

# Factors Associated with Contraceptive Use Among Migrant Female Head Porters in the Kumasi Metropolis

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## Abstract

Despite the widespread use of modern contraceptives globally, literature on contraceptive utilization among underserved populations like migrant female head porters is relatively scarce. The factors affecting modern contraceptive use among migrant female head porters remain largely unexplored. The study examined proximate determinants of modern contraceptive use among migrant female head porters in the Kumasi Metropolis of Ghana. The study employed a quantitative cross-sectional design to assess contraceptive use among female migrant head porters in Kumasi, Ghana. The study involved two hundred (200) migrant female head porters who were conveniently sampled for the survey. Data were entered into SPSS Version 16 and analyzed using Multivariate Logistic Regression Model. The study found ethnicity (AOR=7.250; CI=1.567-33.541), National Health Insurance subscription (AOR =0.395; CI=0.178-0.878), knowledge of HIV status (AOR =1.034; CI=0.428-2.500) and having multiple sexual partners (AOR =0.450; CI=0.060-3.377) to be associated with contraceptive use among the female migrant head porters. Findings have policy implications for improving contraceptive uptake among migrant female head porters. The study recommends that government scales up efforts towards regular testing for HIV/AIDS among head porters, free subscription to the National Health Insurance Scheme, and promoting the use of contraceptives to reduce vulnerability to sexually transmitted diseases and unplanned pregnancies among the female migrant head porters.

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## Introduction

The United Nations Sustainable Development Goal (SDG) five (5) recognizes gender equity as a fundamental human right. Realizing this goal is hinged on achieving SDG 3 which stresses universal access to sexual and reproductive healthcare services including family planning (Alatinga et al. 2021). The right to health includes the right to control one's body and sexual and reproductive freedoms. The unmet need for contraceptive services limits women's chances to pursue their careers and compete with men, hence widening the inequality gap (Cahill et al., 2017).

The contraceptive prevalence rate (CPR) measures the percentage of women who are currently using one form of contraception or another (Cahill et al., 2017; UN, 2015). Contraceptive use is fast increasing globally, but still remains low in sub-Saharan Africa (Cahill et al., 2018; Fiato, 2016; Nyongesa & Odunga, 2015; Nyarko, 2018). African countries with high CPR are mainly islands including Cape Verde, Mauritius, or North African countries such as Tunisia, Morocco, Algeria, and Egypt. Contraceptive prevalence in Ghana according to the Demographic Housing Survey (2014) is 22% (Avisah et al., 2007). CPR in South Africa, Mozambique, Kenya, and Somalia is 60.3% 15.7%, 12.7%, and 2.6% respectively (Sharan et al., 2015; Nyarko, 2018; DHS, 2014). Many women prefer to stop or delay childbearing but are not using any form of contraception. This may be due to a lot of factors including socio-economic barriers, beliefs and norms, and side effects of contraception, among others.

According to the Ghana Population Council (2018), about 17% of pregnancies in Ghana are unwanted. There is a high tendency for teenage girls to engage in unprotected sex, multiple sex partners, and prostitution (Baafuor, 2010; Nakirijja et al., 2018). Migrant female head porters falling into this category are usually less educated and unskilled (Yeboah & Appiah-Yeboah, 2009; Owusu-Ansah & Addai, 2013), and often misinformed about modern contraceptive usage and benefits. A woman's age is a critical determinant of her use of contraceptives (Oni & McCarthy 1986; Blum, 2017). Contraceptive utilization is usually low among young women, peaks among women in their late twenties and thirties, and declines the women ages (Nakirijja et al., 2018; Teye, 2013; Kalule-Sabiti et al., 2014). Older women portray sexual inactivity as menopause sets in and perhaps because they have achieved their desired family size. Middle-aged women, however, exhibit a growing interest in space childbearing and the desire to excel in their careers.

The last two decade has witnessed a new trend of migration in the major Ghanaian cities of Accra and Kumasi (Awumbilla et al 2008; Afriyie et al., 2015). Afriyie et al (2015) christened this phenomenon as the "feminization of migration". Young girls between the ages of 12 and 30 from northern Ghana evade major cities in a bid to accumulate money to learn a trade to acquire property for marriage. These female migrants are popularly referred to as Kayayei in local Ghanaian parlance are engaged in the business of head load carrying (porterage) to earn a living. The congestion and uncontrolled traffic in the major cities of Accra and Kumasi impede vehicular movement (Afriyie et al., 2015; Baah-Enumh et al., 2012). This makes the head porter business highly patronized (Agarwal et al., 1997; Boateng et al., 2013; Dassah et al. 2021). Head porterage offers flexible means of transport within the busy market areas. Baah-Enumh et al. (2012) investigated the living conditions of female head porters and reported the deplorable conditions they live and work. Many of them lack decent places to sleep and can be found sleeping in uncompleted buildings, shacks, kiosks and verandas at night (Alatinga et al., 2021) and are vulnerable to rape, prostitution, and unwanted pregnancies.

Despite the widespread phenomenon of the head porter business, there is no data about them. The Ministry of Gender,

Children and Social Protection, with the oversight responsibility over vulnerable populations such as Kayayei, estimates that over 40,000 head porters are in the streets of Kumasi and Accra alone (Baah-Ennumh et al., 2012). Abdulai (2016) noted that the Kayayei business is a direct response to poverty and marginalization in northern Ghana. Other researchers reveal that young girls migrate to engage in the head porter business as a means of escaping Female Genital Mutilation and forced marriages (Edwin et al., 2016; Anarfi & Adjei, 2009; Opare, 2010). Anarfi and Kwankye (2005) contended that the idea to migrate and engage in the head porter's business is supported by parents and fueled by peers who return home with expensive clothing and kitchenware.

The factors affecting contraceptive use are many and multifaceted. For example, Alatinga et al. (2021) used a quantitative approach to study contraceptive use among female head porters in Kumasi and Accra and found age, education, ethnicity, and socio-economic status as predicting factors of contraceptive use. Similarly, Avissah et al. (2018) using data from the Ghana Demographic and Health Survey (GDHS) reported educational attainment, religion, age, ethnicity, and type of earnings as significant predictors of contraceptive use among women.

## Methodology

### Study Population

There are no accurate statistics on migrant female head porters in Ghana as a result the study lacked a sampling frame hence it was difficult obtaining a sample size that is more scientific (Baah-Ennumh, Amponsah and Adoma, 2012; Afriyie et al. 2015). Due to this limitation, two hundred (200) migrant female head porters (Kayayei) between the reproductive ages (12-49) were sampled intuitively for the study. For security reasons, head porters live in groups (Anzagra and Yeboah, 2012) and clusters (Adomah, 2009) with each group having a leader. The study identified four clusters of groups in the Kumasi Metropolis, Race Course, Kejetia, Adum, and the Central Business District.

### Sampling

First, the president of the Kayayei association of Ghana was contacted prior to the study, and the objectives were explained to her in detail. After her approval, she referred the team to the chairman of the Kayayei association in Kumasi. The chairmen then contacted the leaders of the four clusters and informed them of the intended research. The research team met with the leaders of the cluster groups and decided on days that were feasible for them to get their members to respond to questionnaires. It is worth noting that the Kayayei business is well-regulated, and one cannot get them to answer questions without the consent of their superiors. Questionnaire administration was carried out on Sundays at the places of residence of head porters when they are free from work and performing house chores. Head porters were conveniently sampled depending on their availability and willingness to participate in the study.

### Data Collection

Questionnaire administration was the main data collection tool used. The questionnaire consisted of both closed and open-ended questions which were used to obtain information from head porters. The questions sought to ascertain the determinants of contraceptive use among migrant female head porters. It measured variables like demographic characteristics, and socio-economic and reproductive health variables. The questionnaires were written in English and translated into Twi (local Ghanaian language). Two graduate students together with one teaching assistant from the Department of Planning, KNUST were recruited and trained for a week to help in the questionnaire administration process. The questionnaires were discussed extensively with them to know what information is required. Each questionnaire administration lasted for thirty minutes. Consent forms were read and explained to head porters and their thumb-prints were taken before the commencement of the data collection process.

## Data Analyses Plan

Questionnaires administered were collated, coded, and given unique identities. Analyses of the quantitative data were done using SPSS (version 16). A multivariate logistic regression model was used to estimate the extent to which demographic, socio-economic, and health-related variables are associated with contraceptive use among the study participants. Regression results were considered at a 0.05 significance level or less. Data was organized and presented in the form of tables, charts, and frequencies.

## Ethical consideration

Ethical clearance was obtained from the Committee on Human Research and Publication and Ethics of the Kwame Nkrumah University of Science Technology prior to the conduct of this research. The purpose of this research was explicitly explained to participants and their consent was obtained before the commencement of data collection. Further, they were assured that their participation was voluntary and they could withdraw at any time they no longer want to continue.

## Results

**Table 1.** Socio-Demographic Characteristics of The Participants

Variable	Category	Frequency	Percentage (%)
Age group	12-20	100	50
	21-30	95	47.5
	31-40	5	2.5
Educational level	No formal education	115	57.5
	Primary level	72	36.0
	Secondary level	13	6.5
Monthly income (GH¢)	100.00 or less	7	3.5
	110.00-399.00	146	71.5
	400.00-599.00	39	19.5
	Above 600.00	8	4.0
Enrolled in NHIS	Yes	128	64.0
	No	72	36.0
NHIS status	Active	112	56.0
	Not active	88	44.0
Ever had unprotected sex before	Yes	194	97%
	No	6	3.0%
Reason for contraceptives use	To prevent pregnancy	118	59%
	To prevent STIs	82	41%
Over the past month, have you engaged in sexual activity	Yes	194	97%
	No	6	3%
Relationship with sexual partner	Husband	41	20.5
	Boyfriend	144	72
	Consensual partner	15	7.5
How long have you been in a relationship?	Within 3 months	41	20.5
	6 months	144	72
	A year and more	15	7.5

**Source:** Field Survey, 2019

An overwhelming number (97%) of respondents affirmed they have had unprotected sex in the past month. Furthermore, 62% admitted they have contracted an STI before. This exposes the vulnerability of female head porters to the risks of unplanned pregnancies and sexually transmitted diseases. The reasons given for the use of contraceptives were to prevent pregnancy (59%) and to prevent STIs (41%). Furthermore, female head porters who were married, revealed that they used contraceptives more when they were single.

Respondents were asked to rank their health at the time of the survey to ascertain the perceived need. The majority of the respondents rated themselves as good (51.5%), fair (27.5%) and very good (21%). This implies that, respondents viewed their general health and functional state as okay and that they do not need to seek healthcare. The evaluated need for healthcare which represents a health professional's judgment of an individual's health status and as to whether the person needs medical attention was not ascertained.

Data from the field survey indicates that the majority of head porters earn between GH¢110 & GH¢399 (71%) per month. About 20% of respondents fall within GH¢ 400.00-599.00 a month, and 4% earn GH¢600.00 and above. The low earnings reflect the low standard of living among the head porters which may affect their ability to afford and utilize contraceptives.

The majority of respondents agreed they have registered for the National Health Insurance card. However, when asked about the validity status of the NHIS card, 56% had renewed their cards with 44% of respondents having expired cards. In Ghana, the possession of a valid NHIS card makes health care accessible and affordable.

**Table 2.** Multivariate logistic regression results on the determinants of contraceptive use among female head porters

Variable	B	P-value	Odd Ratios (ORs)	95% C.I. for EXP(B)	
				Lower	Upper
<b>Age</b>					
11-20	1.00				
21-30	-.227	.892	.797	.030	21.408
31-40	-.164	.919	.849	.037	19.737
<b>Ethnic group</b>					
Frafra	1.00				
Dagaaba	1.409	.154	4.093	.591	28.370
Gonja	1.432	.098	4.185	.770	22.758
Bimoba	1.981	.011	7.250	1.567	33.541
Sissala	1.271	.119	3.563	.721	17.607
Dagomba	.926	.274	2.524	.480	13.275
Others	1.237	.119	3.446	.727	16.325
<b>Religion</b>					
Islam	1.00				
Christianity	.508	.423	1.663	.479	5.771
Traditionalist	.228	.757	1.256	.295	5.344
<b>Marital status</b>		.364			
Single	1.00				
Married	-.742	.751	.476	.005	46.543
Divorced/widowed	-1.863	.443	.155	.001	18.085
<b>Education</b>					
No formal education	1.00				
Primary education	.110	.853	1.116	.349	3.569
Secondary education	.028	.969	1.028	.252	4.188
<b>Monthly Income</b>					
100 cedis or less	1.00				
110-399 cedis	.623	.010	1.864	.816	4.262
<b>NHIS Subscription</b>					
Yes	1.00				
No	-.928	.023	.395	.178	.878
<b>HIV Status</b>					
Yes	1.00				
No	-.928	.023	.395	.178	.878

Yes	1.00				
No	.034	.004	1.034	.428	2.500
<b>Multiple sexual partners</b>					
Yes	1.00				
No	-.799	.007	.450	.060	3.377
<b>Contracting an STI</b>					
Yes	1.00				
No	-.091	.819	.913	.420	1.987

Reference Group=1.00; OR= Odd Ratios; CI=Confidence Interval; p value=0.05

The results have indicated that the Bimoba ethnicity group were 7.250 times more likely to use contraceptive compared with the reference group (OR=7.250; CI=1.567-33.541; P=0.011). This shows a statistically significant association between ethnicity and contraceptive use among study participants. Also, the study revealed a statistically significant association (OR =0.395; CI=0.178-0.878; P=0.023) between having a valid NHIS card and contraceptive use. The study further established a statistically significant relationship between knowledge of HIV status (OR =1.034; CI=0.428-2.500; P=0.004) and contraceptive use. The data revealed that respondents who did not have multiple sexual partners were 0.450 less likely to use contraceptives as compared to respondents who had multiple sexual partners (OR =0.450; CI=0.060-3.377; P=0.007).

## Discussion

Fifty percent of the sampled population were aged between 12-20 years this age structure reflects the Kaya business. As head porters age, they exit the trade (Opore, 2010). The Kayayei business is laborious and energy intensive. (Awumbila, 2007; Baah-Ennumh et al., 2012; Kporku 2014). The main reason for young girls engaging in the Kaya business is to accumulate resources to learn a trade and acquire properties (clothing, jewelry, kitchenware, etc) for marriage. Literature suggests the deliberate recruitment and exploitation of young girls by experienced head porters from their communities into the cities to engage in the business of head porterage (Anarfi and Kwankye, 2005; Afriyie et al., 2015; Opore, 2010). Older Kayayei who are familiar with the business, use that advantage to lure young girls from their villages and exploit them financially by serving as chaperones to them. This has implications as it accounts for the rampant school dropout and subsequent transit to the cities, following the beautiful stories told by the so-called experienced head porters about city life.

The study revealed that Ethnicity was a strong determinant of contraceptive use among head porters. The bimoba ethnicity group was 7.250 times more likely to use contraceptives compared with the reference group, the Frafra ethnicity group. There is great importance attached to having a large family size among most ethnic groups in northern Ghana where these head porters originate from. As a result, couples do not plan their family size nor practice contraception. This

is consistent with studies by Alatinga et al. (2021) and Aviisah et al. (2018) who reported ethnicity as a major determinant of contraceptive use among head porters.

Furthermore, national health insurance was a strong predictor of contraceptive use among female head porters. Head porters who did not have valid national health insurance cards were 0.395 times more likely to utilize contraceptive services compared to those who did have valid NHIS cards. The introduction of a health insurance scheme increased the rate at which women patronized contraceptive services. A valid NHIS card is an assurance that one can seek healthcare anytime one suspects ill health. NHIS subscription relieves people women of the burden of out-of-pocket payment for contraceptive services when they do not have money. Contraception is a critical healthcare service frequently patronized by women in their reproductive ages.

Arguably, having multiple sexual partners increases the risk of contracting sexually transmitted diseases. Literature affirms that female head porters engaged in prostitution as a supplementary source of income (Anarfi and Kwankye 2005; Kombian, 2019). As evident in Table 1, 97% of respondents affirmed they engaged in unprotected sex and 62% confirmed contracting an STI. Multiple sexual partners increase the risk of sexually transmitted diseases such as HIV and AIDS. Similarly, Baafuor (2010), Nakirijja et al. (2018), and Anarfi (2005) reported that unprotected sex, multiple sex partners, prostitution, and unsafe abortion were common among head porters. The results are interesting because contraceptive use was strongly related to having multiple sexual partners.

Knowledge of HIV status correlated strongly with contraceptive use. Head porters who did not know their HIV status were 1.034 more likely to use contraceptives compared to respondents who knew their HIV status. This calls for regular testing for HIV and AIDS among the head porters to determine their status. Testing negative for the HIV virus is an assurance to take precautionary measures against contracting the virus.

## Conclusion

Contraceptive use is a human rights issue. Contraceptive use is a means of population control as well as for the prevention of sexually transmitted diseases. With the increasing influx of female head porters into the Kumasi metropolis from the countryside, and the spread of HIV and other sexually transmitted infections, there is the need to investigate the factors that affect contraceptive usage among them. Researchers have paid more attention to the livelihoods and living conditions of female head porters to the neglect of their reproductive and sexual health issues. The current study investigated the factors affecting contraceptive use among female head porters in Kumasi Metropolis. The study established ethnicity, valid national health insurance subscription, knowledge of the HIV status, and multiple sexual partners as predictive factors affecting contraceptive use among head porters. The study recommends free NHIS subscription for female head porters and regular testing for HIV among head porters. Government and non-governmental organizations should focus on developing the potentials of northern Ghana such as the shea industry to create sustainable jobs for the teaming youth. The Ministry of gender, children, and social protection should design programs to equip head porters with employable skills so they can exit the trade.



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