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Factors Influencing Utilization of Postnatal Care At Health Centers in Kayonza District, Rwanda

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Abstract

Introduction: Underutilization of postnatal care (PNC) services remains a public health concern in Sub-Sahara Africa in spite of the fact that it's associated with reduction of maternal and neonatal deaths. In Rwanda, only 70% of women had PNC checkup within the first two days after birth and the coverage decreases as mothers finish the first PNC check-up thus not completing the four visits. The study aimed to assess factors influencing PNC visit among mothers attending health centres within Rwinkwavu Hospital, Kayonza district, Rwanda.

Methods: A cross-sectional study was conducted among the mothers whose children had been scheduled for their 2nd visit of vaccination (which corresponds with PNC4 visit) in June 2021. A semi-structured questionnaire was used for data collection which was later exported to SPSS version 21 for analysis. The respondents comprised mothers whose children are scheduled on the second visit of vaccination (at six weeks, the same time with the 4th visit of PNC). Ethical clearance from Mount Kenya University was sought and permission to collect the data was granted prior the data collection. Participants were informed on the right to withdraw from the study at any time. Data were analyzed by descriptive and inferential statistics, relationship between utilization of postnatal care and factors associated to it were reported by chi-square test at the level of significance < or = to 0.05 and confidence intervals.

Results: Out of 254 women who participated in the study, only 133 women (52%) reported to have attended to PNC4 visit. Among those who attended PNCs, only 25% had prior attended 4 or more postnatal care visits. Factors that influenced utilization of PNC4 included; being in *income three category(ubudehe)* compared to those in lower income category[AOR: 6.628; CI: 1.814-24.215; P=0.004]; ; maternal formal education, at least primary education [AOR: 0.98; CI: 0011-0.0909; P=0.041]; and utilized family planning [AOR: 3.542; CI: 1.680- 7.466; P=0.001]. The main source of information on postnatal care were radio, television, newspapers, internet, nurse or doctor, CHWs, friends and at home; and the study found that those who received information from radio, nurse or doctor and friends are likely to have a high level of utilization of PNCs compared to their colleagues who did not get that information.

Conclusion: One out of two women had attended PNC4 in health centres from Kayonza district. Therefore, we recommend that ANC sessions should emphase on the importance of PNC, educate mothers on obstetric and neonatal danger signs especially during postpartum period. Future qualitative studies to explore barriers and facilitators influencing utilization of PNC services from providers and beneficiaries' perspective to maintain the quality of PNC would be paramount.

Key words: Postnatal care, Postpartum, Risk factor, Rwanda

Background

The time frame from birth to 42 days is known as postnatal period. Postnatal care is the care given to the mother and newborn within the first six weeks after birth. The majority of maternal and neonatal deaths occur during childbirth and the postnatal period (Barrow and Jobe, 2020). Although there a decrease in child mortality by almost 60% since 1990 to 38 deaths per 1000 lives birth in 2019 to 17 deaths per 1,000 live births in 2020; a global report on child mortality (2020) highlights that children face the highest risk of dying in their first twenty-eight days of life due to inadequate postnatal care services. The same report highlighted that approximately equivalent to 6,700 neonates died every day in 2019 (United Nations Inter-agency Group for Child Mortality Estimation, 2020).

The same report highlighted that the majority of babies who died within the first 42 days after birth occur in the first twenty-eight days of their life represents 55% of total deaths (United Nations Inter-agency Group for Child Mortality Estimation, 2020). Moreover, the risk of neonatal deaths for the neonates who had a postnatal care checkup by a skilled health provider decreased by 80% compared to those who had no PNC checkup(Zaw, Mon and MacQuarrie, 2019).

Postnatal period is such a risky duration to the health of both women and their babies. Postnatal care is very important to keep safe the life of women and babies. It is the period where the mothers and babies begin together a new life. Furthermore; the first hour and day is the most precarious time to both, and any absence of an adequate management or health care during this period may increase the risks of death to both, and disability to the newborn(World Health Organization (WHO), 2013).

Most of the neonatal death occur within the first 42 days but especially in the first 24-hr. While, a half of those neonatal deaths occurs in postnatal period *ie* first seven days after birth. A child born in Sub-Saharan Africa is 10 times more likely to die in the first month of life than a child born in a high-income country and 12 times more likely to die than a child born in the region of Australia and New Zealand (Child, Mortality, 2020).

Safe maternity programs have been emphasized on the significance of PNC checkup and advice mothers to have PNC checkup between the second to the seventh days after childbirth because it may decrease the risk of maternal and neonatal mortality specifically in developing countries. Moreover, it is very important to recognize the essential or basic, care in which every mother and her newborn should receive during the first six weeks after birth and to avail the vital information that can help her to care for herself and the newborn, which empowers her to support her family, and community in general behavioral change (Mahmood *et al.,* 2010).

Antenatal care and postnatal care are preventive services that are provided by a skilled health care worker with the aim of improving maternal child health outcomes through early detection of risks nearing mother and newborn. Antenatal care (ANC) is among services which increase the mother's readiness to the next services or programs in improving maternal child health. The mothers who attended at least one or more visits of ANC are more likely to have a health facility based delivery and returned for PNC (Regassa,2011). The studies proven that a relationship between antenatal care and postnatal care is based on successful health education that provided during ANC service (Dairo and Atanlogun, 2018). In addition, A study on non-utilization of postnatal care services in Nigeria revealed that antenatal care use, distance, education, place of delivery, region and low wealth status are significantly associated with the non-utilization of postnatal care services (Somefun and Ibisomi, 2016). On the other hand, in

Rwanda, increase of health facility delivery from 91% to 93% in 2015 and 2020T increased mothers attendance to postnatal care from 43% in 2015 to 70% in 2020 % (National Institute of Statistics of Rwanda(NISR) Ministry of Health and The DHS Program ICF, 2020).

Uganda is among Sub-Saharan countries with a low coverage of PNC checkup whereby PNC checkup within 2 days after childbirth was twenty-one in urban compared with 9% in rural areas. (Uganda Newborn Health, 2015). In Malawi, only 48% had a postnatal care checkup at 6 weeks (42 days) by a skilled health provider and has vindicated that there is a greater contribution in reduction of maternal and neonatal mortality.(Khaki and Sithole, 2019). It has proven that increasing of coverage of PNC checkup from several years has shown a greater role in reduction of maternal and neonatal mortality rate (Menya and Kabue, 2014).

In Rwanda, the health centers provide curative and preventive services including a PNC services that is offered free of charge(Rwanda Ministry of Health, 2018)(Rwanda Ministry of Health, 2018). Furthermore, one trained CHW among the four CHWs is based in each village to provide the care to the pregnant mothers and newborns up to three months(Rwanda Ministry of Health, 2018). The main purpose of the Ministry of Health (MoH) is to identify early and refer to health facility any one with dangerous signs and encourages the mothers to have the first and fourth visit of postnatal checkups at the health facility where a delivery should take place. whereas the 2nd and 3rd visit are supposed to be conducted by CHWs at community level (MoH-Rwanda, 2015).

Rwanda is among the few African countries that have achieved the Millennium Development Goals 4 (MDGs) reducing infant mortality rate from 50 deaths per 1,000 live births to 32 deaths per 1,000 live births (between 2010 RDHS and 2014-15 RDHS), the overall infant mortality rate has practically unchanged in the most recent 5-year period (33 deaths per 1,000 live births). This

is because the neonatal mortality and post neonatal mortality remained at almost the same level (National Institute of Statistics of Rwanda(NISR) Ministry of Health and The DHS Program ICF, 2020). The percentage of mothers who received a postnatal care checkup within the first two days increased from forty-three percent (by Rwanda Demographic and Health Survey, 2015) to seventy by the year 2020. (National Institute of Statistics of Rwanda(NISR) Ministry of Health and The DHS Program ICF, 2020)

According to the Rwanda demographic health survey (2020), the utilization of PNC check-up is less likely to be attended to in rural areas (69.8%) compared to urban (72.9%). Therefore, this study will assess factors influencing utilization of postnatal care four among mothers attending health centres within Rwinkwavu Hospital catchment area. Thus, this study is therefore reporting on factors influencing utilization of postnatal care four among mothers attending health centres within Rwinkwavu Hospital catchment area with the essence of providing information for comprehensive intervention.

Methods

Study design

The study was a cross-sectional quantitative conducted among mothers whose children were scheduled for the second visit of vaccination (at six weeks) at health centres in Rwinkwavu Hospital catchment area. Cross-sectional studies are designed to collect data at one time and analyze them. Quantitative study analyze the numerical data to come up with research conclusions(Babbie& Mouton, 2005). Data was collected in June 2021 until the desired sample size for this study was achieved.

Study setting and population

The study was conducted from eight health centres located within Rwinkwavu hospital catchment area. Kayonza district is inhabited by 232,384 people. All eligible mothers whose children are scheduled on the second visit of vaccination (at six weeks, the same time with the 4th visit of PNC) at the health centers and consent to participate in the study.

Sample size determination

A sample of 254 mothers whose babies are scheduled on the 2nd visit of vaccination at health centers in Rwinkwavu Hospital catchment area.

A convenience sample technique (CI=95%).

To calculate the sample size of the study; the formula from F*i*sher'*s et al.* (1998) was used.

n **=** it is the desired sample size

$$z_{1-\frac{\alpha}{2}}{}^2 \frac{p(1-p)}{d^2} = \boldsymbol{n}$$

Z= 1.96 of standard normal deviate at 95% CI

P = prevalence of postnatal care check-up is 79.1% $\boldsymbol{N} = 7436 \times 79.1\% = 5{,}882$

d = Precision of errors is 5% $\boldsymbol{n} = \frac{\mathbf{1.96^2 \times 0.791 \times 0.209}}{\mathbf{0.05^2}} = 254$

Proportionate sampling technique was used. The the sample which was chosen in each health centers in Rwinkwavu Hospital catchment area according to its population until the targeted sample was obtained.

This technic allows selection of the participants taking into account the population under study, the bigger the population, the bigger the sample is selected in a specific group. In order to reach the participants, those who conveniently accept to be part of the study were approached until the sample is reached.

Data collection tools

The data were collected by the means of a semi-structured questionnaire with a series of questions in order to enable a data collector to gather the most complete and accurate data in a logical flow.

Data analysis

After completion of data collection, the data was entered in SPSS software (vision 21.0), and analysis was done to identify the relationship between independent variables and the dependent variable, and the confounders were controlled through multivariable logistic regression analysis. During analysis, Chi-square test was used in the inferential statistics to confirm the association between independent and dependent variables when P-value is < 0.05 (at 95% of confidence interval). Furthermore, the data presentation including descriptive statistics to define participant's socioeconomics and demographics using graphs, tables, percentages were done accordingly.

Ethical considerations

Data collection approval was obtained from the Mount Kenya University. In addition, the permission for data collection that was obtained from the director of Rwinkwavu District Hospital and heads of health centers. All selected participants signed a written consent form before their participation in the study. There was no renumeration to participate in the study.

Study limitations

The study was limited in scope where study site in one district hospital in Eastern Province was not enough to generalize the findings to the whole country.

Results

Demographic characteristics

The results revealed that the majority of the women's socio-demographic factors included: maternal age between 20-29 years (45%), being married 125 (50%), 185 (73%) owning community-based health insurance, having completed primary school 110(43%), being substance farmer 138(54%) and 203 (80%) women walked to nearby health centre of which almost half of them 105 (41%) was within 30 minutes to 1 hour. (table 4.1)

Table 1. Socio-demographic variables

Women's age categories	**Frequency(n=254)**	**Percent(%)**
16-19	23	9
20-29	115	45
30-39	103	41
40-49	13	5
Marital status		
Never Married	52	20
Married	126	50
Separated	23	9
Cohabitating	53	21
Ubudehe categories		
Category 1	21	8
Category 2	98	39
Category 3	115	45
Category 4	20	8
Health insurance		
RAMA/RSSB	17	7
CBHI	185	73

Other insurances	21	8
None	31	12
Mother's education level		
No education	48	19
Primary	110	43
Secondary and above	96	38
Mother's occupation		
Housewife	4	2
Shopkeeper	49	19
Farming	138	54
Daily laborer	27	11
Employed (monthly salary)	36	14
Transport cost		
None (walking to health center)	203	80
500 frw	40	16
1000frw and above	11	4
Estimated time to walk to nearest HF		
<15mins	30	12
15-30mins	79	31
30mins - 1 hour	105	41
>1 hour	40	16

Attendance to antenatal care services

All mothers answered that they attended antenatal care services at least once while 48% among them completed 4th standard visit of ANC. The study results showed that 52% of women answered that they had the planned their pregnancies. A total of 249 (98%) of deliveries were assisted by a skilled health care provider at the health facility. (Table 2)

Table 2. Attendance to antenatal care services among study participants.

Variables	N	%
Nature of pregnancy		
Planned	131	52
Unplanned	123	48
Antenatal care visits		
1 visit	7	3

2- 3 visits	84	33
4+ visits	123	48
Place of delivery		
Home	5	2
Health facility	249	98

Level of utilization of postnatal care services among mothers study participants

The results in table 3 show that 77% of women had a PNC consultation within the first 24 hours after birth, 76% of mothers were visited by CHWs, where those who were visited at least twice were 54% of all participants. More than a half of the participants 52% reported that they completed the 4th standard of PNC check-up which is slightly low.

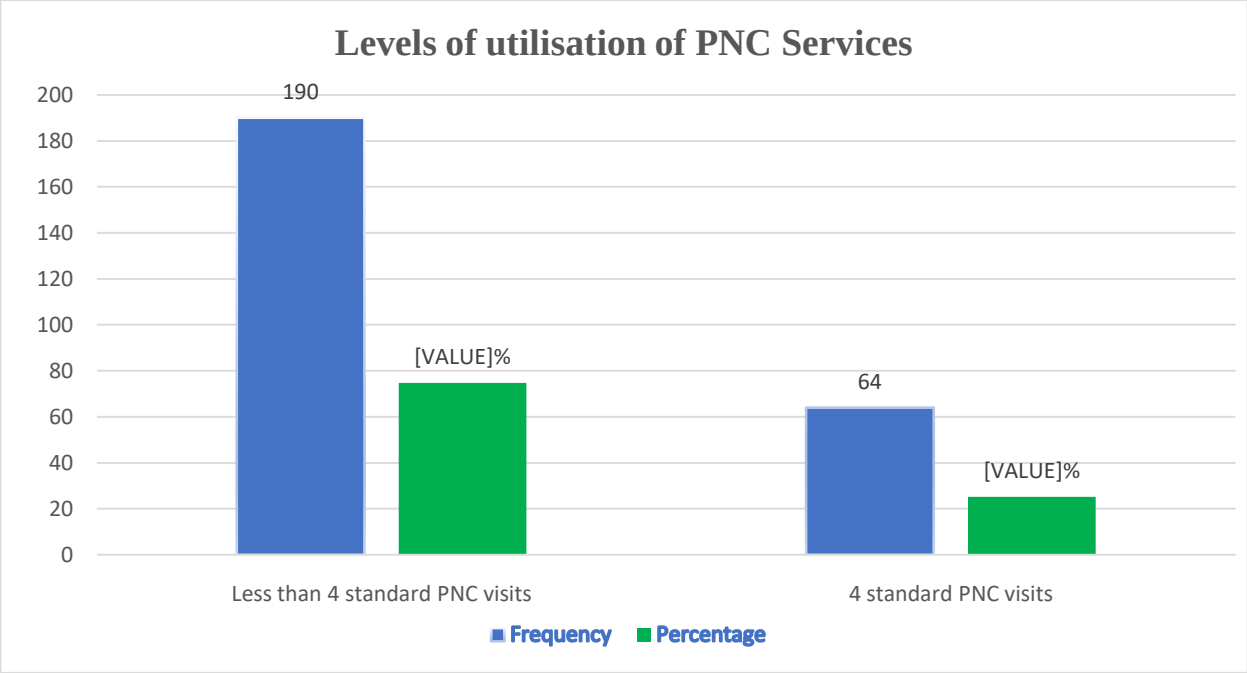
Table.3.Variables determining the utilization of postnatal care among the respondents

Variables		**N**	**%**
Received PNC within 24 hours	No	59	23
	Yes	195	77
Had PNC by CHW	No	60	24
	Yes	194	76
Times you had PNC by CHW	Less than 2 times	116	46
	At least 2 times	138	54
Had 4th PNC check-up	No	121	48
	Yes	133	52

The level of utilization of postnatal care services among the study participants is expressed by the fact that they have attended to postnatal services within 24 hours and had been followed by the community health workers. In addition, they should have had 4th PNC checkup after delivery.

In order to get the variable on levels of utilization of postnatal services, a composite variable combining all four variables is formed to have a variable that is an outcome in the present study.

Figure1 . Levels of utilization of postnatal care service



The results in figure 1 highlight that the majority 190(75%) did not fulfill all four visits to access postnatal services while only 64(25%) have attended to all recommended visits and covered all postnatal services.

Factors associated with the utilization of postnatal care services

The results in table 4 show that six factors are statistically significant to influence attendance to postnatal care among the study participants. It is highlighted that marital status, ubudehe category, health insurance, mothers' education level, occupation of the mother and nature of the pregnancy are statistically significant ($P<0.05$).

In order to get factors that were associated with PNCs utilization, a multiple regression analysis was performed, the variables which were statistically significant during bivariate analysis were entered into a regression analysis model, that isolates the associated factors in the next section. The variables entered into regression analysis model are the above reported with significance.

Table 4. Bivariate analysis of factors associated with PNCs utilization

Variables		Levels of PNC Services utilization		Total	X2	P-Value
		Less than 4 Standard PNC visits	4 Standard PNC visits			
Women's age categories	16-19	18	5	23	1.332	0.721
	20-29	87	28	115		
	30-39	74	29	103		
	40-49	11	2	13		
Marital status	Never Married	44	8	52	11	0.012
	Married	83	43	126		
	Separated	18	5	23		
	Cohabitating	45	8	53		
Ubudehe category	Category 1	19	2	21	22.271	0.000
	Category 2	85	13	98		
	Category 3	70	45	115		
	Category 4	16	4	20		
Health insurance	RAMA/RSSB	9	8	17	23.9	0.000
	Other insurances	9	12	21		
	CBHI	142	43	185		
	None	30	1	31		
Mother's education level	No education	47	1	48	22.8	0.000
	Primary	84	26	110		
	Secondary and above	59	37	96		
Mother's occupation	No occupation	115	27	138	27.948	0.000
	Mother occupation	75	37	112		
Transport cost	None (using foots)	156	47	203	3.95	0.139
	500 frw	25	15	40		

	1000frw and above	9	2	11		
Estimated time to reach at nearest HF	<15mins	20	10	30	5.129	0.163
	15-30mins	56	23	79		
	30mins - 1 hour	79	26	105		
	>1 hour	35	5	40		
Times you got pregnancies	1 times	38	9	47	1.872	0.599
	2 times	51	17	68		
	3 times	62	26	88		
	4 times and above	39	12	51		
Children who current alive	One child	38	10	48	2.853	0.415
	Two child	66	26	92		
	Three child	59	23	82		
	Four child and above	27	5	32		
Nature of pregnancy	Planned	84	47	131	16.374	0.000
	Unplanned	106	17	123		

Logistic regression analysis of factors associated with the utilization of postnatal care services

The results show that as the participants belong into ubudehe category 3 which corresponds to middle income increases the likelihood 6 times to attended to the postnatal care services compared to those in lower income category [AOR: 6.628; CI: 1.814-24.215; P=0.004]; it was again noting that the fact that the participants are educated is associated with attendance to PNCs [AOR: 0.98; CI: 0011-0.0909; P=0.041]; women who had planned their pregnancy had higher attendance to PNCs among the study participants [AOR: 3.542; CI: 1.680- 7.466; P=0.001]. (Table 4.5)

Table 5. Logistic regression analysis of factors associated with the utilization of postnatal care services

		Utilization of PNCs 95% C.I.		
Variables	**AOR**	**Lower**	**Upper**	**P-Value**
Single	Ref			

Married	0.877	0.662	1.164	0.364
Ubudehe category(1)	2.273	0.228	18.322	0.441
Ubudehe category(2)	2.210	0.547	8.933	0.66
Ubudehe category(3)	6.628	1.814	24.215	**0.004**
Ubudehe category(4)	Ref			
RAMA/RSSB	1.282	0.090	18.315	0.855
Other insurances	2.125	0.179	25.233	0.551
CBHI	1.269	0.140	11.525	0.832
None	Ref			
No education	Ref			
Primary	0.98	0.011	0.0909	**0.041**
Secondary and above	0.648	0.276	1.521	0.319
No occupation	Ref			
Mother's occupation	0.000	0.582	1.134	0.998
Unplaned pregnancy	Ref			
Planned pregnancy	3.542	1.680	7.466	**0.001**

Main sources of information influencing postnatal care services utilization

The results indicated that the main source of information related to postnatal care is from nurses or doctors 209(82) followed by friends 205(81%) and community health workers 198(78%). Radio and information from home come at last. There is neither participants who got information from television, newspapers nor internet (Table 6)

Table 6. Source of information influencing postnatal care services utilization

Variables		**N**	**%**
Radio	No	240	94
	Yes	14	6
	Total	254	100
Television	No	254	100
Newspapers	No	254	100
Internet	No	254	100
Nurse or Doctor	No	45	18
	Yes	209	82
	Total	254	100
CHWs	No	56	22

	Yes	198	78
	Total	254	100
Friends	No	49	19
	Yes	205	81
	Total	254	100
At Home	No	204	80
	Yes	50	20
	Total	254	100

Relationship between source of information and utilization of PNCs

The results are reported in table 7 and showed that women who go information from radio, nurse or doctors, community health workers and friends are likely to attend to postnatal care services (P<0.001)

Table 7. Relationship between source of information and utilization of PNCs

		Levels of PNC Services utilization				
Variables		**Less than 4 Standard PNC visits**	**4 Standard PNC visits**	**Total**	**x2**	**P-Value**
Radio	No	186	54	240		
	Yes	4	10	14	16.802	**<0.001**
Nurse or Doctor	No	45	0	45	18.422	**<0.001**
	Yes	145	64	209		
CHWs	No	56	0	56	24.198	**<0.001**
	Yes	134	64	198		
Friends	No	27	22	49	12.502	**<0.001**
	Yes	163	42	205		
At Home	No	157	47	204		
	Yes	33	17	50	2.56	**0.110**

Discussion

Demographic characteristics

The present study showed that participants demographic characteristics vary as far as postnatal care services are concerned. Most demographic characteristics studied are within the country range whereby for example most of the participants are below 30 years old as per population statistics, which stipulates that more than 60% of the population fall in youth category. Though most of the participants are of young age, they registered to adhere to the country policy to have health insurance, which was reported by the majority of the participants. In addition, it was worth noting that due to decentralization of health services, women do not travel a long distance to access PNCs. This research is in the line with the study by (Browne *et al.*, 2016) conducted in Ghana and highlighted that demographic and health insurance determines antenatal, delivery and postnatal care utilization, and that had demonstrated that maternal health insurance status plays a significant role in the uptake of the maternal, neonatal and child health continuum of care service. The demographic data studied in the present study were deeply studied to determine factors in others sections.

4.3.2. The levels of utilization of postnatal services

The present study report a low level of utilization of all 4 visits in comparison of WHO guidelines.

Only 25% fulfilled all four visits for postnatal care services in study setting where the study was conducted. The reported level of PNCs utilization is lower than 52.48% reported in sub-Saharan Africa, and below the average of 31.71% reported in easten Africa region (Tessema *et al.*, 2020). It is again low compared to 70% registered to have had checkup 2 days after birth countrywide in Rwanda (National Institute of Statistics of Rwanda(NISR) Ministry of Health and The DHS Program ICF, 2020) and low compared to 53% reported in Kenya in 2014(Kenya

National Bureau of Statistics, 2014), 56% in Uganda and 66% of mothers who had check up two days after delivery in Tanzania(TDHS, 2015). On other hand, the results are close to 47% overall attendance of postnatal care service among reproductive mothers reported in Ethiopia (Wudineh *et al.*, 2018).

This difference is because the present study considered all four visits combined as an outcome variable and excluded women who did not fulfill all four visits. On the other hand , the literature found in Rwanda, Kenya, Ethiopia, Tanzania and elsewhere were focusing on only the visit 24 hours after delivery and that was considered as the level of utilization of PNCs utilization while WHO recommends that in order to have a full package, new born and mother should at least have other three visits if delivery was conducted at the health facility (World Health Organization (WHO), 2013). The current place on field is that most mothers put much emphasis on the first visit and tend to neglect the visit done by the community health workers; because they tend to rely on check-ups that are done at the health center while WHO recommendation put emphasis on the role of the community health workers to deal with mother and child health.

Further research can focus on in-depth study on the reasons behind a partial PNC services utilization and also the content of the package provided to mothers in all four visits in order to get a full picture of PNCs in the study setting for the present study.

4.3.3. Factors associated with the utilization of postnatal care services

It was worth noting that demographic and other variables play important part as far as postnatal care services utilization is concerned.

It was highlighted that marital status, ubudehe category, health insurance, mothers' education level, occupation of the mother and nature of the pregnancy and family planning were

statistically significant to be associated with the utilization of PNC services among the study participants.

The main factors explored were ubudehe category, where women who belong in category three ubudehe has reported to increase the likelihood 6 times for mothers to attend to the postnatal care services compared to those in lower income category. The results are in line with the study by (Somefun and Ibisomi, 2016) which stipulated that low wealth status are significantly associated with the non-utilization of postnatal care services. On other hand mothers age, residence were not associated with PNC visits which is different from other study that confirmed that mothers' age and urban residence significantly increased the utilization of prenatal and postnatal care but not the use of a hospital or maternity home for delivery(Bwalya, Mulenga and Mulenga, 2017; Ovikuomagbe, 2017; Dairo and Atanlogun, 2018)

Mothers education and distance to reach the health facility was associated with utilization of PNCs where shorter distance to clinics discouraged non-utilization of both prenatal and postnatal care; It was again noting that the fact that the participants are educated is associated with attendance to PNCs ; women who had planned their pregnancy had higher attendance to PNCs among the study participants and this is in line with (Ovikuomagbe, 2017) study which revealed the same and added that that acquiring at least a primary education, discouraging child marriages encourage family planning to prevent early childbearing which ultimately improve the mother health(Ovikuomagbe, 2017; Ndugga, Namiyonga and Sebuwufu, 2020).

Acquiring health insurance was not proved to be associated with the utilization of PNCs which quite different from other studies that confirmed that acquiring health insurance is a factor for utilization of PNCs(Rutayisire, & Mochama, 2020). The reason behind this difference might be linked to the fact that CBHI coverage in Rwanda has entered into the mother's culture and the

majority has it. In addition, some components of PNC visit do not require having health insurance because of being provided by the community health workers in the community. In addition, this study was conducted in one district while others covered the whole country (Rwabufigiri *et al.*, 2016).

4.3.4. Main source of information regarding postnatal care services

The reported main source of information were radio, television, newspapers, internet, nurse or doctor, CHWs, friends and at home.

The fact that mothers received PNC information was reported to be associated with the utilization of PNCs; and this showed that those who received information from radio, nurse or doctor and friends are likely to have a high level of utilization of PNCs compared to their colleagues who did not get that information. These results are supported with that fact that other studies conducted in Rwanda found similar results where the study conducted in Masaka district reported statistical relationship between mothers who received PNC information after delivery and 4th PNC standard visit and PNC visits (Williams *et al.*, 2019; Magayane *et al.*, 2020). Information access is very crucial as far as utilization of health services; therefore, mothers should be given opportunity to know the required PNC visits and its content so as it uptake is increased. Increase awareness on the package of PNCs in the community would help to increase uptake of PNCs utilization.

Conclusion

The study discloses the factors influencing postnatal care among mothers attending health centres; the findings showed that there was a relationship between the socio-demographic characteristics and postnatal care attendance. Having a planned pregnancy, maternal education and high economic income had a greater influence on PNC attendance. While, women who did not receive any information about PNC were likely to miss PNC check-up.

The proportion of mothers who utilized a postnatal care check-up decreases as mothers finish the first PNC check-up thus not completing the 4th visits. Despite a higher coverage of the first PNC standard visit among women who delivered at the health facility, the 4th PNC standard visit is still low in South Kayonza District.

Lack of knowledge on package of all four visits have a negative influence on postnatal care attendance. Some respondents are not aware of the services given during postnatal care check-ups and benefits.

AUTHORS CONTRIBUTION

A. D.: Conceptualized the research idea, contributed to the methods, and collected the data and its analysis as well as manuscript writing.
R.K: Supervised the work from research idea conceptualization, data management as well as manuscript writing.
C. K.: Supervised the work from research idea conceptualization, data management as well as manuscript writing.

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CONFLICT OF INTEREST

All authors declare that no conflict of interest involves in this manuscript

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