## Economic Abuse against Women Working in the Formal and Informal Sectors in Warri, Nigeria

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#### Abstract

This study assessed and compared the prevalence and correlates of economic abuse (EA) against women working in Warri, Nigeria.

A comparative cross-sectional survey of 680 women (340 formal (FS) and 340 informal sectors (IS) each) was done.

There was no significant difference (p=0.4) in prevalence of EA between women in the FS (59.4%) and IS (55.9%). The commonest forms of EA experienced by women were 'partner's refusing to contribute to family upkeep' (FS: 26.5%) and 'unequal job opportunities' (IS: 29.1%). Perpetrator of violence in FS was mainly partners (78.2%), while in the IS it was touts (32.6%). Psychological disturbance (FS-50.0% versus IS-50.5%) and physical injuries (FS-26.7% vs. IS-49.5%, p<0.001) were reported as consequences of EA. In the FS, women from non-indigenous ethnic groups were at greater risk (OR: 4.9, 95% CI: 2.4-9.9) of abuse. In the IS, women with higher levels of education (secondary OR: 2.2, 95% CI: 1.2-3.9 and tertiary OR: 3.7, 95% CI: 9.1-12.1) were at higher risk than those with primary or no education. In both groups, women whose partners consumed alcohol were more likely to experience abuse (FS-OR 2.4; 1.3-4.5 and IS-1.9; 1.0-3.17).

The prevalence of economic abuse was high in both sectors. There is the need for worksite education and regulations to prevent economic abuse to women.

**Keywords:** Economic abuse, economic violence, violence in the formal work sector, violence in the informal sectors, workplace violence.

Word count: 212

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#### Introduction

Economic abuse or violence is an international health problem and a global challenge (National Coalition against Domestic Abuse, 2009). The Convention on the Elimination of all forms of Discrimination against Women (CEDAW) ensures that women and men have equal opportunities to generate and manage income, because it is an important step towards realizing women's rights (UNICEF, 2007). Economic violence occurs when the male abuser has complete control over the victims' money and other economic resources or activities (UNIFEM, 2003). It also involves behaviors that control a woman's ability to acquire, use, and maintain economic resources, thus threatening her economic security and potential self sufficiency (Adams, Sullivan, Bybee & Greeson, 2008). It assumes two main dimensions: control and exploitation (Adams *et al.*, 2008).

Economic abuse may occur within the home or in the workplace (UNIFEM, 2003; Fawole, 2008). In the home, it may involve withholding or restricting funds needed for necessities such as food, medication, shelter and clothing; taking a woman's money or denying her independent access to money; excluding her from financial decision-making and damaging In the workplace, economic violence may involve denying women career her property. development opportunities, giving men preferential access to work, giving women unequal pay for equal work done with a man and limiting her access to cash and credit facilities which are available to workers (UNICEF, 2000; Heise, Ellsberg & Gottemoeler, 1999; Macdonald, 2012). It includes the experience of fraud and theft, illegal confiscation of goods or property, and unlawful closure of worksites by men in authority (UNIFEM, 2003; Fawole, 2008). Economic abuse may manifest as discriminatory laws against women on inheritance, property rights, use of communal land, and maintenance after divorce or widowhood (Heise et al, 1999; Pollet, 2011). It may also include preventing women from commencing or finishing education, or from obtaining informal or formal employment, and controlling access to farmlands and other agricultural resources (UNICEF, 2000).

The work sector comprises of two types – formal and informal. The formal work sector encompasses jobs with fixed working hours and regular wages, that have a chain of command and empowered officers to enforce the agreed upon rules. There are prescribed structures of duties, responsibilities and working relationships formally prescribed by the organization (UNESCO, 1995). The informal sector is made up of very small-scale units producing and distributing goods and services. Family labour or a few apprentices are often employed. The sector is characterized by low income, lack of benefits, less security and strenuous working conditions (UNESCO, 1995). The experiences of women in these two sectors were investigated because the profiles of the women who work in the sectors are different. The socio demographic characteristics, level of empowerment and power dynamics in these two groups are dissimilar. Also, the challenges and perpetrators of violence in the two work settings may differ.

The few available literature show that women experience different forms of economic abuse depending on where they work. At formal work, categorisation of jobs according to gender and selection of more prospective jobs for men, interference as women attempted to obtain job skills, inequality with respect to production, limited access to technology were forms of economic abuse women experienced (Flynn and Oldham, 1999). Some abusers insisted that women quit their work when jobs were scarce because they believed men have more right to work (Zink and Sill, 2004; UNICEF, 2007). In the informal sector, women experienced financial exploitation, confiscation of goods by male customers and closure of worksites by men in authority (Fawole *et al*, 2003). Compared to their male counterparts, female employees worked for longer hours, received less payment for work done and were made to do domestic work outside the contractual arrangement (Fawole *et al*, 2003).

Economic violence may be just as common as physical and psychological violence. For example, a study of 103 domestic violence survivors found that prevalence of economic abuse was just as high as the other types of abuse. All the women reported being psychologically abused by their partners, 98% had been physically assaulted, while 99% had experienced economic violence (Adams *et al*, 2008). Another study revealed that the prevalence of economic abuse among women in ten states in the United States of America

ranged from 69%-88% (Postmus, Plummer, McMahon, Murshid & Kim, 2010). The World Value Survey showed that the percentage of husbands making decisions alone on daily household expenditure varied. East Asia and the Pacific countries had the lowest prevalence, which ranged between 2% and 9%. In South Asia, Middle East and North Africa the prevalence ranged between 24% and 34% (UNICEF, 2007). Sub-Saharan Africa, compared with the other regions of the world, had the highest percentage (6-67%). Nigeria had the second highest proportion of such responses (64.5%) (UNICEF, 2007). However, economic violence appears to have been less researched (Pollet, 2011).

Review of the available literature showed that the prevalence of the abuse in Nigeria varies. As regards financial decision making, 62% of married women reported their husbands made sole decision on major household purchases and 50% of married men indicated they made the major decision on major purchases (NPC/ORC Macro, 2013). Only, 70% of women decided for themselves how their earnings were used, 10% reported that decisions regarding their earnings were mainly made by their husbands (NPC/ORC Macro, 2008). Another national survey found that 19% of women had experienced total abandonment of the financial responsibilities for family upkeep to them (FMOH/ UNICEF, 2002). A study in south west, Nigeria found that 27.5% of the violent acts experienced by young girls who trade in open markets was economic exploitation by men (Fawole, Ajuwon, Osungbade & Faweya, 2003).

Unfortunately, economic abuse affects women's and children's physical and psychological health (UNICEF, 2000; NCADV, 2009). One direct consequence of economic abuse is that women have no resources for day-to-day survival, such as food, housing, transportation and child care (Short *et al*, 2000; Adams *et al*, 2008). Such low income women who endure chronic stress, have been shown to be at increased risk of depression, anxiety, chronic health problems, and poor physical health. The susceptibility of such women to HIV infection is also increased. The experience of abuse often erodes self esteem and puts women at greater risk of a variety of mental health problems, including alcohol and drugs abuse (Heise *et al*, 1999). Economic abuse leads to tension and general nervousness which may result in

physical violence to both the woman and her children (MacDonald, 2012). It may reduce educational attainment and promote various risky behaviors in such children (Postmus 2010).

These findings are mainly from studies in industrialized countries. Despite the potential risk of economic abuse, only few studies exist on women's experience and on the risk factors of the abuse in developing countries (Fawole, 2008; Onyenechere, 2011; Usta, Makarem & Habib, 2013). There is a dearth of literature on the forms of economic abuse experienced by women in the various work settings, what women themselves perceive as the consequences of economic and ways to end the abuse. This has limited understanding of its correlates, and has hindered the ability to address the abuse comprehensively. Thus, a critical review of economic violence against women is necessary in low income countries with high levels of poverty, where economic exploitation may be rife and its effects harmful.

The findings from this study will extend previous knowledge by providing baseline information to guide policy makers and programme managers to respond effectively to stop economic abuse to women. As such, the goals of this study were to: (1) determine and compare the prevalence and patterns of economic abuse against women working in formal and informal sectors; and (2) identify factors associated with experience of economic abuse (3) describe the perceived health problems following economic abuse (4) provide suggestions to end economic abuse at workplaces.

#### Methodology

#### Sample

Economic abuse against women in the formal and informal sector in Warri metropolis in Delta State, Nigeria was studied. Delta State is an oil producing state situated in the south-south geo-political zone of the country. Warri metropolis is the main oil producing city in Delta State. It has a population of about 617,236 people. It has three local government areas (LGAs) or districts namely:-Uvwie, Warri-South and Warri South-West LGAs (National Population Commission, 2006). Before oil exploration began the major occupation of the women were farming, fishing and weaving. Over the years many women have taken up blue and white collars jobs in public and private establishments. The women are also actively

engaged in informal trades such as tailoring, hairdressing, and trading (National Population Commission, 2006). The indigenous women included Urhobo, Isoko, Itsekiri and the Ijaw tribes. The non indigenous included -Benin, Esan, Igbo and Yoruba ethnic groups. Thus Warri provided an ideal setting to study the economic abuse as it is a rapidly developing city where many women work. These women work in both work sectors, but are increasingly getting employment in the formal sector.

This study was a comparative cross-sectional survey. The targets of the study were women aged between 15 and 65 years, who worked in the formal or informal sector in Warri metropolis. The women working in the formal work sector interviewed included: - bankers, teachers, health care providers and civil servants. The jobs in the informal sector included: - hairdressers, tailors, traders, waitresses and sales attendants. Women who worked in both sectors simultaneously were excluded from the survey.

The sample size was calculated using the formula for estimating single proportion. This was based on the proportion of young women in the informal sector who experienced economic exploitation in Ibadan, Nigeria which was 27.5% (Fawole *et al*, 2003) and using a confidence level of 1.96. A minimum sample size of 306 women in each group was targeted. After adjusting for sub group analysis and non response (10%), a minimum sample size of 340 women in each group and a total of 680 women was calculated.

A four-stage sampling technique was used to select respondents. This sampling strategy was employed to ensure representativeness of women from the two work sectors in the metropolis and promote external generalisability of results. In stage one, two LGAs (Warri-South and Uvwie LGAs) were purposively selected out of the three LGAs of Warri metropolis. These LGAs were selected because they were the biggest LGAs. In stage two, one community each (Effurun and Warri communities) was purposively selected from Uvwie and Warri-South LGAs. These communities were selected because they were the administrative headquarters of the LGAs. In the formal sector, stage three involved the development of a list of jobs in the formalsectors. The work areas were identified, from which four were selected by simple random sampling (ballot method). In the stage four, systematic sampling technique was used to select women into the survey. The first respondent to be interviewed at the workplace was selected by tossing a coin between the two most senior women. Subsequently, other respondents were selected by dividing the number of female employees at the work site by the desired sample size for the site to obtain the sampling fraction. In small worksites, all eligible women were interviewed. In the informal sector, stage three also involved the generation of a list of jobs in the sector. Nine work groups were identified of which four were selected by simple random sampling (ballot method). In the fourth stage, respondents were also selected using systematic sampling techniqueThe respondents to be interviewed were proportionately allocated between the four sites. This was done by dividing the total number of female employees by the allocated sample size for the site to obtain the sampling fraction. In small worksites, all eligible women were interviewed. Based on the population of women in both Uvwie and Warri-South LGAs proportional allocation using a ratio of 1:2 respectively was used to select women for the survey. A total of 269 women were interviewed from Uvwie LGA and 411 from Warri-South LGA. The estimated sample size for each LGA was divided into two, for each work sector. Hence for Uvwie LGA, 134 participants each were estimated from both sectors. On the other hand, 206 participants each were interviewed for both work sectors in Warri-South LGA. Thus, 340 women were interviewed from the formal and informal sectors respectively to make a total of 680 interviewed in the study . Participation in the study was voluntary. respondents Seven hundred women were approached for the interview of which 680 participated. The response rate was 95.0%.

#### Procedures

Before data collection commenced, advocacy visits were made to the management of the institutions or executives of the trade union of the selected work groups to obtain permission and seek cooperation. The management and executives informed their staff and members about the study and that they may be selected /invited to participate in the study. Permission to carry out the study was granted before respondents were approached for the interview.

Four female research assistants were trained to assist with data collection. The training included briefing on interpersonal skills required for conducting interviews, objectives of the research, the importance of collecting valid data, the sampling strategy, how to obtain informed consent, importance of confidentiality of collected data and how to record responses. The questionnaire was pre-tested on 68 women in Udu LGA, Delta State to ensure questions were clear and unambiguous. The interviewers participated in the pretest. Only when they had performed satisfactorily were they allowed to commence data collection.

The questionnaire was designed after extensive review of relevant literature (Adams et al, 2008; Fawole, 2008; Adams, 2011). The questionnaire was translated into Pidgin English (the common language spoken in the locality) and back translated to English. A 40 item semi-structured interviewer-administered questionnaire was used for data collection. The questionnaire had five sections. It obtained information on the participant's socio-demographic characteristics and work experience, experience and the perpetrators of abuse, perceived health consequences and suggestions to stop economic abuse.

Data collection took place between February and July 2011. The questionnaire took 45 minutes to complete. The questionnaires were administered to the respondent in an unoccupied room or office at the workplace. A total of 680 questionnaires were administered, comprising of 340 respondents from each sector. The questionnaires were checked daily for completeness.

#### Ethical Considerations

Before commencing the study, ethical approval was obtained from the University of Ibadan/University College Hospital Ethics Review Committee. Permission to carry out the study was obtained from the management/unions of the work associations. Written informed consent was obtained from the participants after explaining the purpose of the study to each respondent. Participants were assured of the confidentiality of all responses given. Anonymity was ensured as no names were required of the participants or recorded on the questionnaires. Data obtained from the study was kept in a password protected computer. Based on World Health Organisation Guidelines (WHO, 2001), women who were currently experiencing severe economic abuse were referred to LGA Department of Women Affairs. *Measures* 

To ensure validity of the instrument, a review of literature was done to guide the development of the instrument (Adegbite, 2006; Fawole, 2008; Adams *et al*, 2008; NPC/ORC Macro, 2008; Postmus, 2010). Secondly, the questionnaire was reviewed by experts on gender based violence research (Fawole et al, 2004). Lastly, the questionnaire was pre-tested on 28 women in Udu LGA in Delta State to ensure the questions were clear and unambiguous. Cronbach's alpha model technique was used to test the reliability of the items in the questionnaire. This was done by calculating the reliability coefficient of the pretest using SPSS software. A reliability coefficient of 0.87 was obtained. Others measures are below:-

Socio demographic characteristics: These included respondent's age (<30, 30-39, <40 years), marital status (single, married, separated/divorced/widowed), education (none, primary, secondary and tertiary), religion (Christian, Moslem, Traditional), years of work experience, ethnicity (Urhobo, Isekiri, Ijaw, Ibo, Edo, Yoruba) and number of dependents currently. Partner's lifestyle included history of previous or current harmful alcohol consumption (yes or no) and smoking habits (yes or no). Partner referred to current or last partner for those who were widowed, separated or divorced. Alcohol use was considered harmful if the respondent admitted to having a history of heavy episodic drinking, or being drunk in the last three months, or if partner was a moderate to severe drinker, while smoking referred to use of cigarette every day or some days. These socio demographic characteristics were selected after reviewing literature showing conceptual frameworks on ecological model of factors associated with partner abuse factors influencing experience of violence to women. The individual and relationship factors of the model guided the selection (Heise, Ellsberg & Gottemoeler, 1999; Fawole, 2008; NPC/ORC Macro, 2013).

*Economic abuse:* The economic abuse measure was made up of 19 items. Eighteen of these items assessed respondents experience of specific acts of economic abuse, while one item assessed whether respondent had ever experienced of economic abuse since being an adult. The specific acts of economic abuse was based on where violence occurred namely: - home (12 items) and workplace (6 items). Examples of the items asked on economic abuse experienced in the home included: - if a respondent had been denied access to her economic resources, if partner had complete control of the family financial decision, if partner withheld funds needed for food and other necessities, if partner excluded her from financial decision

making for purchase of household goods. Some of the forms of violence experienced at work documented included:- if respondent had ever experienced unequal pay for equal amount of work done with male colleagues in the workplace, if she had been denied career development opportunities and if she had limited access to cash and credit facilities available at the work place. The economic abuse items had a yes or no response format. Affirmative response to at least one of the items constituted economic abuse. Experience of economic abuse in the lifetime was documented by asking respondents if they had experienced any of these acts from a man since they attained the age of 15 years. Similarly response to this question was binary – yes or no as appropriate.

The operational terms used to describe some of the different types of economic abuse were:financial emasculation, which was when a man placed a woman on strict allowance or forced her to beg for money; financial suppression occurred when a man used the fact that he had more money to dominate a woman; financial restriction involved withholding or restricting funds needed for necessities such as food, shelter, medication and clothing; denial of financial independence, was when a man denied a woman the ability to control her personal earnings; and financial non involvement occurred when a man refused to contribute financially to feeding and other basic family needs. These terms were obtained following review of literature on economic violence (Adams et al., 2008; Pollet, 2011; Macdonald, 2012). However some of the other items measured did not have descriptive labels. Examples included:- complete control of family financial decisions, deny right to inherit property, land and other economic resources, unequal pay for equal work done as the men, limited access to cash and credit compared with the men, denying career development opportunities, unequal employment or job opportunity with the men, preferential work access for men, disallowed to work outside the home because of gender to mention a few.A reliability coefficient of 0.93 was obtained on assessment of this measure. In the analysis, the economic abuse variable was coded dichotomously as 'yes' or 'no' to each of the item (i.e., 1, 0).

*Perpetrator of abuse:* The perpetrator of abuse was operationalised by asking respondents who gave an affirmative response to any of the 18 items measuring economic abuse to state the main male person who perpetrated economic abuse to them. The possible perpetrators

included: - spouses, male relatives; men at the workplace such as co-workers and employees, unemployed persons soliciting for business or employment (touts); and government officials. The possible perpetrators of abuse were cited in other studies (Heise, Ellsberg & Gottemoeler, 1999; Adams *et al.*, 2008; Fawole, 2008). The one main perpetrator of abuse was documented. In the analysis, perpetrators were disaggregated based on the work sector of the respondents. A reliability coefficient of 0.91 was obtained on assessment of this measure.

*Health Problems following abuse* : Women's perception of the health problems were measured by asking respondents who admitted experience of economic abuse to mention health problems resulting from the acts of abuse mentioned above (dispute over money and other economic resources or opportunities). The question was open ended and was stated thus: What was the health problems following the economic abuse you experienced? The responses included physical injuries such as black eye, broken teeth, burns, cuts, bruises, sprains, dislocation, fracture and internal injury. Responses coded as emotional distress included: - sadness, misery, unhappiness, fear, anxiety, depression and post traumatic stress syndrome. The person who perpetrated the physical injuries was asked, and responses included intimate partners, fathers, male relatives, government officials and touts.

*Suggestions to end violence*: Possible ways to end economic violence were sought from the women. This was operationalised by asking respondents the open ended question, 'What is your suggestion to stop economic violence to women?' This was asked to obtain feasible and practical recommendations on how to end economic abuse. Responses were then coded based on the sector, perpetrator and health consequences.

#### Data Analysis

The independent variables were the women's socio demographic characteristics and her partner's lifestyle. The dependent variable was experience of economic abuse.

Data entry and analysis was done using the Statistical Package for the Social Sciences (SPSS Version 16.0) software (SPSS, 1998). Univariate analysis was done using means and proportions. For example, proportions were used to compare the prevalence and patterns of

economic abuse against women working in the formal and informal sectors. It was also used to describe the perceived health consequences of economic abuse.

Bivariate analysis using the Chi-square test was used to determine the socio demographic factors (explanatory) associated with experience of economic abuse (outcome) in the two sectors. Logistic regression analysis was done to identify factors associated with womens experience of economic abuse in the formal and informal sectors. The variables that were significant at bivariate analysis were subjected to multivariate analysis to control for confounders and adjusted odds ratios computed. Stepwise regression (forward selection method) was used to choose explanatory variables (education, ethnicity, years of work experience, number of dependent, use of alcohol, knowledge) for the multivariate analysis and was also verified using the backward selection method. The model with the maximum likelihood ratio was adopted as the best fit for the data. The p-value was set at 5% level of significance. Missing data were minimal (<5%) and were categorized as no response in the univariate, and ignored in the bivariate and multivariate analysis.

For the qualitative data analysis, open codes were developed to capture key thematic content in the responses of the respondents and interpreted. The analysis was done manually and the suggestions to stop economic abuse were narrated in quotes. Themes identified within the responses included suggestions to en economic abuse based on sectors, perpetrators and consequences of economic abuse.

#### Results

#### Socio-Demographic Characteristics

The socio demographic characteristics of respondents are shown in Table 1. The mean age of the formal sector respondents was  $36.8\pm9.3$  years, while in the informal sector mean age was  $29.8\pm9.1$  years. Among respondents from the formal sector, tertiary level education was commonest (74.4%), while secondary education was commonest (71.2%) in the informal sector. In both groups most of the women had less than 10 years working experience, 64.1% and 75.0% in the formal and informal sector respectively.

#### Prevalence and Types of Economic Abuse by Work Sector

Table 2 compares the lifetime prevalence of EA by work sector. The most prevalent type of EA ever experienced among formal sector workers was 'financial non involvement' (26.5% versus 11.5%; p<0.001). Compared with the formal sector, a higher proportion (29.1% versus 13.5%; p<0.001) of women working in the informal sector stated "unequal job opportunities for women". As regards the question "who collects your earnings from work?" Majority (94.1%) of the women reported that they collected their earnings themselves. This was 98.8% among respondents in the formal and 89.4% in the informal sectors.

The overall prevalence (irrespective of the sector) of EA in the home was 41.2%, and 34.9% in the work place (P=0.0005). Generally, a higher proportion of respondents in the formal sector had experienced EA (59.4%) compared to the informal sector (55.9%) (p=0.4).

In the home, a significantly higher proportion (45.3% versus 37.1%; p=0.03) of women in the formal compared to informal sector had experienced EA. In the workplace, a higher proportion of the women working in the informal sector experienced EA compared to the formal sector workers (40.9% versus 28.8%; p=0.001).

#### Factors Influencing Experience of Economic Abuse by Work Sector

Table 3 shows the socio-demographic factors influencing ever experiencing EA using bivariate analysis ( $\chi^2$ ). In the formal sector, ethnicity was significantly associated with experience of economic abuse with a higher proportion of women from non indigenous ethnic groups reporting more experience of abuse than the indigenous ethnic groups (75.0% for others versus 51.2%, 60.0%, 56.5% and 34.5% for Urhobo, Isoko, Itsekiri and Ijaw respectively). Also, significantly more women (83.8%) with more than 20 years of work experience reported experience of economic abuse compared to those with 10-19 years (55.3%) and less than 10 years (56.8%). In the formal sector, more women (68.6%) with tertiary education had experienced abuse compared with those with secondary (58.3%) and primary (39.7%) education (P<0.05). Significantly more women with fewer dependants experienced abuse compared with those with larger number of dependants (61.3% versus 31.3%). Table 4 presents the results of logistic regression analysis. In the formal sector, women from non-indigenous ethnic groups were five times more likely [aOR 4.91 (95% CI:

2.4-9.9)] to experience EA compared with the indigenous women (Urhobos). Women with a larger number of dependents also had increased odds [aOR 2.9 (95% CI: 1.1-7.3)] of experiencing EA compared with those with fewer dependents. Partners with history of consumption of alcoholic drinks were twice more likely to have perpetrated EA [aOR 2.4 (95% CI: 1.3-4.5)] compared with those who never consumed alcohol.

On the other hand, women in the informal sector with tertiary education were four times more likely to experience EA [aOR 3.7 (95% CI: 1.1-12.1)] compared with women with primary or no formal education. Women whose partners consumed alcoholic drinks were two times more likely to experience EA [aOR 1.9 (95% CI: 1.0-3.7)] compared with those who never consumed. Women with more dependents were less likely to experience EA [aOR 0.3; 95% CI: 0.1-0.8)] compared with those with fewer dependents.

#### Perpetrators of Economic Abuse

Table 5 shows the main perpetrators of EA. Most of the perpetrators were persons acquainted with the victims. In the formal sector, intimate partners were the main perpetrators (78.2%). On the other hand, in the informal sector, touts – unemployed persons soliciting for business (32.6%) were the major perpetrator.

#### Health Problems Following Economic Abuse

The health problems following abuse were physical injuries (37.8%) and emotional disturbance (50.3%). Physical injuries and emotional distress were reported by 26.7% versus 49.5% (p=0.001) and 50.0% versus 50.5% of respondents in the formal and informal sectors respectively. In the six months preceding the survey, 11.8% of the respondents in the formal sector and 16.8% in the informal had experienced at least one physical injury as a problem following EA, while 5.9% and 8.6% respectively had experienced more than three injuries in that period. The main perpetrators of the injuries in both sectors (FS-63.8% versus IS-49.1%) were intimate partners. The psychological distress reported included depression, low self-esteem, anxiety, phobia, humiliation and heartbreak.

#### Suggestions to Stop Economic Abuse

The suggestions to stop economic abuse included: - Providing equal opportunity and empowering women . This was stated thus:-

There is the need to give women equal opportunities as the men. Women should be allowed to go to school and work just like the men are allowed. It is only then that economic abuse can stop because then women will not be dependent on the men (31 years, IS).

Others suggested that women should be assisted financially and that the government should be more involved in solving women's economic problems. Some of their responses were:-

The government and society needs to provide assistance by giving women loans or allowing them to borrow money at low interest rates. In this way government will help women to be financially secure and thereby able to protect themselves from abuse (41 years, FS).

We need government to be more involved in solving problems women experience in this country. Issues such as assisting with school fees and vocational training for women are what government need to work upon and improve so that from a young age girls can fend for themselves (49 years, IS).

Others suggestions given were along the following themes:- spousal counseling before marriage and when marriages are having problems"; changing parents and societal values, legislations against economic abuse to women, sensitization/ enlightenment programmes, work-place interventions and spiritual intervention/prayers.

#### Discussion

This study aimed to determine and compare the prevalence and patterns of economic abuse against women working in formal and informal sectors and identify the factors associated with experience of economic abuse. In addition, it aimed to describe the perceived health consequences of economic abuse and provide suggestions on how to end economic abuse in the workplace. The prevalence of abuse was high is both sectors with a slightly higher proportion of women in the informal sector experiencing abuse. The most prevalent type of abuse experienced among women in the formal sector was:- partners refusing to be financially involved in the maintenance of the family, while the most prevalent form in the informal sector was unequal opportunities for women compared to their male colleagues. The factors associated with experience of abuse were ethnicity, number of dependants, and consumption of alcohol in the formal sector, while in the informal sector level of education, alcohol consumption and number of dependant were the predictors of abuse. The health problems which occurred after abuse were physical and emotional.

Generally women in the informal sector were younger, unmarried and had lower educational levels than those in the formal sector. Many of these women may have dropped out of school due to economic reasons to commence trading and other vocational jobs early to make a livelihood (Fawole, Osungbade & Ajuwon, 2004; Onyenechere, 2011). In many low income countries it is recognized that women are concentrated in the informal sector (Flynn and Oldham, 1999; UNESCO, 1995). However, because of their low educational attainment and the prevalent stereotyping, they are often unable to obtain employment in the formal sphere in the society (Ayodapo, 2010). Most formal jobs require high level of training and specialisation necessitating women employed in such sector to be well educated. However, because of the long period of their schooling educated women tend to settle down to work and marriage later than their uneducated age mates (UNICEF, 2007).

Our findings confirm that economic abuse was a common experience (FS-59.4% and IS-55.9%) in lives of both groups of women. The prevalent poverty in the country may contribute to many womens vulnerability to abuse (Ayodapo, 2010; Postmus 2010). A previous Nigerian study found that about a quarter of women experience work-place economic abuse (Fawole *et al*, 2002). However the study only assessed experience of violence in the work place, which is often less that the abuse experienced in the home (domestic) (Heise et al, 1999). Hence the true prevalence of economic abuse is likely to be much higher than what the researchers reported. Qualitative studies on Lebanese women also showed that most women experienced many forms of economic abuse (Usta et al, 2013). A study in the United States (US) found much higher estimates, 79% of women experienced economic exploitative behaviors and 78% experienced employment sabotage (Postmus et al, 2012). The higher prevalence may be because of a better appreciation of the problem by the women in the developed world.

Work setting was associated with the form of violence experienced, with women in the formal sector experiencing more domestic (home-based) abuse, while those in the informal sector experienced more work-place abuse. Intimate partners are often the perpetrators of domestic abuse (WHO, 2001; Fatusi and Alatise, 2006). Hence, it is unsurprising that partners were the major perpetrators of abuse in the formal sector. On the other hand women in the informal sector, touts were the major perpetrators because of the lack of regulation in the sector (UNESCO, 1995). Male employers and government officials had also been reported to perpetrate abuse to women in the sector (Fawole *et al*, 2004, MacDonald 2012).

The experience of economic violence was diverse. The proportion of women who had independent access to their personal earnings (FS-20.2% versus IS-17.4%) was significantly higher among women in the formal sector. In the 2013 Nigerian Demographic and Health Survey, 29% of husbands made sole decisions on their wife's earnings (NPC/ORC Macro, 2013). The traditional belief that payment of the bride price at marriage allows ownership of the wife and her resources is still held by some men (Adegbite, 2006). For traditional reasons, women have been disinherited from their parents or spouses property because of their sex (Usta et al, 2013). However this form of economic abuse is not limited to traditional societies. In the US, 83% of women stated that their partners made sole decision on family finances and 73% had partners who took money from the bank account or wallet without permission (Adams *et al*, 2008), confirming the universality of economic abuse.

Women in the formal sector reported more experience of partners avoiding financial responsibility. This may be because they earned better than their informal counterparts, therefore their partners were unable to avoid financial responsibility (Adegbite, 2006). Other researchers have reported that some partners evaded financial responsibility by paying bills late or not at all and spent money needed for rent and food on other bills (Adams *et al*, 2008). The lack of job opportunities for women was the most common form of economic abuse reported in the informal sector and was the only form of abuse that was significantly more

experienced on comparing the women in both sectors. This may be from personal experience as some might have experienced difficulty obtaining formal employment and may be the reason why they were in informal employment (United Nations Educational, Scientific and Cultural Organization, 1995). There is need to ensure equal job opportunities for women in the sector (Abor, 2006). This was highly recommended by the women.

Economic abuse was associated with ethnicity, level of education and partner's alcohol intake habits. Women from non-indigenous ethnic groups appeared to be more at risk of economic abuse. This is in contrast to a study in Bangladesh which found that ethnicity did not affect occurrence of violence (Koenig, Ahmed, Hossain, Khorshed & Mozumder, 2003). The increased risk of non-indigenous women may be because these women were perceived as 'outsiders' who were making money 'off' the indigenes and therefore should be curtailed (Luke, 2003). Women with higher educational levels may be more at risk of abuse probably because they earned better and had bigger businesses. In a Bangladesh study, membership of savings or credit groups was associated with significantly elevated risks of violence to women because of their stronger economic power (Koening et al, 2003). Therefore, partners may be able to withdraw financial support and exploit more 'successful' women. It might also have been due to a better appreciation of the problem due to their education and therefore reporting of abuse. However, lower educational attainment has also been found to be a risk factor for abuse because of the low socio-economic status, poverty and ignorance by such women (Koenig et al, 2003; Waltermaurer, Butsashvili, Samuels & McNutt, 2013). Alcohol is known to reduce inhibitions towards engaging in violence (Wolf, Gray & Fazel, 2014). Also the direct cost of the drinks and indirect costs due to the lost productivity and treatment of alcohol associated morbidities may encourage economic abuse (Wickizer, 2014).

The health problems of women who have experienced economic abuse were psychological and physical, showing the interconnectedness of the different types of violence. Researchers have observed that victims often experience multiple forms of violence simultaneously (Hesie et al, 1999; Postmus 2010). A greater proportion of the women reported the psychological problems, probably because these form of abuse is easy to perpetrate, can be hidden from others and are assumed to be benign (UNIFEM, 2003). As regards physical injuries, the sense of injustice on the woman's part when the primary responsibility for care of the family falls entirely on her may result in arguments, assault and consequently physical injuries (Fatusi and Alatise, 2006). A study of women in South Eastern Nigeria found that 16% had experienced physical injuries following physical violence by intimate partners. Indepth interviews of the victims showed that physical assault was common, while psychological trauma, low self esteem and stress was reported by others (Ilika *et al*, 2002). Unfortunately despite these physical and psychological problems, economically abused women find it more difficult to leave abusive relationships (Postmus 2010; Pollet, 2011).

These results should be considered in the light of some limitations. First, some of the women were reluctant to disclose extent and perpetrators of abuse because of fear of reprisal attacks, despite the fact that confidentiality was assured and anonymity maintained. Some may have given socially desirable responses. Thus the true prevalence of abuse is likely to be higher than we reported. Secondly, there were temporality issues in the measurement of some of the study variables. Hence it is not possible to determine whether the risk factors identified preceded or occurred after the experience of economic abuse. Lastly, the main male perpetrator of abuse was not defined and was left to the respondents interpretation which could have been the most severe, the most frequent or the most recent economic abuse. The strength of this study is that it is one of the first few studies that documents women's experience and risk factors of economic violence. It brings to the fore an often ignored but potent form of gender based violence. Also, both qualitative and quantitative methods were employed. These findings have extended the literature base in that prevalence and determinants of abuse to women in both the formal and informal work sectors were described. Also, forms of abuse experienced in the home and workplace were documented.

The findings have public health implications for future abuse prevention programmes. In both sectors regulations or policies that will protect women from exploitation and punish perpetrators are urgently necessary. In the formal sector these rules should ensure equal economic opportunities for men and women and include discussions on economic abuse in staff work assessments (and review of work with clients); while in the informal sector they should help non

indigenous women thrive economically. In both sectors, educational programmes aimed at enlightening women on economic violence are urgently needed. These programs should also reach out to men (partners in the formal and men at work sites in the informal) to change societal beliefs that permit economic abuse. Health care providers need to focus on economic abuse when working with survivors and make economic concerns central to victims well being. Non-governmental organizations and governments need to include programmes to economically empower survivors and help them to regain economic security as part of their activities. Interventions aimed at reducing partners alcohol consumption and limiting family size are likely to reduce economic abuse as well. Finally, more research is needed to fully understand economic abuse and its impact on survivors and their economic self-sufficiency. These researches should target both potential victims and perpetrators.

#### Conclusion

This study adds to literature as one of the first original research on economic abuse. Furthermore we found that economic abuse was common in both sectors, although the forms of abuse differed. The most prevalent type of abuse experienced among formal sector women was partners refusing to be financially involved in the maintenance of the family, while the most prevalent in the informal sector was unequal job opportunities for women. The factors associated with experience of abuse were ethnicity, number of dependents, and consumption of alcohol in the formal sector, while in the informal sector level of education, alcohol consumption and numbers of dependents were the predictors of abuse. The problems following economic abuse included physical injuries and emotional disturbance. This study provides the foundation to guide interventions to stop economic abuse. These interventions may commence with educating women on economic violence including on financial security. Development of work-place policies or guidelines to protect women and punish perpetrators is also crucial. In the formal sector equality in economic opportunities for both sexes should be promoted, while in the informal sector women should be provided financial investment opportunities. Also. there is the need to protect non-indigenous women in the informal sector, and educated women whose partners consume alcohol from abuse in the formal sector.

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Socio-demographic characteristics	Formal sector (N=340)	Informal sector (N=340)	Total
	n (%)	n (%)	(%)
Age (years)			
<30	94 (27.6)	189 (55.6)	283
30-39	102 (30.0)	95 (27.9)	197
$\geq \! 40$	144 (42.4)	55 (16.2)	199
No response	-	1 (0.3)	1
Marital status			
Single	99 (29.1)	167 (49.1)	263
Married	210 (61.8)	153 (45.0)	363
*Others	31 (9.1)	20 (5.9)	51
Religion			
Christianity	339 (99.7)	328 (96.5)	667
#Others	1 (0.3)	12 (3.5)	13
Ethnicity			
Urhobo	121 (35.6)	120 (35.3)	241
Isoko	55 (16.2)	38 (11.3)	93
Itsekiri	23 (6.8)	60 (17.6)	83
Ijaw	29 (8.5)	44 (12.9)	73
+Others	112 (32.9)	78 (22.9)	190
Educational status	112 (32.9)	10 (22.9)	190
≤Primary		63 (18.5)	63
Secondary	87 (25.1)	242 (71.2)	329
Tertiary	253 (74.9	35 (10.3)	288
•	255 (14.)	55 (10.5)	200
Work experience (yrs)	• • • • • • •		
<10	218 (64.1)	255 (75.1)	473
10-19	85 (25.0)	59 (23.2)	144
$\geq 20$	37 (10.9)	24 (7.1)	61
No response		2(0.6)	2
Number of dependents			
<5	168 (49.4)	163 (47.9)	331
5-9	96 (28.2)	86 (25.4)	182
10-15 N	46 (13.6)	30 (8.8)	76
No response	30 (8.8)	61(17.9)	91
Partner smokes			
No	298 (87.6)	280 (82.4)	578
Yes	28 (8.2)	46 (13.5)	74
No response	14(4.2)	14 (4.1)	28
Partner drinks			
No	163 (47.9)	172 (50.6)	335
Yes	177 (52.1)	164 (48.2)	241
Noresponse	0	4 (1.2)	4

 Table 1: Respondents Socio-demographic Characteristics

\* (Separated, widowed, divorced), + (Ibo, Edo, Yoruba), # (Islam, traditional and Atheist)

Table 2: Forms and Prevalence of Econor	nic Abuse by Wo Formal	rk Sector Informal sector	p-value
	sector (N=340)	(N=340)	I
Forms of Economic Abuse	n (%)	n (%)	
Complete control of resources and	31 (9.3)	35 (10.3)	0.7
activities Complete control of the family financial	51 (15.4)	53 (15.6)	0.9
decision Financial emasculation	18 (5.4)	13 (3.8)	0.3
Financial suppression	22 (6.6)	31 (9.1)	0.2
Financial restriction	67 (20.2)	59 (17.4)	0.4
Financial dependence	29 (8.7)	12 (3.5)	0.005
Financial non involvement	88 (26.5)	39 (11.5)	<0.001
Deny right to inherit	9 (2.7)	15 (4.4)	0.2
Unequal pay for equal work	13 (3.9)	14 (4.1)	0.9
Limited access to cash and credit	19 (5.6)	28 (8.2)	0.2
Deny career development Opportunities	35(10.3)	29 (8.5)	0.4
Unequal employment / job opportunities	46 (13.5)	99 (29.1)	<0.001
Preferential access to work (for men)	26 (7.6)	15 (4.4)	0.08
Unable to work outside the home	21(6.2)	13 (3.8)	0.2
Experience of Economic Abuse			
Experienced violence at home	151 (45.3)	126 (37.1)	0.03
Experienced violence at work	98 (28.8)	139 (40.9)	0.001
Experienced any violence	202 (59.4)	190 (55.9)	0.4

Table 2: Forms and Prevalence of Economic Abuse by Work Sector

Socio-demographics	Formal Sec	tor		Informa	sector	sector
	N=340	n (%)	p-value	N=340	n (%)	p-value
Age (years)						
<30	94	60 (63.8)	0.2	189	99(52.3)	0.2
30-39	102	64 (62.7)		95	53 (55.8)	
≥40	144	78 (52.7)		55	37 (67.3)	
Marital status						
Single	99	56 (56.6)	0.7	167	90 (53.9)	0.7
M arried	210	126 60.0)		153	89 (58.2)	
*Others	31	20 (64.5)		20	11 (55.0)	
Ethnicity						
Urhobo	121	62 (51.2)	<.0.001	120	64 (53.3)	0.07
Isoko	55	33 (60.0)		38	24 (63.2)	
Itsekiri	23	13 (56.5)		60	26 (43.3)	
Ijaw	29	10 (34.5)		44	24 (54.5)	
Others **	112	84 (75.0)		78	52 (66.6)	
Educational status						
≤Primary	-	0 (0)		63	25 (39.7)	0.008
Secondary	87	55 (63.2)	0.4	242	141(58.3)	
Tertiary	253	147(58.1)		35	24 (68.6)	
Work experience (yrs)						
<10	218	124(56.8)	0.006	255	143(56.0)	0.7
10-19	85	47 (55.3)		59	35 (59.3)	
$\geq 20$	37	31 (83.8)		24	12 (50.0)	
No of dependents						
<5	168	93 (55.4)	0.009	163	100(61.3)	0.02
5-9	96 16	58 (60.4)		86	51 (59.3)	
10-15 Partner smokes#	46	37 (80.4)		30	10 (33.3)	
No	298	172(57.7)	0.05	280	152(54.3)	0.05
Yes	28	22(78.6)		46	32 (69.6)	
Partner drinks#						
No	163	90 (55.2)	0.2	172	82 (47.7)	0.003
Yes	177	112(63.3)		164	105(64.0)	

Table 3: Factors Associated with Experience of Economic Abuse by Work Sector

\*\*Others were Ibo, Edo, Yoruba

# NR were excluded from the analysis

**Table 4:** Factors Associated with Experience of Economic abuse by Work Sector

	OR, 95% CI	aOR, 95% CI	OR, 95% CI	aOR, 95%CI
Age (years)				
<30	1		1	
30-39	1.4(0.7-2.2)		2.4(0.8-2.9)	
$\geq 40$	1.6(0.8-3.1)		1.5(0.8-1.9)	
Marital status				
Single	1		1	
M arried	1.2(0.9-1.3)		1.3(0.8-1.6)	
*Others	0.8(0.6-1.2)		0.9(0.8-1.3)	
Ethnicity				
Urhobo	1	1	1	1
Isoko	2.0(1.1-3.4)	1.9 (0.9-3.4)	1.5(0.5-3.8)	1.4 (0.5- 3.7)
Itsekiri	1.2(0.5-3.4)	1.2 (0.4-3.4)	0.6(0.3-1.1)	0.5 (0.2-1.1)
Ijaw Others **	0.5(0.3-1.2) <b>4.9(2.4-9.8</b> )	0.4 (0.1-1.2) <b>4.9 (2.4-9.9)</b>	0.7(0.4-1.5) <b>2.0(1.1-4.4)</b>	0.6 (0.3-1.4) 1.9 (0.9-4.3)
Educational status				
≤Primary			1	1
Secondary	1	1	2.4(1.3-4.1)	2.2 (1.2-4.0)
Tertiary	1.2(0.7-2.1)	1.1(0.60-2.1)	3.9(1.2-12.5)	3.7 (1.1-12.1)
Work experience (yrs)				
<10	1	1	1	1
10-19	0.9(0.4-1.7)	0.7 (0.4-1.4)	1.4(0.7-2.8)	1.4 (0.7-2.8)
$\geq 20$	2.1(0.6-5.5)	1.9 (0.6-5.4)	1.4(0.8-4.5)	1.3 (0.6-4.0)
No of dependents				
<5	1	1	1	1
5-9	1.0(0.6-1.8)	0.9 (0.5-1.7)	0.4(0.2-0.9)	0.3(0.1-0.8)
10-15 Partner smokes#	3.1(1.4-7.8)	2.9 (1.1-7.3)	0.9(0.4-1.9)	0.7 (0.4-1.4)
No	1		1	
Yes	2.9(1.0-4.9)		3.0(1.0-3.9)	
Partner drinks#				
No	1	1	1	1
	2.9(1.8-5.4)	2.4 (1.3-4.5)	2.6(1.5-4.3)	1.9(1.0-3.17)

# NR were excluded from the analysis

### Table 5: Main Perpetrator of Economic Abuse by Work Sector

Perpetrators of abuse	Formal sector	Informal sector
-	(N=202)	(N=190)
	n (%)	n (%)

Spouse	158 (78.2)	31 (16.3)	
Touts	2 (1.0)	63 (32.6)	
Local government officials	2 (1.0)	24(12.6)	
Male bosses	25(12.4)	37(19.5)	
Male customers	12(5.9)	27 (14.2)	
Father/ relatives	5(2.5)	9(4.8)	
2			

 $\chi^2 = 73.7; p < 0.001$ 

#### Authors Biography

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