



## **Difference in time spent by women and men on productive and family care during productive hours in Morogoro district, Tanzania**

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### **ABSTRACT**

Though women constitute a substantial proportion of work force in agriculture and other economic activities, the factors and extent to which family care activities consume their economic productive time compared to their male counterparts is largely unreported. In the current study, we aimed to comparatively understand the differences in time that women and men spend on economic and family care activities. Methodology: This cross-sectional study involved 646 participants, 323 resident married women aged between 18 and 49 years and their 323 spouses from six villages in six wards of Morogoro district. Participants were interviewed specifically to provide data on the time they spend in productive and family care activities to establish any difference in time expenditure between men and women within the same household. Quantitative and qualitative data were collected using a structured questionnaire and focus group discussions, respectively. Student T test was used to analyze quantitative data by comparing mean time differences between men and women, content analysis was used to analyze qualitative data. Results: Results show that the time spent by women and men in productive and care activities differ significantly ( $p < 0.01$ ). Compared to men, women spend 2.23 hours less per day in economic production. Conversely, women spend 1.20 hours more in family care and 2.12 hours more in child nursing activities in a day. Nearly sixty five percent (64.8%) of the women spend 3 hours or more to attend Maternal and Child Health (MCH) services per visit. Conclusion: women spend less time in production and more time for care activities during economic productive hours. The time that women spend in care activities is increased by poor access to social services. Interventions that will reduce the time spent by women on household care and increase their time on economic production are vital if the potential of women productivity is to be enhanced.

Key words: Child nursing, economic productivity, family care, Tanzani, time use, women

### **RÉSUMÉ**

Bien que les femmes constituent une proportion substantielle de la main-d'œuvre dans l'agriculture et d'autres activités économiques, les facteurs et la mesure dans lesquels les activités de soins familiaux consomment leur temps de production économique par rapport à leurs homologues masculins sont largement non signalés. Dans la présente étude, nous avons cherché à comprendre de manière comparative les différences de temps que les femmes et les hommes consacrent aux activités économiques et familiales. Méthodologie : Cette étude transversale a impliqué 646 participants, 323 femmes mariées résidentes âgées de 18 à 49

ans et leurs 323 conjoints de six villages dans six quartiers du district de Morogoro. Les participants ont été interrogés spécifiquement pour fournir des données sur le temps qu'ils consacrent aux activités productives et familiales afin d'établir toute différence de temps passé entre les hommes et les femmes au sein d'un même ménage. Des données quantitatives et qualitatives ont été recueillies à l'aide d'un questionnaire structuré et de discussions de groupe, respectivement. Le test T de l'Etudiant a été utilisé pour analyser les données quantitatives en comparant les différences de temps moyennes entre les hommes et les femmes, l'analyse de contenu a été utilisée pour analyser les données qualitatives. Résultats : Les résultats montrent que le temps passé par les femmes et les hommes dans les activités de production et de soins diffère significativement ( $p < 0,01$ ). Par rapport aux hommes, les femmes consacrent 2,23 heures de moins par jour à la production économique. À l'inverse, les femmes consacrent 1,20 heure de plus aux soins familiaux et 2,12 heures de plus aux soins aux enfants par jour. Près de soixante-cinq pour cent (64,8 %) des femmes passent 3 heures ou plus pour se rendre aux services de santé maternelle et infantile (SMI) par visite. Conclusion : les femmes consacrent moins de temps à la production et plus de temps aux activités de soins pendant les heures économiques productives. Le temps que les femmes consacrent aux activités de soins est accru par un faible accès aux services sociaux. Les interventions qui réduiront le temps consacré par les femmes aux soins du ménage et augmenteront leur temps consacré à la production économique sont essentielles si le potentiel de productivité des femmes doit être amélioré.

Mots-clés : Soins infirmiers, productivité économique, soins familiaux, Tanzanie, emploi du temps, femmes

## **INTRODUCTION**

The differential division of labour among men and women is a global concern since it impacts on the socio-economic status of men and women. Many studies have been conducted to describe gender differences in terms of time spent on productive and reproductive activities. An important rationale for most studies has been the existing viewpoint that women take multiple responsibilities and spend more time in reproductive work compared to men, which compromise their economic productivity (Cawthorne, 2008). Anti-poverty approaches concerned with women in development have shown existence of increased hours and intensity of work among women (Jackson, 1996 cited in Chant (2012). Spending more time in reproductive work particularly care activities for women is a characteristic of both developing and developed countries. It is argued that 'unpaid' family care, which constitutes most of reproductive responsibilities, is a global issue affecting women regardless of their education levels and income or the level

of development of their countries. In Africa, Tanzania inclusive, gender time allocation in activities takes a similar trend whereby women spend more time on non-productive activities compared to men (Feinstein *et al.*, 2010; Komatsu *et al.*, 2015).

Despite the ambiguities that have exist in categorizing day to day activities, it is generally acceptable that productive or economic, market or paid activities reflect activities associated with payment (Blackden and Wodon, 2006; Kes and Swaminathan, 2006; Antonopoulos, 2008). Reproductive, non-economic, or unpaid activities are those that are not associated with any direct payments. Care giving ranges from assistance with daily activities including health care. Some scholars suggest that most of care activities are termed as physical reproductive roles and they include care and maintenance of the present and future work force (male partner, infants, school-going and non-working children and other dependent household members) (Galtry, 2000; Bibler and

Zuckerman, 2013). Care work for the family and the community is essential to human life and to the social and economic foundations of all economies. It enables the “productive” economy to function as it supports the well-being of the workforce, children, older persons and people with disabilities, and subsidizes the monetized economy.

Differences in time use between men and women on production work and family care are known to exist, nevertheless, variations exist across different regions, cultures and socio-economic classes. African women must often work long hours performing domestic chores and collecting water and wood, apart from their paid or unpaid work in the fields or other labour market activities (Bardasi and Wodon, 2010). Consequent to this, time burden is widely identified as a major constraint on women’s economic productivity. Previous reports suggest that mothers with children less than five years of age would be working more hours in economic productions if suitable and affordable childcare facilities were available in the community (Kuhhirt and Ludwig, 2012). In developing countries, Tanzania inclusive, particularly in rural areas where incomes are low, it is challenging to hire assistants for housework. Due to absence of advanced tools for performing domestic work, these activities remain a burden to women particularly bulkiness of the time responsibilities and the respective time devoted to accomplish them.

The socio-economic status of most households in rural areas of Tanzania is low. According to URT (2018), 80% of households are categorized in three low wealth quintiles, out of five wealth quintile categories. The Government of Tanzania intends to unleash women’s potential in production so as to achieve its plans as shown in the Five-Year Development Plan (FYDP) 2016/2017-2020/2021 that include improving household welfare (URT, 2016). To achieve this goal, the active involvement of women who make the major workforce especially in agriculture is of paramount importance.

However, the full participation of women in economic production activities is constrained by a number of factors including their involvement in performing multiple responsibilities such as productive and non-productive work. Therefore, any interventions that aim to increased economic production at the household and national levels must ensure that women spend more time on economic activities. One important way to achieve this, is to ensure the time women spend on production is increased. Nevertheless, before interventions to increase the time spent by women on economic production, it is important that the time spent on both economic and non-economic household care activities is quantified. Guided by a theoretical argument that, care-giving responsibilities for children and households take away the time that could be spent by women for economic productions (Pressman, 2003), this study aimed to objectively quantify the difference of the time spent by women and their male spouses on economic activities and non-economic family care activities in a household. The study hypothesis was that, time spent by women in household productive and care activities in rural areas during economic production hours does not differ significantly from that of male counterparts.

## MATERIALS AND METHODS

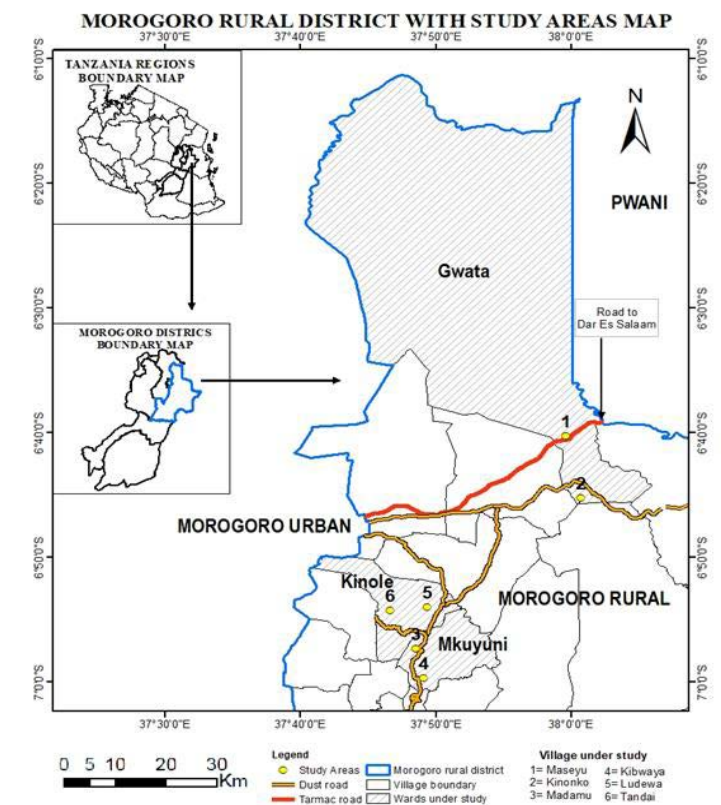
**The study area and study design.** This study was conducted in Morogoro District, a prototype rural community in Tanzania. The district was selected purposively due to its known prevalence of poverty, whereby 55% of the households are regarded as poor (Lusambo, 2016). This is supported by the national data that 80% of the rural population are in the 3 lowest wealth quintiles (URT, 2019). Three wards in the study district, Gwata, Mkuyuni and Kinole were purposively selected. From the three wards, six villages were randomly selected to participate in the study. The six study villages were Kinonko and Maseyu from Gwata ward, Madamu and Kibwaya from Mkuyuni ward and Tandai and Ludewa from Kinole ward. This study adopted a cross sectional design as the most suitable design for the data to be collected (Bryman and

Bell, 2018). In addition, this design requires relatively short time and it is cost effective.

**Study population, inclusion criteria and sample size.** This study included 323 married or co-habiting women aged between 18 and 49 years residing in the study villages, with at least two children. This age range is within a reproductive age of between 15 and 49 years in accordance to the Tanzania Demographic Health Survey (National Bureau of Statistics, 2011). Choice of women in this age range was particularly important in obtaining information on childcare activities in addition to other types of activities performed by women. Included in this study also were 323 spouses of the participating women. Involvement of couples in the study was inevitably important to determine differences in time expenditures between the two spouses in a household. We chose to involve women with two children or more so that the component of time spent on

child care becomes quantifiable.

**Sampling and field procedures.** Both study sites and participants were selected purposively. The study district, wards and villages were selected due to their being typical representatives of a rural community in Tanzania. Village registers of residents were used to select respondents based on inclusion criteria for enrolment. All married or cohabiting women (323) and their spouses were selected. Male spouses were interviewed so as to provide data on the time expenditure by men. Before interviews, the team of investigators and prospective participants established the time available for productive work as 12 hours between 6.00 in the morning and 6.00 in the evening. The time spent by men and women was determined within the 12 hours as an average of the time each individual participant, man and woman, spend per day for four consecutive days.



**Figure 1. Map showing the study area**

**Study variables and definitions of categories.**

Activities performed by women at different stages of their life cycle were identified by the community through community meetings as follows: Women are responsible for productive activities that mostly include agriculture in totality, business/trading, casual labour, and animal husbandry as the case may be. In addition, women are responsible for reproductive work such as family care and maintenance (food preparation, washing clothes, looking after children, educating children, fetching some water, cleaning house environment and collection firewood). While pregnant and when a woman has a child below five years of age, in addition to the above activities, a woman has to attend Mother and Child Health (MCH) clinic, perform child nursing, sit with a baby.

In the current study, time comparison variables were the time spent by women and men on; Economic productive work, Family care and maintenance activities; and Child nursing care. Pregnancy associated variables included; time unable to work at all during first and last pregnancy, the time unable to work at all after delivery. Variables for time expenditure to attend ANC and MCH services were; Time spent on MCH clinics, time spent on ANC clinics and the age of taking a child to MCH clinics.

Economic productive work included activities which are the main economic activities in the study area, including agriculture, business/trading, mining, bee keeping, fishing, casual labour and animal husbandry. Family care included activities such as cooking for children and family, washing clothes and looking after the children. Child nursing included baby-sitting and breast feeding.

**Data collection tools and methods.** For quantitative data collection, a structured, close ended questionnaire was administered through face-to-face interviews. The questionnaire used in this study was developed by the investigators, whereby its validity and reliability were also determined. It was first piloted on ten

respondents before the actual study and these respondents were excluded during actual data collection and analysis. Validity and reliability were determined by using IBM SPSS computer software. Pearson's correlation coefficient ( $r$ ) was 0.87 above the recommended value of  $r$  0.7 (Benesty *et al.*, 2009). This method was previously used by other scholars (Collins, 2003; Azzarri *et al.*, 2006). Qualitative data was generated through Focus Group Discussions (FGDs) through in-depth interviews. All issues, including the time spent on productive and care activities. For both women respondents and their spouse/male partner, time measurement was done as described by previous scholars (Komatsu *et al.*, 2015) whereby a record was taken for activities conducted in four consecutive days whereas the average time was considered as usual time that a person spends for that particular activity.

Three groups of 6-8 women each were involved in FGDs. One FGD was formed from one of the participating villages in each ward. The group size was based on the recommended number of between 6-12 individuals per group (Azzarri *et al.*, 2006; Ritchie *et al.*, 2013). The selected group participants involved men and women who had held leadership positions either during the time of study or in the past to tap on their leadership experience which include profound information about the study population. Identification of FGD group members was participatory, involving presiding leaders of study villages. Field notes were taken during discussion and important quotes were recorded. The FGDs was intended to provide supplementary information obtained from quantitative interviews.

**Data analysis**

**Analysis of quantitative data.** Quantitative data collected by questionnaires was analyzed using SPSS v22 software (IBM SPSS Armonk, NY, and USA). Descriptive data of categorical variables are presented in the form of numbers and percentages organized into Tables. Measures of central tendency (medians and means) are reported as tables and in text. Comparison of

time spent by men and women in productive and reproductive activities was performed using student's t-test. This test compared the mean values for the two groups, i.e., men and women, in terms of the time each spend on productive and family care activities. For each study issue, non-responses were excluded in the analysis.

**Analysis of qualitative data.** Content analysis was adopted whereby a systematic process for analysis was followed which involved reviewing the field notes and preparing summary for information from individual focus groups. This approach has also been used by others (Morgan, 1993; Renner and Taylor-Powell, 2003). Themes allied to the guiding questions were identified and recorded

indicating distinct opinions about the research issues. Few quotes were used to illustrate important points.

## **RESULTS AND DISCUSSION**

**Socio-demographic characteristics of study participants.** Demographic characteristics of study participants are presented in Table 1. Out of 323 women involved in the study, 53.3% had attained primary school education and about a half (43.3%) had not received any formal school education. About one fifth (15.8%) had children who were below five years old, more than one third (35.6%) of the women respondents had children of between 5-14 years of age. Majority of 63.8% of respondents' spouses/ male partners had primary school education.

**Table 1. Socio-demographic characteristics of respondents (n=323)**

Characteristics	Frequency	(%)
Age groups of women respondents (years)		
18-25	85	26.3
26-40	174	53.9
41 or older	64	19.8
Age groups of male partners (years)		
18-25	21	6.5
26-40	137	42.4
41 or older	165	51.1
Education level of women respondents		
No formal education	140	43.3
Primary school	172	53.3
Secondary school or higher	11	3.4
Education level of male partners		
No formal education	75	23.2
Primary school	206	63.8
Secondary school or higher	42	13
Marital status		
Married	299	92.6
Cohabiting	24	7.4
Household size		
Less than 4	7	2.2
4 – 6	228	70.6
More than 6	88	27.2
Median (IQR) number of HH members	6 (4 – 7)	
Age groups of household members (years) (n=1731)		
Under 5	274	15.8
5 – 14	616	35.6
15 or older	841	48.6
Average household density	5.4	

**Time spent by men and women in different activities.** The time spent by men and women in economic productive activities and care activities during 12 hours of daytime were analyzed for comparison purposes (Table 2). Results show that, on average, women spend 2.23 hours less per day in economic production activities compared to men. On the other hand, the study found that women spend 2.8 more hours per day compared to men, in family care and maintenance work as well as child nursing care. In all cases, the mean time spent by men and women for the three types of activities (economic production, family care and maintenance as well as child nursing care) was statistically different ( $p < 0.01$ ). FGDs

results revealed that time spent in household work was lengthened by poor availability of social services in the area particularly lack of assistants for child-care and poor access to important services such clean water.

**Economic productive time lost by women during pregnancy and after delivery.** Results in Table 3 show that based on the first and last pregnancy, only about one fifth (20.1 or 21.2%) of the study participants could not work at all for more than two months when pregnant. Nevertheless, after delivery, majority of women (57.4%) were unable to work for more than two months.

**Table 2. Time spent by men and women for economic and care activities (n=323)**

Mean time spent on different activities*	n	Mean	SD	Mean diff.	95% CI	p-value
Economic productive work						
Women	323	6.31	2.16	-2.23	-1.51, 0.95	<0.001
Men	323	7.54	2.44			
Family care and maintenance work						
Women	251	3.02	1.77	1.20	0.93, 1.47	<0.001
Men	251	1.82	1.94			
Child nursing care						
Women	275	3.89	3.73	2.12	1.69, 2.55	<0.001
Men	275	1.78	1.63			

\*Average time in hours spent in 12 hours of daytime for four consecutive days of a week

**Table 3. Amount of productive time lost during pregnancy and after delivery**

Variable	Time (Months)	Frequency	%
Unable to work at all during first pregnancy (n=279):	Less than 1	69	24.7
	1 - 2	154	55.2
	More than 2	56	20.1
Unable to work at all during last pregnancy (n=278):	Less than 1	67	24.1
	1 - 2	152	54.7
	More than 2	59	21.2
Unable to work at all after delivery of last born (n=277):	Less than 1	18	6.55
	1 - 2	100	36.1
	More than 2	159	57.4

**Time spent by women to attend ANC and MCH services.** Results presented in Table 4 show that majority of the women spend 3 hours or more for a single visit to the ANC during pregnancy and MCH clinics for up to five years after delivery. Factors that extend the time that women spend for attending clinic services were reported as inadequate health workers at the clinics and inadequate commitment of care providers to attend their clients (FGDs). When pregnant, women attend ANC and MCH clinics more than five times on average (5.4) and make about sixty visits (once every month) until the child is about five years old (4.8 years).

**Common health problems experienced by women after delivery.** Participating women were asked to explain their knowledge and experiences regarding their health status after delivery. Results show that after delivery, many women encounter health problems that hinder their engagement in production. The main health problems experienced by women (and related percentages) are shown in Figure 2. Most of the women are affected by general body weakness (46%) and back/waist pain

(21.6%). Other health problems affect less than 13% of the study participants.

**Women access to childcare assistance and services.** Among the 323 respondents, 310 (96.0%) answered to the question on whether they were assisted to care for their children for the last two young children. Of these, only 11 (3.4%) acknowledged to have received reliable assistance for care of the last two children. Of the 11 respondents who received assistance, all of them reported to have received assistance from relatives. When asked if the assistance was timely, 8(72.7%) agreed on the timeliness of the assistance. The major reason for not getting assistance was reported to be financial constraints to pay for the service; other reasons are shown in Figure 3. Respondents who got assistance were asked if a male or female extended the assistance. Out of the 11 respondents, 7(63.7%) responded to the question. Of these 5 (71.4%) were assisted by a female with mean (SD, range) age of 35.6 (33.6, 5-80) years while 2 (28.6%) were assisted by a male with mean (SD, range) age of 11.5 (2.1, 10-13) years.

**Table 4. Results showing the time spent to attend ANC and MCH services**

Variable	Response	Frequency	%
Time spent on MCH* clinics (hours) (n=321):	Mean (SD**, Range)	1.7 (0.5, 1 - 2)	
	Less than 3	113	35.2
	3 or more	208	64.8
Number of ANC*** visits when pregnant (n=320):	Mean (SD, Range)	5.4 (1.2, 2 - 8)	
	Less than 4	16	5.0
	4 or more	304	95.0
Maximum age of taking child to MCH clinic (years) (n=321)	Mean (SD, Range)	4.8 (0.8, 1 - 6)	
	Less than 5	17	5.3
	5 or more	304	94.7

\*MCH= Maternal and Child Health service; \*\*SD= Standard deviation \*\*\*ANC= Antenatal Clinic



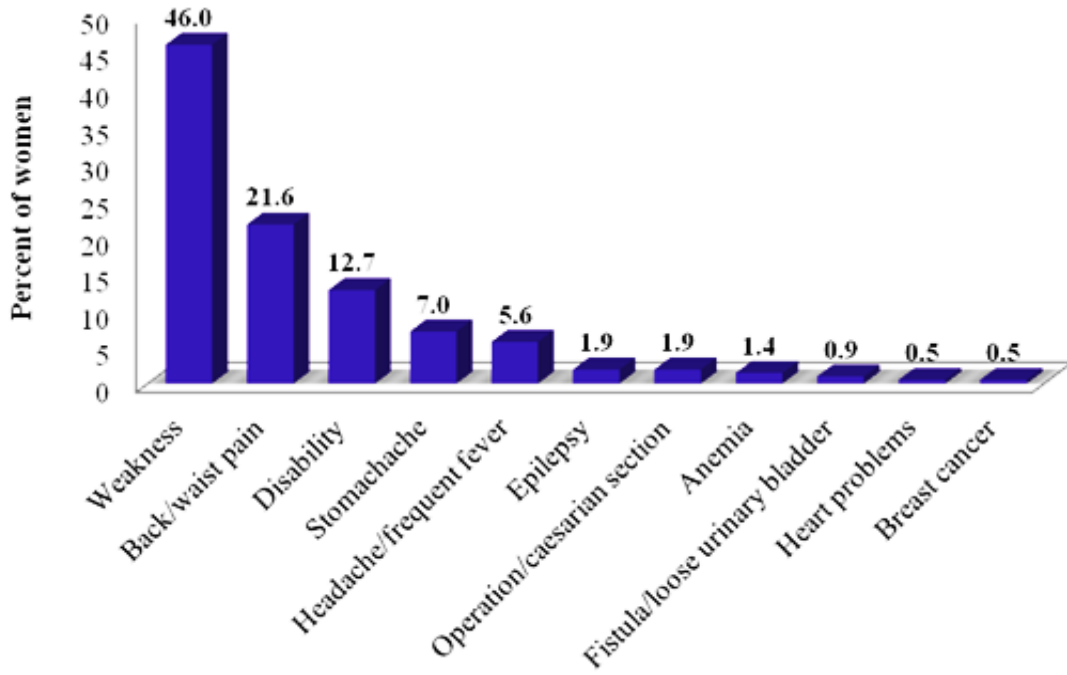


Figure 2. Health problems experienced by women after delivery

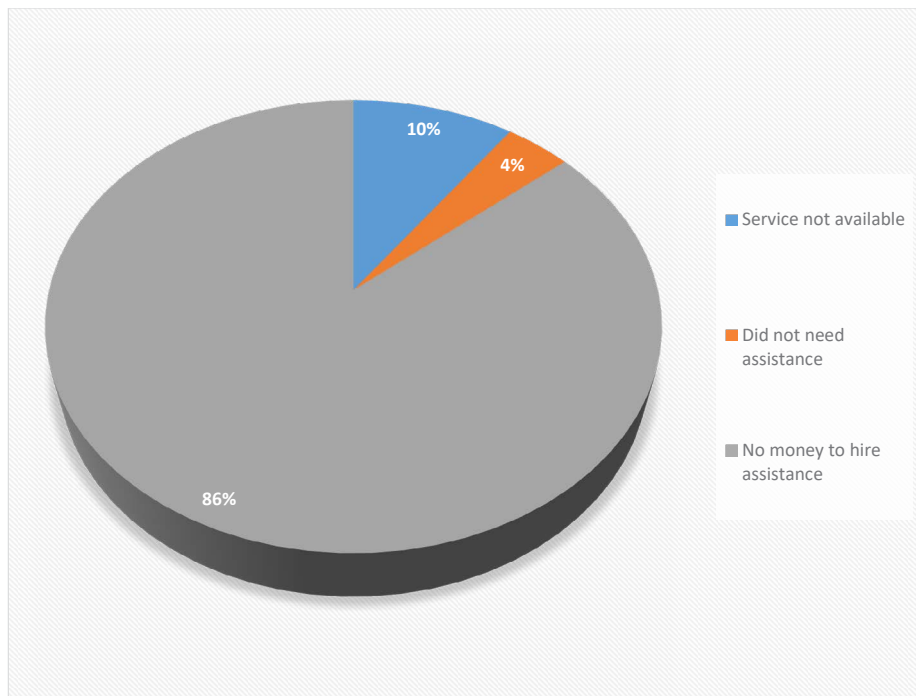


Figure 3. Reasons for not getting child care assistance

## **DISCUSSION**

The purpose of this study was to compare time spent by women and men on households' economic and care activities during productive hours in a rural setting in Morogoro District in Tanzania. Results show that four out of ten interviewed women did not attain primary school education. The findings were within the recorded data by the Tanzania Demographic and Health Survey 2010, whereby the highest proportion of the population who have never been to school was found in Tabora (42% for females and 34% for males) and Dodoma (40% for females and 33% for males) (National Bureau of Statistics (NBS) (Tanzania) and ICF Macro, 2011). Moreover, based on the same author, it is acknowledged that the level of education differs significantly across the regions. Finding from this study shows a considerable illiteracy rate among women in the study area. The main reason for the observed high illiteracy rate as reported in FGDs was gender discrimination whereby girls were not provided with the basic opportunity and support to obtain primary school education as compared to boys. Previous studies suggest the concept that education is important in providing exposure to individuals to a variety of experiences, viewpoints, creativity and innovative thinking in planning of daily activities (Thiessen and Nickerson, 1999; Bynner and Parsons, 2002). Based on this argument, the reported illiteracy in the study area is likely to negatively impact on time management by the study community members.

Contrarily to the hypothesis in this study that the time spent by women in household productive and care activities in rural areas during economic production hours does not differ significantly from that of men, this study found statistically different the time expenditure between men and women in economic productive, family care and child nursing activities. Although the interview showed both men and women to perform all

three types of activities, it was clearly evident that women spent more time in family and child nursing care activities (p-value < 0.01) in both cases. On the other side, men spent more time in economic productive activities (p-value < 0.01). This observation was not surprising since in many African and Asian communities, family maintenance and child care activities are regarded as, by large, a female responsibility (Blair and Lichter, 1991; Hundley, 2000). Similar findings were previously reported in Bangladesh, Cambodia, Ghana, Mozambique and Nepal (Komatsu *et al.*, 2015). Literature shows the involvement of women in family care activities especially at young age, have consequences that impede women's overall processes of development. For example, it has been reported that women leave studies to undertake domestic labour, while men do so to enter paid labour (Godoy, 2004).

Findings from FGDs showed that the amount of time spent by women in performing household activities was lengthened by a number of factors most of which are related to poor social services. Scarcity of nearby sources of water for domestic use, absence of electricity, lack of reliable assistance for child care, lack of technologically improved cooking stoves and scarcity of cheap alternative sources of domestic power (firewood) were among the factors that contributed to intensive time expenditure on family care activities among women. Findings from this study are in line with previous findings by other scholars that gender time distribution in activities is affected by factors that include the status of access to social services such as availability of water, fuel and to improved domestic technology (Harvey and Taylor, 2000; Bittman *et al.*, 2004; Blackden and Wodon, 2006; Johnston *et al.*, 2015).

Findings from this study show that women spent more time in family and child care but not in economic production partly because

childcare assistance services were un-available in the study area. Majority of women were undertaking productive work in parallel with child care. During FGDs, a woman from Maseyu village pointed out that...“Women usually take care their children while working...”. This finding has also been reported in other parts of the world (Belanger and Stone, 2008). Our study has shown that the large majority of participants either could not afford hiring a maid or having a relative to assist with childcare. The ideology that childcare is a woman’s responsibility is deeply rooted in the study area perhaps because majority of rural women do not have formal employment. They are mainly engaged in agricultural activities making it easy to manipulate their time to accommodate both childcare and economic productive activities simultaneously. However, the consequences of this are far reaching affecting both the mother’s work efficiency and the child’s health and education. An important challenge remains to enable women spend more time in productive activities in rural Tanzanian where more than a half (54%) of the labour force in agriculture relies on women.

Attendance to antenatal care (ANC) and maternal and child health (MCH) services was found to be among the factors that contribute to loss of productive time among women. During pregnancy, women reported to lose time for economic productivity by attending ANC. The findings show that productive time among women is lost again after delivery due to MCH attendance, childcare, and a range of maternal post-delivery health problems. This study found that, almost all women (> 95%) had to make more than 4 ANC visits and about 60 (57.7 visits on average) to MCH clinics until the child is about 5 years old (4.8 years), which is in line with the recommended attendance to ANCs of between 4-10 visits and up to 60 MCH visits until the child is 5 years old (Simkhada *et al.*, 2008). In the present study, majority of women (64.8%) spend three (3) or more hours

for each ANC/MCH visit. The implication for this is that, for any single pregnancy and child care to the age of 5 years, a woman spends a significant amount of time to obtain ANC and MCH services. This time is deducted from productive potential time since such services are offered during work hours.

Although the ANC and MCH services are unarguably indispensable, the concern remains whether there are factors which unnecessarily extend the time spent in acquiring these services. In the FGDs, participants were in the opinion that the small number of care providers in ANC and MCH clinics and poor commitment of the health service providers at the MCH facilities contribute to unnecessary increase in the time that women spend at ANC and MCH centers. “We stay long at the MCH clinic because most of the time service providers at the clinic are busy with personal issues...” reported the woman from Kibwaya during FGDs. In addition, post-delivery health issues including body weakness and back/waist pain were also among the contributors to productive time loss among women.

These findings underscore the urgency for improved quality of health care delivery systems particularly in rural settings. Apart from increasing the number of ANC/MCH service facilities to increase accessibility to the service, the issue of under staffing in health facilities should be urgently addressed. Motivation of care providers and availability of medical devices for care provision are important points for improvement interventions that will not only reduce time lost by women who seek care but also boost efficiency of care providers.

After delivery, more than a half of the participants (52.2-54.7%) stayed for about 1-2 months without working at all during the first and last pregnancy, respectively. Moreover, almost similar proportion (57.4%) could not work all for more than 2 after delivery due to

among other things, poor health problems that include body weakness, back/waist pain, abdominal pains, headache and frequent fever. Moreover, majority of women lack assistance for childcare due to lack of money and unavailability of the service. This was not strange since it is common for physical function of a woman to decrease when pregnant. Literature shows that physical function can decline from a mean score of 95.2% prior to pregnancy to 58.1% during the third trimester (Haas, 2005). The prevalence of depressive symptoms rose from 11.7% prior to pregnancy to 25.2% during the third trimester, and then declined to 14.2% during the postpartum period. It can therefore be noted that the process of childbirth consists of non-productive periods of time for a woman. The main concern in this study is the productive time lost thus reduce un-necessary loss of time that can be spent for production.

#### **CONCLUSIONS AND RECOMMENDATIONS**

This study examined the time spent by women and men in households on economic and care activities in Morogoro District, Tanzania. It was found that compared to men, women spend less time in economic production compared to men while they spend more time on household care work in addition to the time spent to attend ANC and MCH clinics. Factors that contribute to extending the time that women spend in care activities included poor access to clean water, lack of electricity, poor household care technologies especially cooking technologies. From findings of this study, we conclude that care giving activities consume women's economic productive time; and the extent of the economic time that women spent in family care activities is augmented by poor social services among rural communities. We therefore recommend that, plans for interventions that focus to reduce the time that women spend in care activities be implemented. This can be achieved by improving access to social services that include clean water, electricity

and affordable domestic technologies.

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#### **STATEMENT OF NO-CONFLICT OF INTEREST**

The authors declare that there is no conflict of interest in this paper.

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