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User Based Assessment of the Appropriateness and Effectiveness of Printed Visual Media Materials Currently in Use for HIV/AIDS Information Dissemination in Dodoma Region – Tanzania, from 2013 to 2015

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Abstract

Despite the notable and commendable efforts directed towards the relentless national wide struggle to combat and contain the notorious HIV/AIDS this struggle is still to make full use of the printed visual media. The printed visual media such as posters, bill boards, wall charts, flipcharts, fliers, stickers, leaflets as well as books and booklets can only contribute tremendously in education when they are researched on, designed and used meaningfully. These visual media are apparently not fully given their respectable role and place in the current HIV/AIDS campaigns in Tanzania. In urban Tanzania (let alone the rural side) public places such as pubs, restaurants, liquor stores and supermarkets are filled with fiercely contesting market promotion printed visual media and very few, if any, are for the HIV/AIDS campaigns. Why? It is true that many efforts have and are being made through various governmental and non-governmental initiatives to use the printed visual media in HIV/AIDS campaigns. But the application of these materials is not widely visible. Coca cola and Pepsi, alongside many brewery companies, together with numerous producers of other consumer products make excellent use of the printed visual media to win their customers.

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The HIV/AIDS campaign could effectively do the same to help influence and trigger change in peoples' minds towards positive attitudes in fighting and containing HIV/AIDS!! The printed visual media, when effectively used alongside other means of information dissemination such as the radio, television, drama video and the social media can very successfully reinforce educational campaigns. But as for the Tanzanian situation such printed visual media are hardly seen in many of the places where they could be expected to be actively used. This study was aimed at assessing the printed visual media materials as applied in HIV/AIDS educational campaigns in Dodoma region, Tanzania. The study used an open ended questionnaire, focus group discussions, and in-depth interviews to collect data. The assessment was essentially user based. The assessment was done in the viewer/user's point of view and not the researcher. The user freely assessed the materials with the help of designed instruments. The study reveals that printed visual media materials are playing an important role in educating people concerning HIV and AIDS. Respondents' views and other data analyses indicate that despite the fact that the materials are positively helping in information dissemination for HIV/AIDS, they are faced with numerous technical and cultural drawbacks that limit their meaningful role. The study is set to inform various stakeholders and National Policies on the state of current utilization of printed materials in enhancing educational campaigns in Tanzania and elsewhere.

Key-words: Appropriateness and Effectiveness; Assessment; HIV/AIDS in Tanzania; Printed Media Materials.

1. Introduction (Background to the Study)

Going around public places in Dar es Salaam and other urban centers in Tanzania, one happens (sometimes) to come across printed materials on HIV/AIDS education. Looking at such materials it could be realized that some of them are not well designed and produced in a meaningful way. This is in terms of their effectiveness in educating and instigating people to change their sexual life, attitudes and behavior in favor of the unforgiving fight against HIV/AIDS [1, 2, 3] Saying this does not mean that all those inadequately designed and/or printed education materials are totally useless in educating people for change, but rather, something needs to be done to make the materials more appropriate and effective - more action packed, well illustrated and legibly/readably designed and presented [4]. The National Cancer Institute [5] relates that "Communication planning is undeniably a crucial part of development work but surprisingly it is often overlooked. In fact, in many development projects and programs this task is neglected. Although communication can be seen as ad hoc, it has to be carefully planned and monitored from the beginning to yield better results, in the short and long run". But then what is communication? What are the issues involved in realizing meaningful information dissemination for effective intervention? In simplicity, communication can be regarded as a two way transfer of information or message from a source through a medium or channel to an intended receiver and vice-versa. In its broader sense, communication can be regarded as the sharing of information between individuals or groups of people through the use of a medium or media. Communication is therefore by no means one-sided but rather involves the sharing or giving and receiving of information [6, 7, 8,]. In the case of Tanzania, therefore, looking at posters and other printed materials that are posted in hospitals and other public places, one (who is well versed in visual communication) realizes that some of such materials appear dull, devoid of portraying any life like action packed activities. [9] Without portraying believable action and realistic behavior, the posters, or any of these printed education materials, simply remain as mere wall decorations [4, 10]. They stand far from

attracting and holding the attention of targeted audience so as to trigger their minds to enter into discussion concerning what they see and read together with what they experience in their everyday life. Reference [2] emphasizes the importance of designing communication strategies in relation to the target audience's cultural background and interest. He does relate, "We must ask ourselves 'To whom are we intending to transmit this information?'…We know that the higher the degree of interest in the receiver the better the perception of the message; little is learnt by those who have little motivation to learn and this is the reason why decisions related to the styles of the images need so much attention."

Some of the printed educational materials used in Tanzania are not suitably designed and produced for the intended target groups. Thus the urgency for producing appropriate and meaningful messages for HIV/AIDS control programs calls for an in-depth study of Tanzania's present multimedia information dissemination channels [1, 2, 10]. Tanzania's National AIDS Control Program [11] states that effective and meaningful information dissemination for HIV/AIDS intervention needs to be intensified. This is necessarily so because HIV/AIDS prevalence in the country is still remarkable. The 2012 Tanzania national statistics [12] regarding HIV and AIDS show that "…the number of people living with HIV totals 1,500,000 and that the Adult HIV prevalence is 5.1%. Around 1.6 million people are living with HIV in Tanzania - six percent of the population" [13]. A new UNAIDS Gap Report [14] states "There are an estimated 24.7 million [23.5 – 26.1 million] people living with HIV in Sub- Saharan Africa, nearly 71% of the total. Ten countries – Ethiopia, Kenya, Malawi, Mozambique, Nigeria, South Africa, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe – account for 81% of all people living in the region...". While referring to the above touching information another UNAIDS new report [15] on HIV/AIDS states that "19 million of the 35 million people living with HIV globally do not know their HIV- positive status)."

The above brief introduction regarding the state of printed visual materials currently in use for HIV and AIDS education in Tanzania necessitates for a review of related literature to explore what other scholars say regarding the design and administering of workable and meaningful printed educational materials. The review and entire study will be guided by Mayer's Cognitive Theory of Multimedia Learning as outlined in his paper "Research-based Principles for Designing Multimedia Instruction [16]. In his overview of Multimedia Instruction Mayer [1] relates "People learn more deeply from words and graphics than from words alone. This assertion can be called the *multimedia principle* - that is, instruction containing words (such as spoken text or printed text) and graphics (such as illustrations, charts, animation, or video) that is intended to foster learning [16]. Mayer elaborates more on this principle by stating that "However not all graphics are equally effective so careful research is needed to pinpoint principles of multimedia instruction design. The goal of this chapter is to provide a brief overview of 12 research-based principles for how to design effective instruction that uses words and graphics [16]. The review will refer to the principles that are relevant to this study. This is so because Mayer's Cognitive Theory and principles deal with the entire area of multimedia learning, covering Audio - video, and printed visual media materials whereas this study is specifically focused on printed media materials [16]. In the case of this study, principles 11 and 12 that deal with the human voice in relation to the speaker's physical image are not relevant. Mayer's principles will be useful during the data collection, presentation, and analysis processes. Understanding and closely following the principles will help to make sense of what the respondents in the field will be saying regarding the Appropriateness and Effectiveness of Printed Visual Media Materials

Currently in use for HIV/AIDS Information Dissemination in Tanzania.

2. Review of Related Literature

In its urge for most appropriate ways of message dissemination Tanzania's National AIDS Control Program NACP [11] questions on how effective communication could be achieved to reverse current HIV prevalence trends as follows: "What are the perceptions of different communities on HIV/AIDS messages? How can HIV/AIDS messages which are socially and culturally sensitive and appropriate be developed to specific communities and groups? What are the appropriate approaches for communication in HIV/AIDS? What are the research methodologies which should be promoted to empower communities develop effective HIV/AIDS interventions? How is it to re-package and replicate/scale-up successful interventions?" The development of these questions has been so with the keen understanding that effective communication is not a simple process. Communication is complex. For communication to be adequate – and regardless of the nature of communication – it needs to adhere to research based principles that help to make the whole information transmission process meaningful. 16, 10, 4]. It would be difficult for anyone to design workable mass media communication materials and strategies without a grounded knowledge of the principles governing effective information dissemination [1, 2]. Within any communication process there are barriers – both physical and social cultural – that influence and interfere with or determine the nature of transmission of information. The less the barriers the more successful will be the transmission of any particular information [5,17,18]. Information transmission, and especially to people who happen to belong to differing cultural backgrounds and identities need to be carefully and scientifically designed. The mode of information transmission needs to take care of the various social cultural differences pertaining to the situation in question [19,20,21]

Communication plays a central role in people's every day actions and interactions. Human beings attempt to understand one another's personal feelings and intentions through interpersonal communication. People talk, cry or sing to externalize their internal personal feelings and intentions. Likewise, human beings write books and paint pictures, or create sculptures and play music and dance to its tune so as to exteriorize their inner emotions. It is thus generally said and assumed that whenever there is verbal, visual or physical interaction there is an exchange of participants' ideas or information [9]. But is all that is said or sung by one party well understood by the other? Is all that is portrayed through a picture; played in music or drama well conceptualized by the intended audience? Is all that is taught or discussed in class well taken by the students? These are central questions that challenge all communicators and receivers of information [1, 10]. Nonetheless In communication through printed visual media materials, there are theory based specific design and information dissemination guidelines that need to be closely adhered to for a successful communication process [1]. These guidelines, which have, over time, been identified and developed through research based field experiences around the world, are meant to guide designers and information communicators on how best to design printed visual media materials and successfully disseminate the information contained in them to specified target audiences [1, 2, 22, 23]. These guidelines which, in this case, closely guided my study are briefly outlined below.

2.1 Realism, Detail and Stylization

The style in which illustrated visual images are presented to target readers does influence picture interpretation and understanding and for this matter the effectiveness and success of such visual media. Not all types of picture representations can be read and understood by all people. Some people, such as those with limited or no formal education can only easily interpret picture representations that are rendered in simple and realistic style [4]. People who have been well exposed to a variety of complex picture reading and interpretation, can be able to conceptualize information from more complex compositions [22]. For effective design and development of pictorial images for information dissemination it is essential therefore to take into close consideration the various representational factors that matter most and especially the cultural setting and educational level of the audience [1,18,19]. In communication, realistic rendering has generally been contended to present better results when used in information dissemination projects [23,25,26] Pictures that are presented in a life like style are found to be easily understood and more meaningfully interpreted by intended viewers compared to ones in abstract or stylized form. People's ability to recognize objects in a pictorial composition is increased when that picture is presented in a realistic style [23,24,26].

For a message in pictures to be easily understood, especially by less or non picture literate, the representation has to show the objects in the same/similar way as they appear in real life [25]. Any attempt towards abstraction will tend to limit the recognition ability of the viewer [9,23]. Nonetheless such images should not contain too much detail or present excessive deletion of detail. The pictorial presentation requires only including selected detail that is just enough to allow for easy and meaningful reading [9, 18, 25].

Also linked with realistic rendering is the use of colors. Colors need to be applied with close reference to the audience in question [25, 27]. Colors to be used need to make the rendered image believable to the intended audience [28,30]. The selection of colors has to pay close reference to the end readers' norms, values and cultural color preferences, so as to make the pictorial image visually acceptable and positively attract and hold the attention of the intended readers. Most true to life picture colors do greatly enhance audience attraction and picture comprehension [25, 27]. For effective information dissemination, colors and all other items of the picture need to be selected and linked with the intended audiences' past cultural experiences [28, 29].

2.2. Content Familiarity and Subject Message Composition

Another essential factor in effectively communicating with people through pictorial images is the careful treatment of subject composition. Here subject composition refers to the selection and arrangement of the various objects that make up a picture message [25]. The objects can be human figures, working tools or any other pictorial objects. The social cultural and physical environment must also be closely considered when creating communication visuals, since it always has some effect in the way a pictorial composition is interpreted. The National Cancer Institute [5] clarifies on the essence of presenting believable and recognizable pictorial compositions for information dissemination. The Institute claims that "Recognizable familiar objects presented in an illustration add to comprehensibility. Conversely, the presence of locally unfamiliar objects tends to reduce correct interpretation of the symbol." In pictorial compositions, realistic drawings alone are not enough to guarantee effective composition. These drawing compositions require to be based on the target audiences' past social experiences [5, 18]. For pictorial representations to be believable they need to include

objects that are familiar to the target audience [1]. Effective illustrated visual materials need to portray the fashion and mannerism predominant in the society in question. The effect of familiarity is also noted by The Sage Colleges [31], that pictures of familiar scenes or objects are more easily identified by an intended audience. In whatever case, therefore, effective pictorial compositions need to be created based on a clear understanding of the target audience [25, 30].

For easy and meaningful pictorial interpretation, a single picture should not include a large number of objects or attempt to portray several steps in a process [23]. Every single picture as already noted has to be simple and composed of selected essential detail. If many steps in a process have to be shown in one single page, the use of a series of picture frames can be employed [1, 18, 25]. People also require long time of exposure to the use of signs/symbols to be able to interpret meaning in information dissemination using pictorial compositions with signs/symbols, [30, 31]. Improper and thoughtless use of signs/symbols in disseminating information to a multicultural audience which comprises of people with little or no knowledge of meaning of the used signs/symbols can be counterproductive [29]. In this case, proper pre-testing requires to be done to ascertain the target audiences' meaningful understanding and interpretation of the signs/symbols as used in any illustrated visual media compositions.

2.3. Picture and Words/Text/Font Composition

For meaningful interpretation of printed visual media materials by the target audience, pictorial images need to be complemented and reinforced by text messages [25, 30, 31] Even though pictorial images can be drawn and presented in an easy way to be identified, they require to be supplemented by text messages. Selected few and well planned text has to be incorporated within the design to clarify and emphasize on the actual intended meaning portrayed by the pictorial images [1, 18, 25]. Adding well planned complementary text messages to pictorial images serves to reduce the chances of the intended audience ending up misunderstanding the entire or part of the message [32]. However, mere addition of words to pictorial compositions does not necessarily warrant easy reading and correct interpretation of the contained messages. Words have to be well selected and properly arranged in the design space provided [25, 31]. In the case of designing images like posters, billboards and wall charts, the words (text) need to be large enough; few enough and simple enough to be easily read from a convenient distance. To enhance the intended audiences' attraction for involved reading and meaningful message interpretation, printed visual media have to be visually appealing [5, 18]. Headlines and body texts (if applicable) require to be set in attractive and culturally acceptable colors [25, 30, 31]. The designer needs to choose fonts (type) that are legible and readable. The fonts have to be both appealing and reader friendly. The combination of pictorial images and text requires to be read and understood easily even by an audience with limited or without formal education [1, 5, 9]. The creative combination of headlines; illustrations (pictorial images) and body copy (the text other than the headlines) has to be presented in a way that all of them, as a whole, and as individual entities, emphasize and clarify on the theme of the information to be communicated. The inclusion of well-selected and properly set headlines serves in attracting and holding the attention of the intended potential audience and instigates it to stop and have a closer involved reading of the media material [5, 18]. The body copy helps in clarifying more on what information is communicated via the headlines and the pictorial images. The body copy does, as well, focus on developing added interest and desire on the side of the

reader to know more on the information being communicated [30, 32]. Illustrations used must be meaningful to well grab the readers' attention. The headline and illustration should combine effectively to make a favorable impression on readers. The designer has to create the media in such a way that no part of it appears redundant and having no or very little part to play on the combined effort to communicate the desired messages [25]. The headline, illustration and body copy should form an attractive and harmonious combined whole that effectively serves the communicative purpose of the media [18]. In conclusion, education on HIV/AIDS calls for effective means of information dissemination, and such information can't be desperately and hastily disseminated via unplanned communication channels. This could be counterproductive to the HIV/AIDS struggle and to some extent a waste of energy and resources [25, 30, 31]. Politicians, researchers, communicators and all other people concerned can't simply say that people have to be forced to change their attitudes – as if this change is spontaneous and will happen overnight. While knowing and expecting peoples' attitudes will slowly but eventually change, the HIV/AIDS epidemic is already in and life threatening. Hence effective means of information dissemination need to be designed that will effectively pass the required knowledge to the intended, now vulnerable audience [32].

3. Description of the Study

3.1 Statement of the Problem

The Tanzania's National AIDS Control Program NACP's [11] five questions: "What are the perceptions of different communities on HIV/AIDS messages? How can HIV/AIDS messages which are socially and culturally sensitive and appropriate be developed to specific communities and groups? What are the appropriate approaches for communication in HIV/AIDS? What are the research methodologies which should be promoted to empower communities develop effective HIV/AIDS interventions? How is it to re-package and replicate/scale-up successful interventions?" were important in developing this study.

These questions indicated that there were problems hindering effective dissemination of HIV/AIDS information to Tanzania's public and it was high time to make improvements.

In line with the above questions the situation regarding HIV/AIDS educational printed materials had not improved much at the time of designing this study. It was apparent, at the time of initiating this study that some of the printed visual media materials were neither featuring prominently nor taking part effectively in the national HIV/AIDS campaigns in Tanzania [21]. The relentless national wide struggle to combat and contain the notorious HIV/AIDS didn't seem to make full, extensive and meaningful use of the printed visual media. The printed visual media such as posters, bill boards, wall charts, flipcharts, flyers, stickers, leaflets as well as books and booklets could provide meaningful HIV/AIDS education if researched, designed, and used in the proper way [25, 30, 31]. Such visual media did not appear to be given their full respectable role and place in the HIV/AIDS campaigns in Tanzania [25, 30]. In urban Tanzania (let alone the rural side) public places such as pubs, restaurants, liquor stores and supermarkets were then filled with fiercely contesting market promotion printed visual media and very few if any, were for the HIV/AIDS campaigns. Why? Coca cola and Pepsi, alongside many media houses and brewery companies, together with numerous producers of other consumer

products were making excellent use of the printed media to win their customers [33, 34]. The reception room walls in hospitals, dispensaries and health centers all over Tanzania were heavily loaded with posters and other printed materials representing manufacturers and distributors of brand name drugs and health care equipment. In these areas, the drug companies strategically used the printed visual media to rigorously compete for commercial success. The HIV/AIDS campaigns could effectively do the same to influence and trigger change in peoples' minds towards positive attitudes in fighting and containing the disease. The printed visual media, when effectively used alongside other means of information dissemination such as the radio, television, drama and video could very successfully reinforce educational campaigns [25, 30, 31]. But, as for the Tanzanian situation, such printed visual media appeared to be hardly seen in any of the places where they could be actively used [21]. The HIV/AIDS poster, so to speak, was a total stranger in some of Tanzania's public places, including schools, colleges, and Universities, where the then HIV/AIDS most vulnerable active and productive citizens of tomorrow were being nurtured. The aim of this study was therefore to assess the appropriateness and effectiveness of these printed visual media materials as they did exist and function in the field in order to understand the actual situation and establish possible reasons why this was so and how the situation could be rectified. The assessment was done through the users' or intended audiences' views and opinion to establish the materials' type, style, quality, placement and distribution and realize whether they were designed with the kind of the educational campaign and the culturally varied nature of the target audience in mind [21].

3.2. Methodology

This study was done in Tanzania, Dodoma Region and involved Dodoma Municipality, Mpwapwa and Kongwa (Chibaigwa business center) Districts. Dodoma region is situated in central Tanzania about 300 kilometers west of Dar er Salaam. Mpwapwa district is situated about 80 kilometers east west of Dodoma and Chibaigwa 90 kilometers east of Dodoma. The study was qualitative in nature and used descriptive methods of data collection. The study used an open ended questionnaire. Open-ended interview leading questions were as well used for focus group discussions and in-depth interviews to collect data [36]. The prepared data collection instruments – the questionnaire and interview guides were pre- tested and corrections made to ascertain their reliability and efficacy in the field data collection activity [23, 31]. Visual media materials and literature found in the field were also observed and assessed based on fourteen (14) set questions that were used for data collection and thereafter, its analysis. The sampling procedure for questionnaire respondents was random [35,36] and involved a population of youths aged 15 – 24 years, most of who were of school and college going ages. Regarding random sampling Jackson [35] relates that "A random sample is achieved through random selection, each member of the population is equally likely to be chosen as part of the sample." Therefore respondents were randomly picked in groups depending upon their age group, gender and occupation. The sampling was done in Dodoma municipality urban areas. A total of 450 copies of the questionnaire were distributed to respondents. However, only 424 respondents completed this questionnaire. Out of the 424 respondents 213 females and 211 males completed the questionnaire.

The sampling involved secondary schools students and other respondents selected from areas that had permanent/ongoing community activities. The community areas would be those where people had permanent ongoing activities and it would be possible to find the target respondents at the time of the study including the

distribution and collection of the questionnaire. Purposive sampling procedure was used for picking participants for focus group discussions and in-depth interviews. This sampling procedure enabled the picking of participants who were thought to be able to make a meaningful contribution to study. In all these purposive sampling an equal number of male and female participants were selected. In total 8 FGDs and 9 in-depth interviews were held on the study site. Eight Focus Group Discussions were conducted in the selected schools and community activity centers. One Focus Group Discussion and one in-depth interview were conducted in each of Dodoma Secondary/High School; Jamuhuri Secondary/High School; Central Secondary/High school; Kikuyu Secondary School. At Kiwanja Cha Ndege Secondary/High School 2 Focus Group Discussions and 1 in-depth interview were conducted. One Focus Group Discussion was done at Mambo Poa Youth Center and another one at Majengo Market Place. In every arranged Focus Group Discussion or In-depth Interview an equal number of male and female participants were purposively selected based on age, gender and occupation.

Observation and assessment of printed media materials guided by the fourteen (14) set questions was also conducted in all research sites. Locations like bars/pubs and restaurants; hotels, hospitals, dispensaries and clinics, schools and colleges were visited to see whether or not these visual materials were posted (or available) for people to read and be informed of the heartening realities of HIV/AIDS. This field observation and analysis was focused on design styles, readability/legibility, and relevance to intended audience, placement and distribution of the then currently available (on site) printed visual media materials for HIV/AIDS information dissemination. The researcher also assessed documents, records and other relevant data on printed educational materials for HIV/AIDS found in the field. These field assessments were used to relate and affirm the reliability and efficacy of the information that was gathered from the study respondents. Unlike the questionnaire completion that was done only in Dodoma Municipality, the physical onsite assessment and analysis part was done in all study areas of Dodoma, Kongwa, Chibaigwa and Mpwapwa. This assessment was in this case only to deal with the printed visual materials that were available and seen at the material time and place of the study. The objective of this field assessment was to find out and relate the information obtained through questionnaire, focus group discussions and in-depth interviews and the actual situation in the study areas. This field assessment through observation was only concerned with seeing whether or not the printed materials were actually present on site, and in what quality and form in relation to respondents' contentions. The Researcher - Respondents' discussions and questionnaire responses were firstly based on learners' past memories regarding HIV/AIDS education materials' availability and distribution in the study areas. Secondly the discussions and questionnaire responses aimed at finding out respondents' views concerning their reading encounters with HIV/AIDS printed education materials that they had seen and read. The study thus was essentially centered on the responses from targeted audiences' memories regarding their viewing/reading and learning encounters with HIV and AIDS printed educational materials.

3.3. Data Analysis and Discussions

The completed study questionnaire was open ended with four brief close-ended questions on respondents personal data like gender and age.. The data (which were mainly descriptive in nature) resulting from this questionnaire were analyzed using ethnographic grouping approach. This involved "systematically classifying data into some sort of Schema consisting of categories, themes, or types [35, 36, 37]. Each and every copy of

the questionnaire‘s individual open ended questions were carefully studied and analyzed manually to discover respondents’ common response patterns [35]. Such analyses made it possible for the study to discover the similarities and differences within the respondents’ views regarding the existence, placement, readability/legibility, cultural relevance and role of printed visual media materials for HIV/AIDS information dissemination. The common response patterns were systematically grouped into categories and thereafter into themes. The classified responses in theme groupings were carefully tallied and calculations done in percentages to reflect the number of responses numerically. The analysis was non-statistical and the percentages were obtained to enable a summarized manageable and meaningful qualitative analysis. A coding process, which was simultaneously done by two people, enabled an in-depth exploration of the collected data to get a thorough sense of the study. Regarding data coding Jackson [35] asserts that “The data should be coded by more than one person to establish interrater reliability…interrater reliability is a measure of reliability that assesses the agreement of observations made by two or more raters or judges.”

All Focus Group Discussions and In-depth Interviews (many of which were tape recorded) were decoded and studied to make sense of the responses with reference to and in comparison with the questionnaire responses developed categories and themes. The report writing process systematically made use of information from Focus Group Discussions, in – depth interviews, Field assessment and notes alongside that from questionnaire response derived categories and themes [35, 36, 37]. The discussions of the research findings, as developed here below, are guided by the fourteen (14) questions generated for the questionnaire. Hence the discussion does analyze target audience’ responses, question after question, starting from question 1 up to question 14. Questions (i) to (iv) in the questionnaire were directed towards getting personal data of the respondents. Respondents’ Personal data was used, when ever applicable, throughout the discussion. Information resulting from Focus Group Discussions, In-depth Interviews, and Researchers’ field Observations and Notes were used to support and clarify and in some cases justify various concluding contentions so advanced through respondents’ views. For purposes of this paper the presentation and discussion – based on the fourteen questions - is made reasonably brief as compared to the actual research report for the study. Towards the end of the discussion a summing up is made to bring together the various arguments and contentions into a meaningful conclusion. This conclusive discussion looks into, and sums up, both the good and the bad factors that had been found to influence the active participation of printed visual media in helping to educate people with regard to HIV/AIDS in the study areas. This discussion makes keen reference to and is closely guided by the original objective of the study which was “...to establish a clear understanding of the presence and current use of printed visual media materials on HIV/AIDS – their availability, placement and distribution; their effectiveness, weaknesses and relevance in influencing people towards sexual behavioral change in fighting HIV/AIDS in Dodoma region, Tanzania”

For purposes of clarity and focused discursive treatment, the discussion is made in the order of the following major themes: (i) Illustrated visual media materials’ availability, distribution and placement and (ii) their effectiveness, weaknesses and relevance in design and educational impact to the target audience. As pointed out the discussion is hereby, among other things, closely guided by the questionnaire responses. Many of these questions did result in multiple answers. One single respondent could give more than one alternative answers for a single question. Such questions did not lead to yes or no answers. The responses were a variety of alternative

possible answers that were provided by differing numbers of respondents. All similar answers/responses were treated independently/together and counted against the total number of 424. This situation has necessitated the total number of individual responses for every single alternative answers to be separately assessed as percentages of 424, the total number of returned questionnaires. For this matter the total number of respondents/responses for each possible answer in every one question (that had several alternative answers) could add up beyond 424. The number of responses for every possible/differing answer is therefore counted separately. The same happens to percentages of responses for every one question which in many cases add up to over 100%. Here bellow is a summary of responses from questions that were asked to the sampled respondents. The responses in percentages are followed by brief comments regarding their meaning to the study.

3.4. The responses regarding the Availability Distribution and Placement (in the study area) of Printed Visual Media Materials:

Question 5a: Have you ever seen HIV/AIDS education printed materials in the place/area you live? *(Total number of respondents was 424)*

388 (92%) respondents saw some of such visual media materials in the study area; 6 (1%) respondents did not see any materials; 30 (7%) respondents did not answer the question.

The above responses give an indication that many printed media materials had been seen by respondents. Going around the study area, however, it was observable that the materials were not readily visible and hardly found in public places.

Question 5b - i: Where did you see the Printed Visual Media Materials? *(Total Number of respondents was 424)*

380 (90%) respondents had seen the materials along streets and roads/highways; 360 (84%) had seen the materials in schools; 281 (66%) had seen the materials during HIV/AIDS Campaigns; 281 (66%) had seen the materials in hospitals; 133 (31%) had seen the materials at Mambo Poa Youth Center and Angaza; 51 (12%) saw the materials at VCT Centers; 35 (8%) respondents saw the materials at Market Places; 35 (8%) respondents saw the materials in Offices;

The responses in this question do indicate that many of the visual media materials were seen in streets and highways; in schools; and many were distributed to people during HIV/AIDS campaigns. These materials had as well been seen in Hospitals and youth centers. The same trend was observable during visits in the study areas.

Question 5b – ii: What was the type of HIV/AIDS printed visual media materials that you saw? *(Total Number of respondents was 424)*

318 (75%) respondents saw Fliers; 205 (48%) respondents saw Posters; 107 (29%) respondents saw Booklets; 98 (23%) respondents saw Books.

The trend of the responses does indicate that Fliers did form the largest number of visual materials found in the study area, followed by posters and booklets.

***Question 6**: **How was the availability of HIV/AIDS printed visual materials in Dodoma Municipality?** (Total Number of respondents was 424).*

310 (73%) respondents replied that the materials were available in Dodoma Municipality; 99 (23%) said the materials were not available; 15 (4%) did not answer the question.

Reading through the figures, 99 (23%) respondents is just a little less than one third of the target audience of 424. Having this number of respondents relating that the materials were not available can't be readily ignored. The responses do hence indicate that printed visual materials were available in Dodoma urban but were not well distributed. The figures give an impression that the materials were available in some places but not found in others.

***Question number 7: How was the Distribution of HIV/AIDS printed visual media materials in Dodoma Urban?** (Total Number of respondents was 424)*

247 (58%) respondents said the materials were well distributed in Dodoma Urban; 147 (35%) respondents said the materials were not well distributed in Dodoma Urban; 30 (4%) respondents did not answer the question.

In this case the number 147(35%) of respondents is also substantial to relate that there was no even distribution of the materials in the study area. For this matter there could be some places that didn't have the materials or rather they were not readily available.

***Question 8a: What were the places that did have more Concentration of HIV/AIDS education printed materials?** (Total Number of respondents was 424)*

232 (55%) respondents mentioned Town center streets and roads/highways; 213 (50%) mentioned Mambo Poa Youth Center; 138 (32%) mentioned Hospitals; 132 (31%) mentioned schools; 119 (28%) mentioned VCT Centers; 21 (5%) mentioned Other Youth Centers; 10 (2%) mentioned Offices; and 5 (1%) mentioned Bars/leisure Centers

It is observed that the materials were mostly found in Town center streets and roads/highways. A smaller but significant number was also seen at Mambo Poa Youth Center; Hospitals, schools and VCT Centers. Other Youth Centers, Offices and Bars/Leisure Centers were marked as less concentrated with visual media materials. One possible reason for a smaller number in VCT Centers, as observed during the Focus Group Discussions and In-depth Interviews was that not many people, especially the healthy ones visited VCT centers. Many people did not even know their location in Dodoma town. The researcher observed this trend of distribution in the study area though the materials were not commonly found in some of the mentioned places such as some schools, offices and bars/leisure centers.

Question 8b: What were the places where HIV/AIDS education printed materials were not found in plenty? *(Total Number of respondents was 424)*

400 (90%) respondents observed that materials were hardly found in rural/peripheral areas; 95 (22%) said materials were not found in residential areas; 72 (17%) said materials were not found in schools; 52 (12%) said materials were not found in the town center.

It is here observed that the materials were hardly seen in rural areas.

Question 8c: What were the places where HIV/AIDS education printed materials were not found at all? *(Total Number of respondents was 424)*

411 (97%) respondents did not see materials in Rural/peripheral areas; 28 (7%) did not see materials in Leisure Centers; 25 (5.8%) did not see materials in Churches/Mosques; 24 (5.6%) did not see materials in Residential Areas. This question's responses emphasize the poor distribution of materials in rural/peripheral areas of the study area. .

Question 8d: What were the Places/Locations which required plenty of Placements of the HIV/AIDS education printed materials? *(Total Number of respondents was 424)*

267 (63%) respondents mentioned Schools; 170 (40%) mentioned Rural/Peripheral/Village; 103 (103%) mentioned urban areas; 76 (18%) mentioned Residential areas; 70 (16.5%) densely populated areas; 64 (15%) mentioned Market places; 56 (13.2%) mentioned Leisure places; 50 (11.7%) mentioned Main Bus Stand/Bus Stands.

Reading through the whole discussion in this section - Question (8a) through (8d**)**, it is seen that a lot needs to be done in the distribution and placement of illustrated visual media materials in the study area. There were places that had the materials though there were many others that did not have any. The study acknowledges the work being done regarding utilization of printed materials for HIV/AIDS education, but a lot more needs to be done. Respondents' contentions in the discussion well reveal the need for more to be done so as to effectively join forces with the other media in working towards making Tanzania an HIV/AIDS free zone.

Question: 9 – i: In your own opinion, were the design styles of the HIV/AIDS education materials culturally relevant? *(Total Number of respondents was 424)*

233 (55%) respondents said the materials were culturally relevant to the target population; 186 (44%) said the materials were not culturally relevant. Only 5 (1%) had no answer to the question

Going by these figures it is perceived that there were substantially large opposing numbers of respondents who either viewed the materials as relevant or on the other hand as not relevant. The number 186 (44%) of the audience who observed the materials as not relevant to the culture of people they were meant to educate is large enough not to be easily left aside as negligible. On the other hand the figure 233 (55%) is more than half the

number of all respondents and hence has to be taken as indicative of the type of materials that were in use in the study area. Reading into these more or less contesting opinions it is noted that there were more people in the study area who viewed the HIV/AIDS printed visual media materials as relevant to their culture than those who on the other hand found them as not culturally relevant.

Question: 9 – ii: Do you think the HIV/AIDS education materials you have seen are culturally moral? *(Total Number of respondents was 424)*

276 (65%) respondents said the materials were culturally moral; 148 (35%) respondents said the materials said the materials were culturally immoral.

Question: 9 – iii: Give supporting reasons for your response in question 9 – ii above. *(Total Number of respondents was 424)*

270 (64%) respondents thought the materials could be viewed without causing embarrassment; 180 (42%) found the materials to be clear and easy to read and understand; 130 (30%) thought the materials were educative and hence relevant; 90 (21%) respondents said many of the materials used Kiswahili language.

Question: 9 – iv: If you think the HIV/AIDS printed education materials you have seen are not culturally relevant give supporting reasons. *(Total Number of respondents was 424)*

237 (56%) respondents thought materials did not observe local norms and values; 202 (48%) thought the materials were sexually too open/provocative; 139 (33%) related that human figures used were too sexually provoking; 91 (21%) observed that materials' design and preparations were not well targeted to the young and the old people; 78 (18%) contented that the materials were promoting sexual acts especially among the young.

In this question we observe that about one third of all the respondents thought the materials were not moral and about two thirds of the targeted audience regarded the materials as culturally moral and could be viewed by any group of people anywhere. These figures do give an impression that the study area had notably large numbers of people who on one hand took the materials as morally acceptable and on the other those who found them as culturally immoral.

Question: 9 – v: If you did consider some of the HIV/AIDS printed education materials as culturally moral, give reasons to support your response. *(Total Number of respondents was 424)*

198 (47%) respondents thought it was good for the materials to be open in text and pictorial language for effective education; 119 (28%) observed that since people read the materials and subsequently got educated then they were moral; 107(25%) did not answer the question.

Question: 9 – vi: If you did consider some of the HIV/AIDS printed education materials you saw as Culturally Immoral, give reasons to support your response*. (Total Number of respondents was 424)*

245 (58%) respondents said materials used immoral dresses and other visual images; 189(45%) thought materials used language that was not properly targeted; 21 (5%) regarded the promotion of Condoms as culturally immoral.

Question: 9 – vii: If you think the HIV/AIDS printed education materials as immoral, in what ways could these materials be morally designed? *(Total Number of respondents was 424)*

385 (91%) respondents mentioned the use of decent but true to fact visual and verbal language; 364 (86%) mentioned materials designed to project true to fact information; 340 (80%) mentioned the use of clear and attractive audience centered visual images; 322 (76%) recommended the use of not too sexy visual images; 205 (48%) suggested the use of locally moral norms and values in their designs.

Question 9 - (vii) asked for suggestions how printed visual materials could be designed and produced to enable them to be used without offending some other people. The suggestion that was given by the largest number of respondents 385 (91%) was that designs use decent and true to fact visual and verbal language. The use of decent verbal language did feature much in the responses despite the fact that it couldn't be used in printed pictorial media materials. This was an important contention with regard to visual communication in general - the reason why it was here included in the respondents' statement.

The above responses regarding morality and immorality of visual materials do generate a lot of ideas that would be of much use in improving the design and presentations of printed media materials for HIV/AIDS education. The problem of morality and immorality is very crucial in any peoples' cultural values. To enable meaningful education to take place through printed media materials, unprecedented effort needs to be made in making the materials relevant and morally acceptable to the people to be educated.

Question: 10a – (i): In your own opinion how good or bad were the placements of the HIV/AIDS printed education materials if you did see any*? (Total Number of respondents was 424)*

258 (60.8%) respondents said the materials were conveniently placed; 158 (37.3%) saw the materials as not well placed for clear audience visibility; 8 (1.9%) had no answer to the question.

The figures show that not all the materials in the study area were conveniently placed. There were some which were not strategically placed for clear visibility and meaningful readability. These figures suggest that some effort is required to make sure that the materials in the study area are conveniently placed to meet the requirements of the audience.

Question: 10a – ii. In your own opinion, how conveniently could the distribution and placement of HIV/AIDS printed education materials be done? *(Total Number of respondents was 424)*

367 (87%) respondents suggested distribution through festivals, HIV/AIDS campaigns and workshops/seminars; 319 (75%) suggested distribution through schools; 311 (73%) suggested Placement of materials in Hospitals; 297 (70%) suggested placement of materials on office and community notice boards and walls; 297 (70%)

suggested establishment of distribution centers and systems using faithful agents; 99 (23%) suggested the use of students in distribution.

Question: 10b – i. In your own opinion, how good or bad was the HIV/AIDS printed education materials' readability in relation to placement? *(Total Number of respondents was 424)*

212 (50%) respondents said the materials were well placed, visible and readable; 181 (47.2%) said the materials were neither visible nor readable, 31 (7.3) did not answer the question.

The responses show a balance between the number of respondents who viewed the materials as readable and those who saw them as unreadable. This suggests that some more in-depth study is needed to find out the reasons behind such trend.

Question: 10b – ii. If you think some of the HIV/AIDS printed education materials you saw were not clearly visible and readable, give reasons to support your response. *(Total Number of respondents was 424)*

209 (49%) - respondents said materials were designed using too small text and pictorial image sizes; 139 (33%) said materials were designed in unsuitably small paper sizes; 60 (14%) said many materials were designed in flier and leaflet forms.

When closely comparing the responses given in questions 10b – (i) and 10b – (ii), it is observed that there were problems with materials in terms of visibility and readability. Both question responses offer substantial reasons that can be used in improving the quality of HIV/AIDS printed visual media materials for quality client education.

Question 11a (i): In your own opinion how, do you think was the Quality of Design in the HIV/AIDS printed education materials that you saw? *(Total Number of respondents was 424)*

285 (67%) respondents viewed the materials as well designed with easy to read and understand messages; 120 (28%) had the opinion that the materials were neither well designed nor easy to read and understand; 19 (5%) did not answer the question.

Going through the figures it is observed that more than two thirds of the 424 intended respondents were of the opinion that the materials were well designed in an easy to read and understand style/form. Respondents who viewed the materials as neither well designed nor easy to read and understand only formed less than a third of the total anticipated respondents. This gives an impression that a good number of the materials were suitably designed even though there were some that needed improvement to meet the intended audiences' expectations.

Question 11a – (ii): If you saw the HIV/AIDS printed education materials to be well designed, give reasons to support your response. *(Total Number of respondents was 424)*

273 (64%), respondents said the pictorial and text images were well prepared in terms of layout and

presentation; 194 (46%) said the materials did convey clear messages. 151 (36%) said the visual media materials were prepared in simple, clear and easy to understand language; 69 (16%) said the materials did educate many people.

Question 11a – (iii): If you saw the HIV/AIDS printed education materials not well designed, give reasons to support your response. *(Total Number of respondents was 424)*

138 (33%) respondents observed that the materials didn't allow for easy reading and understanding; 70 (17%) said the materials were designed using very small sized images; 50 (12%) said the materials used too sexy images; 43 (10%) said the images were too symbolic to allow for easily understanding; 38 (9%) claimed that not all people were able to read the materials for various reasons such as being poor sighted or blind.

In this case, the visual media materials' designing process had to consider eliminating the above presented anomalies to allow for clear audiences' reading and understanding.

Question 11b: In your own opinion, how do you think was the quality of the HIV/AIDS printed education materials' Pictorial images and Text/Font sizes' Legibility and Readability? *(Total Number of respondents was 424)*

219 (52%) respondents thought the pictorial images and text/font sizes were large enough to allow for meaningful reading; 188 (44%) said the pictorial images and text/font sizes were not large enough to allow for easy meaningful reading; 17 (4%) did not respond to the question.

Reading through the responses it is indicated that the visual materials found in the field were a mixture of some which were well designed to meet peoples' demands and expectations and there were others that were not well designed to allow for easy and meaningful reading.

Respondents have, in this section, generated substantially useful information regarding the quality of printed visual media materials in relation to placement for meaningful reach-ability, visibility and readability. This is information from the people themselves who read and feel the difficulties or easiness in reading and understanding the materials distributed for HIV/AIDS information dissemination. It is more than fare play, to honor the views of these respondents as greatly contributory to future materials' meaningful design strategies, for quality educational impact on the intended people.

3.5. The responses regarding Printed Visual Media Materials' Educational Impact

This final section of the discussion looks into the quality of the materials with reference to their ability to disseminate information to their target population. It needs to be born in mind, however, that educational impact through the media and for this matter for HIV/AIDS is never realized through a single source. People get educated through many sources of information such as person to person conversations, lecturing and discussions; through the radio; through film, television and video presentations. Likewise, people get informed through reading books, booklets, fliers, brochures, posters and billboards. Information could also be

disseminated through theater productions and presentations, through listening to music and so forth. The list of possible media through which people get educated is long and highly diversified. For this reason, the responses from the target audience should be taken while being aware that there were other contributory sources of information over and above the printed materials under study. The study wanted to know whether or not the printed visual media materials were remembered by the audience to have played a noticeable contributory role in educating them on HIV/AIDS.

Question 12: Were the HIV/AIDS printed education materials Educative to the Audience? *(Total Number of respondents was 424)*

278 (65%) respondents saw the materials to be inspiring and educative; 83 (20%) thought the materials were not inspiring and therefore not educative; 63 (15%) did not have comments.

Reading through the figures does suggest that the printed visual materials were educative to the intended people – despite that there would be some few exceptions of people not getting educated.

Question 13: In your own opinion, was the education through printed HIV/AIDS education materials beneficial to the intended audience? *(Total Number of respondents was 424)*

358 (84%) respondents believed the education had enabled them have an informed understanding and inner thoughts regarding HIV/AIDS; 4 (1%) said the education wasn't helpful; 62 (15%) did not respond to the question.

Reading through the responses it is seen that the majority of people 358 (84%) out of 424 who responded to the question had the opinion that the materials had significant effects in educating people concerning HIV/AIDS. As for the 62 (15%) respondents who had no response, their non-response large number could be indicative that the question wasn't clear enough, or that they just decided to remain quiet for their own known reasons.

Question 14: If you think *education through* ***HIV/AIDS printed education materials was beneficial give reasons to support your response.*** *(Total Number of respondents was 424)*

249 (59%) respondents replied that they were well educated on HIV/AIDS; 218 (52%) said that they knew, after being educated that HIV/AIDS was life threatening and they were ready to change their behavior; 212 (50%) contended that after getting educated they realized that they had to be faithful sexually to avoid HIV infection; 200 (47%) said the education made them familiar with HIV infection protection methods; 20 (4.7%) said the education was not helpful to them as they regarded HIV as a disease like any other; 4 (0.9) said they used their own sources of knowledge and didn't rely on education through illustrated visual materials to change their sexual behavior and lifestyle.

The figures do reflect that the majority of respondents did gain useful HIV/AIDS education that helped them start rethinking about their sexual relations with other people. Reading through the figures it is reflected that the education provided to respondents was beneficial as the majority of them expressed to have changed their

attitudes and behavior regarding sexual relations with other people. The responses do evidence that printed visual materials have a big effect in educating people regarding HIV/AIDS in Tanzanian. The follow-up study did as well support the continuation of such contentions.

4. Learning from Study Findings

It should again be emphasized that the respondents in question were in no way solely educated through reading printed visual media materials. The respondents were educated on HIV/AIDS through numerous sources of information. The important thing is respondents' views regarding the contribution, if any, of printed visual media materials in offering this education [21, 38].

Reading through the study discussion it is strongly indicative that the contribution of these materials in educating people on HIV/AIDS was notably substantial. Nevertheless there were several technical shortfalls in the creation, distribution and placement of the materials with respect to the target population [21]. It is also observed that there were cultural issues (i.e. none observance of respondents' cultural norms and values especially moral and immoral presentations) that in one way or another influenced the information dissemination process [32, 38]. To a limited extent, the design quality of the materials, as reported by respondents, did as well affect the attainment of meaningful processes through which education could be transmitted to target audiences.

Talking of the availability and distribution of printed visual media materials, such as those focusing on HIV/AIDS, has some limitations. This is so because we all expect to see all these materials as we walk around places, either being hung high up as billboards, or seen on notice boards, walls and pillars of buildings as posters and burners. But the availability and distribution of other versions of the printed media is hardly visible to the out of doors passerby since many of such materials are normally placed inside buildings such as offices, homes, hospital rooms and the like. Some of these materials could be kept as personal possessions in shelves, in brief cases or inside private bedrooms. This situation is quite a contrast when compared with printed visual media materials dealing with aggressive advertising of commercial products like drugs, liquors, soft drinks, cosmetics and nowadays mobile phone subscribing [33]. The keeping inside of some type of educational materials does as well apply to these commercial advertisers but their distribution of materials is by far more aggressive than the HIV/AIDS system seen in the study area. This second type of commercial advertising is normally very visible and aggressively looking for its target audience among a specific population. And as we all might know well planned aggressive advertisers normally win. This contention can easily be acknowledged when we think of the enormous number (us included) of Coca Cola and all types of Beer and wines drinkers all around us [33, 34]. Since the HIV virus is quite a danger to future human existence, it would have warranted for even greater aggressive educational campaigns through printed visual media. But then what is the situation out there in the community? The researcher's physical observations in the study area for the past three years - (2013 through 2015) - have found that printed educational materials are not visibly available in plenty in public places to educate the intended audiences for attitudinal and behavioral change regarding HIV/AIDS [38]. For people to change attitudes and behavior is not an easy thing. A lot of painstaking, concerted, aggressive and ongoing effort is needed. It is true that nowadays people know much about HIV/AIDS, but we should not forget that we

are here dealing with a very deceptive and sensitive disease that can always and easily conquer the senses of any great minds we can ever think of. The brief conclusive discussion below, which makes use of the responses obtained from the field, helps to shade light regarding this availability, distribution placement and effectiveness of the materials in the area of study.

Findings in this study have generated a lot of information regarding the state of illustrated visual media materials in the research area. The original assumption was that "The printed visual media is not appropriately and fully used in influencing people towards sexual behavioral change in fighting against HIV/AIDS in Tanzania". Study findings are indicative that these visual media materials are actually used and are part and parcel of the activities related to the fight against HIV and AIDS in Tanzania [21, 39]. Respondents' views, (some of which were audio tape recorded) field observations and assessment of the materials on site have revealed that these materials are largely used in educating people regarding the dangers of HIV/AIDS and the various ways of avoiding getting infected with the source virus. The visual media materials have joined forces with the rest of the media in disseminating useful HIV/AIDS related information – information that has to a greater extent made people, the young and the old, aware of the existence of the disease, its dangers and how to effectively defend the humankind from possible extinction. Nonetheless, the research findings have as well revealed many shortfalls that have in one way or another made the materials not to play their part more effectively.

However and despite the response indications just observed, it needs to be noted that these materials were not readily available or seen when one moved from place to place in the study area. Field observations, focus group discussions and in-depth interviews did give an impression that these illustrated visual media materials were not widely and evenly distributed. There were some places that had them and there were others without any.

5. Conclusion

The study helps to unveil the current state of printed visual media materials as applied in HIV/AIDS educational campaigns in Tanzania. It reveals that these materials are playing an important role in educating people concerning HIV and AIDS. This finding is in line with Adekola [39], in his study titled "The Impact of Instructional Media on the Education of Youths on HIV/AIDS in Nigeria Communities". Reference [39] concludes that "…improved knowledge on HIV/AIDS … would only be effective in the fight against the spread of HIV/AIDS among urban youths when it is backed-up with relevant functional instructional materials" Respondents' views indicate that despite the fact that the materials are positively helping in information dissemination for HIV/AIDS, they are faced with some technical and cultural drawbacks that limit their meaningful role. The study lays forward the need and essence for research based visual communication design, distribution and placement [21, 38, 40]. Design production and utilization of visual media materials requires being audience based and well grounded on peoples' cultural settings [21]. Printed visual media materials have to timely reach their intended audience and be rightly placed for meaningful reading. The study informs that illustrated visual media materials are hardly seen in rural areas. Why should this be the case? HIV has no boundaries and it doesn't discriminate against anybody. It infects all types of people in all places. All essentially depends on how people know how to defend their bodies from possible infection by the virus. And if infected

how to well manage their living positively with the disease. The distribution and proper placement of all HIV/AIDS educational media shouldn't be discriminatory for whatsoever reasons. The distribution and placement of the materials should touch all corners of towns, municipal centers, cities and their peripherals. The materials should be properly distributed and placed in all parts of villages regardless of these villages' distances from towns and cities. More importantly, the materials' design styles have to suit the reading and understanding abilities of the intended audiences [21, 38, 40]. Printed media materials' design styles have to honestly refer to audiences' educational levels and cultural orientations. This finding is also supported by research done by [21] in Ethiopia that showed that "…most of the materials which were produced both by NGOs and ORHB were not culture sensitive" It is reading that is accompanied with clear message conceptualization that can possibly make an influence on the readers' positive behavioral change. Visual media materials have to invite potential audiences and not deter them from reading for whatever justifications [38, 40]. These study findings help in knowing what drawbacks stand on the way of creating meaningful printed visual media materials and how to best improve their preparation, production, distribution and placement to meet the expectations of specific audiences. This finding is also supported by the Ethiopia study by [21], which states that "… Moreover, printed IEC materials were not available during the survey and poor utilization was consistently reported" Best approaches need to be established the soonest and strategies for strengthening the materials' functional capabilities established [30]. As the study reveals, this otherwise very dependable type of media doesn't seem to be prominently and effectively employed to its maximum capabilities in the relentless HIV/AIDS national campaigns. Materials' extensive distribution and proper placement appears to be notably downplayed.

Tanzanians are dying of AIDS. Many dependants are left behind suffering economically and socially, for lack of the necessary help and support they used to get before the demise of their deceased relatives. All concerted efforts need to be made to enable the printed visual media more effectively play its role and contribute further towards HIV/AIDS campaigns in Tanzania. The study by [39], supports this finding by relating that "…more radical media oriented approach should be adopted in the education of youths … on HIV/AIDS". The findings are urgently needed to inform policy on the importance of research based media and how best to improve its performance in HIV/AIDS campaigns. These findings are also critically needed to enable the design of a possibly follow up project - a project that will advise and facilitate a meaningful design, production, distribution and placement of well researched on HIV/AIDS printed visual media materials. The spread of HIV/AIDS among Tanzanians is so extensive that such projects on information dissemination can't wait. It is my hope that this paper will thus act as a bridge and reference point for successfully involving printed visual media materials in HIVI/AIDS campaigns in the future. It is anticipated that future visual media materials production and utilization will continue referring to the findings, and hence make them contribute toward information dissemination activities in the on-going campaigns on HIV/AIDS in Tanzania and elsewhere.

5.1. Limitations/Constraints

The notable limitation/constraint encountered during the study was the inability to locate/see some of the HIV/AIDS printed visual media materials which were in personal/private possession. This was a limitation both on the part of the respondents and on the researcher. These privately kept materials, regardless of their numbers, which were assumingly in personal procession and kept either inside homes in offices or elsewhere, prevented

the respondents and the researcher from realizing the contribution of these materials to the actual nature of distribution of HIV/AIDS materials in specific areas of the study.

5.2 Recommendation

Based on the research findings it is recommended that:

- Policy makers and other concerned stakeholders need to see how best to use the study findings in order to positively step-up the utilization of printed visual media materials in information dissemination especially with regard to HIV/AIDS control.
- HIV/AIDS control educational campaigns need to find ways of managing the design quality, distribution and placement of printed visual media materials so as to make the education offered through such media effectively and meaningfully reach more targeted people.
- More notably a balanced distribution and placement of HIV/AIDs printed visual media materials require as well to reach the rural/peripheral areas rather than concentrating in urban areas.
- The design of printed visual media materials need to take into consideration the social economic and cultural settings of their targeted audiences.

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