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PROBABLE FACTORS AFFECTING UTILIZATION OF CONDITIONAL CASH TRANSFER IN MATERNAL HEALTHCARE IN EKITI STATE, NIGERIA

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ABSTRACT: *This study investigated probable factors that affect utilization of conditional cash transfer in maternal healthcare services in Ekiti State, Nigeria. The aims and objectives were to investigate how socioeconomic factors, uptake level, and quality of healthcare service affect utilization of conditional cash transfer in maternal healthcare services in Ekiti State, Nigeria. The descriptive non-experimental qualitative study used structured questionnaire to collect data. Convenience non-probability random sampling techniques was used to select 768 participants from 23 health facilities across 6 local government areas in 2 senatorial districts of Ekiti State. The findings revealed that the mean value of the groups especially income (1.60) was not significant at 2.5 (mean criterion), while education (3.21) and health insurance (3.73) were significant at 2.5. The chi-square Pearson Goodness of fit test was statistically significant at 0.05pvalue. Government should introduce conditional cash transfer to improve the uptake and quality of maternal healthcare in the State.*

KEYWORDS: conditional cash transfer; maternal health; healthcare services; maternal mortality; Nigeria.
JEL Classification: H75, O15, J32, I11, J61

INTRODUCTION

Maternal health is a key policy focus in the Sustainable Development Goals of 2015 – 2030 for every country. The extent to which maternal healthcare services are used is a reliable indicator of global economic growth and development. Maternal and child mortality rates are higher in countries where both maternal and child healthcare services are underutilized (Pandey, 2018). Maternal deaths are low in developed nations, being an outcome of availability of high-quality health care and easy access to it by pregnant women (Ewa et al., 2012). But the risk of maternal death is 1 in 48 deliveries in developing nations, and this is ascribed to available low-quality healthcare (Iyaniwura & Yussuf, 2009). The 2018 National Nutrition and Health Survey (NNHS) reported that only 46% of pregnancy deliveries were supported by a skilled medical attendant in Nigeria.

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The Bamako Initiative (BI) programme (2013) reported that Nigeria is top-ranked with a higher maternal mortality rate in the world. At least, six women die during childbirth or shortly after, and yet, the target date of 2015 for reducing maternal mortality by 75% had gone unachieved (Konwea & Fabamise, 2019). The high maternal morbidity and mortality showed low uptake of maternal healthcare services in Nigeria. Only 58% of maternal woman had ante natal care (ANC) services from skilled personnel and delivery healthcare by skilled birth attendants (SBAs) range between 9.8% and 81.8%. Only 45% of pregnant women had 4 minimum ANC visits recommended. Likewise, family planning services have been underutilized, with nearly 20% unmet need for family planning in Nigeria (Alenogbena et al., 2015). Although maternal deaths in Ekiti State may be observed as complications of pregnancy and delivery, these happened because of unfavourable conditions of pregnancies and deliveries that cause complications and deaths (Konwea & Fabamise, 2019).

According to Bonomo and Machado (2018), Conditional Cash Transfer (CCT) programs are highly referred for its effectiveness over decades in both developing and developed countries. Countries in Latin America including: Mexico, Brazil, Nicaragua, & Hondruas are the originators of CCTs dating far back 1990s (Owusu-Addo, 2014). Thus, Africa, Asia, and the Middle East countries coined out their versions of the CCT programs (Pandey, 2018). The Brazilians developed the Bolsa Família Program (BFP), and it is widely acknowledged as the largest CCT worldwide, having had close to 14 million families on enrollment, and it is cost-effective (Barros et al., 2010). South Asia introduced Voucher Scheme (Jehan et al., 2012), Mexico introduced Opportunidades (Adato, & Hoddinott, 2010; Fiszbein & Schady, 2009), Peru introduced JUNTOS, Nicaragua introduced Red de Protección Social (Díaz & Saldarriaga, 2017), Guatemala introduced Mi Familia Progresa (Gutierrez, 2011), Nepal introduced Safe Delivery Incentive Programme, India introduced Janani Suraksha Yojana (Pandey, 2018), Indonesia introduced Program Keluarga Harapan (Triyana & Shankar, 2017), Colombia introduced Families in Action, Bangladesh introduced Maternal Health Voucher Scheme, and Pakistan introduced Health Voucher Scheme (Jehan et al., 2012). These programmes are acknowledged as "a magic bullet in development" by policy administrators and academia (Dugger, 2004). The accolades of CCT programmes cut across international boundaries and in recent times, Kenya, Malawi, Cambodia, and South Africa are among the countries that have implemented it (Baba-Ari et al., 2018).

There is an ongoing debate that Conditional Cash Transfer Programs (CCTs) could form an efficacious policy instrument for the increasing demand for maternal healthcare from the vulnerable in the society. This is because CCTs provide a stipend to indigent households periodically, which is conditioned on fulfillment of stated requirements which include: attendance at antenatal, skilled delivery, and postnatal healthcare (Díaz & Saldarriaga, 2017).

In Nigeria, a pilot CCT scheme tagged Subsidy Reinvestment and Empowerment Programme, Maternal and Child Health component (SURE-P MCH) was introduced for sustainable utilization of maternal healthcare services. Nine (9) states were selected from the six geo-political zones of the country, which are: Niger, Ogun, Kaduna, Zamfara, Bauchi, Anambra, Ebonyi, Bayelsa, including the Federal Capital Territory (FCT). A total of 20,133 pregnant women enrolled in SURE-P MCH across the selected states, including FCT from April 2013 to March 2014. Out of the 20,133 beneficiaries, 64% returned not less than once after been registered, and 80% returned after delivery with skilled birth attendance. The SURE-P MCH documented a substantial increase in the utilization of maternal healthcare services monthly, as pregnant women attended at least four antenatal healthcare visitations. As a result, there was a rise of 15.12 visitations per 100,000 catchment

population. It also documented a significant rise in two or more tetanus toxoid doses intake by pregnant women every month (21.65/100,000 catchment population) (Okoli et al., 2014).

Although, Ekiti State was not selected to be a beneficiary state for the uptake of the National SURE-P MCH pilot scheme in a bid to improve maternal healthcare services utilization – albeit there are strong indications, especially considering the relatively high rate of maternal mortality in Ekiti State that the state may soon embark on the utilization of Conditional Cash Transfer in maternal healthcare services, having previously implemented unconditional cash transfer to the elderly between 2013 – 2015 (Olajide et al., 2014). The unconditional, non-contributory pension scheme was aimed at aged citizens that are vulnerable and/or had no pensions, at a monthly cash transfer of ₦5,000 (roughly $32 USD at the time) in the state (Olajide et al., 2017). Not only that, Ekiti State and Benue State are the only two states in Nigeria to implement "Central Medical Stores – Unified Drug Revolving Fund (CMS – UDRF) and Essential Pharma Limited (EPL) schemes that were introduced by the World Bank, Partnership for Transforming Health Systems (PATHS), and the British Department for International Development (DFID)" (Olugbenga, 2014, p. 513). The schemes aimed at increasing the capacity of the States to take advantage of bulk purchase of medical drugs and quality drug supply, and to sell at lower or subsidized prices to public healthcare users, i.e. maternal women (Olugbenga, 2014).

Statement of the Research Problem

The problems of maternal mortality and morbidity across the nooks and crannies of each state of the Federal Republic of Nigeria have been a great concern for decades (Akanbi et al., 2015). They are also denial or threats to the fundamental rights of women; most essentially "right to life". Despite several global policy interventions to reduce maternal mortality such as: the 1987 United Nations Safe Motherhood Initiative, the World Summit for Children in 1990, the International Conference on Women in 1994, the 1995 Beijing Conference of Women, the Fourth Conference on Women in 1995, the Millennium Development Goals (MDGs), and the Sustainable Development Goals (SDGs) 2030. Also, regional treaties and declarations include: the African Charter, the Maputo Protocol, and the 2001 Abuja Declaration. Likewise, national policies and strategies include the: 1988 National Health Policy & Strategy, the 2004 Revised National Health Policy, the 2004 National Millennium Development Goals Report, and the 2007 Integrated Maternal, Newborn & Child Health Strategy. More so, Nigerian States, Lagos State initiated Maternal & Child Care Centres, Ondo State initiated Safe Motherhood coined "Abiye", Anambra State approved a Bill for free maternal health services (Mojekwu & Ibekwe, 2012; Okonofua & Shiffman, 2007).

The fact that these policy efforts are disjointed and uncoordinated is a major challenge. This happened because each state is solely focused on its own dictates and vision. They suffered duplication and integration across Nigerian States, as a move to attain success. Particularly, the disjoined feature of the policies revealed massive failure both in leadership and governance of health sector, and as well other sectors in Nigeria undoubtedly (Mojekwu & Ibekwe, 2012). As a result, maternal mortality continues to be the greatest inequity of the twenty-first century. The stark differences in Maternal Mortality Rates (MMRs) between regions reveal regional policy differences in maternal mortality reduction. Sub-Saharan Africa had the highest rate of MMR among developing countries in 2008, with "640 maternal deaths per 100,000 live births, followed by South Asia (280), Oceania (230), South-Eastern Asia (160), North Africa (92), Latin America and the Caribbean (85), Western Asia (68), and Eastern Asia (41)" (Mehari & Wencheko, 2013, p. 16).

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The World Health Organization (2014b) corroborated that developing countries have MMR of (230) that is 14 times higher than MMR of (16) in developed countries in 2013. 86% of maternal deaths in developing countries are largely contributed by Sub-Saharan Africa (62%) and Southern Asia (24%). India (17%) and Nigeria (14%) are the two countries accounting for highest proportion (one-third) of maternal deaths worldwide. Maternal mortality ratio (MMR) in Sub-Saharan African countries include the following: Burundi (740), Senegal (320) (WHO, 2014), Kenya (362) (Demographic and Health Survey, 2014), Cameroon (590), Nigeria (630) (World Bank, 2013), Zambia (591) (Banke-Thomas & Ameh, 2017), and Ethiopia (673) (Ayele et al., 2014). This shows that Nigeria is at the forefront of Sub-Sahara African countries that are documenting high maternal mortality rates. Research indicates that low utilization of healthcare by pregnant women and nursing mothers is the primary cause of the high maternal mortality rate documented in Sub-Sahara Africa (Ononokpono & Odimegwu, 2014).

In Nigeria, ANC usage varies greatly between states and regions, with the lowest rate of 17.4% in Sokoto State, 22.7% in Katsina State, 24.3% in Kebbi State, and the highest rate of 98.2% in Osun State (National Population Commission [Nigeria] and ICF International, 2014). The Nigerian Federal Government recommended a minimum of 4 ANC visitations to pregnant women, and birth delivery to be assisted by professional healthcare officers –skilled birth attendant (FMoH, 2004, 2013).

According to Fayemi (2013), structural inequity is the main impediment to maternal health initiatives in Ekiti State. A significant percentage of the population are indigents, and access to quality maternal healthcare in rural areas is very far from advisable. He maintained that the fertility rate is 5 children per woman, with 20% of pregnant women giving birth in public health facilities, 15% in private facilities, and 62% giving birth at home. Furthermore, within 41 days of delivery, 56% of nursing mothers received little if any post-natal care. From pregnancy to delivery, 45% of pregnant women had no less than four antenatal healthcare visitations, with 87% of them receiving skilled delivery care. The high maternal mortality rate in Ekiti State is associated with factors such as: age, educational status, prolonged obstructed labor, early marriage, early pregnancy, low income, and unemployment (Konwea & Fabamise, 2019).

Arising from these concerns, especially low income, and unemployment, this study investigated probable factors that affect utilization of Conditional Cash Transfers in maternal healthcare services in Ekiti State using the theoretical framework of the theory of change. This became a need, to look inward from demand-side-factors into maternal healthcare utilization, as an approach to address socioeconomic issues of maternal women in the utilization of maternal healthcare services in Ekiti State. Thus, this study attempted to inform policy actors on evidence-based, on the use of financial incentive, as a policy option to foster the use of maternal healthcare services in Ekiti State. The rationale for the phenomenon of this study is drawn from similar policy actions implemented in the state relating to unconditional cash transfer to the elderly between 2013 and 2015 (Olajide et al., 2014; Olajide et al., 2017), and the Central Medical Stores – Unified Drug Revolving Fund (CMS – UDRF) and Essential Pharma Limited (EPL) schemes (Olugbenga, 2014), as a viable way to combat high maternal mortalities that have surged the state over a decade.

Purpose of the study

The purpose of this study was to examine the probable factors that affect utilization of conditional cash transfer in maternal healthcare services in Ekiti State, Nigeria.

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Research Questions

The relevant research questions that were addressed in this study are:

1. How will socioeconomic characteristics (ethnicity, age, marital status, education, occupation, family income, health insurance coverage) of women on antenatal and postnatal care affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria?
2. How will the uptake level of healthcare by pregnant women and nursing mothers affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria?
3. How will the quality of services provided to pregnant women and nursing mothers affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria?

Research Hypotheses

1. Socioeconomic characteristics of women on antenatal and postnatal care will not significantly affect the utilization of CCT in maternal healthcare services in Ekiti State Nigeria
2. Uptake level of healthcare by pregnant women and nursing mothers will not significantly affect the utilization of CCT in maternal healthcare services in Ekiti State Nigeria
3. Quality of services provided to pregnant women and nursing mothers will not significantly affect the utilization of CCT in maternal healthcare services in Ekiti State Nigeria

Significance of the Study

According to Glassman et al. (2013), CCT programs are progressively being recognized and measured in developing countries, principally, programs that focus on definite outcomes such as maternity care, sexual practices, and immunization procedures. CCT programs are gaining traction in Sub-Saharan Africa; a region where 18 countries have implemented CCT, and three have maternal healthcare requirements (Garcia & Moore, 2012). Thus, this study would provide further inferences for government and policy actors on continuous utilization of CCT in Nigeria where CCT pilot programmes have been conducted in nine (9) states: Niger, Ogun, Kaduna, Zamfara, Bauchi, Anambra, Ebonyi Bayelsa, and FCT included (Okoli et al., 2014). It will bridge the gap between policy and practice by formulating a robust and comprehensive CCT policy package to influence pregnant women utilization of maternal healthcare through possible recommendations that are evidence-based.

The study will encourage maternal women to use maternal healthcare during prenatal and postpartum period in Ekiti State, where only 45% of pregnant women had at least four prenatal care consultations from pregnancy to delivery and 56% of nursing mothers received no post-natal healthcare in less than 41 days of delivery (Fayemi, 2013). More so, it would assist in understanding the linkages between transfers, conditionality, utilization, and outcomes.

REVIEW OF RELATED LITERATURE

Theoretical Review

This study relies on the theory of change of De Silva et al. (2014) which is an efficient scheme that explains how intervention affects change. The theory states that monetary incentive overcomes direct and indirect barriers of finance and behavior of maternal women during antenatal, delivery, and postnatal care. It promotes sustainable usage healthcare services in comparison to the existing practice (Ochieng et al., 2019). The basic tenet of the hypothesis is that understanding the theory

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supporting a program is essential to know if it works, and how it works (Coryn et al., 2011). Thus, the intervention strategy is a recommended CCT to pregnant women and newborn mothers for each health facility appointment attended for antenatal, postnatal and delivery healthcare in Ekiti State.

Empirical Review

There are increasing studies globally linking conditional cash transfer to maternal healthcare services utilization, as an attempt to boost the utilization of maternal healthcare services. In Nepal, Khanal (2019) investigated CCT (Aama Surakshya Karyakram) in maternal health service utilization. It employed "Kingdon's multiple streams framework" in the explanation of the problem, policy, and politics streams brought together for the introduction of the programme in Nepal. Evaluation of prior interventions on safe motherhood detailed expensive transportation cost as a primary problem challenging usage of the obstetric care, despite it been delivered at no cost to the women.

In Brazil, Bonomo and Machado (2018) investigated cash and care, CCT and birth outcomes. The study used regression analysis to estimate the administrative data collected from the Bolsa Familia Program (BFP) and the vital statistics nationality data retrieved from the Brazilian Ministry of Health. They found a positive impact between cash transfer and birth weight. The probability of low-birth-weight lessens significantly. Also, higher exposures to monetary incentive at pregnancy stage decreased preterm birth incidence, and it reduced the likelihood of prenatal care delay.

In Kenya, Cohen et al. (2017) investigated the impact of cash transfers on delivery planning and the quality of maternal healthcare. The study performed a randomized evaluation for the two types of maternal monetary intervention. Their results revealed that many pregnant women did not have access to high-quality healthcare. More so, CCT in maternal health causes effective birth planning, and increased likelihood of the use of skilled health delivery in high-quality facilities.

In Peru, Diaz and Saldarriaga (2017) examined the use of CCT – JUNTOS, for promoting antenatal healthcare utilization in poor rural areas. The study used quasi-experimental techniques to assess JUNTOS' impact on antenatal healthcare. Their results showed that JUNTOS raised antenatal healthcare utilization, receipt of quality healthcare, and cut down obstetric complications at birth.

METHODOLOGY

Ekiti State was created on October 1st 1996 with five other states in Nigeria, including: Bayelsa, Ebonyi, Gombe, Nasarawa, and Zamfara, by the decree of the then military administrator, General Sani Abacha, GCON – the Head of State and Commander-in-Chief of Armed Forces of the Federal Republic of Nigeria (Ota et al., 2020). The State has 16 Local Government Areas and 15 Local Council Development Areas, and its State capital is Ado-Ekiti.

Ekiti State is on the longitudes 40°51′ and 50°451′ East (Greenwich meridian), and latitudes 70°151′ and 80°51′ (North of the Equator). It is situated in the tropics with total land mass is 5887.890sq km, bounded by Kwara and Kogi States at the South, Osun State at the East, and Ondo State at the East and South sides. The 2006 national population census estimated its population at 2,384,212 (Ekiti State Government [EKSG], 2019).

The sample size was determined using the formula of Cochran (1977).

$$N = \frac{Z^2 \cdot P \cdot Q}{D^2}$$

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Where:

N = number of desired sample size when population is greater than 10,000 (minimum sample size)

Z = standard normal deviation set at 1.96 corresponding to 95% confidence level

P = the proportion of targeted population estimated to have the characteristics (Mothers or pregnant women) for this study is assumed at 50%. This is due to acute shortage of study and publication that reported the figure for the targeted population.

Q = 1 – P

D = the degree of accuracy desired set at 0.05

$$N = \frac{Z^2 \,.\, P \,.\, Q}{D^2}$$

$$N = \frac{1.96^2 \text{ x } 0.5 \text{ x } (1 - 0.5)}{(0.05)^2}$$

$$N = \frac{3.8416 \text{ x } 0.25}{0.0025}$$

$$N = \frac{0.9604}{0.0025}$$

$$N = 384.16 * 2$$

$N = 768.32$ The total sample size calculated is 768.32.

Inclusion Criterium

- All pregnant women (primiparious or multiparious) and nursing mothers who were either receiving ante-natal and postnatal health care at the survey time

Exclusion Criteria

- All pregnant women that were in labor at the time of survey.
- All pregnant women & nursing mothers that were not allowed by the physician to participate in the survey due to their obstetric conditions
- All pregnant women or nursing mothers below 18years old at the period of survey

The study employed descriptive non-experimental qualitative method. Convenience non-probability random sampling technique is used to select 32 respondents across 23 health facilities in the selected 6 LGAs within Ekiti South and Ekiti Central Senatorial Districts of Ekiti State.

RESULTS PRESENTATION

Research Question 1: How will socioeconomic characteristics of women on antenatal and postnatal care affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria?

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Table 1: Descriptive analysis showing socio-economic characteristics of the maternal women

		Pregnant women		***Nursing mother***			***Mean***	***Standard Deviation***
a.	Class of patient	367 (47.8%)		401 (52.2%)			1.52	0.500
		Yoruba	***Hausa/Fulani***	***Ibo***	***Others***		***Mean***	***Standard Deviation***
b.	Ethnicity	648 (84.4%)	40 (5.2%)	56 (7.3%)	24 (3.1%)		1.29	0.735
		Under 19	***20 – 30***	***31 – 40***	***41 – 50***	***51 & above***	***Mean***	***Standard Deviation***
c.	Age group	61 (7.9%)	429 (55.9%)	246 (32.0%)	31 (4.0%)	1 (0.1%)	2.33	0.684
		Single	***Married***	***Divorced***	***Widowed***		***Mean***	***Standard Deviation***
d.	Marital status	40 (5.2%)	702 (91.4%)	15 (2.0%)	11 (1.4%)		2.00	0.359
		No formal Education	***Primary Education***	***Secondary Education***	***Tertiary Education***	***Religious Education only***	***Mean***	***Standard Deviation***
e.	Educational Attainment	33 (4.3%)	86 (11.2%)	344 (44.8%)	300 (39.1%)	5 (0.7%)	3.21	0.812
		Christian	***Islam***	***Muslim***	***Others***		***Mean***	***Standard Deviation***
f.	Religion	630 (82.0%)	114 (14.8%)	16 (2.1%)	8 (1.0%)		1.22	0.526
		Unemployed	***Employed***	***Self Employed***	***Others***		***Mean***	***Standard Deviation***
g.	Occupational status	209 (27.2%)	147 (19.1%)	392 (51.0%)	20 (2.6%)		2.29	0.896
		₦10,000 – ₦30,000	***₦30,000 – ₦60,000***	***₦60,000 – ₦90,000***	***₦90,000 – ₦120,000***	***₦120,000 and above***	***Mean***	***Standard Deviation***
h.	Income	466 (60.7%)	203 (26.4%)	59 (7.7%)	20 (2.6%)	20 (2.6%)	1.60	0.929
		NHIS	***PIC***	***CBIC***	***Other***	***None***	***Mean***	***Standard Deviation***
i.	Health Insurance	176 (22.9%)	42 (5.5%)	55 (7.2%)	38 (4.9%)	457 (59.5%)	3.73	1.696

*** Criterion Mean is 2.50*
Source: Field Survey (2020)

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From table 1, the value of the group means; (1.52) the class of patients, (1.29) ethnicity, (2.33) age group, (2.00) marital status, (1.22) religion, (2.29) occupational status and (1.60) income were all below 2.5. These indicate that none of these means was valid, thereby implying that most respondents in these groups do not agree that ethnicity, age group, marital status, religion, occupational status and income affects pregnant women and nursing mothers in the utilization of maternal healthcare services by Ekiti State. But the group means for educational attainment and health insurance were valid at 3.21 and 3.73 respectively. These indicate that majority of the respondents agree that educational attainment and health insurance coverage affects pregnant women and nursing mother in the utilization of maternal healthcare services in Ekiti State.

Research Question 2: How will the uptake level of healthcare by pregnant women and nursing mothers affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria?

Table 2: Descriptive analysis showing uptake level of maternal healthcare services

		SA	***A***	***D***	***SD***	***Mean***	***Standard Deviation***	***Decision Rule***
a.	I have missed antenatal or postnatal healthcare because I did not have money	269 (35.0%)	250 (32.6%)	99 (12.9%)	150 (19.5%)	2.83	1.111	Agree
b.	I attended antenatal or postnatal care only when I can afford transport fare to and fro the health facility	269 (35.0%)	234 (30.5%)	128 (16.7%)	137 (17.8%)	2.83	1.096	Agree
c.	I skipped antenatal or postnatal care because I couldn't afford the cost of the services	255 (33.2%)	289 (37.6%)	123 (16.0%)	101 (13.2%)	2.91	1.006	Agree
d.	I had been absent at antenatal or postnatal healthcare because I didn't have enough money to buy the required materials	269 (35.0%)	266 (34.6%)	112 (14.6%)	121 (15.8%)	2.89	1.056	Agree

*** Criterion Mean is 2.50*
Source: Field Survey (2020)

From table 2, the mean value for the groups, that is the parameters estimated (items a, b, c & d) for the uptake level of maternal healthcare services, were 2.83, 2.83, 2.91, 2.89 respectively, all above 2.5. These imply they were valid since they were higher than 2.5. It thereby interpreted that most respondents in these groups do agree as follows; (a) that they missed antenatal and postnatal healthcare because they did not have money, (b) that they attended antenatal or postnatal healthcare

only when they can afford transport fare to and fro the health facility, (c) that they skipped antenatal or postnatal healthcare because they could not afford the cost of the services, and (d) that they had been absent at antenatal or postnatal healthcare because they didn't have enough money to buy the required materials.

Research Question 3: How will the quality of services provided to pregnant women and nursing mothers affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria?

Table 3: Descriptive analysis showing quality of maternal healthcare services provided

		SA	***A***	***D***	***SD***	***Mean***	***Standard Deviation***	***Decision Rule***
a.	The antenatal or postnatal healthcare received from doctors, nurses & midwives were satisfactory	176 (22.9%)	266 (34.6%)	149 (19.4%)	177 (23.0%)	2.57	1.079	Agree
b.	The antenatal or postnatal services provided were good but expensive	33 (4.3%)	61 (7.9%)	263 (34.2%)	411 (53.5%)	1.63	0.807	Disagree
c.	Government should provide financial subsidy to pregnant women & nursing mothers to make their healthcare services affordable	271 (35.3%)	272 (35.4%)	100 (13.0%)	125 (16.3%)	2.90	1.061	Agree
d.	I borrowed money to finance my antenatal or postnatal healthcare services	28 (3.6%)	45 (5.9%)	234 (30.5%)	461 (60.0%)	1.53	0.765	Disagree

*** Criterion Mean is 2.50*

Source: Field Survey (2020)

From table 3, the groups mean value for the parameters estimated (items a, b, c & d) on the quality of maternal healthcare services delivered were 2.57, 1.63, 2.90 and 1.53 respectively. However, only parameters estimated for item a and c were greater than 2.5. They thereby interpreted that most of the respondents in the group agreed as follows; (a) that the antenatal and postnatal healthcare received was satisfactory, and (c) that government should provide financial subsidy to pregnant women and nursing mothers to make their healthcare services affordable. But the parameters estimated for items b and d (1.63 and 1.53) were below 2.5. They thereby interpreted that most of the respondents in the group did not agree as follows; (b) that the antenatal or postnatal services

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received were good but expensive, and (d) that they borrowed money to finance their antenatal or postnatal healthcare services.

Chi-square analysis of the parameters estimates

Hypothesis 1: Socioeconomic characteristics of women on antenatal and postnatal care will not significantly affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria

Table 4: Chi-Square Test:

		Chi-Square	df[a]	Sig.
PROBIT	Pearson Goodness-of-Fit Test	828.033	757	.037
a. Statistics based on individual cases differ from statistics based on aggregated cases.				

Source: Field Survey (2020)

From table 4, the Pearson Goodness-of-Fit Chi-Square test result shows 828.033 for chi-square statistics at 757 degree of freedom. The significant level 0.037 is less than 0.05 pvalue, the result is statistically significant. Therefore, the null hypothesis is rejected. We conclude here that the socioeconomic characteristics of the pregnant women and nursing mothers significantly affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria.

Hypothesis 2: Uptake level of healthcare by pregnant women and nursing mothers will not significantly affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria

Table 5: Chi-Square Test

		Chi-Square	df[a]	Sig.
PROBIT	Pearson Goodness-of-Fit Test	856.143	761	.009
a. Statistics based on individual cases differ from statistics based on aggregated cases.				

Source: Field Survey (2020)

From table 5, the Pearson Goodness-of-Fit Chi-Square test result is 856.143 for chi-square statistics at 761 degree of freedom. The significant level 0.009 is less than 0.05 pvalue, the result is statistically significant. Therefore, the null hypothesis is rejected. We conclude here that the uptake level of healthcare by the pregnant women and nursing mothers significantly affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria.

Hypothesis 3: Quality of services provided to pregnant women and nursing mothers will not significantly affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria

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Table 6: Chi-Square Test

		Chi-Square	df[a]	Sig.
PROBIT	Pearson Goodness-of-Fit Test	844.754	761	.018
a. Statistics based on individual cases differ from statistics based on aggregated cases.				

Source: Field Survey (2020)

From table 6, the Pearson Goodness-of-Fit Chi-Square test result shows 844.75 for chi-square statistics at 761 degree of freedom. The significant level 0.018 is less than 0.05 p-value, the result is statistically significant. Therefore, the null hypothesis is rejected. We conclude here that the quality of services delivered to the pregnant women and nursing mothers significantly affect the utilization of CCT in maternal healthcare services in Ekiti State, Nigeria.

CONCLUSION

There are avalanche of evidences on the impact of conditional cash transfer on maternal healthcare services in developing countries. In Nigeria, evidences were documented on the impact of conditional cash transfer piloted in nine states of the federation. But there is no evidence on the probable factors that affect the use of conditional cash transfer in maternal healthcare services, especially in States that were not covered in the pilot study. Thus, this study covered that gap in Ekiti State, Nigeria with a view to establish the need for conditional cash transfer in increasing utilization of maternal healthcare services in the state.

The study employed descriptive survey type of research. A structured questionnaire was administered to 768 maternal women, using convenience non-probability random sampling technique. Frequency, percentage, mean, and standard deviation were used to answer the research questions, and chi-square tests were conducted for the research hypotheses.

The findings revealed that most participants agreed that education and health insurance affected maternal healthcare services utilization in Ekiti State. Majority of the participants agreed that their uptake level of maternal healthcare services was affected by income, for instance: they missed antenatal and postnatal healthcare because they did not have money; they only attended when they can afford transport fare to and fro the health facility. Also, they agreed that the quality of services provided to maternal women was satisfactory and not expensive, and government should provide financial subsidy to pregnant women and nursing mothers to make their healthcare services affordable. The chi-square results showed that socioeconomic characteristics, uptake level of healthcare, and quality of services delivered to pregnant women and nursing mothers significantly affect the utilization of CCT in maternal healthcare services in Ekiti State.

Recommendations

In improving the utilization of maternal healthcare services through conditional cash transfer in Ekiti State, the following recommendations are made;

1. The recently launched Ekiti State Health Insurance Scheme should be well implemented to cover all women in reproductive age and income groups that are formally and informally employed as an efficient way of inducing timely utilization of maternal healthcare services in the state.

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2. Gainful employment or empowerment opportunity is vital to satisfactory utilization of healthcare by the pregnant women and nursing mothers. This will increase their financial capacity to handle the cost borne on the utilization of MHS.
3. Government should scale up interventions to CCT in improving the uptake level and quality of maternal healthcare services in the state. This could adopt the policy of subsidy or cost free to maternal healthcare services; subsidy to drugs costs, infant care delivery kits and other healthcare needs paid by the women in improving uptake and quality of the healthcare.

Contributions to Knowledge

This study contributed the following under listed to knowledge as follows:

i. The study investigated how socioeconomic factors of maternal women affect the utilization of Conditional Cash Transfer in maternal healthcare services in Ekiti State. Other studies have however investigated the effect of socioeconomic factors of maternal women on utilization of maternal healthcare in Ekiti State. It is obvious that if financial incentive (CCT) is given to maternal women, it would motivate them to use maternal healthcare services available at public health facilities, up to the required level. Thus, the adequacy of maternal healthcare utilization which is crucial to maternal health outcome would be properly addressed. This study found that majority of the maternal women are Yoruba (84.4%), age group 20 – 30 (55.9%), married (91.4%), secondary education (44.8%), Christian (82.0%), self-employed (51.0%), monthly income – between N10,000 and N30,000 (60.7%), and had no health insurance (59.5%). The mean analysis of the socioeconomic factors of maternal women revealed that the value of the group means – ethnicity (1.29), age group (2.33), marital status (2.00), religion (1.22), occupational status (2.29), and income (1.60) were all below 2.5 (mean criterion) while educational attainment (3.21) and health insurance (3.73) were above 2.5 (mean criterion). These imply that the socioeconomic factors of maternal women did not affect utilization of CCT maternal healthcare services in Ekiti State, especially monthly income that is very low.

ii. The study investigated how uptake level of maternal healthcare by maternal women affects the utilization of Conditional Cash Transfer in maternal healthcare services in Ekiti State. The mean value for the groups – 2.83, 2.83, 2.91, and 2.89 were all above 2.5 (mean criterion). Notably, they all agreed that they had either missed antenatal or postnatal healthcare because they did not have money, and they only attended when they can afford transport fare to and fro health facilities. Thus, these implied that income constituted barrier to their uptake level of antenatal and postnatal healthcare. The chi-square test showing Pearson Goodness of fit result was statistically significant at 0.05pvalue, thereby concluded that the uptake level of healthcare by the pregnant women and nursing mothers significantly affect the utilization of CCT in MHS in Ekiti State

iii. The study investigated how quality of healthcare provided to maternal women affects the utilization of Conditional Cash Transfer in maternal healthcare services in Ekiti State. The mean value for the groups – 2.57, 1.63, 2.90, and 1.53. The mean values of 2.57 and 2.90 were above 2.5 (mean criterion). It interpreted that most of the maternal women agreed that antenatal or postnatal healthcare received were satisfactory, and also government should provide financial subsidy to pregnant women and nursing mothers to make their healthcare services affordable or use healthcare. They disagreed that they borrowed money to finance their antenatal or postnatal healthcare despite the fact that they had low income. The chi-square test showing Pearson Goodness of fit result was statistically significant at 0.05pvalue,

thereby concluded that quality of services delivered to pregnant women and nursing mothers significantly affect the utilization of CCT in maternal healthcare services in Ekiti State.

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