

## Gain or loss frames: An assessment of vernacular radio programme in framing of risk about type 2 diabetes

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### Abstract

Research has demonstrated that gain framing of risk about diseases is more preferable to loss framing. People are more likely to take preventive measure since gain frames emphasize the benefits of adopting suggested behaviour as opposed to loss frames which focus on the consequences of failing to adopt suggested behaviour. Accordingly, this paper proposes to assess how a leading vernacular radio station framed type 2 diabetes risks in terms of gain or loss frames. This was done by examining recorded audio from a radio health programme dubbed 'Miya Ngima.' Type 2 diabetes, accounts for about 90% of all diabetes cases in Kenya. The diseases' prevalence is particularly on the rise besides low awareness levels. This is despite various programmes put in place towards reducing the diseases' prevalence rates and increasing awareness; hence the basis of this study. The study used Framing Theory's in understanding how messages are constructed by Miya Ngima programme. Descriptive research designs were applied in the study. The study population consisted of 13 Miya Ngima programmes and one Miya Ngima programme host. Purposive sampling was used to select 2 Miya Ngima programmes on type 2 diabetes and 1 Miya Ngima programme host. Structured interviews were used to collect data from Miya Ngima programme host. Coding sheets were used to get data from Miya Ngima programmes. Qualitative data was subjected to thematic analysis. Results were presented in text formats. The findings revealed that; Miya Ngima did not frame its messages targeting prevention of type 2 diabetes appropriately.

**Keywords:** Diabetes, Disease, Diseases, Frames, Mass media, Obesity, Prevention, Radio, Risk

### 1. Introduction

Mass media has been acknowledged for carrying out certain essential functions in the society. These include informing and shaping public opinion about issues of concern (Peterson, 2006; Owolabi, 2023; Newa et al., 2021; Emojong', 2022; Chukwuma, 2022). Further, mass media is increasingly being utilised as an avenue for targeting behaviour change among audiences (Emojong' & Korir, 2022). Through mass media programmes, members of the society find space where they can dialogue and articulate solutions to the various challenges they face (Anyuor & Achieng', 2022).

The information function and thereby shaping of public opinion by mass media is in part a result of how the media packages information for the public (McQuail, 2010; Amatu et al., 2022). Mass media creates awareness

and shapes risk perceptions about disease through message framing techniques. These techniques of framing risks are therefore important in disease interventions (Andersson, 2007; Olutade, 2021; Anyuor, 2021).

## **2. Media Framing and Disease Prevention**

Utilization of framing techniques by media has been demonstrated in various studies. Stefanik-Sidener (2013) investigated news frames on diabetes in New York Times between the periods 2000 to 2010. Content analysis of 239 articles revealed that the overall dominant frames used across the period was either medical or behavioural frames. He also noted that there was lack of use of societal frames. This was despite the societal frames according to the researcher also being important as it made the public aware of the wider consequences of diabetes.

According to Stefanik-Sidener (2013), the preference for medical and behavioural frames would make people only focus on the individual causes and solutions which was ineffective in diabetes prevention. Sandell et al. (2013) undertook a study to determine framing of risk of H1N1 pandemic in the Australian and the Swedish print media. As noted after the campaign, there was a 60% uptake of immunization in Sweden as compared to 18% uptake in Australia. The difference in uptake rates were attributed to differences on framing of responsibility, self-efficacy and uncertainty. Australian press covered responsibility negatively with much of blame placed on organizations while Swedish press transferred responsibility to citizens.

Inthorn and Boyce (2010) in their investigation on framing of obesity in UK's top 5 television channels found out that media framed discourses about obesity in a far much unhelpful manner as they focused much less on knowledge which would encourage viewers to take action but rather on language which portrayed obesity as shameful. This, the researchers noted was achieved by primetime televisions' more focus on the frame of self-control which made the problem look more of an individual responsibility. Inthorn and Boyce (2010) in support of their arguments added that while it is largely accepted that certain food groups are associated with health problems, obesity was not necessarily a problem of dietary habits as presented in the mass media. As such, the dominant frame of self-control was not appropriate and would not be effective in combating the disease.

Atanasova and Kotevko (2016) investigated obesity frames and counter-frames in British and German online newspapers. By specifically exploring the frames, the researchers observed dominant cross-national framing of obesity to self-control at 50.7% of all the articles under the review. Self-control frame considers obesity as more of an individual responsibility compared to other frames; genetic disorder or as a social responsibility. The researchers noted that framing of obesity across the two nations had an effect of countering entrenched social misconceptions.

Spence (2010) did research to determine the effect of episodic framing on black attitudes about Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) on African American populations. Using time-series experiments, he exposed 400 respondents to one of the nine manipulated stories via the internet. His findings indicated that media played an essential role in influencing blacks' attitudes. For instance, episodic frames that associated black males' sexual behaviours with HIV/AIDS had an effect of making black respondents blame HIV/AIDS spread on irresponsible behavior (Spence, 2010).

Aletta (2020) conducted an investigation on the impact of sports-media narratives (positive or negative) on female track and field athletes' perceived performance in the Ibadan metropolis. The researcher utilised a survey research design with 120 female athletes purposively sampled for the study. The findings indicated positive and significant relationship between positive sports-media frames and perceived performance among female track and field athletes. In addition, there was also a positive significant relationship between negative sports-media

frames and perceived performance among female track and field athletes. The research thus recommended among other things neutral and objective framing of sports-media narratives within the media.

### **a. Radio Ramogi FM, Miya Ngima Health Programme and Type 2 Diabetes Prevention**

According to a 2019 survey by Kenya Audience Research Foundation (KARF, 2019), over 75% of Kenyans prefer radio as their primary source of information. Ramogi FM is a commercial, nationwide radio station that was started in 2003 by Royal Media Services. Ramogi FM is owned by Royal Media Services (Okoth, 2015). Ramogi FM broadcasts in Dholuo, a vernacular language spoken by people mainly from the Luo community who reside in the Western parts of Kenya. Ramogi FM has various programmes including Miya Ngima, a health programme.

The programme translated, 'Give me Life,' focuses on sensitizing and educating the public about various diseases including type 2 diabetes hence impacting on behaviour change (Ndege, 2015). Miya Ngima programme is aired between 4.15 p.m. to 5 p.m. every Sunday. The programme features topical issues on various diseases and is hosted by James Raballa who is the interviewer. There is also an invited guest who is a health expert selected based on the topic of discussion. Miya Ngima also has call in sessions where interested listeners can comment and ask questions. During the 45 minutes of the programme, there are interludes of Music and commercials. According to KARF (2019), an average of 3527 people listen to Miya Ngima programme.

Compared to other non-communicable diseases, data from Kisumu County health records shows that type 2 diabetes prevalence is on the rise with cases almost doubling between the years 2016 and 2019, from 4,310 to 8,197 (Otieno, 2019). KSS-NCC (2015) report indicates that urban areas like Kisumu Central sub-county in which Kondele ward is found have prevalence rates of about 10.7%. This doubles the projected national average prevalence of about 4.56%. In addition, over 60% of those diagnosed with type 2 diabetes present complaints unrelated to the disease when visiting health facilities (Kenya National Diabetes Strategy [KNDS], 2015).

### **3. Statement of the problem**

Information shared via the media radio creates awareness and influences diseases' risk perception which acts as a precursor to behaviour change. This is achieved by use of framing techniques by the media. Ramogi FM, a Dholuo radio station has the leading vernacular broadcaster in terms of listenership in Kisumu Central. It broadcasts 'Miya Ngima;' a programme that seeks to inform and educate its listeners and hence impacting on health behaviour change. Despite Ramogi FM's preference as the main source of information in Kondele ward, Kisumu Central sub-county, the majority of those who have been diagnosed with type 2 diabetes when visiting health facilities presented complaints that are unrelated to the disease. In addition, the disease's prevalence is also on the rise. This seeming lack of awareness as regards type 2 diabetes as evidenced by the presentation of unrelated complaints during diagnosis and the increasing prevalence may suggest uncertainties as to the efficacy of Ramogi FM's Miya Ngima programme in so far as how it frames risk concerning messages towards prevention of type 2 diabetes.

### **4. Objective of the study**

The objective of the study was to assess how Radio Ramogi framed messages on type 2 diabetes in terms of gain and loss frames to its listeners.

## **5. Framing theory**

Framing theory originated from the (1974) work; frame analysis by sociologist, Erving Goffman (Pennington & Birthisel, 2016). The theory implies how media places a particular field of meaning to information they send to the public. This is through subtle changes in the wording of the description about something and therefore influencing audience's interpretation (Griffin, 2000). Accordingly, by selecting and highlighting certain aspects of issues into frames, the mass media shapes how we interpret those issues which is critical to behaviour intentions (Griffin, et al., 2019).

For this study, framing theory was used to assess Miya Ngima radio programme strategies on prevention of type 2 diabetes in Kondele ward, Kisumu Central sub-county. The investigator did this by classifying the messages into thematic areas. Specifically, the researcher focused on how the radio programme, Miya Ngima, framed risk on type 2 diabetes. According to Sandell et al. (2013), the theme is among the most used themes in disease prevention. Risk magnitude themes inform on the likelihood of contracting diseases. Assessment of framing of risk-magnitude themes was based on whether the messages were either presented as gain or loss-frames. Gain frames focus on the benefits of adopting a desirable behaviour. Loss-frames on the other hand emphasize the consequences of failing to adopt a particular suggested behaviour (Shen & Mercer, 2015; O'Keefe & Jensen, 2009). Studies have shown that when targeting disease prevention, risk magnitude when presented as gain frames are more likely to enhance the chances of performing the desirable behaviour as compared to loss-frames.

## **6. Research methodology**

The study adopted descriptive research designs. Kisumu. According to Kothari (2004), descriptive research designs are used when the investigator seeks to describe the characteristics of variables within a study. In this case, how messages towards prevention of type 2 diabetes were framed by Miya Ngima radio programme. The study was conducted in Kisumu Central sub-county. The study is domiciled in health communication and was necessitated by low awareness levels and increasing prevalence rates of type 2 diabetes Kenya's urban areas. Kisumu Central is a sub-county in Kisumu which is among the 3 Kenyan Capital cities alongside Nairobi and Mombasa.

Thirteen Miya Ngima radio programmes on type 2 diabetes that aired three months to and after November 14, 2020 formed that study population. This period was chosen since there is a likelihood of increased coverage on diabetes in the periods to and after November 14, marked as World Diabetes Day. There was also one Miya Ngima radio programme host.

Purposive sampling was used to select 2 Miya Ngima programmes on type 2 diabetes and one programme host. Coding sheets acted as the extraction tools for information on type 2 diabetes from Miya Ngima audio records. The analysed programmes were the ones on type 2 diabetes. Coding sheets were used in assessment of Miya Ngima programme by organising collected data into themes. There was one key informant interview session with Miya Ngima programme host. The interview was necessary since it helped corroborate the findings on message framing techniques used by Miya Ngima programme towards prevention of type 2 diabetes.

Thematic analysis was employed in the assessment of frames used by Miya Ngima radio programmes. The indicators were how risk of type 2 diabetes was framed in Miya Ngima programmes. Using thematic analysis, the researcher identified how messages were framed either as gain or loss frames.

## **7. Results and discussion**

In assessing how message strategies were used by Miya Ngima programmes in conveying information on themes of risk magnitude, the researcher sought to know how risk magnitude themes were framed by Miya

Ngima programme. The programme host was asked whether he preferred gain or loss frames when framing risk related information about type 2 diabetes to listeners. His response was as shown below;

Host: "...We use both gain and loss frame. In the sense that, we first of all, start by telling them certain things that if they do, they'll acquire the disease. I tell them, for instance, that if you don't exercise regularly, you stand higher risk of acquiring diabetes type two. Then we get to the extent of even telling them the ways that if you follow you can actually avoid getting diabetes type two. One exercise regularly, two, avoid fatty food. Three must have a balanced diet." - James Raballa \_ Miya Ngima Programme Host.

The host states that in presenting messages on risk magnitude in Miya Ngima programme, they use both gain and loss frames. In reference to loss frames, the host states; "...we, first of all, start by telling them certain things that if they do, they'll acquire the disease." This suggested that the audiences were presented with messages informing them on what if done will lead to or increase their chances of acquiring type 2 diabetes; "...for instance, that if you don't exercise regularly..."

This form of framing that emphasizes consequences of failing to adopt the proposed action plan according to Shen and Mercer (2015) constitutes loss frame.

Further, the host highlighted on use of gain frames as follows;

"... we get to the extent of even telling them the ways that if you follow you can actually avoid getting diabetes type two."

This meant that audiences were presented with messages informing them on what if done will reduce their chances of acquiring type 2 diabetes; "One exercise regularly, two, avoid fatty food. Three must have a balanced diet."

This form of framing that emphasizes benefits of adopting the proposed action plan in messages according to Shen and Mercer (2015) constitutes gain frame. The findings from the host's comments suggest that Miya Ngima programme used both gain and loss frames in its messaging towards prevention of type 2 diabetes. To confirm the above findings as depicted by the hosts' comments, thematic analysis of Miya Ngima programmes on type 2 diabetes was done. This was based on the various issues covered under the theme of risk magnitude. Diet and exercising were the most discussed issues under the theme of risk magnitude. Extracts (a, b, c and d) below shows how risk-magnitude themes were framed as either gain or loss frames in Miya Ngima programmes.

Extracts (a) and (b) demonstrate how Miya Ngima programmes presented messages under the theme of risk-magnitude as gain frames.

a) *Prog 1: "Ka ichamo chiemo makare, imodho pi maler, koro ok iyud tuo mar sukari."* - Dr. John Odek Odhiambo\_ Biomedical Scientist. Gloss: "...when you eat the right food and drink water that is clean, then you cannot contract type 2 diabetes."

b) *Prog 2: "Ka ichamo chiemo maber, ka ichiemo e yo makare, ok inyal yudo diabetes."* - Dr. John Odek Odhiambo\_ Biomedical Scientist. Gloss: "When you are having the right diet, you cannot contract type 2 diabetes."

In extract (a), the listener is informed on the need to have the right diet; "...when you eat the right food ..." by emphasizing the positive outcome, "then you cannot contract type 2 diabetes." In extract (b), the listener is informed that good diet; "...having the right diet ..." will provide them with a benefit of not contracting type 2 diabetes, "you cannot contract type 2 diabetes."

Extracts (c) and (d) reveal how Miya Ngima programmes presented information under risk magnitude theme as loss frames.

c) *Prog 1: "...eseche ma wachamo chiemo ma obedo processed, nyadingény, bangé wachako bedo kod tuo mawaluongo ni type 2 diabetes."* - Dr. John Odek Odhiambo\_ Biomedical Scientist. Gloss: "...when we eat processed food most of the time, we contract what is known as type two diabetes."

d) *Prog 2: “Moko kuom gigo manyalo miyo igamo tuoni. Koro, achiel en bedo ni ok itim exercise...”* – Mr. James Raballa\_ Miya Ngima Programme Host Gloss: *Some of the factors that may make you contract type 2 diabetes disease are lack of physical exercise...”*

Contrary to (a) and (b), in extracts (c) and (d), the listener is persuaded to adopt the right diet by presenting the negative outcomes. In extract (c) for instance, listeners are discouraged from having an unhealthy diet, “...when we eat processed food most of the time,” by emphasizing the consequences, “...we contract what is known as type two diabetes.” The same style is used in extract (d) where listeners are informed that “...lack of physical exercise,” can lead to type 2 diabetes, “...may make you contract type 2 diabetes...”

The findings from excerpts (a, b, c and d), suggested that Miya Ngima programme used both gain and loss frames in conveying its messages on theme of risk magnitude. The findings in excerpts (a, b, c and d), therefore, confirmed the assertions by Miya Ngima programme host that both gain and loss frames were used in communicating message on the themes of risk magnitude. These findings were in disagreement with framing theory’s concept of selective contextualization which according to Griffin et al. (2019) posits that mass media shapes how we think about issues by selecting and highlighting certain aspects of issues into frames.

It was, therefore, expected that Miya Ngima programme applied this concept by using either gain or loss frames in communicating its messages on the theme of risk magnitude which was not the case. These findings were also contradicting findings by other researchers. Lee and Basnyat (2012) in an investigation of how newspapers in Singapore framed risk themes about the 2009 H1N1 pandemic, observed that most of the newspaper focused on the benefits of quarantining as a way of preventing the virus’ spread. This suggested that the newspapers employed selective contextualisation as indicated by the use of gain frames. The findings were also contrary to those of Latimer et al. (2010). In an evaluation of approaches to constructing physical activity messages, the investigators noted that there was overwhelming evidence of selective contextualization with the majority of articles reviewed using gain frames in presenting messages to audiences. Peng and Tang (2010) during an examination of Chinese newspaper framing of health information noted that a majority of articles predominantly used gain frames as opposed to loss frames.

## **8. Contribution**

The study’s findings highlight the need for proper framing of risk associated with diseases. This is important for not only the prevention of type 2 diabetes but also other diseases.

## **9. Recommendations**

The study recommends that efforts ought to be made by relevant stakeholders towards training media personalities on how to best frame and package information towards disease prevention via the media.

## **10. Conclusion**

The objective of the study was to assess how Radio Ramogi framed messages on type 2 diabetes in terms of gain and loss frames to its listeners. While these outcomes by other researchers indicated the use of specific frames, the present study on the contrary, as shown by the host comments and extracts from Miya Ngima programmes demonstrated that both gain and loss frames were used by Miya Ngima programme. This therefore suggests that Miya Ngima programme on type 2 diabetes did not frame themes on risk appropriately.

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