.15	1.09	1.11	3.16	*
If use alcohol					
No (Ref.)					
Yes	1.68	0.87	3.74	5.38	*

Nagelkerke R square: 0.73; Ref.: Reference category; ns: Non-significant (p>0.05); *: Significant at p<0.05; **: Significant at p<0.01

to those aged below 15 years (OR = 14.94-19.80, p<0.01). This trend could be attributed to increased sexual activity with increasing age among youths as observed in previous studies (Seifu *et al*., 2006; Maria, 2007; Seme and Wirtu, 2008). Results from Table 4 also indicate that having at least secondary education was associated with decreased odds of pre-marital fertility among unmarried female youths relative to those with primary education or none (OR = 0.08, p<0.01). In line with results of this study, researches conducted in other parts of Sub-Saharan Africa have indicated higher formal education to have a protective effect against risky sexual behaviours and the associated risks such as STDs, unwanted/unintended pregnancies and births (Maria, 2007; Guiella and Madise, 2007; Utulu and Lawoyin, 2007; Siziya *et al*., 2008; Atuyambe, 2008). Some of these authors argued that formal education brings about better informed choices and strongly affect the health reasoning ability. It can also be seen from Table 4 that being a Protestant by a non-married female youth was significantly associated with reduced chance of pre- marital fertility compared of being a Catholic (OR = 0.16, p<0.05). Being a Moslem had no significant effect on pre-marital fertility relative to Catholic (OR = 1.35, p>0.05). Reduced chances of pre-marital fertility by unmarried female youths with Protestant religion affiliation could be attributed to the preaching by the religion that strictly prohibits sex before religiously approved marriage as observed in a study done by Odimegwu (2005) in Nigeria. Ethnic variation and hence cultural differences has been pointed out by a number of researchers to be one of important factors that influence perception, attitude and practices towards issues related to sexuality including pregnancies and fertility (Sunmola *et al*., 2002; Ikamari, 2008; Garenne and Zwang, 2008). In agreement with results of these previous studies, results from Table 4 indicate ethinicity/ tribe to be a significant factor influencing pre- marital fertility among non-married female youths in a study population. Being from other tribe other than *Gogo* by a non-married female youth was associated with reduced likelihood of reporting had ever had given birth (OR = 0.10, p<0.05). In agreement to findings of this study, a work by Zakayo and Lwelamira (2011) in other parts of Central Zone of Tanzania (i.e. Bahi District) indicated *Gogo* culture to be less restrictive to issues related to sex among youths and hence prevalence of sexual activity among youths from this tribe at a considerable rate. Other socio-demographic variables considered in this analysis included type of marriage by parents, living arrangement by a non-married female youth, as well as type of family at home. Results from Table 4 shows unmarried female youths in which marriage type by parents was polygamous were more likely to report had ever had given birth compared to those from parents with monogamous type of marriage (OR = 4.92, p<0.05). Furthermore, living with both parents by a non-married female youth was associated with decreased chance of pre-marital fertility compared to those living with single parents (OR = 0.04, p<0.05). Living with others (i.e., friends, relatives) had no significant influence on likelihood of reporting pre-marital fertility by a non-married female youth relative to those living with single parents (OR = 0.47, p>0.05). Surprisingly, family type (i.e., living in nucleus vs extended family) had no significant influence on likelihood of reporting pre-marital fertility (OR = 1.30, p>0.05). Significant effect of type of marriage by parents and living arrangement on youths' sexuality including early pregnancies and motherhood relies on their effects on youths/ adolescents sexual behaviours through parental control (Abu and Akerele, 2006; Kumi-Kyereme *et al*., 2007; Kabiru and Ezeh, 2007; Zakayo and Lwelamira, 2011). Results on the effects of these variables on likelihood of pre-marital fertility are on expected direction. Parental control for youths living with single parent/ friend/ guardian and a youth living in a polygamous family is more likely to be low and hence increased chances of engaging in sexual activity that could lead to increased chances of early pregnancies and motherhood. This study was also interested in determining the effect of behavioral variables by a non-married female youth as well as behaviours of friends (peer pressure) on likelihood of having pre-marital fertility. Female youths that reported to take alcohol were five times more likely to report had ever had pre- marital fertility compared to their counterpart (those not taking alcohol) (5.38, p<0.05). Studies have indicated alcohol consumption stimulates sexual desires and sometimes it is difficult for an individual to think of protected sex when he/she is under influence of alcohol (drunk) (Setshed and de la Monte, 2011; Tegang *et al*., 2011), consequently increased chances of risks associated with unprotected sex such as STDs, early pregnancies and births among youths/ adolescents. Results from Table 4 also indicate that non-married female youths with close friends that are sexually active were three times more likely to report having ever had pre-marital fertility compared to their counterpart (OR = 3.16, p<0.05), indicating positive association peer pressure and engagement in sex, consequently pregnancies and fertility among unmarried female youths in a study population. This finding concurs with results of most studies conducted in other parts of Africa including other parts of Tanzania (Seifu *et al*., 2006; Zakayo and Lwelamira, 2011). Seifu *et al*. (2006) argued that youths with sexually active friends are usually forced to engage in sexual activity to get acceptance of their friends.

High incidences of poverty in Sub Saharan Africa had encouraged transactional sex among female youths/ adolescents in the area (Moore *et al*., 2007; Atuyambe, 2008). Evidences from past studies have indicated it is very difficult for a female youth to negotiate safe sex (i.e.,

protected sex) when received money or material gift in exchange for sex (Amuyunzu-Nyamongo *et al*., 2005; Zakayo and Lwelamira, 2011), and hence increased chances for risks associated with unprotected sex by a youth including unwanted pregnancies and fertility. Consistent with these previous studies, results of this study indicated non-married female youths that had ever had received money or material gift in exchange for sex were more likely to report had ever had pre-marital fertility compared to their counterpart (OR = 11.48, $p<0.05$) (Table 4).

CONCLUSION

Sexual practices, and hence pre-marital fertility/ child bearing among non-married female youths in a study population existed at a considerable rate, with three quarter of study participants reported to had ever had sex, and nearly a quarter of them (those had ever had sex) indicated to had ever given birth. Likelihood (odds) of having pre-marital fertility/childbearing among non-married female youths increased with increase in age, increased with being from polygamous family, decreased by been living with both parents in most of the time, and decreased with religious affiliation being protestant compared to the counterparts. The likelihood also decreased with being from other ethnic groups other than *Gogo*, increased with being alcohol user, increased with if had ever received money or material gift in exchange for sex and if had close friends that are sexually active (peer pressure) compared to the counterparts. Further more, having secondary education and above were associated with decreased odds of having pre-marital fertility compared to primary education or none. Family type (i.e., living in nucleus or extended family) had no significant influence on odds for reporting pre-marital fertility.

RECOMMENDATIONS

Based on findings of this study, it is recommended that education on sexual and reproductive health, including protective sex among non-married female youths through peer education should be provided in the study area. For this intervention to be effective, much emphasis should be on more risky group such as those living in polygamous; those not living with both parents; and those coming from *Gogo* ethnic group. Higher formal education to female youths should encourage in the area as it reduce chances of pre-marital sex and fertility. Furthermore, issues related to youth sexually should be discussed openly in public gathering including gathering in prayers houses (i.e., churches). Alcohol abuse among youths should be strongly discouraged in the area. Small credits to run income generating activities by female youths should be advanced in the area to reduce poverty and chances of transactional sex among female youths.

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