

Application Of The Ultra-Poverty Graduation Model In Understanding Community Health Volunteers' Preferences For Socio-Economic Empowerment Strategies: A Qualitative Study In Kilifi, Kenya

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Abstract

Background: There is a significant shortage of healthcare workforce globally. In order to achieve Universal Healthcare coverage, governments need to enhance their community-based healthcare provider programmes. Community health volunteers (CHVs) are essential personnel in achieving this objective, however their needs remain unmet hence their high attrition rates.

Methods: This study adopted an exploratory mixed methods qualitative approach including Key Informant Interviews (KIs) and Focus Group Discussions (FGDs). Using a semi-structured questionnaire, out of the 17 Community Health Units (CHUs), we conducted 10 FGDs based on the number of CHUs in each of the two sub-counties, three from Rabai Sub-county and seven from Kaloleni Sub-county. We conducted 10 key-informant interviews from participants who included County and sub-county Ministry of Health (MOH) and Ministry of Agriculture (MOA) officials as well as multi-lateral stakeholders' representatives from Kaloleni and Rabai sub-counties. Data was audio-recorded and transcribed verbatim. Transcripts were analysed using NVivo qualitative data software version 10. Researcher triangulation supported the first round of analysis of the data in this study. Data was mapped and findings interpreted using a theory driven analysis based on the Ultra-Poverty Graduation (UPG) model.

Results: The results are presented using the Ultra Poverty Graduation (UPG) model, which involves a six-step intervention. It consists of the provision of asset transfer of an in-kind good such as poultry or livestock, weekly stipends with consumption support to stabilize consumption, hands-on training on how to care for assets and run a business, savings and financial support to build assets and instil financial discipline, healthcare provision and access and finally social integration.

Conclusion: The results of this study provides a user-identified approach to identify and assess the strategic needs of CHVs for socio-economic empowerment. The study further applies a sustainable economic empowerment model to provide further understanding on how these needs can be addressed in order to enhance retention of CHVs.

Background

Globally, the shortage of health workforce remains a significant challenge⁽¹⁾⁽²⁾⁽³⁾. Low- and middle-income countries (LMICs) particularly in Africa are most affected⁽⁴⁾⁽⁵⁾. In order to achieve universal health coverage (UHC) in these resource-poor countries, governments are exploring ways to strengthen and sustain their community-based healthcare volunteer (CHV) programmes⁽¹⁾. The role of community health volunteers (CHVs) has never been more important.

CHVs are members of a local community who deliver promotive, preventive and some curative health services to their communities in partnership with frontline health workers⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾. CHVs have two main roles: service extension workers and social activists for change. As service extension workers their responsibilities include but are not limited to health promotion and education services as well as preventive and curative services within the community⁽³⁾⁽⁵⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾. As activists, they are the bridge

between existent healthcare systems and the communities they serve(9)(6)(10)(11). Their role is to enhance community involvement and participate in confronting socio-cultural barriers to health(4)(6). These functions are particularly relevant in Kenya given the shortage and inequitable distribution of healthcare workers. In addition, there is need to accelerate progress towards the achievement of sustainable development goals (SDGs) amongst other health outcomes.

Although CHVs are effective in delivering health services to communities and improving outcomes across specific health indicators, they remain susceptible to high attrition rates(12). Globally the CHV attrition rate stands between 3.2% and 77% and is largely attributable to poor or no remuneration(9)(13). A recent study in Kenya showed attrition incidence stood at 46.8/1000 person years(14). In Kenya and elsewhere, CHVs hail from deprived social, economic and educational backgrounds, are often women, and majority undertake the work with little or no compensation (15)(16)(17). Consequently, high attrition rates among this cadre has resulted in gaps in the delivery of essential services, loss of opportunity to build on expertise and increasing transactional costs arising from the need to constantly recruit and train new volunteers(2)(12).

The needs of CHVs have yet to be understood and addressed, particularly those related to income and economic empowerment(5). Indeed a recent publication by the World Health Organization (WHO) recommends a performance-based financial compensation of CHVs as a form of incentive to optimize CHV programmes(10). This has been received with mixed reactions with some citing that monetary incentives creates suspicion of motives of CHVs by community members while watering down the ethos of volunteering(5). Performance of CHV programmes is measured by the sustenance of a high performance standard by assigned healthcare providers as well as the cost-effectiveness, impact and uptake of these programmes(8).

This is capital intensive and several governments of LMICs struggle with creating a balance in implementation and sustainability of CHV programs(3)(18)(14)(19). In Kenya, CHVs are not government employees. As a result, they receive minimal facilitation as regards training and supervision support with no compensation from the government. This has led to demotivation and high attrition rates. The option of government employment as a potential solution will however require substantial financial investments for fixed wages as well as additional administrative and support structures. In LMICs contexts such as Kenya, where healthcare system resources are limited government employment may not be feasible(11)(20). On the contrary, there is little evidence to suggest that volunteerism in LMICs is sustainable over the long term(21)(22). In other countries, success has been achieved in programmes that provide CHVs with preferential access to micro-loans or grants as seed capital for social enterprises(20)(23)(24).

Since 2016, Aga Khan University (AKU) East Africa has been implementing a reproductive, maternal newborn and child health (RMNCH) project, 'Access to Quality Care through Extending and Strengthening Health Systems' (AQCESS) project in Kilifi County in Kenya. Funded by the Government of Canada and executed by Aga Khan Foundation Canada (AKFC), the project aimed to improve RMNCH outcomes for women, neonates and children under the age of five. As part of the implementation strategy, the project

aimed to strengthen CHVs activities through targeted health trainings congruent with the needs of the communities in which they live. Anecdotal evidence showed that activities of the CHVs might not be sustainable due to high attrition. On this backdrop, AQCESS conducted an exploratory study in 2019 to assess challenges and preferred social economic strategies for possible CHVs sustainability in Kaloleni and Rabai sub-counties in Kilifi County. Findings on the challenges are reported in a separate unpublished paper. The current paper aimed to explore further findings from the study using the Ultra-Poverty Graduation (UPG) model. Specifically, we examine how socio-economic empowerment strategies preferred by CHVs, could enhance their motivation and retention in community using UPG.

ULTRA POVERTY GRADUATION MODEL

The Ultra-Poverty Graduation (UPG) model, pioneered in 2002 by Bangladesh Rural Advancement Committee (BRAC), is a carefully sequenced internationally recognised multi-sector approach that aims to meet the needs of participants to increase their income and become more economically self-reliant(25). The graduation model emphasises on long-term investment in asset transfer, skills development (life skills, technical and vocational skills), business development and resource financing as well as saving and planning for future transitions. Global acceptance and adaptability of the BRAC graduation model by multi-sectorial organizations continues as it is a comprehensive, time-bound approach that involves interventions that grow poor persons from extreme poverty to sustainable livelihoods.

The key aspects, as outlined by the Graduation model, involve a six-step intervention. Graduation is defined by meeting set criteria over the course of the 24-month programme. It consists of the provision of asset transfer of an in-kind good such as poultry or livestock, weekly stipends with consumption support to stabilize consumption, hands-on training on how to care for assets and run a business, savings and financial support to build assets and instil financial discipline, healthcare provision and access and finally social integration. Figure 1.0 below illustrates this.

Methods

Study setting – The current study was conducted in Kilifi County along the Kenyan Coast. Kilifi County comprises seven sub-counties namely, Kilifi North, Kilifi South, Ganze, Malindi, Magarini, Rabai and Kaloleni with a population exceeding 1.3 million. This study was conducted in Kaloleni and Rabai sub-counties where an on-going health programming relationship with the Faculty of Health Sciences of Aga Khan University East-Africa (AKU-EA) existed through AQCESS project.

Study design

This study adopted an exploratory multi-method qualitative approach including Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs).

Study population and sampling methods

The study participants were drawn from a diverse population including CHVs and key stakeholders in the two sub-counties conversant with CHVs work. This included County and Sub-county Ministry of Health (MOH) and Ministry of Agriculture (MOA) officials as well as multi-lateral stakeholders' representatives from Kaloleni and Rabai sub-counties.

In Kenya, Community Health Units (CHU)s are an extension of the Master Healthcare Facilities List. A CHU is a health service delivery structure within a defined geographic area covering a population of approximately 5,000 people. Each unit is assigned two Community Health Extension Workers (CHEWs) (salaried frontline healthcare workers) and community health volunteers (CHVs) (non-salaried frontline healthcare workers who offer promotive, preventative and basic curative services⁽²⁶⁾). Each unit is governed by a Community Health Committee (CHC) and linked to a specific health facility.

Focus Group Discussions

Each focus group discussion (FGD) represented a CHU. Out of the 17 CHUs within Rabai and Kaloleni sub-counties, we sampled ten FGDs based on the number of CHUs in each of the two sub-counties, three from Rabai, and seven from Kaloleni. The FGDs had an average of 6–10 participants sampled proportionately by gender distribution within the CHU. Participants were purposively identified by recruitment liaisons and included CHVs conversant with the Kaloleni and Rabai area.

Key Informant Interviews

Eight key-informant interviews (KIIs) were conducted with participants purposively identified as able to provide rich contextual information. Table 1 below summarises the KII population.

Table 1
Key informant participants

Participant	Role	Number
Ministry of health sub-county officials	Kaloleni Sub County - MoH official	KII 01
Ministry of health sub-county officials	Rabai Sub county Public health officer- also was representing county as a health promotion officer	KII 02
Ministry of Agriculture-Sub County	Rabai - Agriculture extension officer- Sampled based on his experience in the community extension to provide insights on agriculture based IGAs feasible	KII 03
IGA Trainer – Civil Society Organization (CSO)	Rabai and Kaloleni Entrepreneurship/IGA trainer - Sampled based on his experience in training Community Based Organizations (CBOs) allocated IGAs and entrepreneurial funds by the Government	KII 04
Stakeholder/CSO	Rabai Chairperson Upendo CBO group- Sampled due to the role of leadership in the CBOs operations including IGAs –	KII 05
Stakeholder/CSO	Rabai Youth CBO – CBO leader – Sampled based on experience having IGA for the CBO	KII 06
Ministry of health sub-county official	Kaloleni Sub County Community strategy focal Officer	KII 07
Ministry of Agriculture – Sub County	Kaloleni - Agriculture extension officer- Sampled based on his experience in the community extension to provide insights on agriculture based IGAs feasible	KII 08

Data collection Process

Interview process

Participants provided informed written consent before involvement in the study. Interviews were conducted in a private space away from the working station of the participants. Interviews lasted between 40–100 minutes. Participants in FGDs that comprised of mixed gender were given equal opportunity to respond to the questions as moderated by the facilitator. At the end of the interviews, the moderator and the note taker conducted debriefs and included their discussions as part of the notes. To ensure the validity and reliability of the data collection tool, the principle investigator (PI) developed semi-structured questionnaires, one for the FGDs and another for the KIIs. An expert panel consisting of social scientists and an epidemiologist validated the content and construct of the semi-structured questionnaires. Originally developed in English, questionnaires were translated to Kiswahili (a national language in Kenya and the language commonly used in the Coast) and then back translated by an expert linguist. Interviews were conducted in either English or Kiswahili based on participants' preference. A

team of research assistants underwent a two-day training by the PI on data collection and interviewing techniques. During this session, the data collection tools were further piloted on two FGDs from Mariakani-Kaloleni sub-county using 16 CHVs who were excluded from study.

The key themes of the data collection tools were socio-demographic information, current income source and challenges faced meeting these; effect of CHV work on livelihood; engagement in other income generating activities (IGAs), preference of IGAs and proposed sponsors or supporters of these engagements. For the KIs, the themes of the semi-structured questionnaire were; their role in engaging CHVs; the challenges they perceived attributed to CHVs attrition; their sentiments on financial remuneration of CHVs; awareness of IGAs; policies in place for sustainability of IGAs and identification of key players within their institution; access to support and ongoing or previous IGA projects with evidence of enhanced retention. The tools used are provided in Appendix 01–03.

Data management and analysis

Data was audio-recorded and transcribed verbatim and translated where necessary by a translator-transcriber into word text (transcripts). Names and identifiers were removed from the transcripts and replaced with pseudonyms/codes. The PI reviewed all the transcripts to familiarize with the data identifying emerging and recurrent ideas generated from the data. These were examined and referenced based on key codes and grouped into themes. Interpretive thematic coding was done as the primary analysis method. Themes were independently generated from the data by three of the researchers (NN, SC and NF) through indexing and charting until thematic consensus was reached to maximize the validity and rigor of the analysis process. Additionally, identified themes were reviewed by an independent qualitative researcher (AL). The analysis team worked together to resolve any interpretation discrepancies in the analysis process. Transcripts were analysed using NVivo qualitative data software version 10. Researcher triangulation supported the first round of analysis of the data in this study. The PI then mapped the data and interpreted the findings using a theory driven analysis based on the ultra-poverty graduation model. Study results are therefore presented using the ultra-poverty graduation model approach.

Results

Application of the UPG model to the study findings:

In this section of the paper, we present data based on the six stages of UPG model.

1. Transfer of productive assets.

Asset transfer is suitable for those CHVs who desire to run their own business. This is what the CHVs in this study proffered could be offered in the form of cash or in-kind. CHVs from Kaloleni noted that the provisions of poultry or livestock could be beneficial as seen from the following quote.

"Apart from giving us money there are things that we can benefit from... If he gives us dairy cattle individually, that gives me milk.... Even if I will pay it as loan ...through my CHV group. He will have given me something that will benefit me..." (R3, FGD 6, Kaloleni)

Similarly, CHVs from Rabai talked about the need to get financial assistance to sustain their current activities, in the form of purchase of a specific asset such as tents or chairs to conduct events hosting business.

"...we have sustained ourselves in this community group by looking for seats, hiring them,...a tent...,if we would receive funders so that we are given even if it is a rental lease" (R2, FGD 1 Rabai)

The KIIs likewise agreed with one stating that the benefit would not be purely to the CHVs themselves but to the community as a whole.

"...I can also think of...a boda-boda [motor bike]... used for referrals to the facility...that will boost health...if they have their own they will maybe charge lesser than the rest in the community." (KII 02)

2. Weekly stipends/Consumption support

Food security is a key concern and may hinder CHVs from taking risks on long-term livelihood activities. Providing a safety net that meets the basic needs of the CHVs such as a stipend or compensation for the time they provide their services will allow them to engage better in programme activities as well enable them to focus on building self-sustaining livelihoods. The CHVs in this study requested for transport and other support to be able to carry out their duties. This was echoed by the KIIs.

"...[As] has been said....is that token... be increased....I worked with XXX... by that time, '85, '86, '89, [Ksh] 450 was little money but..., at [the] time, it used to be enough....they should look at what they will give the CHVs so that they can be well motivated." (R3, FGD 5 Kaloleni)

"...if there could be some arrangement that they get some payment... I would support that...at least something that can make someone to feel that at the end of the month... he can move on." (KII 01)

"....what can give us the morale is they think about us at least every month...someone will know even if I lose that way, when a certain day reaches I will get something." (R4, FGD 3, Kaloleni)

"...This volunteer work...it doesn't earn a salary... so I... plan myself...this week I need to give the report... under my watch... [I have] 68 houses...3 days I do my own work...I am a widow....so that my children can be able to go to school, so I will do them 2 days in a week, before the month ends I give out my report I will have finished my houses. I like this job [CHV] because it has grown my mind, it has opened me up, it has made me to be busy, it helps me" (R2, FGD 4, Rabai)

3. Intensive hands on training

The CHVs requested technical and vocational training to equip them with skills required for self-employment. Training is tailored to their unique needs and structured to link to a specific livelihood activity. The CHVs in this study requested for enhanced training in the informal sector, in entrepreneurship, best practice in agricultural farming and livestock rearing.

"I am a painter..., but I haven't trained.....To improve the painting, is to be taken to study it and then get a certificate...if you find those people taking contracts... you show him that certificate that you are a painter, he will...employ you." (R4, FGD 7 Kaloleni)

"...I feel we need to be brought training about rearing [livestock] so, that we can know how to keep chicken...and also those drugs that are used when chicken have been affected by any disease and the feeds." (R7, FGD 9 Kaloleni)

"... We have talked about projects...that requires good management...if it would be possible to help us in bringing leadership training so that we... [Are] able to manage those projects that we are even given without difficulty so that we can succeed." (R1, FGD 2 Rabai)

The KIIs felt that training was also important suggesting that it should accompany the health education training that is provided for the CHVs to perform their community related activities.

"...if they are taught about health, they should also have trainings teaching how to start their own businesses." (KII 04).

"..Of their dairy cattle... but they are not producing simply because they haven't been held their hands and told this and that should be done." (KII 03)

4. Savings

Learning how to save one's income and resources is an integral tool. This may be through formal and informal financial settings. Consistently saving one's income helps instil a saving culture as well as expand one's assets. While one can plan for future investment, savings also provides a cushion for unexpected financial difficulties in future. The CHVs in this study expressed desire to be able to save as well as a need for education on how to save. These sentiments were shared by the KIIs as well.

"...The other way that can help us.... is to save money that can be capital.....the money...is given so that they can do something and return with interest...that money can sustain...and the group continues." (R8, FGD 10 Kaloleni).

"...maybe if we get a sponsor we would like him to give us money that we can start table banking...it will uplift everyone." (R8, FGD 8 Kaloleni)

"Okay, when the income comes by, [members contribute], we have opened an account... for the CU and we top up [the account] so that it can stay there and be able to add more [until]... it is enough." (R2, FGD4, Rabai)

“...As I was telling you these guys [CHVs] they need to be given something you see, whatever they get they can invest in business or in other... activities.” (KII 03)

5. Healthcare

Having access to healthcare is a basic human right. Even as CHVs, many felt that they had limited access to healthcare resources. The financial burden of meeting their own healthcare needs was also enormous. CHVs are community champions of health. Providing CHVs direct access to healthcare services through tokens for them and their family members, would allow them the scope to be able to focus on the healthcare needs of their fellow community members.

“Sometimes back there was an organisation...they used to have the kitty. If CHVs can be given because sometimes you don’t have someone to assist you with Panadol....” (R1, FGD 5 Kaloleni)

“My request is for our hospital, XXX, they should stock the drugs for us because there are those who can go to the chemist and there are those who cannot....Our people suffer... She was taken there... told there is no medicine she has to go and buy, she returned and stayed at home with her illness. ” (R4, FGD 2 Rabai)

6. Social integration

The CHVs in this study emphasized a consistent thread of a need for community engagement, acceptability and identity. CHVs are the social link between communities and the healthcare system. A lack of identity by the community is a major challenge at meeting their programme related duties. The CHVs in this study requested that they get some form of recognition provided by the government or CHV programmes within the community. They also asked for formal introduction to the community leaders and consideration for engagement or inclusion during governance meetings that concern the communities within which they serve.

“...If we...can be recognized...we can get a badge, t-shirt so when we get in the community they know these are the CHVs,...there are places [where] we are despised,...we go just with our clothes...if you tell them to dig a toilet they tell you go tell the doctor who sent you to come and dig that toilet...but if we have the apparels...they will give us the respect and even our work will continue on well”. (R5, FGD 2 Rabai)

“We would like to have uniform...bags..., then people will respect us, they will say these women are working at the hospital.” (R7, FGD 6, Kaloleni)

When asked about social integration, the KII had this to say:

“...First there is the economic challenge,... also I don’t think if they have an office somewhere...even if we gave them space in our facility,...that they can have a central place where they can come and discuss their things with us.” (KII 06)

In this way, they are suggesting some shared space and partnership with the CHVs.

Discussion

Community-based CHV led programmes are cheaper and more successful at meeting population healthcare needs than clinic-based programmes(8). Their success is however dependent on the retention of CHVs(8). This current study delivers important findings as it provides a user-identified approach to identify and assess the strategic needs of CHVs for socio-economic empowerment. This study further applies a sustainable economic empowerment model to provide further understanding on how these needs can be addressed in order to enhance retention of CHVs. A successful intervention programme requires an understanding of the needs of the target population and tailoring the model to meet the needs of those it serves.

Previous studies have demonstrated that financial and non-financial incentives are ways in which programmes can enhance retention of CHVs(13). In this study asset transfer, weekly stipends and enhanced savings were aspects found to be of import to the enhanced motivation of CHVs. In addition, the results of this study demonstrated that training particularly hands-on training was regarded greatly as a motivating factor. As in previous studies, a great motivator was the benefits of enhanced education and training that resulted in improved health status that transcended beyond the CHVs themselves and their families but also to the entire community. Lastly, this study found that social integration was a key tenet shown to enhance CHV retention. This finding was similar to other studies where CHVs reported that recognition by their communities built social capital for them strengthening their motivation to continue working and increased their accountability to the communities in which they serve(3)(13). However, these findings were in contrast to a systematic review that revealed that attrition and retention were not issues enabled by the community(12).

Previous studies have looked at the use of incentives and continued professional development as a means of improved retention of healthcare workers(27). These strategies have been found to be beneficial in meeting an acute shortage problem but do not adequately address the problem of retention. The present study reinforces that better working and living conditions are needs regarded highly by the CHVs and interventions that focus on addressing them could potentially enhance retention.

Sustainable success of poverty alleviation using the graduation approach is dependent on the presence of support services that reinforce the pathway of households from poverty using a combination of asset financing, mainstream development programmes and government driven social protection programmes. In addition, self-worth is cultivated among individuals due to improved visibility and empowerment within their communities providing a sense of control over their livelihoods.

Strengths And Limitations Of This Study

Although generalisability was not the intention in this study, one strength of the study is that it uniquely captures the voices of the CHVs and leaders and applies the BRAC graduation model to synthesise findings. We acknowledge important limitations of this study. Firstly, this was a qualitative study and we

appreciate that our findings are not generalizable to the entire Kenyan context. This study represents views of CHVs engaged in communities with support from the AQCESS project. Secondly, as a result, we acknowledge that their responses may over represent a “motivated” sample who receive certain allowances such as travel allowance, training and project support to be able to engage in their activities. Lastly, it is likely that due to affiliation to the project there may have been some bias in honest responses provided.

Conclusion

The results of this study suggest that there exists opportunity for a growth trajectory that can sustainably provide economic empowerment of the CHVs working in Kenya. A platform that provides social assistance harnessing the key tenets of the graduation model whereby seed capital is used to jumpstart an economic activity combined with sufficient financial access and education on management potentially provides this opportunity. In Kenya for this to be successful, it would require both local government and multi-sectoral collaboration, as these endeavours are both capital and time intensive.

List Of Abbreviations

AKFC:	Aga Khan Foundation Canada
AKU:	Aga Khan University
AKU-EA:	Aga Khan University-East Arica
AQCESS:	Access to Quality Care through Extending and Strengthening Health Systems
BRAC:	Bangladesh Rural Advancement Committee
CBO:	Community Based Organization
CHC:	Community Health Committee
CHEW:	Community Health Extension Worker(s)
CHU:	Community Health Unit
CHV:	Community Health Volunteer
CSO:	Civil Society Organization
FGD:	Focus Group Discussion
IGA:	Income Generating Activity
KII:	Key Informant Interviews

LMICs:	Low- and middle-income countries
MOA:	Ministry of Agriculture
MOH:	Ministry of Health
NACOSTI:	National Commission for Science, Technological, and Innovation Research
PI:	Principle Investigator
RMNCH:	Reproductive Maternal Neonatal and Child Health
UHC:	Universal Health Coverage
UPG:	Ultra Poverty Graduation
WHO:	World Health Organization

Declarations

Ethics approval and consent to participate:

Ethical approval was obtained from the AKU Institutional Ethics Research Committee ethics number 2017/REC-102. Permission to conduct the study was also sought from the National Commission for Science, Technological, and Innovation Research (NACOSTI) and from Kilifi County research coordination committee in the study. Both verbal and written consent was obtained prior to interviews from all participants. Data collected were only accessible by the research team.

Consent for publication: N/A

Availability of data and material: Transcripts from this study cannot be shared publicly due to ethical consideration. Researchers meeting the criteria for access to confidential data can contact the following individuals njeri.nyanja@aku.edu OR anthony.ngugu@aku.edu

Competing interests: N/A

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Authors contributions:

Design: NN, AN

Data collection: LN, SC

Data analysis; NN, NF, SC, AL

Conceptualisation/Drafting: NN, AN

Conflict of interest:

The authors reports that they has no conflicts of interest.

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Figures

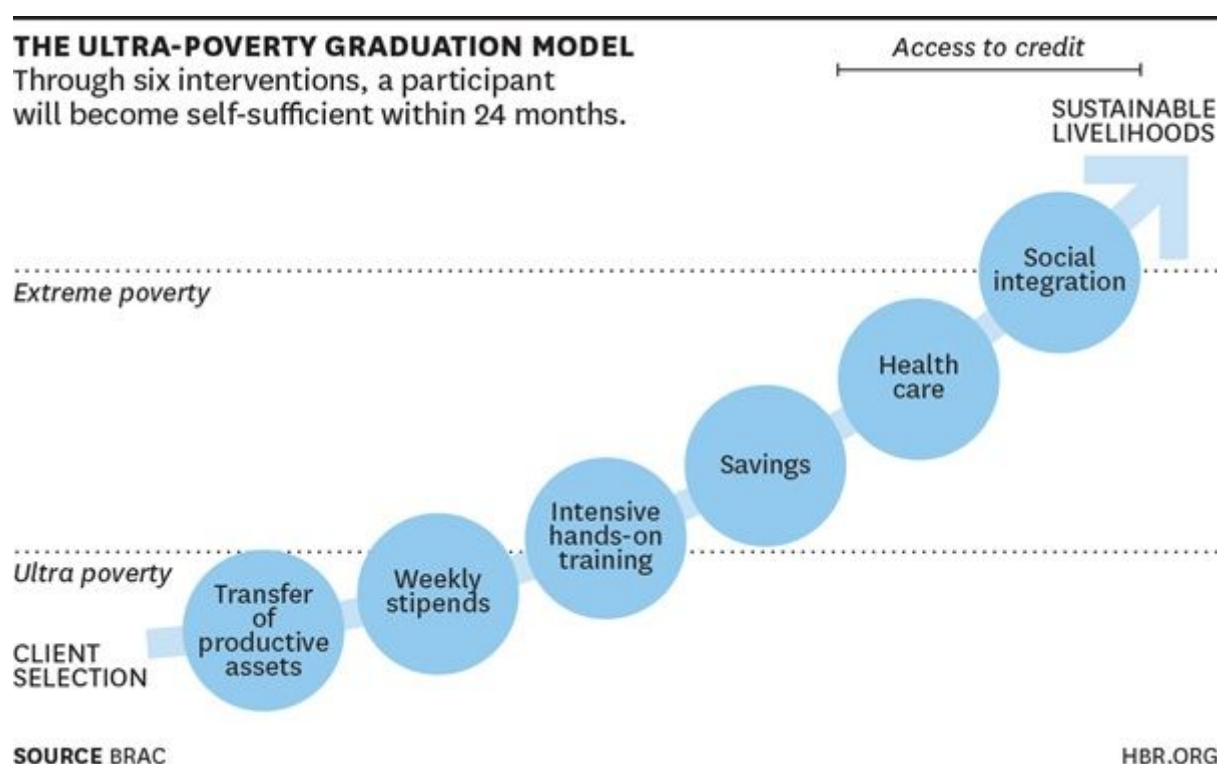


Figure 1

The Ultra Poverty Graduation Model. [Reprinted with permission from "An Approach to Ending Poverty That Works" by Susan Davis Jan, January 22, 2015, hbr.org. Source: BRAC Copyright 2015 by Harvard

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