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Social Marketing and Non-Communicable Diseases Prevention and Risk Behaviour Reduction Among the Youth of Tamale

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Research Article

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Abstract

Objectives: The study aims at ascertaining the contribution of social marketing in the prevention of NCDs towards risk related behaviours reduction among the youth of Tamale.

Methods: A quantitative cross-sectional survey was employed in the study. A semi-structured questionnaire was used to collect primary data from the youth of Tamale, selected by convenient sampling. Simple random sampling technique was employed in the selection of respondents. A sample size of 273 was used and data analysed using SPSS version 21.

Results: The results revealed that all respondents had heard about NCDs. 72.9% knew exactly what they are; 82.4% of respondents perceived lifestyle modification was possible while 254 (93%) of the respondents see rather challenges.

Conclusions: The authors recommend that the Ministry of Health and Ghana Health Service adopt social marketing concept in combating NCDs in Ghana and formulate specific social marketing interventions that will translate increased awareness into behaviour change towards NCDs prevention in Ghana.

Keywords: Social marketing; Youth; Behaviour Change; Mass media campaigns; Non-communicable diseases

Introduction

Andreasen [1] defines opines that 'Social marketing is the application of commercial marketing technologies to the analysis, planning, execution and evaluation of programmes designed to influence the voluntary behaviour of target audiences in order to improve their personal welfare and that of the society of which they are part'. This definition, according to Hans, et al. [2] highlights three important aspects of social marketing as applied to health service utilisation. First, it explicitly defines behaviour as the bottom line of social marketing

and helps to differentiate the social marketing approach from other (complementary) approaches such as education and law. Second, the definition seeks to clarify the difference between social marketing and socially responsible marketing and thirdly, it makes technology of commercial marketing a subset of social marketing, in that in commercial marketing the ultimate success as Hans, et al. [2] put it, "is often defined in terms of its influence on behaviour (e.g. sales, repeat patronage)" and possibly the courtesy of sales representatives towards the customers.

The global burden of non-communicable diseases (NCDs) continues to grow and tackling it constitutes one of the major challenges for development in this twenty-first century. Reports indicate that 68% of global deaths in 2012 were due to NCDs and 40% of these were considered premature [3]. The burden falls disproportionally to low income countries especially in Africa and it is projected to rise [4,5] in subsequent years. According to Nikolic, et al. [6], the share of NCD deaths in Africa among persons aged 15-59 years is expected to increase from 28% to 41% between 2008 and 2030.

In Ghana, an estimated 86,200 NCD related deaths occur each year with 55.5% occurring in persons under 70 years. Most of these NCDs share common behavioural risk factors including tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol [7-9].

In an attempt to terminate this major developmental challenge, the World Health Organisation in 2011 formulated myriad of policies for member countries including Ghana to adopt. However, inefficient programme management, low funding, little political interest, low community awareness, high cost of drugs and absence of structured screening programmes have stifle the efforts of many of these countries to effectively implement the policies [5,7]. Hence there is the need to take up measures that will surmount these challenges to enhance preventive efforts.

Since NCDs emanate mainly from human behaviour [5,8-11,], preventing them requires measures that support and sustain long term lifestyle modifications by addressing these unhealthy behaviours of people. But studies indicate that human behaviour is established and reinforced by environmental factors, societal norms, globalization and sometimes governmental policies [9,10,12-15]. Gateshead Council [16] added that behaviour has intricate dimensions and changing it according to Mendis [8] is challenging.

This calls for serious common pathways to mitigate the situation possibly through behavioural change strategies. Since behaviour can only be analysed and understood at the individual level [9] there is the need for a calculated target research. Lefevbre [15] and Kotler [17] therefore proposed the used of theory based models to modify people behaviour. This can effectively be done by adopting an eight bench mark criteria including, behavioural change analysis, conducting consumer research, developing insight into people motivation for behaviour, segmentation of targeted audience, exchange of behaviour, reducing competition for behaviour change (whilst increasing benefits), and using a market mix of product, price, place and promotion-the '4Ps' [1,13,17,18]. These criteria qualify any initiative as a social marketing intervention [18].

Though many theories abound for studying and influencing human behaviour, a review by Lefebvre [15] indicates that the health belief model, social cognitive theory, theory of reasoned action, community organization and stages of change were the most frequent cited ones. However, Lefebvre [19] indicates that social marketers should not hold to these definitions and criteria on social marketing, but rather employ social and mobile technologies to influence behaviour and social change. After all, the success of any intervention is measured on its impact in solving societal problems to which social marketing interventions should strive to lessen the burden of NCDs in Ghana.

According to Brisibe, et al. [20], social marketing programmes can attain monumental progress in behaviour change campaigns by stimulating people to adopt primary preventive measures. However, people respond to interventions in different ways with some readily embracing whilst a few just living through it [16]. In addition, behaviour change is never unilateral but rather occurs at the individual, interpersonal and community level [21]. It therefore calls for conceited efforts in formulating and implementing interventions geared at prevented NCDs risk related behaviours by applying a marketing strategy.

Originated by Wiebe in the 50s [12], this concept is aimed at improving individual and societal lives by applying commercial marketing techniques to change undesirable human behaviour. Social marketing thus is solely interested in behavioural change that results in societal benefit [9,18,17,20] and according to Manoff [22] and Gordon, et al. [13] this concept has been applied

successfully in areas of public health, environmental protection, family planning and political marketing. The concept could thus be applied in any field, but the overall goal is influencing individuals to embark on a voluntary behaviour change which accrue benefits for their lives and that of society.

In changing behaviour, awareness creation is paramount. Bauman, et al. [9] indicate that social marketers had used mass media campaigns to create awareness on NCDs risk factors amongst Australians albeit no significant behavioural change was attained. They explained further that mass media campaigns in the form of television, radio or posters could potentiate campaign effectiveness by increasing individual and community awareness about particular health-related issues [9].

Social marketers do not only stick to mass media to drum home their messages but any available platform can be utilised to propagate campaign efforts. Thomas, et al. [23], pointed out that most people in the Pacific Region (Palau especially) have access to mobile phones hence derive NCDs campaign messages via social media platforms. Of late, most youth prefer the use of Whatsapp, Facebook, Twitter and the like in accessing information in this information technology (IT) era [24]. Also, a study conducted by Farrelly, et al. [14] reveal phenomenal behaviour change among the youth of New Zealand through using combination of various social marketing interventions (school based, social media and use of role models).

It is worth noting that policies that support tobacco control, healthy nutrition, physical activity and prevention of harmful use of alcohol play key role in NCD prevention and require multi-stakeholder efforts. For instance, environmental determinants of health are mostly out of the control of individuals. Hence Baumen, et al. [9], suggest that to consolidate campaign successes, both upstream (policy makers) and downstream (target groups) should be influenced to support the behaviour change intentions.

Although some scholars [15,17,18] posit that behaviour change is the golden standard for measuring social marketing effectiveness, Bauman, et al. [9] argue that since behaviour change takes long periods to accomplish, proximal measures in the form of awareness, knowledge, change of attitudes, or behavioural intentions could account for campaign successes; to which United Kingdom's Department of Health [25] indicates will shape the agenda for change and signpost a range of potential change options that could lead to health enhancing behaviours. To this end, Hunt, et al. [10] suggested that instead of exposing the youth to mass media campaigns which could have undesirable consequences [14]; social makers should build partnership with the youth where they (youth) spearhead the campaign efforts.

In other jurisdictions, awareness creation was the main aim of the social marketing interventions. For instance, a social marketing campaign on obesity prevention in the United Kingdom, dubbed 'Project Change4life' reached 99% of its targeted audience on awareness creation about the health impact of obesity [26]. At the long run, people will assess the health choices before them in terms of costs and benefits and then select the choice that maximises their net benefits [21].

NCDs related risk behaviours mostly take long periods to establish and may begin at adolescence when youngsters indulged in such undesirable lifestyles for fun. Mendis [8] reveals that it is easier to prevent behaviour from developing than stopping an already established lifestyle. It therefore calls for implementation of suitable policies that create conducive conditions for the youth to imbibe desirable lifestyles. Only such a supportive policy environment can provide the youth opportunities to adopt healthy lifestyles in relation to diet, physical activity, tobacco and alcohol use. Hence with implementation of specific social marketing interventions, many of the modifiable lifestyles that contribute to the NCDs burden could be averted in Ghana.

Research Objectives

The aim of this study is to assess the contribution of social marketing in the prevention of NCDs towards risk related behaviours reduction among the youth of Tamale

Specific objectives

1. To determine the types of interventions being used to prevent NCDs risk related behaviours among the youth of Tamale
2. To investigate the contribution of social marketing in creating awareness on NCDs risk behaviour among the youth of Tamale
3. To ascertain the factors that influence NCDs risk behaviour change among the youth of Tamale.

Materials and Methods

A cross-sectional field survey was conducted in Dungu; a peri-urban community in the Tamale Metropolis of the

Northern Region of Ghana. A Cross-sectional survey was used as only a portion of the population was considered in the study due to resources and time constraints to study the entire community. The study conducted can also be classified as quantitative research as it was based on the measurement of quantity or amount; the survey measured the effectiveness of social marketing interventions in terms of the number of youth in the community who have benefited from such interventions aimed at prevention of non-communicable diseases. According to Kothari [27], quantitative research is applicable to phenomena that can be expressed in terms of numbers.

The community was selected using convenient sampling method as it was close in proximity and also possesses the quality of a typical Ghanaian community with cultural diversity and different educational levels of respondents. Hence results from the study can be inferred to reflect the true picture of a Ghanaian community.

The study population consists of youth within the age range of 15-24 and resident in Dungu community. This age group was chosen on the basis that NCDs risk behaviours are usually imbibed in adolescence and among young adults [10,28] and preventing these behaviours from developing is much easier than stopping consolidated ones [8].

According to the 2010 population and housing census, the total number of people in the community between the ages of 15-24 is 682. The required sample size was then calculated using the Yamane's formula for estimating sample size for a definite population:

$n= N/ [1+N (\alpha)^2]$, (as cited by Israel, 1992).

Where n is the sample size, N is the sample frame (682) and α is the margin of error (5%) with confidential interval of 95%.

Therefore the sample size, $n= 682/ [1+ 682x (0.05^2)$; $n=682 / [1+ 1.705]$. n= 252

A 10% allowance was made for non-response, withdrawals from the study and damaged questionnaires.

Hence the sample size (n) = 252+ 25.2~ 277

TA total of 277 respondents consisting of youth within the age range of 15-24 years were therefore recruited using simple random sampling method (with all youth within the age range having the likelihood of being selected). However, 273 questionnaires were retrieved at the end of the field survey. The respondents were of varied demographics in terms of education, employment marital status, religion and ethnicity. Data was collected using a semi-structured, pre-tested questionnaire which collected details about their demographics, awareness of NCDs, life style (behaviour), willingness to respond against NCDs and perception about some general social marketing interventions. The data was entered into pre-coded SPSS version 21 and analysed. The results were then presented in the form of tables for easy description and interpretation Table 1.

Findings

Variable	Subgroups	Frequency	Percentage	Cumulative Percentage
Sex	Male	119	43.6	43.6
	Female	154	56.4	100
Age	15-18	91	33.3	33.3
	19-21	87	31.9	65.2
	22-24	95	34.8	100
Education	Basic	45	16.5	16.5
	Secondary	67	24.5	41
	Tertiary	155	56.8	97.8
	None	6	2.2	100
Marital status	Married	12	4.4	4.4
	Single	261	95.6	100
Religious Background	Christian	148	54.2	54.2
	Muslim	122	44.7	98.9
	Traditionalist	1	0.4	99.3
	Others	2	0.7	100

Ethnicity	Dagomba	105	38.5	38.5
	Gonja	22	8.1	46.5
	Frafra	10	3.7	50.2
	Akan	54	19.8	70
	Dagaaba	27	9.9	79.9
	Others	55	20.1	100
Occupation	Student	261	95.6	95.6
	Trading	3	1.1	96.7
	Teaching	3	1.1	97.8
	Others	6	2.2	100
	Total	**273**	**100**	

Table 1: Summary of Demographic Data of the Respondents.

Respondents Awareness on NCDs

From the field survey, all respondents had heard about non-communicable diseases before including stroke, diabetes, mellitus, hypertension and cancer though they had varied opinions about these conditions. Majority of the respondents (170, representing 62.3%) agreed that non-communicable diseases cannot be transmitted. 64 (23.4%) of respondents however indicated that non-communicable diseases can be transferred from one person to the other. While 3 of the respondents believed NCDs are diseases of the poor, 2 respondents thought they are profound among wealthy people. 15 (5.5%) of the respondents also believed that NCDs cannot be transferred but affect both the rich and the poor, while 9(3.7%) of the respondents said they had no idea about non-communicable disease. The results are summarised in Table 2 below.

Respondents Knowledge Level	Frequency	Percent	Cumulative Percent
1. They are disease that cannot be transferred	170	62.3	62.3
2. They are diseases that can be transferred	64	23.4	85.7
3. Diseases of the poor	3	1.1	86.8
4. Diseases of the rich	2	0.7	87.5
5. I don't know	9	3.3	90.8
6. Transferable but rich man disease	10	3.7	94.5
7. Transferable and found in both poor and rich alike	15	5.5	100
Total	**273**	**100**	

Table 2: Respondent's knowledge on NCDs.

Channels Used to Disseminate Intervention Messages

Approximately half of the respondents (50.9%) said they received their information from mass media sources. 17 (6.2%) receive their information via social media, while 59 (21.7%) had heard about non-communicable disease through both mass and social media. 21.2% of respondents however had their information on NCDs from other sources as seen in Table 3 below.

Sources of Information	Frequency	Percent	Cumulative Percent
TV, Radio and /or Newspapers	139	50.9	50.9
Whatsapp and/or Facebook	17	6.2	57.1
Responded to all options	59	21.7	78.7
Other sources	58	21.2	100
Total	273	100	

Table 3: Sources of information on NCDs.

Respondent's Perceptions about Environmental Influences to Change

Individuals as well as societal attitudes and behaviours are shaped by factors that revolve around them. The respondents thus enumerated some of the factors that they perceive to have influenced their behaviour and could affect the uptake of campaign messages. Most of the respondents (86 representing 31.5%) revealed that message uptake could be enhanced if incorporated into their religious beliefs. 34 (12.5%) of the respondents believed that peer influence could affect them, while 30 (11.0%) said family is the dominant factor that influence campaign effectiveness. Though 24 (8.8%) of respondents opted for interpersonal message delivery interventions and 27 (9.9%) selected all options (family, religion, peers and personal message delivery), 61 (22.3%) of the respondents felt that the way the message came was fine. However, a small fraction of the respondents (4.0%) indicated that both family and religion should be involved to potentiate effectiveness of campaigns.

Respondents' Awareness of Some General Social Marketing Interventions

Respondents were asked if they had seen any of the following before; The inscription 'cigarette smoking is harmful to health,' written on the pack of cigarette, Billboards and adverts demonstrating the importance of exercise, the amount of fat or sugar written on the sachets of food items and the percentage of alcohol written on the bottle of an alcoholic beverage. Out of the 273 respondents, 263 representing 96.3% had seen at least one of them and only 10 respondents (3.7 %) had not.

Respondents' Awareness of Predisposing Lifestyle Patterns to Ncds

Respondents were asked if they were aware that certain lifestyle patterns like excessive alcohol intake, excessive consumption of fatty foods, lack of physical exercise and cigarette smoking can contribute to the occurrence of NCDs. Out of the 273 respondents, 263 representing 96.3% were aware of these facts while only 10 respondents (3.7 %) were not.

Respondent's Intension to Change their Behaviour

Respondents were asked whether they intended to change if they were to engage in any of the NCDs risk lifestyles. 225 (82.4%) respondents indicated they would change while 41(15.0%) said they would not change. Meanwhile, only 7(2.6%) of the respondents were undecided about whether to change or not.

Reasons for Not Intending to Change

When the 41 respondents were asked why they intended not to change despite awareness of these detrimental lifestyle patterns, 11 (4.0%) of them believed they were not at risk of developing NCDs, 9(3.3%) of them said the message they heard about NCDs was not convincing enough to make them change. 4 of the respondents admitted they lacked the self-will to change, while 17 (6.2%) of them said they would feel uncomfortable among their peers should they decide to change.

Subsequent to the findings, the authors discuss the issues as seen below to throw more light on the issues.

Discussion of Findings

The intention to behave in any particular manner is shaped by knowledge (awareness) of the consequences of such actions. Though awareness does not warrant behaviour change, Bauman, et al. [9] assert it shapes the agenda for change. Youth behaviour which has significant implication for adult life is influenced by their perceptions and cognitions. And for the youth to adopt healthy lifestyles, it is imperative to guide against the development of detrimental behaviours. Based on this analogy, the study seeks to assess the contributions of social marketing in the prevention of non-communicable diseases among the youth of Dungu in the Tamale Metropolis by assessing their willingness to restrain from certain lifestyles that predispose them to developing these conditions. The campaigns have been effective in penetrating the masses (youth of Dungu) to create public awareness on NCDs. This correlates to the impact of *Project Change 4 Life* in the UK which achieved a 99% in awareness creation on the health hazards of obesity to its targeted families [26].

However, knowledge level of respondents showed that, the real meaning of NCDs could be misleading from their perspective. Though Majority (62.3%) agreed that non-communicable diseases cannot be transmitted, 23.4% thought they are transmittable, and only 5.5% of the respondents could answer accurately that NCDs cannot be transferred but affect both the rich and the poor. This indicates that though all respondent previously heard about NCDs, not all of them know exactly what they

are, and this may affect their attitudes and possibly, behaviour towards preventive interventions. Consistent with this finding is a review by Lefebvre [15] which indicates that people will only be motivated to adopt a lifestyle depending on perceived benefits of their actions.

Another area of concern on awareness creation is the channels social marketers use in reaching target audience. With the explosion of electronic based channels (social media) the youth are tuned in that direction as they are drawn by the fantasies of WhatsApp, Facebook, twitter, etc. However, findings from our study indicate that about half of the respondents (50.9%) received their information via mass media (Radio, TV, printed sources) while only 6.2% obtain theirs from social media. The remaining 42.9 of the respondents received their information from a mixture of either platforms or some other sources. This agrees with the review by Bauman, et al. [9] which reveals that mass media campaigns was the main tool used in propagating campaign messages, but conflicts with a study by Thomas, et al. [23] in which social media was the dominant channel used in creating awareness on non-communicable disease to the residents of Palau in the Pacific.

Regarding their experience with NCDs preventive messages, 28.5% of the respondents alluded that the information scared them from the mere thoughts of engaging in certain lifestyles such as eating fatty foods, drinking alcohol, etc. This correlates with the Health Believe Model explained by Lefebvre [15] where he states that issues of fear- or anxiety-arousing messages often take place within the context of increasing perceived threat.

Thus, a few of the youth may react to messages that present threatening themes by adopting healthier lifestyles (such as engaging in regular active exercises, eating healthy foods and avoiding cigarette and alcohol) that guards them against developing NCDs in adulthood. A further 35% of the respondents said the messages motivated them to change their lifestyles. This finding is also consistent with a study conducted by the Australian Service Commission [21], which asserts that people assess health choices before them in terms of costs and benefits, then select the choice that maximises their net benefits.

The findings also reveal that 7.3% of respondents said the message did not motivate them in any way. These can be compared to the 'cynics' in a report by Gateshead Council [16] representing a small fraction of population who live through change programmes without really changing at all. It is paramount to note that though in the minority, such groups can serve a big blow to campaign effectiveness as they tend to antagonize the interventions.

Though there are variations within the findings, holistically the results agree to the reports of Gateshead Council [16] and the Australian Public Service Commission [21] who proposed that change is not evenly distributed among populations and behaviour change can occur at the individual, interpersonal and community levels respectively.

To determine the effectiveness of social marketing in evoking behaviour change, the respondents were presented with some general interventions which employed social marketing strategies to combat non-communicable diseases. They were then asked if they were aware of these interventions. Their perceptions and reactions to these interventions were assessed and evaluated.

When asked if they were aware certain lifestyle patterns like excessive alcohol intake, excessive consumption of fatty foods, lack of physical exercise and, cigarette smoking can contribute to the occurrence of NCDs, 96.3% said YES, while only 3.7 % were not aware of these facts.

In furtherance, respondents were asked if they had ever seen any of the following that aims at preventing NCDs; The inscription 'cigarette smoking is harmful to health,' written on the pack of cigarette, billboards and adverts demonstrating the importance of exercise, the amount of fat or sugar written on the sachets of food items and the percentage of alcohol written on the bottle of an alcoholic beverage.

Again, 96.3% of them affirmed YES, and 3.7 % indicated NO. Thus awareness level of the youth of Tamale to basic knowledge of NCDs risk factors as well as interventions aimed at reducing the burden is high.

The research then narrowed down to assess the overall impact on the youth by these facts and general interventions. A scenario was created and the respondents were to assume to be in such situations (thus the risky lifestyles mentioned above) that predispose them to developing NCDs in the future.

When questioned if they intended to change in case they were to be indulged in any of those detrimental lifestyles, 82.4% of respondents confirmed they would

change while 15.0% of them said they would not change on the grounds that the messages were not convincing enough to warrant them to change. Meanwhile, only 2.6% of the respondents were undecided about whether to change or not. From these results, one can conclude that generally the youth of Dungu in Tamale are susceptible to change when they receive NCDs preventive messages from social marketing interventions. This revelation agrees with studies conducted by Bridges, et al. in Western Australia where youth social marketing campaigns have been effective in reducing smoking prevalence from 43% to 14% among 15-year-olds in a nine year time frame. The results however conflicts with a review by Bauman, et al. [9], in which there was high variability in community awareness and knowledge of campaigns on physical activity, healthy eating and weight control but led to fewer changes in risky behaviour reduction.

Other issues raised by the respondents, bordered on factors that influence their behaviour. The results indicate that individuals as well as societal attitudes and behaviours are shaped by factors that revolve around them. When asked which factors could best improve the uptake of campaign messages, 31.5% chose religion, 12.5% selected peer influence, 11.0% selected the family, while 8.8% of respondents opted for interpersonal message delivery interventions. 22.3% of the respondents felt that the way the message came was fine with them. However, a small fraction of the respondents (4.0%) indicated that family and religion should be involved to potentiate effectiveness of campaigns. This finding correlates with findings by many researchers [9,10,12-15] who posit that human behaviour is influenced by social norms, environment factors, globalization, moral as well as governmental policies.

Therefore, social marketing campaigns should consider working in partnership with other agencies in order to foster concurrent work on both the physical and social environment and improve opportunities for the adoption of healthier lifestyles in the community. This finding is particularly important for the prevention of NCDs in Ghana since many detractors (including TV and radio advertisement as well as sociocultural factors) mitigate on the impact of campaigns.

Conclusion and Recommendations

The impact of social marketing is measured by behaviour change that is attained in any particular interventions. This study sought to assess the effectiveness of such interventions on the prevention of NCDs risk related behaviour reduction among the youth of Dungu Community in Tamale.

First of all, the authors found that implementers of social marketing intervention on NCDs prevention use general interventions that target the entire Ghanaian population and do not design 'tailor-made' intervention strategies for any particular group. This renders most of such programmes ineffective since they are too broad and do not appeal to individual conscience to change their behaviour. The implication is that getting customer insight through research by implementers and utilising the information to design 'tailor made' interventions will achieve successes in preventing NCDs risk behaviours among Ghanaian youth including those of Dungu Community. The researchers therefore recommend to the Ghana Health service, Ministry of Health and all interested stakeholders to apply highly effective but specific strategies to health campaigns to maximise results in NCDs prevention programmes towards risk related behaviour reduction.

Secondly, the findings revealed that awareness level of respondents on non-communicable diseases and their risks factors was found to be high. This invariably resulted in the respondents accepting to change if they were involved in any of the debilitating NCDs risk related lifestyles. There seem to be a disconnection between awareness creation and behaviour change through social marketing processes. Therefore, implementers of social marketing intervention on NCDs prevention (MOH and GHS) should rectify this disparity by utilising research findings and application of behavioural change theories to design specific intervention programmes on NCDs to convert increased awareness into behaviour change.

Thirdly, the study found numerous factors that affect uptake of campaign messages by respondents. Most of these factors serve as obstacles that confront the youth as they attempt to change their behaviours. These challenges could frustrate the efforts of interventions aimed at inducing behaviour change. However, many of the issues identified as challenges were beyond the control of respondents and require responses at a higher level. The authors therefore recommend that implementers should not use social only marketing interventions to influence the downstream (individuals) in order to change their NCDs risk related behaviours. Rather, they should seek to influence the upstream (policy makers, politicians, organisations and community leaders) concurrently to

help create a conducive atmosphere towards NCDs risk behaviour reduction.

Finally, this research is limited to only recipients of social marketing intervention programmes. Therefore, future research should seek to understand the views of implementers including GHS, MOH and all organisations working within the health sector.

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Declaration of Conflicting Interests

The Author(s) declare(s) that there is no conflict of interest.

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Authors' declaration

Ethics Approval

Ethical approval was not sought for the present study because it was non-interventional, did not involve any invasive procedures or clinical trials. Accordingly a verbal concern and approval from respondents and community leadership were sufficient for the research to progress without any ethical biases.

Informed Consent

Verbal informed consent was obtained from all subjects before the study.

Trial Registration

Not applicable.

References

1. Andreasen AR (2002) Marketing Social Marketing in the Social Change Marketplace. Journal of Public Policy and Marketing 21(1): 3-13.

2. Hans CM, van Trijp (2010) Social marketing approaches to obesity prevention in obesity epidemiology: From eetiology to public health. Crawford D, et al. (Eds), 2nd(edn), Oxford University Press.

3. WHO (2014) Global status report on non-communicable diseases. Attaining the nine global non-communicable diseases targets; a shared responsibility, WHO, Geneva.

4. Dalal S, Beunza JJ, Volmink J, Adebamowo C, Bajunirwe F, et al. (2011) Noncommunicable diseases in sub-saharanafrica: What we know now. Int J Epidemiol 40(4): 885-901.

5. Bosu WK (2013) Accelerating the control and prevention of non-communicable disease in Ghana: The key issues. Postgraduate Medical Journal of Ghana 2(1).

6. Nikolic IA, Stanciole AE, Zaydman M (2011) Chronic emergency: Why ncds matter. Washington, DC: World Bank.

7. Ministry of Health (2012) National policy for the prevention and control of chronic non-communicable diseases in Ghana, MOH, Accra.

8. Mendis S (2010) The policy agenda for prevention and control of non-communicable diseases. Br Med Bull 96 (1): 23-43.

9. Bauman A, Bellow B (2011) Healthy lifestyle promotion programs in Western Australia: a review of evaluation and market research into mass media and social marketing campaigns focused on healthy eating, physical activity and healthy weight. Australia: Australian Heat Foundation.

10. Hunt S, Kay Lambkin F, Simmons M, Thornton L, Slade T, et al. (2016) Evidence for the effectiveness of peer-led education for at risk youth: an Evidence check rapid review brokered by the sax institute (www.saxinstitute.org.au) for the NSW Ministry of Health.

11. Bosu WK (2012) A comprehensive review of the policy and programmatic response to chronic non-communicable disease in Ghana. Ghana Med J 46(2): 69-78.

12. Wakhisi AS (2012) A social marketing perspective of young people's sexual health. Brunel University, pp: 1-238.

13. Gordon R, Wilks L, MacAskill S (2009) Mapping exercise report on social marketing. UK: European Commission.

14. Farrelly MC, Niederdeppe J, Yarsevich J (2003) Youth tobacco prevention mass media campaigns: past, present, and future directions. Tob Control Suppl 1: i35-47.

15. Lefebvre RC (2000): In PN Bloom & GT Gundlach (Eds.), Handbook of Marketing and Society, Newbury Park, CA: Sage Publications.

16. Gateshead Council (2009) Understanding & managing reactions to change.

17. Kotler P (2011) Social Marketing: Influencing behaviour s for good, 4th(edn), United States of America: Sage Publications.

18. Andreasen AR (2006) Social marketing in the 21st century, Thousand Oak, CA: Sage Publications.

19. Lefebvre RC (2011) An integrative model for social marketing. Journal of Social Marketing 1(1): 54-72.

20. Brisibe SF, Ordinioha B, Gbeneol P (2015) Framework for the social marketing of clinical preventive services in Nigeria. World Journal of Preventive Medicine 3(1): 11-16.

21. Australian Public Service Commission (2007) Changing behaviour: A public policy perspective. Australia: Commonwealth of Australia.

22. Manoff RK (1985) Social Marketing: new imperative for public health. Eastbourne: Praeger, New York.

23. Thomas V, Papoutsaki E, Gouda HN (2016) Integrating ICTs in communication campaigns for non-communicable diseases in the Pacific. Information Technologies & International Development 12(4): 35-45.

24. Paquette H (2013) Social media as a marketing tool: a literature review. Major Papers by Master of Science Students. Paper 2.

25. United Kingdom Department of Health (2011) Changing behaviours, improving outcomes: A social marketing strategy for public health. London: Crown.

26. Mitchell S (2011) Change4life three year marketing strategy. London: Crown.

27. Kothari CR (2004) Research methodology: methods and techniques. 2nd(edn), New Delhi: New age international publishers.

28. Nugent R (2006) Youth in global world. Washington, DC: Population Reference Bureau.