Baseline Survey Report

Randomized Evaluation of Unconditional Cash Transfer Scheme for the Elderly in Ekiti State Nigeria

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April 2014

Abstract

The project is a randomised evaluation of the unconditional cash transfer for the elderly in Ekiti State, Nigeria. It is being undertaken in collaboration with the Ministry of Labour, Productivity and Human Development, Ekiti State (the implementation agency). The project commenced in July 2013 and expected to complete in June 2015.

This report provides an up-to-date account of the activities of our research team, assisted by our PEP mentors, since inception of the project. Much of our activities have been concentrated on the baseline survey of eligible beneficiaries across the state. The need to eliminate contamination of project impacts necessitated deviation from our original plans. The baseline data has been completed and the intervention is being implemented. Though the need to eliminate contamination of project impacts necessitated deviation from our original plans.

The baseline data comprises n=6,325 eligible beneficiaries, with 51% of these randomly assigned into 56 electoral wards for the treatment group, and the remaining 49% assigned into the remaining 56 electoral wards as the control group. Some inconsistencies in the data would need to be rectified in the follow-up.

In analysing the baseline data, the descriptive statistics show that dominant demographic and socioeconomic characteristics of both the individual beneficiaries including widows/widowers, and their household members are generally comparable at the mean between the treatment and control groups, though the actual proportions differ slightly. In general, where such differences are found to be of statistical significance, they would be taken into account in the analysis of the project impact.

1. Introduction

1.1 Background

The Ekiti cash transfer project is sponsored by the Partnership for Economic Policy, Canada. The project is a randomised evaluation of the unconditional cash transfer for the elderly in Ekiti State, Nigeria. It is being undertaken in collaboration with the Ministry of Labour, Productivity and Human Development, Ekiti State (the implementation agency). The project commenced in July 2013 and expected to complete in June 2015.

The overall goal of the project is to inform evidence-based policy making in the context of old age social pensions in Nigeria and Sub-Saharan Africa (SSA) generally. To this end, the core research objectives are;

    i)   To demonstrate effectiveness of the cash transfer scheme on the beneficiaries;

    ii)   To examine whether the effect on the beneficiaries and the size of that effect exhibit some pattern of heterogeneity (e.g. by gender or location of the beneficiary); and

    iii) To examine whether there are unintended effects, positive or negative, associated with the scheme.

The broader context of the project relates to the rise in non-contributory old age pension schemes that are being implemented across the world, the majority of which are in developing countries (HelpAge International 2012a). But, most recent regional/state level (as opposed to national level) and pilot non-contributory schemes have been implemented in four countries in Sub-Sahara Africa (SSA).[1]

An immediate impetus for the Ekiti project was to understand what we can learn from these new schemes, in terms of their impact on the beneficiaries and how effective they are, particularly in an environment with high poverty levels and multiple

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[1] The six pilot programs are two state level schemes in Nigeria – Ekiti State (2011) and Osun State (2012), two schemes in Kenya (2006 and 2008), Uganda (2011) and Zambia (2007)) (HelpAge International 2012a).

demands on increasingly constrained budgets. The government's planned expansion phase provided an opportunity to employ an experimental approach of randomised control trial (RCT).

1.2 Aims of baseline survey

The baseline data is the first set of primary data collected at the start of the project and just before the implementation of the cash transfer program. The main aims include;

(i)   To obtain baseline information on the characteristics of elderly individuals (aged 65+), members of their households; and widows;
(ii) to enable an examination of the differences in characteristics (if any) between the eligible individuals in the treatment and control groups, and
(iii) to provide information on outcomes against which the project impact will be evaluated; and
(iv) to provide data for the power calculation and randomisation in the follow-up.

1.3. Methodology

1.3.1.   Development of Questionnaire & translation into Yoruba language

Questionnaires used for the field survey were jointly developed by our research team, officials of the implementation agency, and our project mentors. The questionnaire design generally followed the format of the Nigeria's Living Standards Measures Study of the General Household Survey-Panel 2010/11 (NBS 2012). The following sources also provided guides to the questionnaires;

i)   Demographic and Health Survey 2009 (NPC 2012),
ii)   Survey of Widows in Iraq (International Justice & Protection Centre Network, 2010),
iii) National Crime Survey (US Department of Justice), and
iv)   Food Consumption Survey (Babatunde et al, 2010).

These various sources ensured a comprehensive coverage as well as practicality and validity of questionnaires. Following the approval by our project mentors and the implementation agency, the final draft of the questionnaire was then translated into the Yoruba language to ensure that enumerators and interview teams face no difficulty when they communicate with the elderly people.

1.3.2.   Survey instruments

The baseline survey consists of two sets of questionnaires, both of which were developed in collaboration between the officials of the state government and our mentors. The first set of questionnaire is the General Questionnaire (GQ), comprising five key areas, namely;

(i)   General Beneficiary Information;
(ii) Household Member Questionnaire - which collects information the beneficiary household members;
(iii) General household characteristics of the beneficiary;
(iv) Beneficiary characteristics and living conditions; and
(v)   Widows/widowers questionnaire.

The second set of questionnaire is the Food consumption survey.

An important addition to the GQ is that a complete section was devoted to collecting the contact information of the respondents and/or their relations. The information collected includes names and telephone numbers of at least one person who could be contacted within the next two years. The idea of the contact information section was to ensure that the respondents and/or their relations can be tracked in the follow-up, thereby reducing the probability of losing them. Also, it reduces the extent to which enumerators could answer the questionnaires themselves. Additionally, the contact information enabled us to contract respondents to ask questions where there has been missing information or inconsistencies in their response.

1.3.3.   Sampling design and power calculation

Sample design generally follows two stages, namely; (i) Determining the primary sampling units required for randomisation; and (ii) Power calculation for survey sample. In our project, the sampling was initially designed to be representative of the elderly population in Nigeria, including Ekiti State, and to generate sufficient statistical power for external validity. However, this was not to be due to problems arising from individual randomization, which should be addressed.

The original plan was to use the beneficiary level as the primary sampling unit for randomisation. However, we were concerned that this might be inconvenient in terms of program implementation. More importantly, we need to avoid possible contamination (spillovers) of the project impact that may arise from individual randomization.

Therefore, a decision was made to randomise at a higher level, using the beneficiary register at the smallest electoral (ward) level (cluster randomization). Ekiti state has 163 electoral wards with 18,642 eligible beneficiaries in the government register (i.e. those with eligibility score of 67 or higher). In this case, cluster randomization implies allocation of electoral wards to treatment or control, and eligible individuals within each unit (ward) in the treatment group receive the intervention.

However, this also lead to another problem since cluster randomization for the purpose of power calculation requires that we calculate the intracluster correlation coefficient (ICC or *rho*) for our outcome of interest (e.g. Kerry and Bland, 1998). The *rho* is important in order to account for correlation of shocks to our outcome of interest within clusters.

The nature of the problem is such that there was no way of knowing the ICC for the outcomes of interest in the Ekiti state, given that the total sample size suggested by the Ekiti government is only 5,000 beneficiaries. In order to overcome this problem, our mentors suggested that we determine the ICC for the States in Nigeria, based on several household variables and use this to calculate the sample size with sufficient power.

Therefore, we calculated ICC for several variables, namely; total household income, per capita income, per capita income for elderly, and per capita health expenditure for elderly. For these variables, the calculated ICC ranges from 0.001 for individual outcomes relating to beneficiaries to 0.10 for other household outcomes. Using the Optimal Design software, we found that for a standardized effect size of 0.20 and rho=0.05, we require 100 clusters (wards) with at least 35 beneficiaries in order to achieve a power of 0.8 and a 5% significance, (See, Figure 1 in the Annex).

Unfortunately, the calculated ICC was higher for some of the outcomes of interest, suggesting the need for more clusters or more people per cluster. Specifically, when we allowed for an ICC of 0.10, we needed 120 clusters each with at least 60 beneficiaries.

The problem persisted however. This is largely because going by the eligibility score of 67 imposed by the government, there were too few wards that meet this requirement (60 beneficiaries). Even when the government agreed to reduce the eligibility score to 50, only 64 wards have 60 beneficiaries or more. The low number of beneficiaries in some of the wards could be attributed to the fact that people changed wards in order to become eligible, but according to the program administrators, each ward should at least have 60 beneficiaries.

An approach suggested by our mentors to solve this problem was to initially *oversample* the number needed and undertake the baseline survey. The ICC could then be re-calculated *post-survey* in order to obtain the desired sample size, using the baseline data on the outcomes of interest. The oversampling lead to a sample size of n=6,720 (120 wards x 60 beneficiaries) eligible beneficiaries to be surveyed.

The main advantage of the oversampling approach is that we have the wards with the required number of beneficiaries, and the randomised assignment can be performed on all the wards. The main drawback however, is that we would not have a sample that is representative of the Ekiti state, therefore losing external validity. We will have internal validity, though.

1.4. Recruitment and training of field staff and data entry clerks

1.4.1. Recruitments

Three levels of recruit were made for the baseline survey, namely; (i) Enumerators; (ii) field supervisors; and (iii) Data entry clerks

1.4.1.1. Enumerators
Enumerators were supplied by the implementation agency. However, we ensured that the enumerators selected were those who have been involved in past in conducting similar survey in the state, and reside in their local government areas. This requirement was to ensure that only those who know the elderly people were recruited and maximise reach. The elderly are more likely to respond to questions from people they know than strangers. Ekiti state comprises 16 Local Government Areas (LGA). Thus, three enumerators were recruited for each LGA, making a total of 48 enumerators, comprising 26 females and 22 males. Also, we made sure that for each LGA at least one of the enumerators is a female.[2]

1.4.1.2. Field supervisors
Four field supervisors (2 females and 2 males) were recruited amongst the enumerators to complement our research team on the field. Their main function was to monitor the progress of the baseline survey, carry out random checks on households, and collate completed questionnaires. The field supervisors were relatively more experienced enumerators in the service of the State's community development activities.

1.4.1.3. Data entry clerks
Ten data entry clerks (5 female and 5 males) with experience in data entry in Excel   were recruited for the purpose of transferring the responses in the questionnaires into Excel template, specially prepared for data entry. A member of the research team coordinated the activities of the data entry clerks, specifically to rechecked entries for accuracy, and prepared a master template for each of the questionnaires.

1.4.2. Trainings

Our research team provided two levels of training for the baseline survey. The first training was organised for the enumerators and supervisors as part of the project inauguration workshop. The second was organised for the entry clerks. Training instructions were given by the senior research team members.

1.4.2.1. Training for enumerators and supervisors
The training for the enumerators and supervisors consisted of (i) interview techniques relating to the elderly; (ii) instructions on the questionnaires, the reasons for particular question, and what type of information was required; and (iii) methods and field practices to undertake actual interviews to ensure that respondents, particularly the elderly fully understood the

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[2] The gender dimension in our recruitment exercise is in the spirit of PEP, the project funders.

questionnaires. In particular, they were specifically required to administer the questionnaires in Yoruba language or Ekiti local dialect. Additionally, we provided each enumerator /supervisor with the Interviewer's and Supervisor's Manual, which detailed the training instructions, specifically with respect to (ii). At the end of the training sessions, trainees were allowed to asked questions and were assessed according to their understanding of the questionnaires.

In addition, five enumerators were selected to randomly administer the questionnaires for actual interviews with 10 randomly selected households that were less likely to be part of the actual survey sample. We found that it took 1hr 46 minutes to administer a complete questionnaire booklet. The time was increased to 2hrs 10mins for the elderly people.

1.4.2.2. Training for data entry clerks
The data entry clerks were trained specifically on how they were expected to transfer the information on the questionnaires into Excel templates designed for data entry. Also, we provided them with a list of variable names associated with each question.

1.4.3.   Field work and monitoring

For each LGA the interview team comprised three enumerators and one supervisor. But each data entry clerk covered at least one local government. Once the enumerators completed a local government, the supervisor collected the questionnaires and cross-check them, including a random check on the households, and then forward them to the office for data entry.[3]

We put monitoring structure in place in order to ensure that good quality data were collected. Firstly, the recruitment of supervisors was for monitoring purpose. Secondly, we maintained three research team members on the field. They were to meet the field interview teams on a regular basis, providing them assistance and clarifications where needed. This process served as our approach to monitoring and quality control. The supervisors and the research team on the field were to ensure proper compliance with the procedures as contained in the manuals were followed, and to make necessary corrections and address issues as that arose.[4]

1.5. Data cleaning

The data cleaning process was undertaken in stages according to the questionnaire type. The cleaning process became necessary because the data entry procedure was not designed to highlight many of the errors that occurred during the fieldwork. Only a few of the many errors which occurred at the fieldwork stage could be corrected through re-visits to respondents or calls to the household members by supervisors or a member of our research team.

Thus, the second stage in the data cleaning process which would have been limited to examining range values, outliers, and missing information for required variables, included the need to also correct for errors and inconsistencies.[5] Any problems found were then reported back to the field supervisors for possible corrections. Data cleaning was undertaken in STATA v13 format of the data.

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[3] Our project mentors introduced us to the CSPro software, for design the data entry of questionnaires. However, we could not use it because of time constraint. We will use it in the follow-up.

[4] For example, an enumerator submitted completed questionnaire in which none of the elderly respondents was a widow. Our research team member on the field investigated this by making phone calls to the respondents to confirm their marital status.

[5] We are grateful to Natalia of PEP who helped with identifying the errors and inconsistencies in STATA version of the baseline data.

It should be noted that data cleaning will be an ongoing process, as there is need for overall review of the data to identify outliers and other errors on the complete set of data. Where problems are identified, it has been agreed that the questionnaires would be checked and where necessary, the relevant households would be revisited for corrections during follow-up. The final stage of the data cleaning process involved merging household member and beneficiary level data sets across all questionnaires, using the household identifier. Any discrepancies in the merging procedure were documented.

2.   Baseline data analysis

2.1. Overall data and Random assignment

A total of n=18,954 individuals were interviewed, comprising the elderly beneficiaries and their household members. However, the data on the elderly beneficiaries consists of n=6,325, representing 94.1% of the total of n=6,720 originally proposed. The remaining 6% or n=395 has been delayed due to some problem questionnaires (e.g. with missing items in important variables) which have been returned to the field for completion.

The random assignment of electoral wards was based on the beneficiary data.[6] Table 1 shows the results of the randomised assignment and distribution of beneficiaries into treatment and control groups by LGA and ward. The randomised assignment produced 56 wards comprising n=3,230 beneficiaries in the treatment group, representing 51.1% of the total, and 56 wards comprising n=3,095 beneficiaries (or 48.9%) in the control group.

Looking at the distribution of beneficiaries across LGAs, Ekiti South West has the largest number of beneficiaries (359) in the treatment group, representing 11.1% of the total across 6 wards, compared to Ikole LGA with just 60 beneficiaries in one ward, representing less than 3% of the total.

2.2. Descriptive statistics comparing the treatment and control groups

At this stage of the project, the differences between the treatment and control groups (if any) is assessed by comparing descriptive statistics (mean and standard deviations) of the demographic and socioeconomics characteristics. The descriptive statistics are presented at three levels, namely; individual (beneficiaries), household members, and widows/widowers.

2.2.1. Household member data

2.2.1.1. Household size and composition
Table 2a and 2b show the household size and household composition, respectively. The mean household size is around 3 persons per household, ranging between 1 (those living alone) to 13 persons. The mean household size is considered low compared to the average of 4 persons per household for the Ekiti state in the national census survey. However, this is a survey targeted at the elderly, only households with an elderly person, aged 65 and above were surveyed. Moreover, the Director of the Social Security in the implementation agency contended that this low figure may be reflecting the high rate of rural-urban drift in the state, leaving the leader in the rural areas with a few household members.

Additionally, those who are living alone represents about 10% of the total household sample, whilst around 79% of the total sample live with family members in the range between 2 to 4 members in the household. It is unclear whether this concentration should be expected or otherwise. As the household composition shows however (Table 2b), the majority (66.5%) of the elderly individuals still living with their spouse, children/grandchildren, or both. It is the tradition in Ekiti State

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[6] We are grateful to our project mentors for helping with the STATA codes for the random assignment.

that young children and grandchildren live with their aged grandparents.   Note that the proportion of the elderly who reported to be living alone is about the same with the household size=1.[7]

2.2.1.2. Demographic and socioeconomic characteristics of general household

Table 3 presents the summary statistics (mean and standard deviations) of demographic and socioeconomic characteristics of the general household, for overall household data and for households in the treatment and control groups. The demographic (age and sex) and socioeconomic characteristics are generally comparable between household members in the treatment and control groups, with the exception of a few characteristics, such as marital status in which the proportion who are single/never married, and widows/widowers are a little higher for the control group.

Also, there is no clear difference in their education background (read and write, and school attendance) on average, but few more people in the control group (13%) than in the treatment group (11%) are more likely to have completed basic primary school education, but less likely completed degree/higher degree. Additionally, on average, relative more household members in the control group 41.4% are more likely to be currently working, compared to 40.3% amongst household members in the treatment group.

However, there is little difference in the type of occupation they are more likely to engage in. Specifically, the majority (around 33%) of the household members, either in the treatment or in control group, are more likely to be working in subsistence crop farming, whilst fewer household members in the control group are more likely than household members in the treatment group to be working as artisan (16% compared to 18%) or as street and market seller (10.7% compared to 13.5%).

Finally, an interesting pattern emerges regarding the income and expenditure between the household members in the treatment and control groups. For the household members in the treatment group, average monthly income from all sources is N6,757.47 on average, compare to the average monthly expenditure for all items which is N7635.55. The reverse is the case for the control group in which average monthly income from all sources is N7,207.76 on average, compare to the average monthly expenditure for all items amounting to N6,594.88 on average. These statistics suggest that on average, the household members in the treatment appear to be more in need (income < expenditure) than household members in the control group (income > expenditure).

In summary, there are huge variations associated with income and expenditure figures, suggesting possible wide range values and outliers. These possibilities will be investigated in the follow-up. Though there are little differences across the range of the socioeconomic characteristics between household members in the treatment and control groups. We go on to test whether such differences are of statistical significance. The results from a probit regression are presented in Table 4.[8]

As the Table 4 shows, the null hypothesis that the difference in means of the characteristics between the treatment and the control groups is statistically not different from zero is rejected at 95% confidence interval in only three characteristics, namely; age, occupation (professional and street/market sale), and income from all sources (lower for individuals in the treatment group). The results here imply that these baseline differences between the treatment and the control groups should be taken into account during analysis of project impact on household related outcomes.

2.2.2. Demographic, socioeconomic characteristics, and living conditions of beneficiaries

Table 5 shows the descriptive statistics of the demographic, socioeconomic characteristics, and the living conditions of the beneficiaries in the whole sample, treatment and control sub-samples. Overall, around a third of the beneficiaries were males,

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[7] There are still some inconsistencies in the sample size due missing observations. This will be corrected at follow-up.
[8] The Standard Errors of the probit regression were adjusted for clustering of individuals within wards.

suggesting that the majority were females, though the proportion of males is slightly higher amongst the control group. In terms of marital status, the majority of the elderly beneficiaries are widowed in both the treatment and control sub-samples, though with a slightly higher proportion amongst the later (47%) than in the former (44%). It should be noted however that contrary to the general perception of living in large polygamous family setting, on average over a third of the beneficiaries are still married to their spouse in a monogamy setting, with a slightly higher proportion in the control group (40%) compared to 39% in the treatment group.

On average, a slightly higher proportion of the beneficiaries in the treatment group (12%) than in the control group (10%) are more likely to be able to read and write in a language. This is a reflection of the fact that a small proportion amongst these groups of beneficiaries similarly reported to have attended school. Amongst those who attended school, the majority of the beneficiaries are more likely to have completed basic primary education, but a higher proportion of the beneficiaries in the control group (68%) were are more likely than beneficiaries in the treatment group (48.2%) to have done so. Also, the proportion of the beneficiaries currently working on average are comparable between the treatment and control groups on average, with the dominant occupation being subsistence crop farming.

The living conditions of the elderly beneficiaries are examined on the type of dwelling/housing, main source of drinking water, toilet facility, owner of house they live in, and the living arrangement. Dwellings in which all rooms are plastered is the dominant housing type in both the treatment and control groups. Also, the majority of the beneficiaries in both groups source water for drinking and cooking from unprotected wells/ spring or stream, pond and river, whilst 'near bush' is used as the main toilet facility. Regarding home ownership, the majority (over 50%) of the beneficiaries live in family inherited houses, and this result is comparable between the treatment and control groups. In terms of living arrangements, whereas around 10% of the beneficiaries on average tends to be living alone, the majority (more than 50%) live with their family members, comprising spouses (wife/husband) and children/grandchildren. These results appear to suggest that the majority of the beneficiaries live in rural areas, where they live with spouse and a few of their children/grandchildren in mainly family inherited houses.

Moreover, the proportion of beneficiaries currently working is comparable between the treatment and control sub-samples, with the majority (over 60%) working in subsistence crop farming. This is typical occupation of rural dwellers in Nigeria. However, the proportion of beneficiaries in subsistence crop farming is slightly higher in the control group (66%) than in the treatment group (62%).

Also, the majority of the beneficiaries (over 40%) reported their self-assessed general health to be fair, typical of what one would expect elderly people, and this is comparable between the treatment and control groups. In terms of better health however, the proportion of beneficiaries reporting the general health to be 'very good' or 'good' are slightly higher in the control group than in the treatment group.

We also examine the descriptive statistics of the major source of support for the beneficiaries (if any) and the amount. On average, slightly less than half (around 45%) of the beneficiaries in both the treatment and control groups reported to have received a form of support in the past six months, the main source of which is their children/grandchildren and 'undisclosed' sources (36.3% and 29.3% in the treatment and control subsamples, respectively. These undisclosed sources should be investigated at follow-up. It should be noted however that the average amount of support received is generally slightly lower than the reported monthly expenditure on all non-food items, thereby supporting the need for income support. The huge variation in the figures is an indication of possible outliers.

Finally, the majority (over 56%) of the beneficiaries in both the treatment and control groups reported to have had shortage of food in the household in the past six months. Changes in food consumption is a key outcome of interest in this study. It would be of interest how the receipt of the cash transfer changes this.

In summary, the dominant demographic and socioeconomic characteristics and indicators of living conditions are generally comparable on average between the beneficiaries in the treatment and control sub-samples, though with slight differences in the actual proportions. Whether these slight differences are statistically important would be investigated.

2.2.3. Characteristics of the widows/widowers

Table 6 presents the descriptive statistics of the widows/widower's data. As the table shows, the average age partner before death is around 72 years. A little over 1% of the widows/widowers reported to have remarried since the death of their spouse. For this group, it took an average of around 5 years before they do so, and an average of almost 18 years must have elapsed since they were widowed before remarried. These interesting results are result are consistent across the sub-samples of the treatment and control groups.

Over a third on average (more than 31%) of the widows/widowers across the subsamples reported to have had an emergency situation requiring unexpected expenses, the nature of which is more likely to be 'own illness or sickness' (over 74%). Note that the widows/widowers in the control group are more likely (39.1%) than widows/widowers in the control group (31.3%) to have such an emergency situation arising from 'own illness or sickness' (77.1%) compared to (74.2%). However, the actual expenditure on the emergency situation is slightly smaller (N26.04) for control group than for the treatment group (N28.20), but the majority (around 44%) are more likely to source this expenditure through assistance from their children/grandchildren and very little (less than 5%) will come from their own savings.

We examined their finances since widowed. The overall data shows that the majority of the widows/widowers are more likely to rely on the support from the children/grandchildren (46%) or support from relatives/friends in order to meet their basic needs (28%). This result is consistent across the treatment and control groups. However, the proportion reporting relying on support from the children/grandchildren is higher in the treatment group than in the control group (compare 49.6% comp 43.1%, respectively), the reverse is the care with respect to relying on support from relatives/friends (compare 28.6% amongst the control group, compared to 27.2% amongst the treatment group).

Also, around a third of the widows/widowers (31.3% and 33.3% in the treatment and control groups, respectively) reported to have received a form of widow support from the government in the last six months, the major source of which is a kind of allowance from the government, whilst around a third reported to have no support whatsoever. [9]

We also examined the residential and the inheritance of the family property. In terms of residential condition, the majority of the widows/widowers (71.5% and 64.5% in the treatment and control groups, respectively) would live in their family house with the spouse before they are widowed. However, a slightly lower proportion would remain there afterwards (58.3% and 49.3% in the treatment and control groups, respectively) would move to live elsewhere such as their family compound and relatives/friend's house.[10] Although, over a third of the widows/widowers reported that their spouse had no property before death, which is surprising similar proportion also responded that they and their children inherited the spouse property (33.4% and 38% in the treatment and control groups, respectively).

Finally, generally the majority of the widows/widowers reported to have a feeling of lack of self-confidence and vulnerable and highly dependent on others (combined 46.5%), around a third amongst (33.3%) these also have hope for a better future. Whereas the majority of the widows/widowers in the treatment group (41%) are less likely than widows/widowers in the control group (52.3%) to a feeling of lack of self-confidence and vulnerable and highly dependent on others, a relatively higher proportion amongst the treatment group (38.6%) are more likely than amongst the control group (27.9%) are likely to express hope for a better future.

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[9] In order to avoid contamination, we investigated this during the field survey and found that the widow support is one-time N500 cash payment plus food items, as initiated by the wife of the state governor. It is not a regular support.

[10] Note that the proportions of the widows who live in family compound and relatives/friend's house are higher after widowed than before widowed. For the treatment group, compare 19.5% to 21.8% living in family compound, before and after widowed, respectively. For the control group, compare 27.3% to 30.1% living in family compound, before and after widowed, respectively. The proportions for the control group are slightly higher in both cases.

In summary, the widows/widowers appear to exhibit some well-known characteristics of this group of people in the population. As in the other data, the dominant characteristics are generally similar between widows/widowers in the treatment and control groups. There are some subtle differences in the actual proportions. We will test whether these differences matter for the impact on the outcomes of interest.

3. Program implementation

Modalities for payment, supervision and monitoring were finalised at a meeting with the Commissioner and other government officials held on 14 January, 2014. Two key issues came up for discussion at the meeting relating to the selection of those who were actually eligible amongst the beneficiaries in the treatment group, and the number of beneficiaries which was considered to be higher than what the government had budgeted for. These issues were later resolved based on agreement that those who were considered ineligible in terms of their means would not be given the cash. This affected a total of 216 persons across all the treated wards.

Implementation began mid-January 2014, with the first payment of the sum of N5,000 each to a total of n=3,069 beneficiaries in treated 56 wards, amounting to a total of N15,350,000. The beneficiaries were paid at designated centres in each local government area.[11] The payment delegation was led by the Commissioner himself, who personally handed the cash to the beneficiaries, assisted by government officials and councillors in the selected wards. Where a beneficiary was unable to come to the centre a government official went to meet the beneficiary at home to give the cash. For those in the hospital, the ward councillor went to give the cash to closest relative and the elderly patient is told about the payment. Finally, we ensure that the payment sheets are given to us after the government department has reconcile their accounts. This is to enables us to monitor payments as well as take stock of deaths (attrition).

4. Usefulness of PEP collaboration

The PEP collaboration has been highly useful for our research project. We are grateful for the PEP funding of this project. Firstly, the majority of our team members now have greater capacity and confidence in undertaking baseline survey and the use of software. The government officials too are happy, as they refer to our research team whenever there is a question on the elderly pensions. The state government have been particularly grateful to PEP for funding the project. It is now that the officials are realising the importance of impact evaluation, generally, particular RCT. The state governor is planning a separate agency for impact evaluation of all development interventions in the state.

Secondly, the contributions of our two mentors – Dr. Maria Laura Alzua and Dr. Ana Dammert are well appreciated, for their time and readiness to offer help whenever the need arises. Their involvement have been very helpful, particularly in offering timely advices, providing statistical help when needed, and most importantly in dealing with the initial problems.

Also, the PEP collaboration project has generated interest amongst our research team members and others to plan to undertake higher degrees in International Development, which will enable them specialise in evidence-based research especially impact evaluation. Our Executive Director, Mr. Thompson Ayodele has started a graduate program in International Development at the University of British Columbia, Canada.   Mrs. K. Gold and Mr. O. Sotola are also motivated to undertake their PhDs in International Development.

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[11] The Commissioner was met with songs in local dialect at each of the payment centres in praise of the Governor, Dr. Kayode Fayemi for the intervention.

More generally, the mentoring initiative at PEP is more than having a resource person on the project answering questions or providing occasional help. It is more of an approach through which PEP builds personal development of its network of researchers, through an ongoing relationship by learning, dialogue, challenge and building capacity.

5. Change in teams composition (if any)

None reported.

6. Timeline for follow up

Table 7 in the Annex presents the timeline for the follow-up.

7. Conclusions

This report has provided an up-to-date account of the activities of our research team ably assisted by our PEP mentors, since inception of the project. Much of our activities to date have been concentrated on the baseline survey for data collection. To date, we have been able to complete the baseline data, though not without any problems that necessitated deviation from our original plans, particularly with reference to the determination of sample size with sufficient power, and some inconsistencies in the data that need to be rectified in the follow-up.

In analysing the baseline data, we found that the dominant demographic and socioeconomic characteristics are generally comparable on average between the beneficiaries and their household members in the treatment and control sub-samples, though with slight differences in the actual proportions. Whether these slight differences are statistically important would be investigated. In general, where such differences are found to be of statistical significance, they would be taken into account in the analysis of the project impact.

The good news is that the implementation of the program is up and running, with well over 3,000 beneficiaries given the cash for the month of March. Whilst it is hoped that the government maintains this figure to the end of the experiment, there will be attrition due to deaths, the magnitude of which cannot be predicted a priori.

References

1. HelpAge International (2012a): Social Pensions Database. Available at http://www.pension-watch.net/about-social-pensions/about-social-pensions/social-pensions-database/ .
2. National Planning Commission, NPC 2012a: Nigeria population survey 2009/10.Abuja: National Planning Commission.
3. NPC 2012b: Demographic and Health Survey 2009 (NPC 2012b). Abuja: National Planning Commission
4. International Justice & Protection Centre Network 2010: Survey of Widows in Iraq.
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6. Food Consumption Survey Babatunde R.O, Adejobi A.O, and Fakayode S.B. 2010: Income and calorie intake among farming households in rural Nigeria: results of parametric and nonparametric analysis. *Journal of Agricultural Science*, vol.292):135-146.

7. Kerry, S. M and Bland J.M. 1998: The intracluster correlation coefficient in cluster randomisation. *Statistics notes. BMJ* 316:1455.1.

Dissemination of the project outputs (Blogs)

1. *Ekiti's Social Pension: Is it Effective?* Posted By Dr. Damilola Olajide, 22, January 2013. http://www.pension-watch.net/blogs/dr-damilola-olajide-18543/ekitis-social-pension-is-it-effective-513/
2. *What impacts do we expect from the Ekiti State social pension?* Posted By Dr. Damilola Olajide, 22 October 2013. http://www.pension-watch.net/blogs/dr-damilola-olajide-18543/what-impacts-do-we-expect-from-the-ekiti-state-social-pension-635/

Annex

Figure 1: Power and sample size calculation
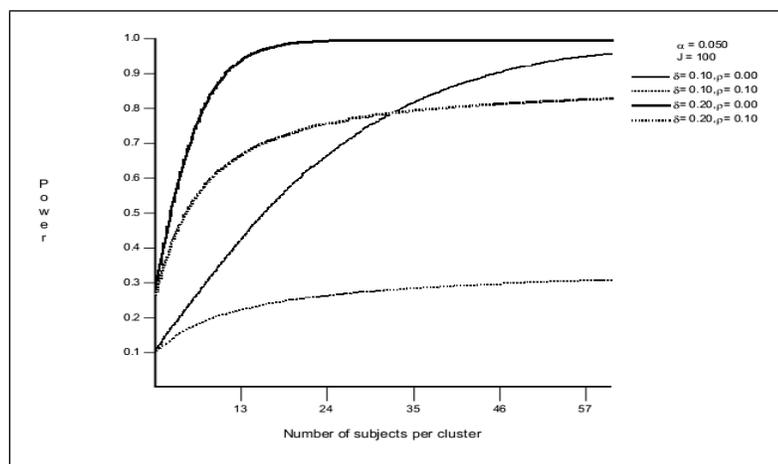
Table 1: Distribution of treatment group by LGAs and Wards

	Treatment group				Control group		
Local Govt Area	No. of beneficiaries	Percent	No. of Wards		No. of beneficiaries	Percent	Wards
A	B	C	D		E	F	G
ado	105	3.25	2		261	8.43	5
efon	300	9.29	5		118	3.81	2
ekiti_east	297	9.2	5		109	3.52	2
ekiti_south_west	359	11.11	6		58	1.87	1
ekiti_west	237	7.34	4		178	5.75	3
emure	224	6.93	4		135	4.36	3

gbonyin	241	7.46	4		179	5.78	3
ido_osi	120	3.72	2		290	9.37	5
ijero	228	7.06	4		110	3.55	3
ikere	125	3.87	2		296	9.56	5
ikole	60	1.86	1		322	10.4	6
ilejemeje	238	7.37	4		186	6.01	3
irepodun_ifelodun	349	10.8	6		60	1.94	1
ise_orun	101	3.13	2		271	8.76	5
moba	180	5.57	3		238	7.69	4
oye	66	2.04	2		284	9.18	5
Total	**3,230**	**100**	**56**		**3,095**	**100**	**56**

Source: Authors' calculation

Table 2a: Household size

Household size	Number of persons	Percent
1	622	9.75
2	1,879	29.45
3	2,174	34.07
4	1,007	15.78
5	406	6.36
6	170	2.66
7	67	1.05
8	28	0.44
9	16	0.25
10	4	0.06
11	1	0.02
12	5	0.08
13	2	0.03
Total	6,381	100
Mean per household	2.970	

Table 2b: Household composition (Living arrangement)

Beneficiary living arrangement	Freq.	Percent	Cum.
spouse-husband or wife	1,746	27.6	27.6
children/grandchildren	1,614	25.51	53.11
spouse,children/grandchildren	847	13.39	66.5
friend's family	117	1.85	68.35
relative's family	915	14.46	82.82
alone	618	9.77	92.59
other-with tenants	88	1.41	93.99
no answer/don't know	50	0.79	94.78
missing	*330*	*5.22*	*100*
Total	6,325	100	

Table3: Demographic and socioeconomic characteristics of general household members

	ALL			TREATMENT			CONTROL	
variable	mean	sd		mean	sd		mean	sd
age	50.871	23.589		50.816	23.825		50.931	23.328
sex (male=1)	0.467	0.499		0.469	0.499		0.465	0.499
marital=married-monogamy	0.518	0.500		0.502	0.500		0.535	0.499
marital=married-polygamy	0.083	0.276		0.092	0.289		0.073	0.261
marital=never married/single	0.201	0.401		0.219	0.414		0.181	0.385
marital=cohab/informal union	0.002	0.048		0.002	0.039		0.003	0.056
marital=divorced	0.003	0.050		0.003	0.050		0.003	0.050
marital=separated	0.009	0.096		0.011	0.106		0.007	0.084
marital=widow/widower	0.184	0.387		0.171	0.377		0.198	0.398
Read and write	0.563	0.496		0.566	0.496		0.561	0.496
Ever attended school	0.535	0.499		0.542	0.498		0.526	0.499
eduqual=none	0.463	0.499		0.454	0.498		0.473	0.499
eduqual= primary school	0.119	0.324		0.109	0.312		0.130	0.336
eduqual=secondary/modern schl	0.250	0.433		0.258	0.438		0.240	0.427
eduqual=teachers training/NCE	0.098	0.297		0.104	0.306		0.090	0.286
eduqual=technical/ vocassional	0.013	0.114		0.012	0.108		0.015	0.120

eduqual=religious school	0.003	0.054	0.002	0.048	0.004	0.059
eduqual=degree/higher degree	0.041	0.199	0.046	0.209	0.037	0.188
eduqual=other	0.011	0.102	0.013	0.112	0.008	0.091
eduqual=no answer/dont know	0.003	0.052	0.001	0.038	0.004	0.063
Whether currently working (yes)	0.408	0.492	0.403	0.490	0.414	0.493
occupation=subsistence crop farmer	0.333	0.471	0.332	0.471	0.335	0.472
occupation=subsistence livestock farmer	0.040	0.197	0.034	0.182	0.047	0.212
occupation=subsis mixed crop & livestock farmer	0.014	0.116	0.009	0.096	0.018	0.135
occupation=subsitence fisher,hunter,ortrapper	0.015	0.120	0.013	0.112	0.017	0.128
occupation=market-oriented cash crop farmer	0.027	0.162	0.018	0.133	0.037	0.188
occupation=market-oriented livestock farmer	0.007	0.084	0.005	0.068	0.010	0.099
occupation=professional	0.048	0.215	0.059	0.236	0.036	0.187
occupation=civil servant	0.086	0.281	0.096	0.295	0.076	0.264
occupation=artisan	0.170	0.376	0.178	0.383	0.162	0.368
occupation=mixed market-oriented crop & livestock farmer	0.011	0.105	0.010	0.099	0.012	0.111
occupation=street and market sale	0.122	0.327	0.135	0.342	0.107	0.309
occupation=shop sales person	0.074	0.262	0.068	0.252	0.081	0.273
occupation=forces (police,army,navy,air force,civil etc)	0.003	0.051	0.003	0.054	0.002	0.047
occupation=other	0.047	0.211	0.038	0.191	0.057	0.231
occupation=no answer/don't know	0.002	0.046	0.001	0.034	0.003	0.056
Average monthly income-all sources (N)	6977.35	9110.29	6757.47	8228.89	7207.76	9946.37
Average monthly expenditure-all items (N)	7132.90	10306.50	7635.55	12285.58	6594.88	7605.04

Table 4: Results of probit regression for household member characteristics

Dependent: treatment=1	Coef.	Robust Std. Err.	z	P>z	[95% Conf.	Interval]
age	0.008	0.003	2.17**	0.03	0.001	0.014
Sex (ref: female)						
Sex (male=1)	0.054	0.050	1.07	0.283	-0.044	0.152
Marital (ref: married monogamy)						
married-polygamy	0.218	0.205	1.07	0.287	-0.183	0.619
never married/single	-0.017	0.132	-0.13	0.9	-0.275	0.242
cohabiting-informal union	-0.012	0.429	-0.03	0.978	-0.853	0.830
divorced	-0.327	0.355	-0.92	0.357	-1.023	0.369
separated	0.372	0.221	1.68	0.092	-0.061	0.805
widow/widower	-0.061	0.127	-0.48	0.628	-0.310	0.187
read_write						
yes	-0.469	0.301	-1.56	0.119	-1.058	0.120

Attended school						
yes	0.219	0.202	1.09	0.278	-0.176	0.614
Eduqual (ref: none)						
primary school	0.212	0.233	0.91	0.363	-0.245	0.669
secondary/modern school	0.453	0.257	1.76	0.079	-0.052	0.957
teachers training/NCE	0.367	0.304	1.21	0.228	-0.230	0.964
technical/vocassional	-0.046	0.351	-0.13	0.895	-0.735	0.642
religious school	0.451	0.420	1.08	0.282	-0.371	1.274
degree/higher degree	0.344	0.306	1.12	0.261	-0.256	0.943
other	0.520	0.374	1.39	0.165	-0.213	1.252
no answer/don't know	-0.076	0.472	-0.16	0.871	-1.002	0.849
Occupation (ref: subsistence crop farmer						
subsistence livestock farmer	-0.234	0.299	-0.78	0.434	-0.821	0.353
subsis mixed crop & livestock farmer	-0.296	0.299	-0.99	0.321	-0.882	0.289
subsitence fisher,hunter,ortrapper	0.115	0.528	0.22	0.827	-0.920	1.151
market-oriented cash crop farmer	-0.382	0.256	-1.49	0.136	-0.884	0.121
market-oriented livestock farmer	-0.195	0.334	-0.58	0.559	-0.849	0.459
professional	0.536	0.216	2.49**	0.013	0.114	0.959
civil servant	0.410	0.250	1.64	0.101	-0.079	0.899
artisan	0.201	0.155	1.3	0.194	-0.102	0.504
mixed market-oriented crop&livestock farmer	-0.119	0.421	-0.28	0.778	-0.944	0.707
street and market sale	0.360	0.157	2.29**	0.022	0.052	0.669
shop sales person	-0.061	0.198	-0.31	0.758	-0.448	0.326
(police,army,navy,air force,civil defence corp,etc)	0.322	0.524	0.61	0.539	-0.705	1.348
other	-0.258	0.309	-0.83	0.404	-0.864	0.348
no answer/don't know	-0.602	0.686	-0.88	0.381	-1.947	0.743
avincome_all	0.000	0.000	-2.4**	0.017	0.000	0.000
avexpenditure_all	0.000	0.000	1.68	0.093	0.000	0.000
_cons	-0.457	0.274	-1.67	0.095	-0.995	0.080
Log pseudolikelihood = -3118.2788						
N =4,698						

Notes: [a] The asterisks indicate *** p<0.01, ** p<0.05, * p<0.1; [b] Standard Error are adjusted for clustering of individuals in wards.

Table 5: Demographic and socioeconomic characteristics of beneficiaries

	ALL			TREATMENT			CONTROL	
variable	mean	sd		mean	sd		mean	sd
sex (male=1)	0.310	0.463		0.307	0.461		0.315	0.464
marital= married-mono	0.395	0.489		0.391	0.488		0.399	0.490
marital=married-poly	0.124	0.330		0.139	0.346		0.110	0.312
marital=never married/single	0.002	0.049		0.003	0.050		0.002	0.048

marital=cohabiting-informal union	0.001	0.025	0.000	0.018	0.001	0.031
marital=divorced	0.004	0.066	0.006	0.077	0.003	0.051
marital=separated	0.018	0.131	0.021	0.143	0.014	0.118
marital=widowed	0.455	0.498	0.440	0.496	0.470	0.499
marital=no answer/don't know	0.001	0.036	0.001	0.035	0.001	0.036
eduqual=primary school	0.563	0.496	0.482	0.500	0.679	0.467
eduqual=modern/secondary school	0.351	0.478	0.429	0.495	0.240	0.428
eduqual=vocassional training	0.020	0.140	0.019	0.136	0.022	0.145
eduqual=religious education	0.008	0.088	0.006	0.075	0.011	0.103
eduqual=adult education	0.058	0.233	0.064	0.245	0.049	0.215
dwelling=house made from cement bricks	0.128	0.334	0.132	0.338	0.123	0.329
dwelling= house made from mud bricks	0.383	0.486	0.383	0.486	0.383	0.486
dwelling=All rooms are plastered	0.435	0.496	0.442	0.497	0.428	0.495
dwelling=housed has separate kitchen	0.023	0.151	0.012	0.107	0.036	0.186
dwelling=house roof leaks during rainfall	0.012	0.109	0.014	0.118	0.010	0.098
dwelling=no answer/don't know	0.019	0.136	0.018	0.132	0.020	0.140
water_source=treated pipe borne water	0.129	0.336	0.117	0.322	0.142	0.349
water_source= untreated pipe borne water	0.061	0.239	0.058	0.234	0.064	0.244
water_source=borehole or hand pump	0.162	0.369	0.168	0.374	0.157	0.364
water_source=unprotected well or spring	0.311	0.463	0.285	0.451	0.338	0.473
water_source=stream, pond, river	0.210	0.407	0.232	0.422	0.187	0.390
water_source=other	0.100	0.300	0.091	0.288	0.109	0.311
water_source=no answer/dn't know	0.026	0.160	0.048	0.214	0.004	0.060
toilet=none	0.123	0.328	0.133	0.340	0.112	0.315
toilet=flush to sewage/septic	0.031	0.173	0.024	0.152	0.038	0.192
toilet=covered pit latrine	0.226	0.418	0.253	0.435	0.199	0.399
toilet=uncovered pit latrine	0.153	0.360	0.142	0.350	0.164	0.370
toilet=nearby bush	0.400	0.490	0.397	0.489	0.403	0.491
toilet=neighbour's toilet	0.044	0.205	0.034	0.182	0.054	0.227
toilet=public toilet	0.021	0.144	0.015	0.122	0.028	0.164
toilet=other	0.000	0.013	0.000	0.000	0.000	0.018
toilet=no answer/dn't know	0.002	0.040	0.002	0.047	0.001	0.031
Read and write	0.110	0.313	0.120	0.325	0.099	0.298
Own the house you live in	0.389	0.488	0.385	0.487	0.393	0.489
Ever attended school	0.143	0.350	0.165	0.371	0.120	0.325
Currently working	0.252	0.434	0.263	0.440	0.242	0.428
Occupation=subsistence crop farmer	0.638	0.481	0.620	0.486	0.659	0.474
occupation=subsistence livestock farmer	0.104	0.305	0.125	0.331	0.080	0.272
occupation=subsistence mixed crop and livestock farmer	0.028	0.166	0.021	0.144	0.036	0.187
occupation=subsistence fisher, hunter or traper	0.007	0.083	0.002	0.049	0.012	0.109
occupation=market oriented cash crop farmer	0.035	0.184	0.028	0.166	0.043	0.202
occupation=market oriented livestock farmer	0.005	0.071	0.002	0.049	0.008	0.089

occupation=mixed market oriented crop /livestock farmer	0.009	0.093	0.008	0.090	0.009	0.096
occupation=street and market sales person	0.123	0.329	0.145	0.352	0.099	0.299
occupation=shop sales person	0.047	0.212	0.048	0.215	0.045	0.208
occupation=other-artisans, palmwine tapper, driving, etc.	0.004	0.061	0.000	0.000	0.008	0.089
sah_genhealth=very good	0.050	0.217	0.035	0.183	0.065	0.247
sah_genhealth=good	0.352	0.478	0.341	0.474	0.364	0.481
sah_genhealth=fair	0.455	0.498	0.488	0.500	0.421	0.494
sah_genhealth=poor	0.105	0.306	0.092	0.290	0.117	0.322
sah_genhealth=very poor	0.037	0.190	0.043	0.203	0.031	0.175
sah_genhealth=no answer/dont know	0.001	0.033	0.002	0.040	0.001	0.026
house_owner= inherited family house	0.542	0.498	0.550	0.498	0.533	0.499
house_owner=rented	0.182	0.386	0.196	0.397	0.168	0.374
house_owner=child/children	0.054	0.227	0.052	0.223	0.056	0.231
house_owner=friend	0.007	0.085	0.005	0.069	0.010	0.098
house_owner=relative	0.189	0.392	0.173	0.378	0.207	0.405
house_owner=other-husband	0.020	0.138	0.018	0.133	0.021	0.144
house_owner=no answer/don't know	0.006	0.075	0.006	0.079	0.005	0.070
living_arrangement=spouse-husband or wife	0.291	0.454	0.292	0.455	0.291	0.454
living_arrangement=children/grandchildren	0.269	0.444	0.261	0.439	0.277	0.448
living_arrangement=spouse,children/grandchildren	0.141	0.348	0.157	0.364	0.125	0.331
living_arrangement=friend's family	0.020	0.138	0.023	0.150	0.016	0.125
living_arrangement=relative's family	0.153	0.360	0.155	0.362	0.150	0.357
living_arrangement=alone	0.103	0.304	0.094	0.292	0.112	0.316
living_arrangement=other-with tenants	0.015	0.121	0.011	0.105	0.019	0.135
living_arrangement=no answer/don't know	0.008	0.091	0.007	0.081	0.010	0.100
Received regular support (yes)	0.459	0.498	0.446	0.497	0.473	0.499
support_provider= children/grandchildren	0.276	0.447	0.246	0.431	0.306	0.461
support_provider=spouse-husband/wife	0.072	0.259	0.049	0.217	0.095	0.293
support_provider=other family member	0.077	0.267	0.065	0.247	0.089	0.285
support_provider=friends	0.037	0.189	0.044	0.206	0.030	0.172
support_provider=relatives	0.074	0.262	0.077	0.267	0.071	0.257
support_provider=neighbours	0.010	0.098	0.012	0.107	0.008	0.088
support_provider=other-unspecified	0.327	0.469	0.363	0.481	0.293	0.455
support_provider=no answer/don't know	0.126	0.332	0.143	0.350	0.109	0.311
Support amount of received	2493.1	1168.5	2505.7	1107.6	2410.9	1224.9
food shortage in hhold past 6 months	0.571	0.495	0.565	0.496	0.577	0.494
monthly expenditure- all non-food items	2531.7	2406.6	2609.9	2687.9	2453.9	2087.4

Table 6: Demographic and socioeconomic characteristics of widows/widowers

variable	ALL mean	ALL sd		TREATMENT mean	TREATMENT sd		CONTROL mean	CONTROL sd
Age of partner before death (yrs)	72.36	13.50		72.72	14.46		71.97	12.41
Remarried (yes)	0.014	0.116		0.013	0.113		0.014	0.118
how long before remarry (yrs)	5.333	2.730		5.636	2.610		5.043	2.868
how long since widowed (yrs)	17.79	10.77		17.92	11.05		17.65	10.47
any emergency situation (yes)	0.351	0.477		0.313	0.464		0.391	0.488
expenditure on emergency	27.02	25.98		28.20	26.44		26.04	25.57
emergency_exp_source=selling assets	0.140	0.348		0.145	0.352		0.137	0.344
emergency_exp_source=borrowing/loans from friends/relatives	0.165	0.372		0.203	0.403		0.135	0.342
emergency_exp_source= requesting assist from child/children	0.443	0.497		0.436	0.497		0.448	0.498
emergency_exp_source=finanlcial assictance from neighbours	0.199	0.400		0.164	0.371		0.227	0.419
emergency_exp_source=other-mainly saving	0.033	0.178		0.022	0.147		0.041	0.199
emergency_exp_source=no answer/ don't know	0.020	0.139		0.029	0.169		0.012	0.108
emergency_nature=own illness or sickness	0.758	0.429		0.742	0.438		0.771	0.421
emergency_nature=illness/sickness of a child/grandchild	0.201	0.401		0.209	0.407		0.194	0.396
emergency_nature= the need to undergo surgery	0.018	0.133		0.019	0.136		0.017	0.131
emergency_nature=external shock - deaths	0.023	0.151		0.030	0.171		0.017	0.131
widow_support	0.322	0.467		0.313	0.464		0.333	0.471
widow_support_type=Govt-pension/allowance	0.458	0.498		0.548	0.498		0.370	0.483
widow_support_type=children/grandchildren	0.118	0.323		0.089	0.284		0.147	0.354
widow_support_type=relatives, friends or peers	0.098	0.298		0.060	0.238		0.136	0.343
widow_support_type=no support whatsoever	0.307	0.461		0.277	0.448		0.336	0.473
widow_support_type=other-unspecified	0.019	0.136		0.026	0.160		0.011	0.105
residence_before_wid=family house with spouse	0.681	0.466		0.715	0.452		0.645	0.479
residence_before_wid=family compound	0.233	0.423		0.195	0.396		0.273	0.446
residence_before_wid=relative/friend's house	0.067	0.250		0.071	0.256		0.063	0.243
residence_before_wid=Other - renting	0.016	0.127		0.017	0.127		0.016	0.126
residence_before_wid=no answer/don't know	0.003	0.055		0.004	0.059		0.002	0.050
residence_after_wid=family house with children	0.539	0.499		0.583	0.493		0.493	0.500
residence_after_wid=family compound	0.259	0.438		0.218	0.413		0.301	0.459
residence_after_wid=relative/friend's house	0.113	0.317		0.116	0.321		0.111	0.314
residence_after_wid=children's family	0.058	0.234		0.056	0.230		0.061	0.239
residence_after_wid=Other - renting	0.009	0.095		0.005	0.073		0.013	0.113
residence_after_wid=no answer/don't know	0.022	0.147		0.022	0.146		0.022	0.148
finance_since_wid=could not afford basic/nonessential expenses	0.059	0.235		0.041	0.199		0.077	0.267

finance_since_wid=could afford some basic/nonessential expenses	0.090	0.286		0.095	0.293		0.085	0.278
finance_since_wid=support from children/grandchildren to meet basic needs	0.464	0.499		0.496	0.500		0.431	0.495
finance_since_wid=support from friends/relatives to meet basic needs	0.279	0.448		0.272	0.445		0.286	0.452
finance_since_wid=other-church, govt, labour, etc	0.097	0.296		0.089	0.285		0.106	0.308
finance_since_wid=no answer/don't know	0.011	0.105		0.006	0.080		0.016	0.126
spouse_property=myself and my children	0.356	0.479		0.334	0.472		0.380	0.486
spouse_property=other wife/wives and their children	0.106	0.307		0.127	0.333		0.083	0.276
spouse_property=other wife/wives with male children	0.018	0.133		0.014	0.116		0.023	0.150
spouse_property=spouse's children non-joint	0.005	0.067		0.002	0.049		0.007	0.082
spouse_property=spouse's male children only	0.027	0.162		0.029	0.169		0.024	0.153
spouse_property=spouse's family	0.051	0.219		0.052	0.222		0.049	0.217
spouse_property=other relative/person	0.039	0.193		0.050	0.217		0.027	0.163
spouse_property=spouse had no property	0.371	0.483		0.369	0.483		0.373	0.484
spouse_property=no answer/don't know	0.028	0.166		0.024	0.152		0.033	0.180
dominant_feeling=lack of self-confidence	0.262	0.440		0.212	0.409		0.315	0.464
dominant_feeling=vulnerable and highly dependent on others	0.203	0.402		0.198	0.399		0.208	0.406
dominant_feeling=neglected by my deceases partner's family	0.078	0.269		0.072	0.258		0.085	0.279
dominant_feeling=isolated from the community	0.057	0.233		0.071	0.257		0.043	0.202
dominant_feeling=hope for a better future	0.333	0.472		0.386	0.487		0.279	0.449
dominant_feeling=being a widow/widower affects my community participation	0.033	0.180		0.023	0.150		0.044	0.206
dominant_feeling=no answer/don't know	0.033	0.178		0.038	0.192		0.027	0.161

Table 7: Timeline for follow-up

Month	Activities	Duration
May – June 2014	- Review of survey questionnaires. - Testing for balance between treatment and control groups - Re-calculation of ICC using baseline data for re-sampling. - Acquiring GPS system and train enumerators/supervisors to use for recording address locations of respondents. - Testing new questionnaire and GPS system	2 months
July – August 2014	- First follow-up data collection - Training of data entry clerks in the use of CSpro software. - Data entry work [a]	2 months
September – October 2014	- Data entry works and addressing error reporting issues.	2 months
November 2014	- Data preparation-appending, merging, etc.	1 month
December 2014 – January 2015	- Descriptive statistics of data - Follow-up report - Addressing issues from the follow-up: determine attrition from payment data.	2 moths
February – March 2015	- Second follow-up survey begins	2 months

Notes: [a] Data entry to commence immediately as soon as questionnaires are returned. In this concurrent approach, supervisors will be saddled with greater responsibility to work closely with both enumerators and data entry clerks. This will safe time, and error reports (if any) can be generated earlier rather than after the data collection.