African Journal of Rural Development, Vol. 8 (2): April-June, 2023:pp.158-170 ISSN 2415-2838

Incentives for Promoting Nutrition Sensitive Behaviours Using Social and Behaviour Change Communication Approaches: A Case of the Afikepo Nutrition Programme in Malawi

MHAGAMA, P.

Malawi University of Business and Applied Sciences, Private Bag 303, Chichiri Blantyre 3, Malawi

Corresponding email: pmhagama@poly.ac.mw

ABSTRACT

In some parts of the world, incentives have been used to encourage individuals adopt certain positive health behaviours to achieve health outcomes. This article, therefore, examines whether the introduction of incentives and the extent to which the use and the nature of incentives could increase the level of commitment of the various players in the fight against malnutrition under the Afikepo Nutrition programme in Malawi. The programme's main aim was to enhance the nutrition security through increased availability of diversified foods and improved dietary intake of safe and nutritious foods to achieve optimal nutrition for women of childbearing age, adolescent girls, infants and young children. Data were collected through semi-structured interviews with district nutrition officials, community and frontline workers, and focus group discussions with members of the care group model. The article argues that giving incentives can increase the level of commitment put into the activities being promoted by the programme to achieve nutritional outcomes. It also argues that nutrition messaging and incentives should be targeted not only at vulnerable groups but at various players to help achieve programme objectives and that what can motivate people is realisation that one's role and contribution to the programme is being recognised and appreciated.

Key words: Behaviour change, health outcomes, incentives, Malawi, nutrition, vulnerable groups

RÉSUMÉ

Dans certaines parties du monde, des incitations ont été utilisées pour encourager les individus à adopter certains comportements positifs en matière de santé afin d'atteindre des résultats sanitaires. Cet article examine donc si l'introduction d'incitations et dans quelle mesure l'utilisation et la nature des incitations pourraient accroître le niveau d'engagement des différents acteurs dans la lutte contre la malnutrition dans le cadre du programme nutritionnel Afikepo au Malawi. Le principal objectif du programme était d'améliorer la sécurité nutritionnelle par une disponibilité accrue d'aliments diversifiés et une meilleure consommation d'aliments sûrs et nutritifs pour atteindre une nutrition optimale pour les femmes en âge de procréer, les adolescentes, les nourrissons et les jeunes enfants. Les données ont été collectées par des entretiens semi-structurés avec des responsables nutritionnels de district, des travailleurs communautaires et de première ligne, et des discussions de groupe avec les membres du modèle de groupe de soins. L'article soutient que la distribution d'incitations peut augmenter le niveau d'engagement consacré aux activités

promues par le programme pour atteindre des résultats nutritionnels. Il soutient également que les messages nutritionnels et les incitations devraient être ciblés non seulement sur les groupes vulnérables mais aussi sur divers acteurs pour aider à atteindre les objectifs du programme et que ce qui peut motiver les gens est la réalisation que leur rôle et leur contribution au programme sont reconnus et appréciés.

Mots-clés : Changement de comportement, résultats sanitaires, incitations, Malawi, nutrition, groupes

Introduction

The Government of Malawi engaged the European Union (EU), United Nations Children's Fund (UNICEF) and Food and Agriculture Organisation (FAO) to implement a K70.4 billion (€74.5 million)-worth programme called Afikepo, which literally means 'Let the children reach their full potential'. The programme which ran from 2017 to 2022 aimed at addressing the challenges observed in dealing with undernutrition, inadequate coordination amongst players and the little impact registered in reducing stunting levels in the country (FAO and UNICEF, 2020). The Afikepo programme was introduced in 10 districts spread across the country. These districts were Chitipa, Karonga, Mzimba, Nkhata Bay, Kasungu, Nkhotakota, Salima, Chiradzulu, Thyolo and Mulanje. The selection of the districts was based on their magnitude of stunting and low birth weight (FAO and UNICEF, 2020). Specifically, the programme mainly aimed at enhancing the nutrition security through increased availability of diversified foods and improved dietary intake of safe and nutritious foods to achieve optimal nutrition for women of childbearing age, adolescent girls, infant and young children (FAO and UNICEF, 2020). In other words, the programme aimed at empowering the vulnerable groups to mainstream neglected and underutilised crops into the traditional food systems thereby building a sense of belief and confidence in their local foods and recipes as against the 'elite' or 'government' ones (Gavaravarapu and Pavarala, 2014). To achieve this, in all its implementation structures from the District to the Area and to the Village levels, the Afikepo programme through the Care Group model used Social and Behaviour Change Communication (SBCC) strategies to promote joint planning, implementation, monitoring and evaluation by all key stakeholders. This is consistent with the participatory development approach which recognises that the beneficiaries of development initiatives have long years of experience, knowledge and capability to understand their situation and how to uplift themselves from their marginalised situation (Servaes, 1996).

The Care Group model included pregnant women and lactating mothers, adolescent girls, community workers and frontline workers. At the district level, the District Nutrition Coordinating Committee (DNCC) were the overall planning and implementing structure of the Afikepo project. All activities including SBCC activities were planned centrally at the district level and then cascaded to the Traditional Authority level through the Area Nutrition Coordinating Committee (ANCC), to the Group Village level as Village Nutrition Coordinating Committee (VNCC) and then at community level with the Health Promoters and Cluster leaders ensuring interventions reached the beneficiaries. The Care Group model was meant to ensure that households were reached and that there was regular interface between implementors and beneficiaries. It was envisaged that through this multi-sectoral approach, the programme would improve diversified food production, improve food security, feeding practices and reduce stunting amongst children by 2% every year (FAO and UNICEF, 2020).

Despite the positive impact nutrition-sensitive initiatives register in reducing hunger and malnutrition, studies have shown that the adaptation of these nutritional interventions especially in the rural sub-Saharan region has been ineffective (International Fund for Agricultural Development (IFAD), 2016; Odenigbo *et al*., 2018). Elsewhere, incentives have been seen to influence behaviour and improve health outcomes (Chopra *et al*., 2012; Bradley *et al.,* 2018; Vlaev *et al*., 2019). Bradley, *et al* (2018) define incentives as 'merely mechanisms that motivate or encourage an individual to act in a certain way'. When applied to healthy behaviours, incentives can be viewed as mechanisms that encourage individuals to adopt certain positive health behaviours to achieve health outcomes. According to Gallus *et al.* (2021), it is not clear how people choose incentives and that this topic is not widely researched. In Malawi, specifically, little has been done to investigate incentives that can influence adoption of the nutrition-sensitive interventions among the implementing staff and the targeted population (the beneficiaries). Studies available on nutritional initiatives concentrate only on the extent of the organisational outreach, activities executed, and lessons learned (Ruel *et al.,* 2017). It is against this background that the Afikepo Nutrition programme decided to include the issue of introducing incentives in their Concept Note titled 'The Afikepo Incentive-based Mechanism and Afikepo Programme Incentives: From Conceptualization to Implementation Project'. To determine what sort of incentives could be given to the various players, a survey was conducted to collect data regarding the types of incentives that could be planned for community mobilization in the Afikepo Nutrition programme.

This article reports the results of the survey conducted between September 2021 and February 2022 which examined whether the introduction of incentives and the extent to which the use and the nature of incentives could increase the level of commitment of the various players in the fight against malnutrition in Malawi in the Afikepo Nutrition programme. The article evaluates the different types of incentives that each group of people in the Care Group Model cared to receive, how that incentive could influence adoption of the nutrition-sensitive behaviours and promote commitment to the fight against nutrition in the Afikepo programme in Malawi. The study targeted all the different groups of people in the Care Group model which were the implementing staff and also the beneficiaries of the programme.

Role of incentives in promoting nutrition. Incentives are defined as 'financial (positive or negative) and non-financial tangible incentives or rewards, such as free or reduced cost items or services that have a monetary or exchange value' (Thomson *et al.,* 2014). Incentives in health care are intended to bring about changes in behaviour at individual, patient, healthcare provider, community or national level which can lead to improved health outcomes and slow the increase in health care costs (Claxton *et al.,* 2013; Thomson *et al.,* 2014). According to Vlaev, *et al.,* (2019) incentives are important in many circumstances and are used across the public and private sectors to influence behaviour. Vlaev *et al*. (2019) further observe that the increased enthusiasm for using incentives to influence health behaviours has been shown because the full economic and social costs of unhealthy behaviours have become apparent. This view is also shared by Bradley *et al.* (2019) who observe that incentives which are structured in such a way that they can drive behaviour change not only provide a solution that can help improve the nation's health but also lower the health care costs. The other reason for this enthusiasm of using incentives is the finding that health behaviours can be significantly affected by the structure of economic incentives that individuals face (Sindelar, 2008). As such, incentives

have been recommended as an important strategy to reduce barriers to access to health care and, often health gains are clear objectives of these strategies (Chopra *et al*., 2012). Laviolette *et al., (*2016) identify two types of incentives namely financial and non-financial. According to Bassani *et al*. (2013) 'financial incentives are becoming widely used policy strategies to alleviate poverty, foster several aspects of development, and improve the health of populations'. The advantage of financial incentives is 'their potential to increase coverage of a broad range of health interventions among children under five years although there is limited evidence for this' (Bassani *et al.,* 2013).

According to Giles *et al.* (2014) financial incentive interventions are more effective than usual care or no intervention for encouraging healthy behaviour change. Laviolette *et al.* (2016) conducted a literature review to assess the impact of eight incentive mechanisms which the World Bank incorporated into projects and initiatives to incentivize results for various nutrition-related outcomes. The mechanisms include: development policy lending (DPL), programme-for-results (PforR), performance-based budgeting (PBB), performance-based financing (PBF), performance-based contracting (PBC), conditional cash transfers (CCT), unconditional cash transfers (UCT), and public works programmes (PWP). The financial incentive mechanisms which were reviewed show evidence of positive influence of the incentives on nutrition and related outcomes among children although most of the evidence focused on health outcomes and health care utilisation (Laviolette *et al*., 2016).

The study by Laviolette *et al.* (2016) recommends Community Driven Development (CDD) and Community-Based Performance Based Financing (PBF) as useful approaches to reducing malnutrition in communities. Community-driven development provides grants to communities to develop projects to address problems prioritized by the community (Laviolette *et al*., 2016). This is consistent with the participatory development approach. The study also recommends Cash Transfers (CT) as powerful tools for nutrition improvement at household level arguing that the information that often goes together with the cash transfers can be a powerful non-financial incentive to enable the household members to make informed decisions on the use of their household resources (Laviolette *et al.,* 2016).

There are also various non-financial incentives that can be used at each level of the system to achieve positive nutrition outcomes depending on the type of impact anticipated and the social environment in which the interventions are introduced. Laviolette *et al.* 2016) recommend a mix of financial and non-financial incentives to achieve nutritional impact. Furthermore, the type and amount of incentive, perceived value, and timing all contribute to the impact or influence that the incentive will have on people's behaviour (Bradley *et al.,* 2019).

Therefore, when selecting nutrition programmes and interventions, Laviolette *et al.* (2016) recommend implementing them at different levels of the system affected in addition to identifying the key nutrition challenges to determine where to focus the effort and what approach or instrument might be most useful. The Afikepo Nutrition programme in Malawi was implemented by FAO and UNICEF in collaboration with the Government. It was a multi-sectoral effort that integrated agriculture, health and nutrition actions to address the problem of food and nutrition insecurity and undernutrition (FAO and UNICEF, 2020). Therefore, we can identify the following levels from this programme: government level where policies are made, at the service delivery level where supplies are made, at the community level where there is social mobilization and empowerment, and at the household and individual levels where the feeding and caring behaviours

manifest. With this information in mind, the incentive packages needed to be applied at the relevant and appropriate level where they were expected to be more effective. It is, therefore, important to analyse how financial and non-financial incentives are aligned (or not) to either influence or discourage behaviour change at each level (Laviolette *et al.,* 2016). The results reported in this article were based on a survey of incentives at community, household and individual levels.

Incentive theory of motivation. The study adopted the Incentive Theory of Motivation as propounded by Skinner and others. Motivation can be defined as 'the process to make a start, guides, and maintains goal-oriented behaviours. Basically, it leads individuals to take action to achieve a goal or to fulfil a need or expectation' (Gopalan *et al*., 2017). At the centre of this theory of motivation are three concepts of conditioning, homeostasis and positive reinforcement. For Skinner *et al.,* (1938) behaviour is a result of reinforcements and that behaviour differs depending on how and when the reinforcement is given (Lillienfeld *et al.,* 2009). According to Gopalan *et al*. (2017), the incentive theory is one of the major theories of motivation which illustrates the desire to motivate behaviours for enrichment or incentives. The theory proposes that a person's behaviour is attracted by a positive stimulus (incentive) and tends to avoid anything that brings negative reinforcement (Peters, 2015).

According to the Incentive Theory of Motivation, behaviour can be conditioned to balance responses to positive reinforcement. According to Rotter (1966), the effects of reinforcement on preceding behaviour partly depends on whether a person views the incentive as dependent on the behaviour or independent on it. An incentive, therefore, is either a collateral or an act that is provided for the sake of greater action. Positive incentives are those reinforcements that guarantee satisfaction of individual's needs and wants. In the case of Afikepo programme, such positive incentives can include different material handouts that project implementing staff and beneficiaries expect to receive in order to make them fully committed to the project expectations.

According to Gopalan *et al.* (2017) people are motivated to do some actions because of internal desires, and at other times, people's behaviour is motivated by external rewards. This gives us two categories of motivation; intrinsic and extrinsic. According to Ryan and Deci (2000) intrinsic motivation is an activity done for own contentment without any external anticipation whereas extrinsic motivation are a result of external factors or activities such as a reward or incentive. It has been argued that a combination of intrinsic and extrinsic motivators can improve health worker motivation, retention and performance, where improved performance can provide a sense of achievement translating into greater motivation (Aninanya *et al.,* 2016). This theory, therefore, helps to understand whether the choice of incentives by the different players in the Care Group model were intrinsically or extrinsically motivated and how those incentives could contribute to the achievement of the goal of improving diversified food production, improve food security, feeding practices and reduce stunting amongst children.

Methods

This study used two methods to collect data: semi-structured interviews and focus group discussions (FGDs). The semi-structured interviews involved participants drawn from three districts of Mzimba South (Northern Region), Nkhotakota (Central Region), and Thyolo (Southern Region). The districts were selected purposively as the survey opted for those areas where the Afikepo Nutrition programme was being implemented.

Semi-structured interviews were conducted with 24 District officials and frontline workers such as District Coordinators working under the Food and Agriculture Organisation (FAO), Principal Nutrition and HIV and AIDS Officers (PNHAOs), Food and Nutrition Officers (FNOs), Nutritionists working under the FAO, District Nutrition Officers from the Ministry of Health, Health Promotion Officers (HPOs), Agriculture Extension and Development Officers (AEDOs) and Health Surveillance Assistants (HSAs). All these people were grouped under Frontline workers. These were selected through purposive sampling based on their involvement in the Afikepo programme. Interviews were also held with six randomly-selected Care Group Promoters which helped to get participants' views on the kinds of incentives which would motivate targeted beneficiaries to adopt and replicate good nutrition behaviours.

The focus groups were selected using convenience sampling as the survey opted for those whose group members stayed within the vicinity of the district councils. In total, six FGDs were conducted – two each in Mzimba South, Nkhotakota and Thyolo districts respectively. Each focus group comprised on average 10 people, and lasted about 40 minutes. The participants for the FGDs were members of either Lead Mothers' or Cluster Leaders' Committees. However, one FGD in Mzimba South involved members of a youth club. The input presented by the FGD participants provided first-hand views on the kinds of incentives which could motivate the beneficiaries, volunteers as well as workers. The interview protocol and FGD guide were peer-reviewed to enhance their validity and reliability.

Data derived from the semi-structured interviews and focus group discussions were analysed qualitatively. Qualitative analysis commenced right in the field using the thematic analysis technique. The data generated through the semi-structured interviews and focus group discussions were first transcribed verbatim, and then categorised based on themes identified from the interview protocols and FGD guides. The analysis further assisted to isolate major issues and outliers from the data. Ethical considerations which were observed in this study included seeking consent from the participants prior to each data collection activity including audio-recording. Additionally, the participants' personal information was kept confidential and the interviewees' names were kept anonymous. Since the study also included adolescents, informed consent was obtained from the parents and/or guardians of each participant under the age of 18 but the researcher ensured that most of them were aged above 18 (i.e., from 19 to 21 years). The parents of these adolescents were also part of the study but were interviewed separately.

The findings obtained in this survey have been presented based on the type of participant – pregnant women, adolescent girls, community workers and frontline workers. Under each type, there is a discussion of the major incentives preferred by the participants.

Results and Discussion

Nutrition incentives for mothers. It must be pointed out from onset that in the Care Group model, households were encouraged to grow and/or keep and consume locally available foods such as vegetables, legumes, small livestock and also to start small-scale businesses for income generation in order to meet their nutritional requirements. They were also taught how to prepare nutritious meals from these foods with all the six food groups available. This was one way of building people's trust in their own local foods and dispelling the myths that nutritious meals were those consumed by the city dwellers. Therefore, the mothers identified a number of incentives needed for them to be encouraged to adopt good nutrition and sanitation behaviours in line with what they were being encouraged to do.

The incentives included: Financial assistance towards establishing small-scale businesses; farm inputs such as seeds and livestock; Afikepo-branded materials such as t-shirts and wrappers; back packs; exchange visits with women in other districts; cash or material prizes for high performing households; and recognition and moral support.

For the mothers, provision of farm inputs was the major incentive. The mothers reported that they needed improved seed varieties for crops such as yellow maize, orange sweet potatoes, carrot, green beans and other vegetables as these are considered to be highly nutritious. In addition, they said they needed to be given an opportunity to start keeping small livestock especially disease-resistant species such as goats, rabbits, and chickens (particularly layers) because of their high nutritive values. Likewise, they requested for assistance in form of fertilizers which they could apply in their gardens in order to improve crop yield. Their request for farm inputs and engaging in livestock production as incentives came as no surprise because most of them were subsistence farmers who would directly benefit from these incentives to improve their daily livelihoods. The request for such incentives is a reflection of the community's realisation of what went wrong in their food system, how the traditional agricultural practices have faded, how consumption patterns have changed, and how their traditional foods have been replaced by the 'government' foods (Gavaravarapu and Pavarala, 2014), and this is an attempt to reclaim all that. It is also an acknowledgement of the role that NGOs have played in building confidence of the people in their local foods and their nutritional value.

Prizes for high performing households was reported to be another major incentive which could motivate them to adopt and maintain good nutritional behaviours. One mother highlighted that, 'these prizes are not there at the moment. We are frustrated that our efforts are not being recognized at all'. A frontline worker echoed the women's sentiments on prizes by indicating that:

> Model villages need to be given prizes in recognition of changed behaviour. These prizes can be basic material items such as salt, sugar, pieces of cloths and so on. As people expect to be winning such prizes, behaviour change becomes permanent (interview with a Frontline worker).

As Laviolette *et al*. (2016) advise, financial incentives are not necessarily the best or the only way to motivate individuals. This is reflected in the women responses presented above. With regard to being recognised for outstanding performance, it was suggested that women from households which had successfully implemented the programme activities could be incentivised by being featured on community radio stations to share their best practices with others. Here we have examples of extrinsic motivators. According to Aninanya *et al.* (2016) "extrinsic motivators include verbal recognition from employers and peers, gifts, and financial rewards for achieving recognised targets". In addition, officials from the Afikepo programme implementers (UNICEF, FAO or Ministries of Agriculture and Health) could visit such households to provide moral support and encouragement. This corroborates the view that the need for status and social recognition means that in many situations, social incentives can be used together, or even instead of economic incentives, to achieve desired behaviours (Laviolette *et al.,* 2016). It can be deduced from here that being recognised for achieving what is being implemented can be a big motivation for people to sustain the changed behaviour.

The women also requested the implementers of the Afikepo programme to incentivise them by arranging exchange visits with women in other districts. This is an intrinsic motivator where the women can gain their 'own contentment without any external

anticipation' (Gopalan *et al.,* 2017). What these women participants called incentives through exchange visits can be described as the need for social networking which offers its own opportunities for creating and sustaining change (Teyhen *et al.,* 2014). In this incentive scheme, the women could be motivated to perform better by visiting other women and sharing their success stories of cooking nutritious meals and agricultural best practices with other women doing the same things and also learning from others about their success stories and best practices as well which they could emulate and implement when they returned home. This kind of networking can be an effective intrinsic incentive which can help in spreading information about nutritious foods resulting in positive bahaviour change. This view is supported by Teyhen *et al.* (2014) who observe that networks designed to bring individuals with similar characteristics and goals in groups are more effective than random networks in spreading behaviour change and creating sustained change.

However, as Gallus *et al.* (2021) argue, 'the crucial aspect of incentivising is how it is done: the scheme. The scheme refers to the structure of the incentive, as perceived by the people involved'. This is crucial indeed especially for the Afikepo programme to understand the different incentive needs of the different programme implementers and beneficiaries.

Incentives that can motivate adolescents in the Afikepo programme. The adolescents who participated in the survey mentioned the following incentives which they expected to receive from the programme implementers and which they thought could motivate them to participate with commitment: farm inputs such as seeds for crops and vegetables and fertilisers; sanitary pads; soap; balls for netball and football games; and regular capacity building workshops on nutrition and sanitation.

The girls prioritised farm inputs as an incentive that could help them adopt and maintain good nutrition and sanitation behaviours. They further explained that assistance in form of improved seed varieties or cuttings for crops such as yellow maize, orange sweet potatoes and vegetables such as carrot, turnips, and beetroot would help them prepare gardens where they could be accessing nutritious foods. They complained of not having adequate financial resources to buy these foods from the market on a regular future basis which they saw as being a hindrance to the adoption of health behaviours. It should be noted here that even multiple but small incentives can go a long way in motivating individuals to adopt health behaviours that can result in improved nutrition and health. These findings corroborate those of Vlaev *et al.* (2019) who reported that the increase of schemes aimed at changing the health-related behaviour of the public has been accompanied by evidence that even small incentives can positively influence choices. Therefore, incentives must first be in place to enable communities to understand the problem of malnutrition and its implications for the future and then prioritize actions to reduce the problem. Malnutrition is common among people of low income because they can hardly afford to buy or grow nutritious foods as reported above. By prioritizing the farm inputs as mentioned above, it implies that the adolescents in this study were aware of their nutritional needs but did not have the means to afford the requirements. This implies that if they could be incentivized with financial assistance to grow or buy the requirements on their own, the potential for improved nutrition and improved health could be there. When mobilizing people to engage in certain activities, it can be a good idea to provide them with the resources needed to achieve the set goals otherwise it can be a dis-incentive that can result in programme failure and wastage of money.

The discussion above brings to light the question of who should decide which incentives to give and to whom? It has been observed that nutrition

this study, the Afikepo programme attempted to turn around events and make the issue of incentives participatory so that proper planning and budgeting can be done with regard to what incentives can be given to who and at what cost. However, the question regarding how incentives are selected is addressed by Laviolette *et al.* (2016) who argue that 'incentives vary across cultures and over time because social incentive structures are established by different forms of social interactions that take place within cultural norms and expectations that vary geographically and over time'. Therefore, in deciding what type of incentives (financial or non-financial) to give, it is imperative to consider cultural aspects because what is valued in one culture may be perceived differently in another culture. To obtain this information, thorough consultations with all players is crucial for a better impact. Similarly, it has been argued that health and nutrition professionals need to create conducive environments for sharing nutrition messages that are relevant to the community's values, realities and cultures so that people's involvement is seen as a consciousness changing opportunity rather than raising consciousness (Dutta-Bergman, 2004).

Incentives for community workers and frontline workers. The survey found that there were two types of community and frontline workers operating in the districts: Care Group Promoters and Cluster Leaders who worked for development partners and Community Volunteers who worked for Government, respectively, and these are separately recognized by each stakeholder. These are the people who participated in the semi-structured interviews. According to Laviolette *et al.* (2016) both the health worker and the households need to be incentivized through the result-based action plans. The community and frontline workers reported that they expected to receive the following as incentives: Farm inputs such as fertilisers for individual gardens; push bikes to ease mobility challenges since these people cover long distances to reach the households; monthly honoraria or allowance for the work that they do; mobile phones and airtime for easy communication with Village Nutrition Coordinating Committees (VNCC) and Cluster leaders; Continuous Professional Development (CPD) trainings; business loans; material incentives such as uniforms, Afikepo-branded materials such as t-Shirts, wrappers, backpacks, protective gear (rain coats and gumboots), and other items such as soap, salt and sugar.

These kinds of incentives are both extrinsically and intrinsically driven. A number of issues can be noted here. First, it can be noted that the health worker needs to be incentivised with the aim of improving the quality of care and also the commitment to their work. In this incentive mechanism or scheme, the household and the worker agree on a household action plan based on a rapid assessment, which is tracked through subsequent household visits, and its results are incentivized financially. Laviolette *et al*. (2016) note that the objective of these household visits and the assessment is to improve nutrition. This form of incentive is known as Performance Based Financing (PBF) which involves incentivizing health workers to conduct household visits (Laviolette *et al.,* 2016). It is argued that PBF could become a powerful tool for increasing the role of households in their own nutritional improvement. It is further argued that if households were given financial incentives, they would provide additional resources to the poor households to buy the required nutritious foods (Laviolette *et al.,* 2016).

Secondly, on transportation, the community and frontline workers in the survey suggested the provision of bicycles as one way of addressing the problem of mobility because of the nature of activities they conducted. One participant noted that:

> We have theatre groups which travel in the villages conducting performances on nutrition and sanitation. These groups need assistance with transportation as they usually travel long distances from one community to another. As you can see, this is a hilly place; it is really difficult to travel on foot (interview with a frontline worker).

In addition, motorcycles were considered necessary because the workers usually operated in a wide geographical area which was extremely difficult to be fully covered on foot. The motor cycles would be a good incentive in this instance as they would ease the mobility challenges that they were facing.

Further, the Community Volunteers, because of the nature of their job, requested for cameras or quality mobile phones which could be used to take pictures of their activities to be used as evidence during reviews. In addition, one Community Volunteer said that: ' we also need some gifts to hand out to the communities in form of water pails, soap and other items related to good nutrition and sanitation'. These gifts can be described as another strong extrinsic motivator where gift-giving functions as a form of altruism (Fu, 2011).

In relation to non-material incentives, the participants requested for capacity building workshops in Communication for Development or Social and Behaviour Change Communication (C4D/SBCC) and nutrition (both long and short-term) to enable them to provide oversight when designated experts (Health Promotion Officers and District Information Officers) carried out their work in the communities. It was reported that the majority of the staff members had never attended a formal training or short-term courses in the field of C4D/SBCC and nutrition. As such, the staff members felt that they lacked capacity in executing C4D/SBCC activities. They claimed that they were operating blindly on issues to do with monitoring the implementation of C4D/SBCC activities. Therefore, they strongly felt that strengthening the working relationship between frontline workers and community volunteers through joint planning and review of C4D/SBCC activities would fill the gap. The discussion above reveals that community frontline workers had their own needs based not only on their individual, family and cultural values but also on the prevailing and desired economic, social status and career aspiration (Ramlall, 2004). These factors influenced the choice of the incentives outlined above. To return to the discussion on employing both intrinsic and extrinsic motivation, it can be noted that motivation can be cultivated extrinsically at the initial stage and transform itself into intrinsic motivation as the programme progresses (Tohidi and Jabbari, 2012), as reflected in the choice of the incentives by the community and frontline workers which to them could lead to high performance and attainment of the programme goals. This is also consistent with the argument that the reasons for some behaviours exist on a self-determination continuum ranging from amotivation to intrinsic motivation, with various stages of extrinsic motivation in between. The place where a person belongs on the continuum depends on the extent to which his/her needs are satisfied (Ryan and Deci, 2000).

Finally, a number of similarities and differences exist between the incentives mentioned by the different groups of people involved in the study. Among the similarities, it can be noted that all the groups of people mentioned farm inputs, branded Afikepo materials such as t-shirts, back packs and wrappers, and also materials incentives such as cash prizes, cash for establishing small businesses, and material incentives such as soap, sugar and salt, among others. This was not surprising because all the groups of people were living in the rural areas where their social economic status did not differ very much and all of them were involved in subsistence farming. Although some of the community workers were in full employment, they, too, shared some

similarities with the participants in the focus group discussions because they lived in the same communities like everyone else. The incentives requested, therefore, reflected their status and once provided with them, could be used to improve their living standards at household level.

The differences were noticed mainly among the community workers who participated in the interviews whose choice of incentives differed from the rest of the participants in the focus group discussions. In addition to the farm inputs, cash and materials incentives, the community workers mentioned motor cycles or push bikes, mobile phones, monthly honoraria or allowances, and continuous professional training. These incentives set them apart from the other groups of people in the Care Group model because of the nature of their job. Therefore, the incentives they mentioned were meant to easy the conduct of their work. Of interest to note was the reliance on hand outs and allowances by some community workers. When asked why they wanted to be incentivised by allowances or honoraria when they were already employed, some community workers reported that they did not want to do any work under the Afikepo Nutrition programme unless they were paid allowances for the time they were involved. Doing work under the Afikepo programme was viewed as falling outside their job description.

The other difference was noted among the youth who mentioned sanitary pads, bathing and washing soap, regular training workshops on nutrition and sports equipment as their preferred incentives. The choice of these, too, depended on their socio-economic status, age and type of activities they were involved in.

Conclusion

The results reported in this article were based on the study conducted among the women, adolescent girls, community and frontline workers who were part of the Care Group model employed in the Afikepo Nutrition programme whose aim was to increase and diversify dietary intake of safe and nutritious foods to achieve optimal nutrition for women of childbearing age, adolescent girls, infants, and young children in targeted districts in Malawi. Guided by the Incentive Theory of Motivation, the findings indicate or reveal that nutrition messaging and provision of incentives cannot be targeted at vulnerable groups of people only (women and children) but also a cross section of various players within a particular community who need to be incentivised to help achieve the programme objectives. The article has discussed a number of incentives considered to have potential to motivate different players to achieve their roles in the programme. A number of conclusions can be drawn as follows: firstly, that giving incentives to various players in the Care Group model can increase the level of commitment and effort put into the activities being encouraged and promoted by the Afikepo programme to achieve nutritional outcomes. Secondly, giving incentives can motivate non-performers including non-performing households to boost their morale and energy so as to avoid being seen as the lazy ones. Thirdly, there is also increased level of satisfaction among frontline workers when an incentive as small as a t-shirt or wrapper is given. This demonstrates that the size or amount of an incentive is not what can motivate people but the fact that one's role and contribution to the project is being recognised and appreciated. It is a sacrifice to work as a volunteer, however, there is an expectation for them to benefit in one way or the other from the programme and this can come through the incentives chosen. Furthermore, what seems to determine the choice of each incentive is the role that one plays in the Care Group model and the programme as a whole. The need for recognition and moral support for the role one is playing in the

programme can be a factor determining the choice of an incentive in addition to satisfying individual, family, economic, career aspiration, social status and cultural values. This recognition can also have an impact on the sustainability of the desired change, confirming the argument that behaviour which is reinforced is likely to be repeated. For instance, some players, such as community and frontline workers, chose incentives they considered helpful in performing their roles effectively whereas the direct beneficiaries (women and children) identified incentives they felt could effectively help them attain their nutrition requirements or needs. The community workers or volunteers' need for incentives for their effort and time was also a factor determining the kind of incentive being chosen. What has also come out clearly from the findings is that people are influenced to choose incentives depending on their personal circumstances. A final conclusion that can also be made is that nutrition service providers such as the Afikepo Nutrition programme can save a lot of money if part of their total budget is invested in providing incentives to the various players in the programme because, as it has been discussed in this article, incentives have potential to increase positive nutrition outcomes.

Acknowledgements

This work was supported by UNICEF Malawi who funded the Afikepo C4D/SBCC Capacity Building Project in Malawi. Many thanks also go to all the District officials and frontline workers and all the participants in the Care Group model in the three districts who provided useful information that informed this article.

Statement of No-Conflict of Interest

The Authors declare no conflict of interest in the paper.

References

Aninanya, G.A., Howard, N., Williams, J.E., Apam, B., Prytherch, H., Loukanova, S., Kamara, E.K. and Otupiri, E. 2016. Can performance-based incentives improve motivation of nurses and midwives in primary facilities in northern Ghana? A quasi-experimental study. *Global Health Action* 9(1). https://.org/10.3402/gha.v9.32404

Bassani, D.G., Arora, P., Wazny, K., Gaffey, M.F., Lenters, L. and Bhuttal, Z.A. 2013. Financial incentives and coverage of child health interventions: a systematic review and meta-analysis. *BMC Public Health* 13 (S30):1-13. https://doi.org/10.1186/1471-2458-13-S3-S30

Bradley, K.L, Shachmut, K., Viswanathan, S., Griffins, B. and Vielehr, D. 2018. Role of incentives in health – Closing the gap. *Military Medicine* 183 (11/12), 208-212. https://.org/10.1093/milmed/usy216

Chopra, M., Sharkey, A., Dalmiya, N., Anthony, D. and Binkin, N. 2012. Strategies to improve health coverage and narrow the equity gap in child survival, health, and nutrition. *Lancet* 380 (9850):1331-1340. https://doi.org/10.1016/S0140-6736(12)61423-8

Claxton, G., Rae, M., Panchal, N., Damico, A., Whitmore, H., Bostick, N. and Kenward, K. 2013. Health benefits in 2013: Moderate premium increases in employer-sponsored plans. *Health Affairs* 32 (9): 1667–1676.https://.org/10.1377/hlthaff.2013.0644

Dutta-Bergman, M.J. 2004. An alternative approach to social capital: Exploring the linkage between health conscious and community participation. *Health Communication* 16 (4):393–409. https://doi.org/10.1207/s15327027hc1604_1

FAO and UNICEF. 2020. Knowledge, Attitude and Practices Survey (KAP) towards maternal, adolescent, infant and young child nutrition and care practices, water and sanitation and nutrition-sensitive agriculture. Report for the Afikepo Nutrition Programme and Nutrition-sensitive Agriculture component in Malawi.

Fu, Y. C. 2011. The game of life: Designing a gamification system to increase current volunteer participation and retention in volunteer-based nonprofit organizations. Undergraduate Student Research Awards. Paper 2. Accessed May 11, 2023, from http://digitalcommons.trinity.edu/ infolit_usra/2]

Gallus, J., Reiff, J., Kamenica, E. and Fiske, A.P. 2021. Relational incentives theory. *Psychological Review* 129 (3): 586-602. https://doi.org/10.1037/rev0000336

Gavaravarapu, S.R.M. and Pavarala, V. 2014. Communicating nutrition in community settings: Case Studies in critical examination of institutional approaches in India. *Journal of Creative Communications* 9(1):23–48.https://doi.org/10.1177/0973258613517436

Giles, E.L., Robalino, S., McColl, E., Sniehotta, F.F. and Adams, J. 2014. The effectiveness of financial incentives for health behaviour change: Systematic review and meta-analysis. *PLoS One* 9 (3): e90347.https://doi.org/10.1371ournal.pone.0090347

Gopalan, V., Abu Bakar, J.A., Zulkifli,A.N., Alwi, A. and Mat, R.C. 2017. *A Review of the motivation theories in learning*. The 2nd International Conference on Applied Science and Technology 2017 (ICAST'17) AIP Conf. Proc. 1891, 020043-1–020043-7. https://doi.org/10.1063/1.5005376.

International Fund for Agricultural Development (IFAD). 2016. Mapping nutrition-sensitive interventions in East and Southern Africa (ESA): Kenya, Mozambique and Zambia Main Report and Annexes. Report No. 4440. IFAD. Available from: https://www.ifad.org/documents/38714170/39150184/Maing+nutritionsensitive+interventions+in+Eastern+and+Southern+Africa.pdf/8708488f-6ed0-48f7-93a2-899dffeafdbc

Laviolette, L., Gopalan, S., Elder, L. and Wouters, O. 2016. Incentivizing nutrition: incentive mechanisms to accelerate improved nutrition outcomes. The World Bank. https://openknowledge.worldbank.org/handle/10986/25870

Lillienfeld, S.O., Lynn, S.J., Namy, L.L. and Woolf, N. J. 2009. *Psychology: From inquiry to understanding*. Allyn and Bacon.

Odenigbo. M.A., Elabor-Idemudia, P. & Geda, N.R. 2018. Influence of nutrition-sensitive interventions on dietary profiles of smallholder farming households in East and Southern Africa. IFAD Research Series 24. IFAD. https://www.ifad.org/docments/38714170/40297386/24_Research_web.pdf/9a9635f2-8a4d-4859-8559-31138f90d7be?t=1555406971000.

Peters, R.S.2015.The concept of motivation. Routledge. https://doi.org/10.4324/9781315712833

Ramlall, S. 2004. A Review of employee motivation theories and their implications for employee retention within organizations. *The Journal of American Academy of Business* 14 (7):52-63.

Ruel, M.T., Garrett, J., Yosef, S. and Olivier, M. 2017. Urbanization, food security and nutrition. (pp 705-735). In S. de Pee, S., Taren, D. and Bloem, M. (Eds). Nutrition and Health in a Developing World. Nutrition and Health Humana Press. https://doi.org/10.1007/978-3-319-43739-2_32

Rotter, J. B. 1966. Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied* 80 (1): 1–28.

Ryan, R.M. and Deci, E.L. 2000. Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology* 25 (1): 54-67. https://doi.org/10.1006/ceps.1999.1020

Servaes, J. 1996. Participatory Communication and research with new social movements. A Realistic Utopia. pp. 82-108. In J. Servaes, Jacobson,T. L. and White, S.A. (Eds). *Participatory communication for social change* Sage.

Sindelar, J.L. 2008. Paying for performance: The power of incentives over habits. *Health Economics*, 17 (4): 449-51. https://doi.org/10.1002/hec.1350

Skinner, B.F., 1938. The behavior of organisms: An experimental analysis. New York,, NY: Appleton–century-crofts.

Teyhen, D.S., Aldag, M., Centola, D., Edinborough, E., Ghannadian, J.D., Haught, A., Jackson, T., Kinn, J., Kunkler, K.J.; Levine, B., Martindale, V.E., Neal, D., Snyder, L.B., Styn, M.A., Thorndike, F., Valerie Trabosh, V. and Parramore, D.J. 2014. Incentives to create and sustain healthy behaviours: Technology solutions and research needs. *Military Medicine* 179 (12):1419-31. https://doi.org/10.7205/MILMED-D-14-00111

Thomson, G., Morgan, H., Crossland, N., Bauld, L. and Dykes, F. 2014. Unintended consequences of incentive provision for behaviour change and maintenance around childbirth. *PLoS ONE* 9 (10): e111322. https://doi.org/10.1371journal.pone.0111322

Tohidi, H. and Jabbari, M.M. 2012. The effects of motivation in education. *Procedia-Social and Behavioral Sciences* 31: 820-824. https://doi.org/10.1016/jsbspro.2011.12.148

Vlaev, I., King, D., Darzi, A. and Dolan, P. 2019. Changing health behaviours using financial incentives: a review from behavioural economics. *BMC Public Health* 19 (1059). https://doi.org/10.1186/s12889-019-7407-8.