

# **Polygyny and Resources for Empowerment and Equality in Anglo-Phone West Africa: Implications for Childbearing and Women’s Well-Being**

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## **Abstract**

In West Africa, polygyny remained a common type of marriage. However, in spite of numerous studies exploring polygyny, the relationship between polygyny and access to resources for empowerment and equality is not well-ascertained in West Africa. This study addresses this gap by raising the question: to what extent does polygyny explains access to resources for empowerment and equality among married women? Data were extracted from 2013 Demographic and Health Surveys in The Gambia, Nigeria and Sierra-Leone. The outcome variable is access to resources for empowerment and equality measured by access to education, employment and barriers to accessing health care. The key explanatory variable is type of marriage with specific attention to polygyny. Multivariate multiple regression was applied using Stata 12. Results showed that polygyny was negatively associated with access to education in the studied countries; positively associated with access to employment in the studied countries; and negatively associated with access to health in Nigeria and Sierra Leone. It is important to refocus national attention to improving the capabilities of women because economic empowerment will not only improve women’s well-being, it will also translate to the reduction of childbearing pressures among women.

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**Keywords:** Marriage, polygyny, women, empowerment, equality

## **Introduction**

Marriage as an important feature of culture and values in most human societies, has contributed greatly to men, women, and children’s well-being

across the world (Demo & Acock 1996; Williams 2003). In Sub Saharan Africa, the major types of marriage are monogamy (the union of a man and a woman) and polygyny (the union of a man and more than one woman at a time). Though, the type of marriage sanctioned by the legal system in most Sub Saharan African countries is monogamy (Scheidel 2008; Cahu, Fall & Ponguo 2011), the practice of polygyny remains common in many parts of Africa particularly West Africa (Dauphin 2013). In many West African countries, polygyny not only remained strongly embedded in cultural practice, it has also continued to generate controversies regarding its desirability and effects on women's welfare and general well-being.

Studies have examined the effects of polygyny on several socio-cultural and economic issues (Grossbard 1976; Becker 1974; Ademola 1994; Jacoby 1995; Tertilt 2005; Anderson 2007; Gould, Moav & Simhon 2012; Naksomboon 2013; Lawson, James, Ngadaya, Ngowi, Mfinanga & Mulder 2015). Some of these studies argued that polygyny benefits both men and women economically and does not culturally harm them, while some argued that polygyny adversely affect economic and social development. A number of studies have also examined the effects of polygyny on women's sexual and reproductive health (Struensee 2005; Al-Krenawi & Graham 2006; Duncan 2008; Gyimah 2009; Al-Krenawi, Graham & Al Gharaibeh 2011; Bove, Vala-Haynes & Valeggia 2013; Ickowitz & Mohanty 2015; Cleuziou 2015). Most of these studies described polygyny as oppressive and inimical to women's sexual and reproductive health by stressing how polygyny promotes inequality between husband and wives, and reducing women's capacity to control their sexual and reproductive life.

However, in spite of numerous studies exploring the socio-cultural and health effects of polygyny, the relationship between polygyny and access to resources for empowerment and equality is less well-known in West Africa where the practice of polygyny remains widespread. This study addresses this gap by raising the question: to what extent does polygyny explains access to resources for empowerment and equality among married women? Resources for empowerment and equality represent women's potential to attain economic and social empowerment. In the Demographic and Health Survey (DHS) programme, these resources have been measured by women's education, employment, access to health care and ownership of assets (Head, Zweimueller, Marchena & Hoel 2014). Access to these resources elevates women's socio-economic opportunities, widens their worldviews and economic motivations, and provides them with means to further ensure healthy living for themselves and their children. It also helps women to make more meaningful contributions to the family and society (McCauley, Robey, Blanc, & Geller 1994; Pong 1995; Population Reference Bureau [PRB] 2000; Luttrell, Quiroz, Scrutton & Bird 2009). In addition,

research evidence abounds that access to resources for empowerment and equality particularly education and employment impact women's fertility and reproductive behaviour by accelerating the pace of fertility decline and improving women's use of reproductive health services (Agadjanian 2000; Larsen & Hollos 2003; LeVine, LeVine, Rowe, & Schnell-Anzola 2004; Tfaily 2004; Upadhyay & Hindin 2005; Upadhyay, Gipson, Withers, Lewis, Ciaraldi, Fraser *et al.* 2014; Sado, Spaho & Hotchkiss 2014; Corroon, Speizer, Fotso, Akiode, Saad, Calhoun *et al.* 2014).

Knowledge of the links between polygyny and access to resources for empowerment and equality is important to broaden understanding of the processes that may underlie any association between polygyny and women's ability to achieve empowerment. The objectives of this study are to compare access to resources for empowerment and equality among monogamous and polygynous women, and to examine the influence of polygyny on access to resources for empowerment and equality in three Anglo-phone West African countries, namely, The Gambia, Nigeria, and Sierra Leone. This was with the view to discussing the implications of polygyny for women's childbearing experiences and well-being in West Africa. The countries were selected because they have comparable prevalence of polygyny with 39 percent in The Gambia, 33 percent in Nigeria and 35 percent in Sierra Leone (The Gambia Bureau of Statistics & ICF International 2014; National Population Commission & ICF International 2014; Statistics Sierra Leone & ICF International 2014). The study is guided by the hypothesis that polygyny has no influence on women's access to resources for empowerment and equality.

### **Literature Review and Theoretical Focus**

Several authors have provided explanation to the continued prevalence of polygyny in many parts of Africa. These include cultural belief that taking additional wife improves the social and political relevance of the man (Nmah 2012); conditional approval of polygyny by the Islamic faith (Moosa 2009); economic factors such as the possibility of improving household income through the economic activities of the wives (White & Burton 1988); demographic factors such as reproductive pressures on men and women (Ezeh 1997); and prolonged abnormal sex ratios occasioned by the trans-Atlantic slave trades (Dalton & Leung 2011). However, there are two major strands of argument against polygyny. On one hand are the adverse economic effects and on the other hand are the gender equality concerns.

Based broadly on economic arguments advanced by Becker (1974) and modified by Bergstrom (1994), Tertilt (2005), Schoellman and Tertilt (2005) argued that the prevalence of polygyny particularly in sub-Saharan Africa undermines economic development in the sub region. They anchored

their assertions on the upward increase in equilibrium bride wealth as a result of continuous demand for wives. They illustrated that in a polygynous community, equilibrium bride wealth is perceived as a veritable investment because there is continuous demand for wives, consequently parents tends to increase pride wealth on their daughters as a form of social investment and old age security. This may prevent investment in more productive sector of the economy and to that extent the society is not able to build up savings for investment which continue to diminish the per capital income. The persistence of the situation will make polygyny unattractive unless population growth is high and men will choose to marry younger women. Government intervention through the proscription of polygyny is the viable option for improving economic development. The assertions of Tertilt and associates in spite of its economic logic are impracticable in many parts of West Africa because of the cultural support for polygyny. More so in countries such as the United States of America where polygyny has been proscribed, the practice has not been completely eroded (Duncan 2008; Tabi, Dost & Cheney 2010; Fenske 2012).

Gender issues seem to be a major rallying point for opposition to polygyny. Researchers have argue that polygyny encourages wife abuse (Hassounneh-Phillips 2001) and early marriage (Green, Mukuria & Robin 2009); elevate risk factor for the spread of the HIV virus (Tomori, Francisco, Kennedy, Kajula-Maonga, Likindikoki, Babalola *et al.* 2013; Bertocchi & Dimico 2015); and violates women's sexual and reproductive rights (Olomola 2012; Jonas 2012). The bulk of the gender arguments are based broadly on the co-wife conflict or cooperation hypothesis which described women in polygynous unions as competing for the patronage of the man who usually is the bread winner of the family. The women have the option to either compete or cooperate to promote their interests (Madhavan 2002; Jankowiak, Sudakov & Wilreker 2005). The satisfaction of one wife may mean the denial of another especially if one of the wives is a favourite of the man. The man will flock around the favourite more than other wives which not only promote inequality within the union, but also reduce the life satisfaction of the other women (Jankowiak *et al.* 2005). Though, co-wife relationship may not always be about rivalry (Seeley 2012), but struggles over resources are paramount in polygynous unions (Dolan 2001).

As observed by Bove and Valeggia (2009), co-wife competition peaks whenever the women solely depend on the man for access to basic resources either for themselves or their children. Without access to resources the wives are less empowered, unable to take control of their own lives and remain dependent on the man, thus polygyny is not only promoting the subjugation of women, but also undermining women's potential to attain empowerment. This process is well approximated by the capability

framework pioneered by Sen (1979) and further developed by Nussbaum (2000). This framework provides the theoretical underpinning of the study. The capability framework is a subjective instrument for assessing the general well-being of an individual (Alkire 2005). Though it emanated from economic evaluation, it has been widely applied to several social issues including gender issues (Nussbaum 2005; Sen 2005; Anand & van Hees 2006).

The framework dissuades from using income or wealth to evaluate well-being and centred on removing obstacles to peoples freedom so that they can attain the kind of life style they value through improved capabilities (potentials) to function effectively as a member of the society (Robeyns 2005; Anand, Hunter & Smith 2005). In this regard, the ultimate lifestyle envisaged for women in the post-2015 development agenda for sustainable development is one free from all obstacles to women empowerment. The Plan of Action for the Agenda noted that realizing empowerment for women will make substantial contribution to attaining the 17 Sustainable Development Goals. It noted that women and girls must enjoyed unhindered access to quality education, economic resources as well as employment opportunities (United Nations [UN] 2015). Women's lack of access to resources for empowerment will thus affect their capabilities for empowerment.

## **Methods**

### **Data Sources and sample sizes**

Data were extracted from the most recent Demographic and Health Survey (DHS) in three selected Anglo-phone West African countries, namely, Nigeria, Sierra-Leone and The Gambia. The DHS programme provides valid information about basic demographic and health characteristics of men and women across developing countries. The surveys are implemented using similar designs and methodology that ensures the samples is not only nationally representative, but also provides comparable statistics across developing countries. In most developing countries, the DHS is implemented by the national statistical agency with technical and financial assistance of ICF International through Measure DHS (ICF International 2012). The permission to use the data was obtained from Measure DHS. The studied countries were selected because they have comparable prevalence of polygynous unions. Women not currently in unions such as unmarried, separated, widowed and divorced women were excluded from the analysis. The analysed sample sizes are 2,262, 9,561 and 2,929 respectively for the Gambia, Nigeria and Sierra Leone.

## **Research Variables**

The outcome variable is access to resources for empowerment and equality measured by access to education, employment and barriers to accessing health care. Access to education was categorised into two, namely, women who never attended school (no access) and women who completed at least primary school (access). Barriers to accessing health care was grouped into two, namely women who had at least one barrier in accessing health care (barrier accessing) and women who have no barrier in accessing health care (no barrier accessing). Employment was measured by employment status of the respondent as at the time of the survey. This was categorised into being currently 'employed' or 'unemployed'. The key explanatory variable is type of marriage categorised into 'polygyny' and 'monogamy'. Women whose husbands had no other living wives were defined as being in monogamous union while those whose husbands had at least one other wife were defined as being in polygynous union. Four background variables were included in the analysis. These are place of residence, wealth quintile, partner's education, and access to mass media. These variables are included because a previous study has shown that they impact women's level of empowerment (Kishor & Subaiya 2008).

## **Data Analysis**

Analyses were carried out using Stata 12. Frequency distribution was used to describe access to resources for empowerment and equality by type of marriage. Multivariate multiple regression was applied to examine the influence of the explanatory variables on the sets of outcome variables. This analytical approach was chosen because the study sought to jointly regress access to resources on the same set of independent variables. The strength of the method lies in its ability to provide a unique way of dealing with multiple comparisons when measures of the dependent variables are correlated (StataCorp 2011). The use of Stata 12 for performing multivariate regression was divided into three integrated parts. First, the 'manova' Multivariate Analysis of Variance (MANOVA) command was used to determine the statistical significance of the model using four multivariate criteria, namely, Wilks' lambda (W); Pillai's trace (P); Lawley-Hotelling trace (L); and Roy's Largest Root (R). Second, the 'mvreg' command was used to obtain the regression coefficients for each predictor in each part of the model (StataCorp 2011). Third, the 'test' command was used to determine the significance of the coefficients across the different outcome variables. Statistical significance for all the tests was set at 5%.

## Results

Table 1 presents the socio-demographic characteristics of the respondents in the studied countries. The prevalence of polygyny was slightly more than one-third in the three countries. Except in Sierra Leone, the dominant wealth group of the respondent was the 'poorer' wealth category. Among the three countries, Nigeria had the highest proportion of women from 'richest' household wealth. More than two-thirds of respondents in Nigeria and Sierra Leone are urban residents. In the Gambia, though more than half of the respondents are rural residents, the proportion of urban-based respondent was substantial and higher than the proportions in Nigeria and Sierra Leone.

Across the countries, the dominant age category was 25-34 years. Sierra Leone had the highest proportion of respondents' partner with no formal education. Among respondents' partner with educational attainment, secondary education was the dominant educational level reached by respondents' partner in the studied countries. Proportion of respondents with no access to mass media was highest in Sierra Leone and lowest in The Gambia. Majority of respondents in The Gambia had moderate access to mass media compared with Nigeria and Sierra Leone. With slight variations, fertility desires were similar in the three countries with the highest proportions of women desiring more children. The highest proportion of women who want no more children was reported in Sierra Leone (33.7%). In the Gambia and Nigeria, the proportions of women who want more children were above two-thirds of the sampled women.

The distribution of respondents by age at first marriage showed similar pattern across the countries. The dominant age interval at first marriage was 15-19 years. Except in Sierra Leone, about one-fifth of adolescent girls had become married before reaching age 15. This was more prevalent in Nigeria. Across the countries, less than one-tenth of the sampled women delayed first marriage till age 25 years. In the three countries, majority of the respondent have had between one and four children. In The Gambia, more than one-third (36.4%) of the respondents had five or more children. The proportions of women with five or more living children were above a quarter of the total sampled women in Nigeria and Sierra Leone.

Table 1: Percent Distribution of Respondents by Selected Socio-Demographic Characteristics

| Variable                         | The Gambia<br>n = 2262 | Nigeria<br>n = 9561 | Sierra Leone<br>n = 2929 |
|----------------------------------|------------------------|---------------------|--------------------------|
| <i>Type of Marriage</i>          |                        |                     |                          |
| Monogamy                         | 64.0                   | 66.3                | 65.9                     |
| Polygyny                         | 36.0                   | 33.7                | 34.1                     |
| <i>Wealth Index</i>              |                        |                     |                          |
| Poorest                          | 21.9                   | 25.2                | 26.6                     |
| Poorer                           | 24.1                   | 23.9                | 23.6                     |
| Middle                           | 19.8                   | 18.5                | 22.0                     |
| Richer                           | 20.2                   | 17.2                | 17.4                     |
| Richest                          | 14.0                   | 15.3                | 10.4                     |
| <i>Place of Residence</i>        |                        |                     |                          |
| Urban                            | 42.6                   | 33.4                | 19.2                     |
| Rural                            | 57.4                   | 66.6                | 80.8                     |
| <i>Partner's Education</i>       |                        |                     |                          |
| None                             | 65.9                   | 41.6                | 69.3                     |
| Primary                          | 6.1                    | 19.4                | 9.8                      |
| Secondary                        | 23.0                   | 28.1                | 17.4                     |
| Higher                           | 5.0                    | 10.9                | 3.5                      |
| <i>Current Age</i>               |                        |                     |                          |
| 15-24 years                      | 21.9                   | 22.2                | 23.1                     |
| 25-34 years                      | 58.2                   | 54.4                | 52.3                     |
| 35 years and above               | 19.9                   | 23.4                | 24.6                     |
| <i>Access to Media</i>           |                        |                     |                          |
| No access                        | 11.3                   | 35.2                | 44.2                     |
| Low access                       | 24.0                   | 22.5                | 20.9                     |
| Moderate access                  | 64.7                   | 42.3                | 34.9                     |
| <i>Fertility Desire</i>          |                        |                     |                          |
| Wants no more                    | 15.0                   | 21.7                | 33.7                     |
| Wants Children                   | 84.7                   | 77.8                | 65.6                     |
| Dont know                        | 0.3                    | 0.5                 | 0.7                      |
| <i>Age at first marriage</i>     |                        |                     |                          |
| <14 years                        | 20.0                   | 28.6                | 18.7                     |
| 15-19 years                      | 51.6                   | 45.4                | 58.3                     |
| 20-24 years                      | 23.4                   | 18.3                | 18.0                     |
| 25 +                             | 5.0                    | 7.7                 | 5.0                      |
| <i>Number of living children</i> |                        |                     |                          |
| 1-4                              | 62.7                   | 67.0                | 72.8                     |
| 5-9                              | 36.4                   | 32.0                | 27.0                     |
| 10+                              | 0.9                    | 1.0                 | 0.2                      |
| Total                            | 100.0                  | 100.0               | 100.0                    |

**Source:** Authors Analysis based on The Gambia Demographic and Health Survey 2013; Nigeria Demographic and Health Survey 2013; Sierra Leone Demographic and Health Survey 2013

Table 2 presents access to resources for empowerment and equality according to type of marriage. Educational attainment among the respondents showed similar features in the three countries. More than two-thirds of polygynous women do not have access to education across the countries. Access to education was consistently higher among monogamous

women than polygynous women. The disparity in access to education among monogamous and polygynous women was highest in Nigeria (57.2% vs. 29.2%) and lowest in Sierra Leone (27.0% vs. 19.0%). Except in Nigeria, monogamous women were more employed compared with polygynous women. In The Gambia and Sierra Leone, polygynous women were more employed than monogamous women. The state of access to health care differs among the countries. In Nigeria and Sierra Leone, polygynous women had higher barriers to accessing health care than monogamous women, but in The Gambia, monogamous women had higher barrier to accessing health care.

Table 2: Percent Distribution of Access to Resources for Empowerment and Equality by Type of Marriage

| Variable                                 | The Gambia |          | Nigeria  |          | Sierra Leone |          |
|--|------------|----------|----------|----------|--------------|----------|
|  | Monogamy   | Polygyny | Monogamy | Polygyny | Monogamy     | Polygyny |
| <i>Access to Education</i>               |            |          |          |          |              |          |
| No access                                | 56.1       | 76.2     | 42.8     | 70.8     | 73.0         | 81.0     |
| Access                                   | 43.9       | 23.8     | 57.2     | 29.2     | 27.0         | 19.0     |
| <i>Employment</i>                        |            |          |          |          |              |          |
| Unemployed                               | 50.9       | 49.9     | 30.8     | 31.3     | 23.9         | 15.9     |
| Employed                                 | 49.1       | 50.1     | 69.2     | 68.7     | 76.1         | 84.1     |
| <i>Barriers to accessing health care</i> |            |          |          |          |              |          |
| Barrier                                  | 3.1        | 2.1      | 6.7      | 11.1     | 58.7         | 65.0     |
| No barrier                               | 96.9       | 97.9     | 93.3     | 88.9     | 41.3         | 35.0     |
| Total                                    | 100.0      | 100.0    | 100.0    | 100.0    | 100.0        | 100.0    |

**Source:** Author Analysis based on The Gambia Demographic and Health Survey 2013; Nigeria Demographic and Health Survey 2013; Sierra Leone Demographic and Health Survey 2013

In Table 3, resources for empowerment and equality were disaggregated to show differentials among polygynous women. Result revealed that the initial grouping of women into ‘monogamous’ and ‘polygynous’ women may mislead comparison if the wife-rank is not considered. Access to education among polygynous women increases with wife-rank in all the countries. In Sierra Leone, access to employment among polygynous women decrease as wife-rank increases, but in Nigeria and The Gambia, access to employment among polygynous women decrease for wife rank 2 and then increase for wife rank 3 or more. In Nigeria and Sierra Leone, barriers to accessing health care decreases with wife-rank whereas in The Gambia, barrier to accessing health care increases with wife-rank. Overall, the level of access to resources among higher rank wives particularly wife rank 3 or more were similar to the level of access among monogamous women.

Table 3: Percent Distribution of Access to Resources for Empowerment and Equality among Polygynous women by rank of wife

|  | The Gambia |        |         | Nigeria |        |         | Sierra Leone |        |         |
|--|------------|--------|---------|---------|--------|---------|--------------|--------|---------|
|  | Wife 1     | Wife 2 | Wife 3+ | Wife 1  | Wife 2 | Wife 3+ | Wife 1       | Wife 2 | Wife 3+ |
| Resources for Empowerment:<br><i>Access to Education</i> |            |        |         |         |        |         |              |        |         |
| No access  | 78.8       | 70.7   | 58.3    | 74.4    | 71.0   | 43.3    | 85.0         | 77.4   | 73.6    |
| Access   | 21.2       | 29.3   | 41.7    | 25.6    | 29.0   | 56.7    | 15.0         | 22.6   | 26.4    |
| <i>Employed</i>  |            |        |         |         |        |         |              |        |         |
| Unemployed   | 48.2       | 51.8   | 50.7    | 31.0    | 31.5   | 30.8    | 14.4         | 15.3   | 23.8    |
| Employed   | 51.8       | 48.2   | 49.3    | 69.0    | 68.5   | 69.2    | 85.6         | 84.7   | 76.2    |
| <i>Barriers to accessing health care</i>                 |            |        |         |         |        |         |              |        |         |
| Barrier  | 1.8        | 2.5    | 3.0     | 11.8    | 10.4   | 6.9     | 68.2         | 62.9   | 58.9    |
| No barrier   | 98.2       | 97.5   | 97.0    | 88.2    | 89.6   | 93.1    | 31.8         | 37.1   | 41.1    |
| Total  | 100.0      | 100.0  | 100.0   | 100.0   | 100.0  | 100.0   | 100.0        | 100.0  | 100.0   |

**Source:** Author Analysis based on 2013 DHS in the Gambia, Nigeria and Sierra Leone

Table 4 presents information about the multivariate model constructed for predicting access to resources for empowerment and equality. The tests for the overall model indicated that for all the countries, the model was statistically significant regardless of the multivariate criteria used to determine its adequacy. Estimates of the Wilks' lambda (W); Pillai's trace (P); Lawley-Hotelling trace (L); and Roy's Largest Root (R) for each country revealed statistical significance ( $p < 0.001$ ). However, the multivariate tests for the predictor variables show mixed significance. Type of marriage, significantly predict access to resources in Nigeria ( $p < 0.001$ ) and in Sierra Leone ( $p < 0.005$ ) but not in The Gambia. Place of residence significantly predict access to resources only in the Gambia and not in Nigeria and Sierra Leone. Likewise, wealth index significantly predict access to resources in Nigeria and Sierra Leone but not in The Gambia. In all the countries, partner education and mass media exposure significantly predict access to resources ( $p < 0.001$ ).

Table 4: Model Information for predicting access to resources for empowerment and equality

|   | The Gambia |         | Nigeria   |         | Sierra Leone |         |
|---|------------|---------|-----------|---------|--------------|---------|
|   | Statistic  | p>F     | Statistic | p>F     | Statistic    | p>F     |
| <i>Overall Model</i>                        |            |         |           |         |              |         |
| W   | 0.7610     | <0.001  | 0.4720    | <0.001  | 0.8147       | <0.001  |
| P   | 0.2453     | <0.001  | 0.5346    | <0.001  | 0.1909       | <0.001  |
| L   | 0.3059     | <0.001  | 1.1048    | <0.001  | 0.2205       | <0.001  |
| R   | 0.2770     | <0.001  | 1.0922    | <0.001  | 0.1848       | <0.001  |
| <i>Specific Model:<br/>Type of Marriage</i> |            |         |           |         |              |         |
| W   | 0.9970     | 0.0687  | 0.9814    | <0.001  | 0.9947       | 0.0035  |
| P   | 0.0030     | 0.0687  | 0.0186    | <0.001  | 0.0053       | 0.0035  |
| L   | 0.0030     | 0.0687  | 0.0189    | <0.001  | 0.0053       | 0.0035  |
| R   | 0.0030     | 0.0687  | 0.0189    | <0.001  | 0.0053       | 0.0035  |
| <i>Place of residence</i>                   |            |         |           |         |              |         |
| W   | 0.9933     | 0.0013  | 0.9997    | 0.4178  | 0.9961       | 0.0186  |
| P   | 0.0067     | 0.0013  | 0.0003    | 0.4178  | 0.0039       | 0.0186  |
| L   | 0.0067     | 0.0013  | 0.0003    | 0.4178  | 0.0039       | 0.0186  |
| R   | 0.0067     | 0.0013  | 0.0003    | 0.4178  | 0.0039       | 0.0186  |
| <i>Wealth index</i>                         |            |         |           |         |              |         |
| W   | 0.9897     | 0.0186  | 0.9373    | <0.001  | 0.9845       | 0.001   |
| P   | 0.0103     | 0.0188  | 0.0628    | <0.001  | 0.0156       | 0.001   |
| L   | 0.0104     | 0.0184  | 0.0668    | <0.001  | 0.0158       | 0.001   |
| R   | 0.0090     | 0.0003  | 0.0656    | <0.001  | 0.0132       | <0.001  |
| <i>Partner education</i>                    |            |         |           |         |              |         |
| W   | 0.8792     | <0.001  | 0.8025    | <0.001  | 0.9174       | <0.001  |
| P   | 0.1211     | <0.001  | 0.1979    | <0.001  | 0.0828       | <0.001  |
| L   | 0.1370     | <0.001  | 0.2456    | <0.001  | 0.0898       | <0.001  |
| R   | 0.1343     | <0.001  | 0.2435    | <0.001  | 0.0869       | <0.001  |
| <i>Media exposure</i>                       |            |         |           |         |              |         |
| W   | 0.9754     | <0.001  | 0.9779    | <0.001  | 0.9752       | <0.001  |
| P   | 0.0246     | <0.001  | 0.0222    | <0.001  | 0.0249       | <0.001  |
| L   | 0.0251     | <0.001  | 0.0226    | <0.001  | 0.0253       | <0.001  |
| R   | 0.0214     | <0.001  | 0.0208    | <0.001  | 0.0201       | <0.001  |
| <i>Equation</i>                             |            |         |           |         |              |         |
|   | R-sq       | p-value | R-sq      | p-value | R-sq         | p-value |
| Education                                   | 0.2188     | <0.001  | 0.5142    | <0.001  | 0.1478       | <0.001  |
| Employment                                  | 0.0152     | 0.0002  | 0.0362    | <0.001  | 0.0269       | <0.001  |
| Health                                      | 0.0132     | 0.0011  | 0.0384    | <0.001  | 0.0170       | <0.001  |

The univariate model predicting access to education was strongest in Nigeria where it explains 51.42% of the variance in access to education ( $R^2 = 0.5142$ ;  $p < 0.001$ ). Estimates of the regression coefficients for access to resources are presented in Table 5. As shown in the table, change in type of marriage from monogamy to polygyny was associated with decrease in access to education by 0.033 units in The Gambia, 0.095 units in Nigeria ( $\beta =$

-0.095;  $p < 0.001$ ) and 0.029 units in Sierra Leone though statistically significant only in Nigeria. Likewise, polygyny was positively related to access to employment in all the countries, but the result are only statistically significant in Nigeria ( $\beta = 0.038$ ;  $p < 0.001$ ).

Table 5: Regression coefficients showing influence of polygyny on access to resources for empowerment and equality

| Type of Marriage       | Access to Resources for empowerment |         |             |         |             |         |
|------------------------|-------------------------------------|---------|-------------|---------|-------------|---------|
|                        | The Gambia                          |         |             |         |             |         |
|                        | Education                           |         | Employment  |         | Health      |         |
|                        | Coefficient                         | p-value | Coefficient | p-value | Coefficient | p-value |
| Monogamy <sup>RC</sup> | -                                   | -       | -           | -       | -           | -       |
| Polygyny               | -0.033                              | 0.070   | 0.018       | 0.417   | 0.013       | 0.076   |
| Nigeria                |                                     |         |             |         |             |         |
| Monogamy <sup>RC</sup> | -                                   | -       | -           | -       | -           | -       |
| Polygyny               | -0.095                              | <0.001  | 0.038       | <0.001  | -0.017      | 0.004   |
| Sierra Leone           |                                     |         |             |         |             |         |
| Monogamy <sup>RC</sup> | -                                   | -       | -           | -       | -           | -       |
| Polygyny               | -0.029                              | 0.074   | 0.046       | 0.007   | -0.036      | 0.078   |

Note: <sup>RC</sup> (Reference category)

Polygyny was inversely related to access to health care in Nigeria and Sierra Leone but positively related to access to health care in The Gambia. Results showing the significance of the regression coefficients for specific empowerment resources outcomes are presented in Table 6. In Nigeria, the coefficients for education ( $F = 148.84$ ;  $p < 0.001$ ), employment ( $F = 14.21$ ;  $p < 0.005$ ) and health ( $F = 8.29$ ;  $p < 0.005$ ) are statistically significant thus indicating that polygyny has effect on women's access to resources for empowerment in Nigeria. The reverse is however the case in the Gambia and Sierra Leone.

Table 6: Significance of regression coefficients for specific empowerment outcome due to polygyny

| Resources for empowerment | The Gambia |         | Nigeria |         | Sierra Leone |         |
|---------------------------|------------|---------|---------|---------|--------------|---------|
|                           | F-value    | p-value | F-value | p-value | F-value      | p-value |
| Education                 | 3.29       | 0.0697  | 148.84  | <0.001  | 3.20         | 0.0739  |
| Employment                | 0.66       | 0.4169  | 14.21   | 0.0002  | 7.23         | 0.0072  |
| Health                    | 3.16       | 0.0756  | 8.29    | 0.0040  | 3.11         | 0.0779  |

## Discussion

The study provided information on the relationship between polygyny and access to resources for empowerment and equality which was rarely documented in previous studies (Naksomboon 2013; Cleuziou 2015; Ickowitz & Mohanty 2015). Analyses carried out in the study are thus novel. The key finding of the study was that polygyny to a significant extent was

important for explaining access to resources for empowerment and equality among married women in Nigeria but not in The Gambia and Sierra Leone. This result may be interpreted in two ways. First, the result confirms that there may be peculiarities in the way polygyny is being practiced in different countries. Previous studies (Naksomboon 2013; Cleuziou 2015) had already observed that there are different motivations for polygyny across countries. These differences in motivations may conceal effects of polygyny on resources for empowerment in some countries. It is possible that the effects are noticeable in Nigeria because of the population size being the most populous county in Africa.

Also, the result may be due the fact that polygyny in Nigeria is more socio-economically induced than cultural. Maybe less educated and less empowered women are more attracted to polygyny as succour to widespread feminisation of poverty in the country. In the other studied countries, for example, The Gambia, the country is predominantly an Islamic country with more homogenous ethnic nationalities compared to Nigeria which is not only secular in religion, but consists of several ethnic nationalities. Therefore, it is possible that in The Gambia and Sierra Leone, women enter polygynous unions mainly because of cultural/religion reasons, and not necessarily because of social or economic reasons. This could be the reason why no relationship was found between polygyny and resources for empowerment and equality in the two countries.

Second, the changing nature of polygyny may also conceal some effects of the practice. As shown in this study, the level of access among higher-rank wives was similar to the level of access among monogamous women. This may be because unlike in the past when polygynous men live in the same compound with several wives, the tendency in contemporary societies is for the co-wives to leave apart (Cleuziou 2015; Ickowitz & Mohanty 2015). This may reduce tension, competition or cooperation among wives and thus not make adverse effects noticeable on time. Again, the similarity in the characteristics of higher wife-rank and monogamous women suggest that the second or latter wives were likely to have similar social status with monogamous women which also imply that some women with improved social status may also voluntarily opt for polygynous unions. In such cases, the influence of polygyny on access to resources may pale into insignificance. With respect to Nigeria, there are at least three processes through which polygyny affects access to resources for empowerment and equality.

One, there is often high age disparity between polygynous men and their wives particularly higher-order wives (Green *et al.* 2009). The implication of the age disparity is that power imbalance may be widened in the relationship with the young wife lacking power to protect her rights and

privileges. If the young girl is not already enrolled in school, there may not be any possibility for school enrolment due to reproductive demands from the man. The situation is worse if the young woman did not choose the man herself. In some cases young girls are given out to older men either as compensation for some favours or in recognition of the wealth and status of the man. Such young girls are made to satisfy the sexual appetite of the man without any prospect of acquiring education and economic empowerment. Two, there is high wealth disparity between polygynous men and their wives. Usually the second or other wives are contemplated when the man's income or means of livelihoods improves (Cleuziou 2015). Apart from the first wife, most other wives are encouraged into the union by prospect of enjoying from the wealth of the man. This disparity may not allow the women to acquire economic resources independent of the man.

Three, polygyny as one of the remaining vestiges of patriarchal societies ensures that women remain under the control and dominance of men. Educated and economically empowered women often confront inequalities within marital unions. This is one of the reasons why polygyny thrives more among uneducated and rural women (Gyimah 2009; Bove *et al.* 2013). The co-wives conflict and competition that exists in polygynous women also work in favour of male dominance of the family by ensuring that the wives don't have a common front to challenge authority of the man (Madhavan 2002; Jankowiak *et al.* 2005; Al-Krenawi & Graham 2006; Al-Krenawi *et al.* 2011). Polygyny thus sustains gender inequality (Olomola 2013) and is therefore not consistent with global targets of improving women's general well-being.

In the three countries analysed, the main thrust of national efforts to improve women's social condition has been to raise awareness about gender issues as an integral part of sustainable development, develop programmes to mainstream gender into all sectors of the national life and implement programmes aiming at women empowerment (2006 National Gender Policy in Nigeria; The Gambia National Gender Policy 2010-2020; 2009 Sierra Leone National Policy on the Advancement of Women). However, one common challenge in the countries is inability to develop effective strategies to confront the prevailing culture of patriarchy which sustain gender inequality at both the household and national levels. In this regard, a family-centred programme could be developed in the countries. The programme should not only emphasise women's freedom of choice in all marital arrangement, but should also seek to promote power balance within marital unions. In addition, institutional framework for promoting women empowerment should be strengthened in the countries.

It is thus important for empowerment agencies in The Gambia, Nigeria and Sierra Leone to focus attention on developing more women-

centred programmes that will not only reduce the efficacy of the culture of patriarchy, but guarantee more women's access to vital resources. These resources particularly education and employment will provide women with viable family life options. It is well noted in literature that empowered women have improve use of modern contraceptives, tends to have fewer children, and tends to have more control of their sexual and reproductive lives (McCauley *et al.* 1994; PRB 2000; Larsen & Hollos 2003; Upadhyay & Hindin 2005; Corroon *et al.* 2014). These not only reduce childbearing pressures and consequences among women, but also help to improve the general well-being of women and their children by enhancing the enjoyment of both the health and non-health benefits of modern contraceptives, which includes availability of more time for economic productivity, and reduction of maternal and child morbidity and mortality. In most cases, women with little or no economic empowerment often lack financial resources that enhances access to primary health care services, which sustains high levels of maternal and child morbidities among socially disadvantaged women.

In addition empowerment programmes targeting women already living under polygynous unions can be developed to alleviate their dependence on the male partner. In line with the plan of action of the post-2015 development agenda, empowering women and girls irrespective of type of marriage will make tangible contributions to the attainment of all the Sustainable Development Goals. As more women become empowered, polygyny will steadily decline in prevalence. It is important to note that the analyses carried out in the study, as well as the inference drawn from the study may be limited by the use of cross-sectional data which provided no adequate opportunity to establish a cause-effect relationship between polygyny and access to resources for empowerment and equality. Notwithstanding, our results are valid for making inferences about the correlation between polygyny and access to resources for empowerment and equality.

## **Conclusion**

The study revealed mixed effects of polygyny on access to resources for empowerment across the studied countries. Result for Nigeria upheld the hypothesis that polygyny has significant influence on women's access to resources for empowerment and equality. The reverses were the case in The Gambia and Sierra Leone. Further research particularly research employing both quantitative and qualitative data are needed to further explore the deleterious effects or benefits of polygyny across countries. While the debate on the desirability of polygyny or otherwise rages, it is more beneficial to refocus national attention on improving the capabilities of women as posited in Sen's capability framework because economic empowerment will

naturally propel women to reject polygyny except for women who want to exercise their freedom of choice in joining polygynous unions.

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