



Factors associated with Knowledge towards the Integrated Early Childhood Development Services among Caregivers of Children aged under six years in Rwanda

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ABSTRACT

This study was conducted to examine the knowledge and attitude towards integrated early childhood development (IECD) among caregivers of children aged under-six years in Rwanda. In this cross-sectional study structured questionnaires were used to collect data from respondents. This study involved 300 caregivers of children below 6 years of age. The results shows that half of caregivers (50%) had good knowledge on IECD, and 90.7% demonstrated positive attitude towards IECD. We found in the study that married caregivers were less likely to have poor knowledge on IECD service [AOR=0.065; 95%CI: 0.008-0.539, $p=0.011$]; Caregiver's from a household with 2-4 household members were nearly four times more likely to have good knowledge on IECD services [AOR=3.710; 95%CI: 1.420-9.694, $p=0.007$]; Father's as secondary caregiver's were less likely to have good knowledge on IECD services. Being married, having less than four household members and being father as caregiver's were associated with IECD service knowledge.

Introduction

Globally, poor developmental milestones for under 5 years are critical public health issues. Recent data from UNICEF shows that 200 million children are at risk of not meeting adequate developmental milestones in their first five years (UNICEF, 2017). Some of the factors contributing to this disturbing statistic include: poverty they live in, poor nutrition, poor health services and lack of access to basic services and early enriched opportunities (WHO & UNICEF, 2016). Parents play an important role in child development (UNICEF, 2017). However, evidence showed a remarkable gap in caregivers' parenting practices for children aged less than five years. UNICEF estimates that only 12% of primary caregivers of 2 to 3 years engage in three or more activities to promote children's learning or advance school readiness (UNICEF, 2014). With regards to child care practices, evidence showed a notable loophole in parents' practices. One in three (33%) of children experience some form of inadequate care. For instance, 27.1% were left in care of someone younger than 10 years, 9% were left alone for more than one hour (UNICEF, 2014).

According to UNICEF, Good caregiving practices in the family are important for helping children to reach their development potential (UNICEF; Imbuto Foundation, 2018). Most children who miss out on their development trajectory early on come from the world's most poor communities in low and middle income countries. Nearly 38.1% of children in Sub-Saharan Africa were reported to be stunted and 66% (51 millions) were wasted (WHO & UNICEF, 2016). According to a research conducted in Sub-Saharan Africa, Stunting was highest in Burundi (57.7%) and Malawi (47.1%) in East Africa; Niger (43.9%), Mali (38.3%), Sierra Leone (37.9%) and Nigeria (36.8%) in West

Africa; Democratic Republic of Congo (42.7%) and Chad (39.9%) in Central Africa (Blessing, Kingsley, Merom, Andre, & John, 2017).

Like many countries, Rwanda faces poor children development. Data show that only 63 % of all children are developmentally on track (National Institute of Statistics of Rwanda, 2015). Nearly 800,000 (38%) children are stunted and thus prevent them to reach their full potential (National Institute of Statistics of Rwanda, 2015). In Rwanda only 18% of children aged 3-6 years have opportunities to attend preschools, early learning facilities and other day care (UNICEF, 2017). Additionally, more than half of children under 2 years of age in Rwanda are victims of violent discipline and more than half of young children left alone at home to take care of their old sibling. The opposite is more reasonable (UNICEF, 2017). An estimate of only 1 in 5 parents are involved in activities that support children early learning at home such as reading, telling stories (UNICEF, 2017). Given the above mentioned issues, the demand for ECD interventions is primarily based on the understanding that early years of life are the most critical in determining the cognitive and physical development of a person. During the 2014 Rwanda government leadership retreat meeting, it was decided on to prioritize the strengthening of the provision of ECD services in Rwanda and improve stakeholder coordination and engagement. Subsequent to the retreat resolution, the Social cluster Ministers forum developed and approved a proposal to entrust the Ministry of Gender and Family (MIGEPROF) with the mandate of coordinating the implementation of the ECD policy given its primary responsibility of harnessing positive family values and children protection which are the bedrocks for effective ECD (MIGEPROF, 2016).

Despite all those interventions targeting to support mothers'/caregivers' interactions and relationships with their children, there is still limited research on caregiver knowledge and attitude about the development of children in Rwanda and factors associated with caregiver's knowledge towards IECD. Thus, this study aims to investigate the knowledge and attitude of caregivers toward IECD services as well as investigate the factors associated with caregiver's knowledge towards IECD in Rwanda.

Research methodology

The main aim of this paper is to describe a research conducted in Burera district of Rwanda assessing the knowledge and attitude of caregivers of children aged six years. Focus were on factors that associated with caregivers' knowledge towards children development. The study is a cross-sectional which used quantitative approaches.

The study population and procedure of the study

This study was conducted in Burera district, Northern Province of Rwanda. This district was chosen based on its size of household which is 5 persons and it is above the national average of 4.8. Based on EICV3. This study targeted caregivers of under six year's old children. Total sample of 300 caregivers were selected with at least one children under 6 years. The data collection tool were paper based questionnaires. The tool has 3 sections: questions on socio-demographic, questions related to knowledge of caregiver on IECDs and questions related to caregivers attitude on IECD service.

The data collectors worked closely with the Head of villages and Community health workers to select caregivers with under six years' children in the respective villages. Caregivers were visited at their household or ones with children registered in ECD centers were found during ECD monthly parent meetings, they received explanation about the study purpose and then data collector's in-person interviews.

Data Analysis

Primary data from paper-based questionnaires was entered using Microsoft Excel and thereafter was transferred into SPSS 22.0 for cleaning, preparation and analysis. Descriptive statistics such as frequency, percentage, mean, median and standard deviation were used to summarize and describe the data and to estimate the proportion of caregivers with adequate Knowledge, attitude and toward IECD. Stepwise logistic regression was done to estimate odds ratios and assess individual independent variable in relation to the knowledge and attitude. The alpha level of 0.05 was used for all significance tests.

The section on knowledge was scored with each correct response scoring one mark and each wrong response scoring a zero then the cumulative scores were converted into percentages. For further assessment, original Bloom's cut off points were used to categorize level of knowledge as follows: 80 – 100% - Good Knowledge; 60 - 79% Moderate Knowledge and <60% - Poor Knowledge. The first two categories were summed together as satisfactory knowledge in the analysis adopted from study conducted by (Rajiv, Harith, Saleh, & Al-Lawati, 2010). The section of attitude was based on Likert scale where responses are scaled to agree if the respondent has positive attitude and responses are coded with disagree if the respondent has a negative attitude (Prof William M.K., 2018).

Results

Respondents Socio-demographic characteristics

This study involved 300 respondents caregivers, of which majority 256 (85.3 percent) were female. The table1 below presents in details the socio demographic characteristics of the respondents. The total of 249 (83 percent) were reported to be married while 25 (8.3%). As regards to the level of education, the bulk number of caregivers completed primary education (33.7%), followed by those who did not complete primary (32%). Majority of caregivers' occupation was agriculture accounted for 90.3% Most of respondents 71.7% reported their source of income is agriculture.

Table 1. : Socio- demographic characteristics of caregivers

Variable	Frequency	Percentage
Respondent Marital status		
Single	70	23.3
Married	207	69.0
Divorced /Widow/Separate	23	7.6
Respondent Level of education		
Not educated	25	8.3
Didn't complete primary	96	32
Primary completed	101	33.7
Secondary	78	26
Respondent occupation		
Agriculture	271	90.3
Business	6	2
Employee	23	7.7
Source of income		
Agricultural	215	71.7
Business	85	28.3
Household monthly income(Rwf)		
1000-10000	234	78
11000-20000	9	3
41000-60000	57	19
Child birth registered		
Yes	234	78
No	66	22
Household size		
2-4	54	18
5-7	149	49.7
8 and above	97	32.3
Children between 0-6 years		
One child	265	88.3
Two children	35	11.7
child sex		
Boy	187	62.3
Girl	113	37.7
Child disable		
No	300	100
Primary caregiver		
Mother	227	75.7
Grand Mother	73	24.3
Secondary caregiver		

Variable	Frequency	Percentage
Father	142	47.3
Mother	27	9
Grand Mother	51	17
Grand Father	16	5.3
Siblings	63	21
Other	1	0.3

The findings were presented using figures and tables. The findings were presented basing on study objectives and it contains the prevalence of caregiver's knowledge on IECDs as well as caregivers attitude and factors associated with caregiver's knowledge towards IECD services.

Caregivers' Knowledge towards IECD services

This section dealt with the exploration of caregivers' knowledge towards IECD services through a number of questions grouped into three main categories mainly Knowledge on Type of childhood development, Knowledge on roles of caregivers to keep their children physically healthy and Knowledge on roles of caregivers to keep their children mentally healthy. The analysis of this section employed multiple responses tabulations with the presentation of both the number of responses as well as the percentage distributions of responses.

Knowledge on Type of childhood development

The table 2. Below present's number and percentages of responses to questions regarding the type of childhood development. The question was based on multiple responses where respondents were asked to choose all responses applicable to their knowledge. As it can be observed, the bulk number chose physical development (95.7%) followed by Language development (86.0%) and Motor development (74.7%).

Using bloom's cut off points, we found that 40% of the caregivers had good knowledge on types of childhood development followed by 39% who hand poor knowledge and thereafter 21% with moderate knowledge.

Table 2. : Knowledge on types of childhood development

Type of childhood development	Frequency	Percentage
Physical development	287	95.7
Language development	258	86.0
Motor development	224	74.7
Cognitive development	202	67.3
Emotional development	182	60.7
Mental development	159	53.0
Social development	154	51.3

Knowledge on roles of caregivers keep their children physically healthy

The table 3 below presents the results on the Knowledge on roles of caregivers keep their children physically healthy. Seven responses of this knowledge were given to the caregivers respondents. However, the first three of them have the highest percentage responses namely: to ensure that children get immunized, Vitamin A, D worming 90.3%; to ensure that infants get complementary food after 6 months 84.7%; and to ensure infants are exclusively breastfed for 6 months 84.3%.

Using bloom's cut off points, we found that majority have good knowledge 47.7% on how to keep their children physically healthy.

Table 2: Knowledge on roles of caregivers to keep their children physically healthy

Roles parents should play to keep their children Physically healthy	Frequency	Percentage
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Ensure that children get immunized, Vitamin A, D worming	271	90.3
Ensure that infants get complementary food after 6 months	254	84.7
Ensure infants are exclusively breastfed for 6 months	253	84.3
Ensure that children are treated by health professionals in case they fall ill	145	48.3
Keep the children always clean	116	38.7

Knowledge on roles of caregivers to keep their children mentally healthy

Table 4 presents the results on Knowledge on roles of caregivers to keep their children mentally healthy. It can be observed that the majority reported to have moderate knowledge on the first responses, i.e. to ensure that both parents give adequate love and affection to their child 71.0%. The results revealed that caregivers have overall poor knowledge 40% on their roles to keep their children mentally healthy as compared to moderate knowledge 32.3% and those who have good knowledge represent 27.7%. Using bloom's cut off points, we generally found that 40.0% of caregivers had good knowledge on how to keep their children mentally healthy.

Table 3: Knowledge on roles of caregivers keep their children mentally healthy

Roles parents should play to keep their children mentally healthy	Frequency	Percentage
Ensure that both parents give adequate love and affection to their child	213	71.0
Ensure that children not be left alone	188	62.7
Ensure that children are not verbally abused"	185	61.7
Ensure that both parents play with children and learning good habits	182	60.7

Knowledge on basic child right and protection

To address the issue of knowledge on Knowledge on basic child right and protection, the researched asked a couple of questions presented in the table5 below.

The findings showed overall, the bulk number of caregivers have good knowledge 82% on child basic right and protection 18%of them have moderate knowledge on basic child right and protection. Using bloom's cut off points, we found that 82% of caregivers had good knowledge on child basic right and protection.

Table 4 Percentage distribution of caregivers Knowledge on basic child right and protection

Knowledge on basic child right and protection	Frequency	Percent of responses	Percent of cases
Children have the rights grow healthy	300	15.5	100.0
Children have the right to get education	300	15.5	100.0
Disabled children have the right to love and care	300	15.5	100.0
Children have the rights to live	299	15.5	99.7
Children should be encouraged	299	15.5	99.7
One should make investment in early childhood development	226	11.7	75.3
It is a crime if parents misbehave with children	209	10.8	69.7
Total	1933	100	644.3

Knowledge on child good health

To address the issue of knowledge on Knowledge on child health, the researched asked a couple of questions presented in the table below Overall, the bulk number of caregivers have good knowledge 81% on child good health while 4.3% of them have moderate knowledge and 14.6% reported to have poor knowledge on child good health. Using bloom's cut off points, we observed that the majority 81.0% had good knowledge on child good health.

Table 5: Caregiver's knowledge on Knowledge on child good health

Knowledge on child good health	Frequency	percentage of responses	percentage of cases
Children 6 to 59 months old should take vitamin A and de-worming medicines at least twice a year	300	16.1	100.0
She should take de-worming medicines during pregnancy	300	16.1	100.0
A woman should deliver her baby in a health center	300	16.1	100.0
If any disability is found in children, they should immediately be taken to health center for test	279	15.0	93.0
Children should be immediately treated for any sign of illness like (for fever, diarrhoea, pneumonia ...)	277	14.9	92.3
Women post postpartum and new-born baby should visit the health center	240	12.9	80.0
Some tests for disability can also be done at home	167	9.0	55.7

Knowledge on child breastfeeding and nutrition

To address the questions related to knowledge on child breastfeeding and nutrition, the researched asked a couple of questions presented in the table7

We found that the overall caregivers' knowledge on child breastfeeding and nutrition was high.

Table 6: Caregivers' knowledge on child breastfeeding and nutrition

Knowledge on basic child breastfeeding and nutrition	Frequency	Percent of responses	Percent of cases
Newborn child should be fed the first milk within an hour from birth	300	20.7	100.0
Children should be breastfed exclusively for six months (one does not need to give even water)	300	20.7	100.0
They should be given complementary food after they are six months old?	300	20.7	100.0
She should take iron folic acid tablets during pregnancy	300	20.7	100.0
A mother should eat nutritious and balanced diet three times daily from the time of pregnancy	247	17.1	82.3
Total	1447	100.0	482.3

Source: Primary data, 2019

Knowledge on water and sanitation and Hygiene (WASH)

To address the questions related to caregiver knowledge on Knowledge WASH, the researched asked a couple of questions presented in the table 8

Using bloom's cut off points, the results revealed that all the respondents had good knowledge on water and sanitation.

Table 7 Caregivers' Knowledge on water and sanitation and Hygiene (WASH)

Knowledge on water and sanitation	Frequency	Percent of responses	Percent of cases
One should always use clean toilet	300	33.3	100.0
Children should always be taught to wash hands with soap and water	300	33.3	100.0
Caregiver should wash hands with soap and water at any critical time	300	33.3	100.0
Total	900	100.0	300.0

Knowledge on child early stimulation and learning

To address the questions related to caregiver knowledge on child early stimulation and learning, the researched asked a couple of questions presented in the table 9

Using bloom's cut off points, the results revealed that all the respondents had good knowledge on child early stimulation and learning.

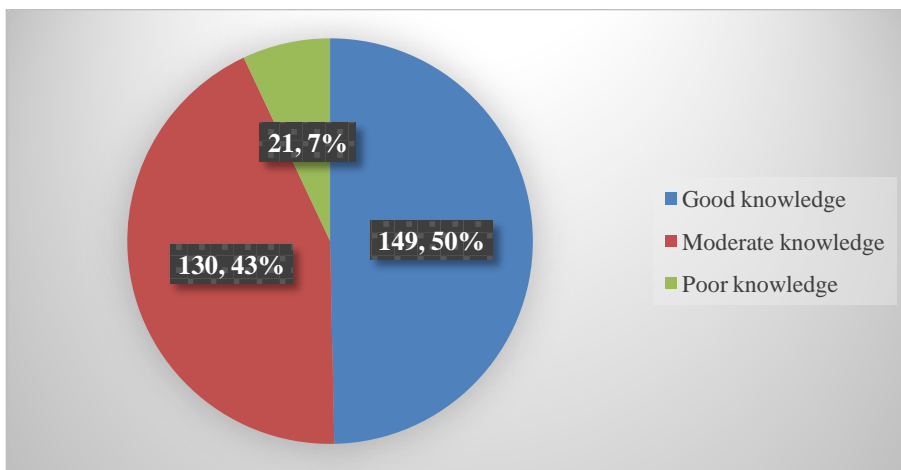
Table 8: Caregivers' knowledge on child early stimulation and learning

Knowledge on early stimulation and learning	Frequency	Percent of responses	Percent of cases
Children should be given opportunity to play with toys Including those made from local materials	300	21.0	100.0
Children should be encouraged to play and work together with friends	300	21.0	100.0
Children should be provided opportunity to play for cognitive development	300	21.0	100.0
Children should be enrolled in ECD centers after they are three years old	280	19.6	93.3
Parents should read child stories and picture books	250	17.5	83.3
Total	1430	100.0	476.7

General caregivers' knowledge towards IECD services

The general caregivers' knowledge towards IECD services was assessed by summing up to the percentage of all categories on caregivers' knowledge presented above. The results showed clearly that, in general, 50% of the caregivers have good knowledge, 43% reported to have moderate knowledge while 7% reported to have poor knowledge.

Figure 1: General caregivers' knowledge towards IECD services



Caregivers' attitude towards IECD services

The table 10 below presents the summary of Caregivers' attitude towards IECD services according to the second objective of this study. The analysis of this section was based on Likert scale where responses were scaled to agree if the respondent has positive attitude and responses are coded with disagree if the respondent has a negative attitude.

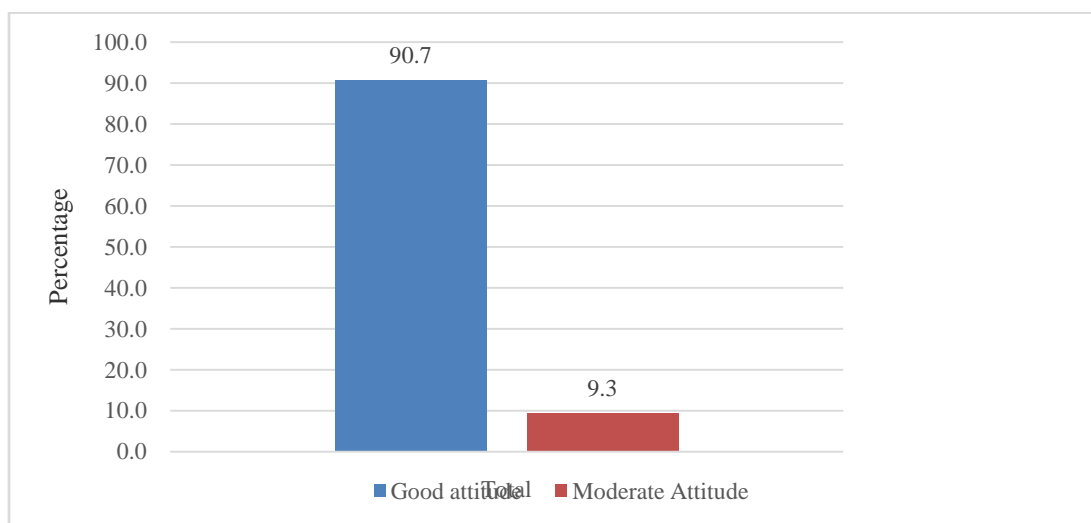
The overall attitude of caregivers towards IECD services was computed by summing up to the percentage each individual response. The results presented in the figure below showed that the overall respondents with good attitude stands at 90.7 percent while those with moderate attitude stands for 9.3 percent.

Table 10: Socio- demographic characteristics associated with caregivers' knowledge towards IECD services

Variable	Caregivers' knowledge towards IECD services		Chi-square	P-value
	Good knowledge n(%)	Moderate/Poor Knowledge n(%)		
Marital status			28.737	<0.001
Single	27(18.1)	43(28.5)		
Married	121(81.2)	86(57.0)		
Divorced /Widow/Separate	1(0.7)	22(14.6)		
Level of education			138.1	<0.001
Not educated	0	25(16.6)		
Didn't complete primary	19(12.8)	77(51.0)		
Primary completed	52(34.9)	49(32.5)		
Secondary	78(52.3)	0		
Occupation			32.534	<0.001
Agriculture	120(80.5)	151(100.0)		
Business	6(4.0)	0		
Employee	23(15.4)	0		
Source of income			120.2	<0.001
Agricultural	64(43.0)	151(100)		
Business	85(57.0)	0		
Household monthly income(Rwf)			81.050	<0.001
1000-10000	84(56.4)	150(99.3)		
11000-20000	8(5.4)	1(0.7)		
41000-60000	57(38.3)	0		

Child birth registered			83.495	<0.001
Yes	149(100)	85(56.3)		
No	0	66(43.7)		
Household size			15.587	<0.001
2-4	17(11.4)	37(24.5)		
5-7	90(60.4)	59(39.1)		
8 and above	42(28.2)	55(36.4)		
Children between 0-6 years			1.481	0.224
One child	135(90.6)	130(86.1)		
Two children	14(9.4)	21(13.9)		
Child sex			2.822	0.093
Boy	122(81.9)	134(88.7)		
Girl	27(18.1)	17(11.3)		
Primary caregiver			95.198	<0.001
Mother	149(100)	78(51.7)		
Grand Mother	0	73(48.3)		
Secondary caregiver			90.133	<0.001
Father	111(74.5)	31(20.5)		
Mother	4(2.7)	23(15.2)		
Grand Parents	14(9.4)	53(35.1)		
Siblings	20(13.4)	44(29.1)		

Figure 2: Overall caregiver's attitude towards IECD services



Factors associated with caregivers' knowledge towards IECD services

The third objective of this study was to identify socio-demographic factors associated with the knowledge of caregivers on IECD services. Due to the distribution of responses, moderate knowledge and poor knowledge were combined to one indicator “moderate/poor knowledge”. Bivariate analysis and Logistic regression performed to estimate factors associated with caregiver's knowledge on IECD services. Variables with statistical significance were taken to multivariate analysis.

The findings from bivariate analysis shows that marital status, education level, occupation, source of income, household income, child birth registration status, household size, primary caregivers and secondary care givers status were significantly associated with caregiver's knowledge on IECD services ($P < 0.001$).

The majority 121(81.2%) with good knowledge on IECD were married, 78(52.3%) of caregivers with good knowledge had completed secondary education. Regarding the occupation, the majority 120(80.5%) of caregiver's with good knowledge were involved in agricultural activities, the main source of the majority of caregivers 85(57%) with good knowledge was small business. The majority of respondent with moderate/poor knowledge 150(99.3%) had monthly income of between 1000 – 10000 Rwandan francs. A total of 85 (56.3%) of caregiver's with moderate/poor knowledge had registered their children. The majority of caregiver's 90(60.4%) with good knowledge on IECD services have between 5-7 members of household members. The results show that all respondents with good knowledge on IECD were mothers. The majority of secondary caregiver's with good knowledge were fathers 111(74.5%).

The results presented in table 10 shows that only three variables are suitable for multivariate logistic regression analysis those are marital status, household size and secondary caregiver's. The findings on multivariate logistic regression analysis are presented in table 11.

The findings show that compared to divorced/widow/separated caregiver's, married caregivers were less likely to have poor knowledge on IECD service [AOR=0.065; 95%CI: 0.008-0.539, $p=0.011$]. In other words, married caregivers are more likely to have good knowledge on IECD services compared to divorced/widow/separated.

Table11: Logistic regression Analysis on the factor's associated with caregivers' knowledge on IECD services

Caregivers' knowledge towards IECD services			
Variables	AOR	95%CI	P-value
Marital status			
Single	0.136	0.015-1.209	0.073
Married	0.065	0.008-0.539	0.011
Divorced/Widow/separated	Ref.		
Household size			
2-4	3.710	1.420-9.694	0.007
5-7	2.240	0.804-6.243	0.123
8 and above	Ref.		
Secondary caregiver			
Father	0.113	0.038-0.340	<0.001
Mother	2.284	0.493-10.572	0.291
Grand Parents	1.706	0.677-4.299	0.257
Siblings	Ref.		

The results revealed that caregiver's from a household with 2-4 household members were nearly four times more likely to have good knowledge on IECD services [AOR=3.710; 95%CI: 1.420-9.694, $p=0.007$].

Fathers as secondary caregivers were less likely to have good knowledge on IECD services [AOR=0.113; 95%CI: 0.038-0.340, $p=0.001$].

In summary, being married, having less than four household members and being father as secondary caregiver's were factors associated with IECD service knowledge.

Discussion

The result of this study reveals that caregivers in Burera district have overall knowledge on type of children development as respectively 40% responded had good knowledge, 39 % have moderate knowledge and 21 % of respondent have poor knowledge conducted; contrary to a study

conducted in Alberta on Parents and non-parental adults who interact with children influence child development, researcher found out that Adults' knowledge was overall poor ($<25\%$ correct responses), but notably higher for physical (48% in 2007, 44% in 2013) than social, cognitive or emotional milestones ($\leq 21\%$ in all cases). Knowledge was lower in the 2013 than the 2007 sample (23% in 2007, 21% in 2013), and in particular for mothers after adjusting for location and income (24% in 2007, 22% in 2013 (Pujadas Botey, et al., 2017).

In terms of different type of childhood development it was stated that caregivers in Burera district have more information about motor development. As it was observed that majority reported to have moderate knowledge on the first responses, i.e. to ensure that both parents give adequate love and affection to their child (213 responses, 71.0%). This was also supported by a study conducted by in Canada, researchers demonstrated that parent and other adults have more knowledge about child motor development than other domain (Mcmillin, et al., 2015). In contrast to study conducted in Iran, they reported that parent knowledge related to motor development was less 21 % in Iranian parent (Habibi, et al., 2017).

This study revealed that caregiver in Burera district have good knowledge regarding child right and protection mostly on the right to health ,right to education , right to parent care an love where majority of respondents score 82 % and fewer score 18 % scored as moderate knowledge. In contrast with the study conducted in Liberia on child protection KAP in central and western Liberia, their result revealed that there is still a gap in knowledge and attitude among caregiver related to child protection and right where among the study respondents only 48% had sufficient knowledge and good attitude on child right(Ruiz-Casares, 2011).

Related to caregiver in Burera district behaviours toward ECD Services, focusing on children health and nutrition, this study showed that the overall respondents with good attitude stands at 90.7 percent while those with moderate attitude stands for 9.3 percent. This was supported by a study conducted by Nekesa in 2010 where the findings indicated that majority 88 % of respondents had positive attitude towards the importance of child nutrition and health for the full potential development (WANYONYI, 2010).

The majority 90 % of caregivers in Burera district have positive attitude towards ECD services. In relation to less familiar concepts such as parent early practices on child protection and development. As shown by their attitude appears to be less positive by 46% of respondents. Support for these findings may be found in study from Liberia(Ruiz-Casares, 2011).

In terms of factors associated caregiver knowledge toward IECD services, the result revealed that being married, having less than four household members and being father as secondary caregiver's were factors associated with IECD service knowledge. Contrary to a study conducted on socioeconomic diversities and infant development at 6 to 9 months in a poverty conducted in area of São Paulo, Brazil, it has been found that children from families with lower incomes show an approximate 50% probability of a developmental delay. They concluded that maternal level of education is associated with children development. And children from higher socioeconomic status have a variety of beneficial opportunities in the first year of life, with a positive effect on development (Tella, et al., 2018).

Another study on factors associated with caregiver knowledge of children development, parent behaviour and parenting stress, this study suggested that more knowledgeable caregivers report more optimal parenting behaviour and less parenting stress (Belcher, Watkins, Johnson, & Ialongo, 2007).

Another study conducted in Turkey on Mother's knowledge of young children development in developing country demonstrated that maternal education knowledge was an independent factor associated with maternal knowledge of children development. That link between maternal education and knowledge of children development although seemingly logical merits reflection in its interpretation (Ertem, et al., 2007).

Conclusion

Generally, this study revealed that the caregivers in Burera district have satisfactory knowledge towards IECD services. More than a half demonstrated satisfactory knowledge on IECD services. The study revealed that 7% of caregivers have poor knowledge on IECD. In addition, More than 90% of caregivers in Burera district demonstrated good attitude towards IECD services and 10%

Demonstrated poor attitude. Being married, having less than four household members and being father as secondary caregiver's were factors associated with IECD service knowledge.

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