



BEST PRACTICES FOR SOCIAL MEDIA MARKETING FOR HEALTH PROMOTION

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ABSTRACT

Purpose: To explore the best practices for using social media marketing for health promotion.

Methodology: Review of primary studies, systematic reviews and meta-analysis using pre-specified search, inclusion and exclusion criteria on databases. Social media marketing interventions were defined as those which used social media as a platform for health promotion and integrated some social marketing principles in their development and implementation.

Findings: Effective strategies for using social media for health promotion include: having a clearly defined health promotion goal, using theoretical frameworks to guide interventions or programs, using key elements of social marketing in developing the program, choosing a theme or brand for the program, using the most appropriate social media channel for the message, generating and stimulating user participation on the social media sites, maintaining a level of activity on the social media channels to attract returning users, using social media to complement traditional campaigns, using mobile technology interventions to complement social media interventions and developing an effective process to evaluate the social media marketing process.

Research limitations: This research had used limited databases and mostly articles with free access. It is possible that other effective strategies for using social media for health promotion were not accessed during the course of this project.

Practical implications: This project shows that social media can be a useful tool to promote behavior change in certain areas of health when carefully planned, implemented and evaluated.

Recommendations: The best practices described in this project can act as a leverage for organizations or public health institutions wishing to use social media as a tool for health promotion or to complement traditional health programs.

Keywords: Social marketing, social media, mass media, health promotion, disease prevention

INTRODUCTION AND BACKGROUND

Public health aims at behaviour change through health promotion, however health promotion does not necessarily lead to behaviour change because human behaviour is a hard thing to change (Baum, 2008). Health promotion is described by the Ottawa Charter as enabling people to increase control over their health and improve their health. It is founded on three basic principles which are advocacy, enabling people to achieve their highest health potential and mediation through intersectoral collaboration (Ottawa Charter, 1986). Effective health promotion requires education, creating supportive environments, strengthening community action, creating healthy public health policies, re-orienting health services towards prevention and research (Ottawa Charter, 1986). Health promotion is a shared responsibility that requires not only individual action but community, health systems, and multi-sectoral collaboration (Preeta, 2012). Health promotion can be used to address health problems in almost every area of health including child health, mental health, injury prevention, pregnancy, healthy living, environmental health, dental health, climate change, chronic diseases and seniors' health.

Most health promotion programs involve the use of mass media including TV, radio, billboards, print media (newspaper, magazines). These communication tools are popular because they can reach large audiences. However, their impact is limited and their effectiveness depends on the expertise of their users (Lewis and Lewis, 2015). Mass media campaigns have been used to promote behaviour change in areas such as tobacco use, illicit drug use, alcohol use, cancer screening and prevention, heart disease prevention, child survival and sex related behaviours (Wakefield, Loken and Hornick, 2010). Another useful communication tool in health promotion which is widely gaining popularity is social media.

Social media can be described as a computer-based technology that allows sharing of thoughts, ideas, information between individual and groups. They are platforms that connect people and institutions who have topics of common interest (Roberts, Callahan and O’Leary, 2017). Social media has brought a paradigm shift to communication, changing communication from unidirectional to a bidirectional or multidirectional and immediate exchange of ideas between individuals and groups of people (Chou et.al, 2013). Popular social media platforms include Facebook, Myspace, Twitter, LinkedIn, YouTube, Instagram, Snapchat and Pinterest. Devices such as personal computers, digital videos, smart phones and watches, webcam and audio recorders have made communication through social media very easy where people across the world can share information in real time and their audience can also actively participate to seek information (Wakefield, Loken and Hornick, 2010). These characteristics of social media makes it a great tool for interactive health promotion.

The advantages of social media include its low cost, its capacity to reach and engage “hard to reach” populations such as adolescents, increasing audience participation, reaching a wide population and allowing interpersonal communication (Moore et.al, 2013, Chou et.al, 2013). It is also effective for motivating participants to take precise actions and can be useful for both small scale and large scale health promotion campaign projects (Freeman et.al, 2015). A big concern about access and use of social media remains inequalities especially among people of lower socioeconomic status, minority groups, the elderly, and people living in remote areas and communities (Chou, et.al, 2013). These gaps appear to be narrowing as mobile technologies are becoming increasingly available globally and people can access social media through mobile devices (Chou, et.al, 2013). Notwithstanding, it is interesting to note that while it took the radio,

television and internet 38, 14 and 4 years respectively to reach 50 million users, it took Facebook 9 months to add about 100 million users (Hird, 2009).

The search for a more effective and targeted approach of health promotion has led to the concept of social marketing. Social marketing can be defined as the “application of commercial marketing technologies to the analysis, planning, execution and evaluation of programs designed to influence the voluntary behaviour of target audiences in order to improve their welfare and that of the society” (Andreason, 1995). It has its origin from commercial and psychological marketing. It involves the application of commercial marketing ideas to communication strategies to influence behaviour change positively (Lewis and Lewis, 2015). Social marketing uses strategies which motivate and encourage behaviour change in target audience groups. These strategies involve exploring the beliefs and motivation of the target group as well as their enablers and barriers to change (Lewis and Lewis, 2015). The highlights of social marketing are being planned or strategic, involving defined segments or audiences and having the goal of behaviour change [National Social Marketing Centre (NSMC), 2011].

Social marketing has been used in health promotion in areas such as smoking cessation, reducing alcohol consumption, weight management, sexual health and prevention of HIV/AIDS.

It is useful for increasing knowledge and raising awareness, prompting individuals to search for information, changing beliefs and behaviour. It however requires other long-term interventions for sustainability (Lewis and Lewis, 2015). The scope of social marketing is becoming wider and shifting from individual behaviour change to encompass change at community, organizational

and environmental levels. This has led to concepts such as community social marketing, counter-marketing and ecological social marketing (Lewis and Lewis, 2015).

Social media marketing can be described as the process of incorporating the unique features of social media into social marketing strategies. There is a need to understand the concept of mass media campaigns and the connection between online engagement and behavior change in social marketing (Freeman et.al 2015). A characteristic feature of social media marketing campaign is its ability to capture the attention of its audience and engage their minds to behaviour change by arousing emotions (Opel et.al, 2015). This approach to health promotion involves understanding the target audience, a clear action for behaviour change, understanding the benefits, costs and barriers of behaviour change and a mix of activities to achieve desired behaviour change (NSMC, 2011).

Developing a social media campaign requires starting with small scale projects which assess the most effective content, format, delivery and social media network sites and then gradually transitioning into larger projects (Freeman et.al, 2015). While social media campaigns show promising results for health promotion, this tool can also be hijacked by anti-health promotions groups seeking to reinforce their views. In areas such as anti-vaccination, the move of anti-vaccination campaigns to social networks has left some of the public questioning the safety and efficacy of vaccines (Fernández-Luque & Bau, 2015). Also, anti-vaccination websites contain negative contents and are reported to have more likes on YouTube than websites with positive contents (Fernández-Luque & Bau, 2015). It is therefore important to understand how this tool can be used effectively to promote behaviour change.

In this paper, best practices for social media marketing for health promotion means the most effective strategies for social media marketing that can be used to help individuals or populations take control of and improve their health. Research has shown the effectiveness of social media marketing in different areas of health promotion however there is limited data on the comprehensive overview of how social media marketing can be used globally in health promotion. There is also limited research that describes how social media campaigns can be used effectively for health promotion. Thus, the aim of this project was to find the best strategies for using social media to effectively change health behavior positively. The objectives of this project were to describe the uses of social media marketing in health and to determine how social media marketing can be used effectively in health promotion and disease prevention. This paper adds to the body of knowledge by providing a summary and review of strategies that have been used to achieve effective social media campaigns in different aspects of health. This will be useful in helping to develop effective social media campaigns in any areas of health promotion in the future.

METHODOLOGY

The literature search for this project was done using several databases including Scopus, ProQuest, JAMA between January 14-31 January 2019, however due to the large volume of results, the search was limited to two major databases -PubMed and Health Evidence. Literature from manual searches using Google Scholar were also added during the write up phase of this project. Both individual studies and systematic reviews were included in the search. The key words used for the search were: social marketing, social media, mass media, intervention, effective, health promotion and disease prevention.

The search terms were:

“Social marketing AND disease prevention”, “Social marketing AND health promotion”, “Social media AND disease prevention”, “Social Media AND health promotion”, “Mass media AND disease prevention”, “Mass media AND health promotion”, “(Social marketing OR social media OR mass media) AND (health promotion OR disease prevention). The decision to add disease prevention to the search terms was because health promotion was vague and generated results not necessarily related to health.

Search Criteria

The criteria used for the literature search on Health Evidence database included filters which limited literature to articles published between 2008-2019 and literature which had either moderate or strong quality rating. The literature search was also limited to articles in English language. All topic areas, population setting, intervention strategies and delivery methods were included and all review types were included. In the PubMed database, publications were limited

to those involving human species published within the last 10 years. Abstracts, free full text and full texts of clinical trials and reviews were included.

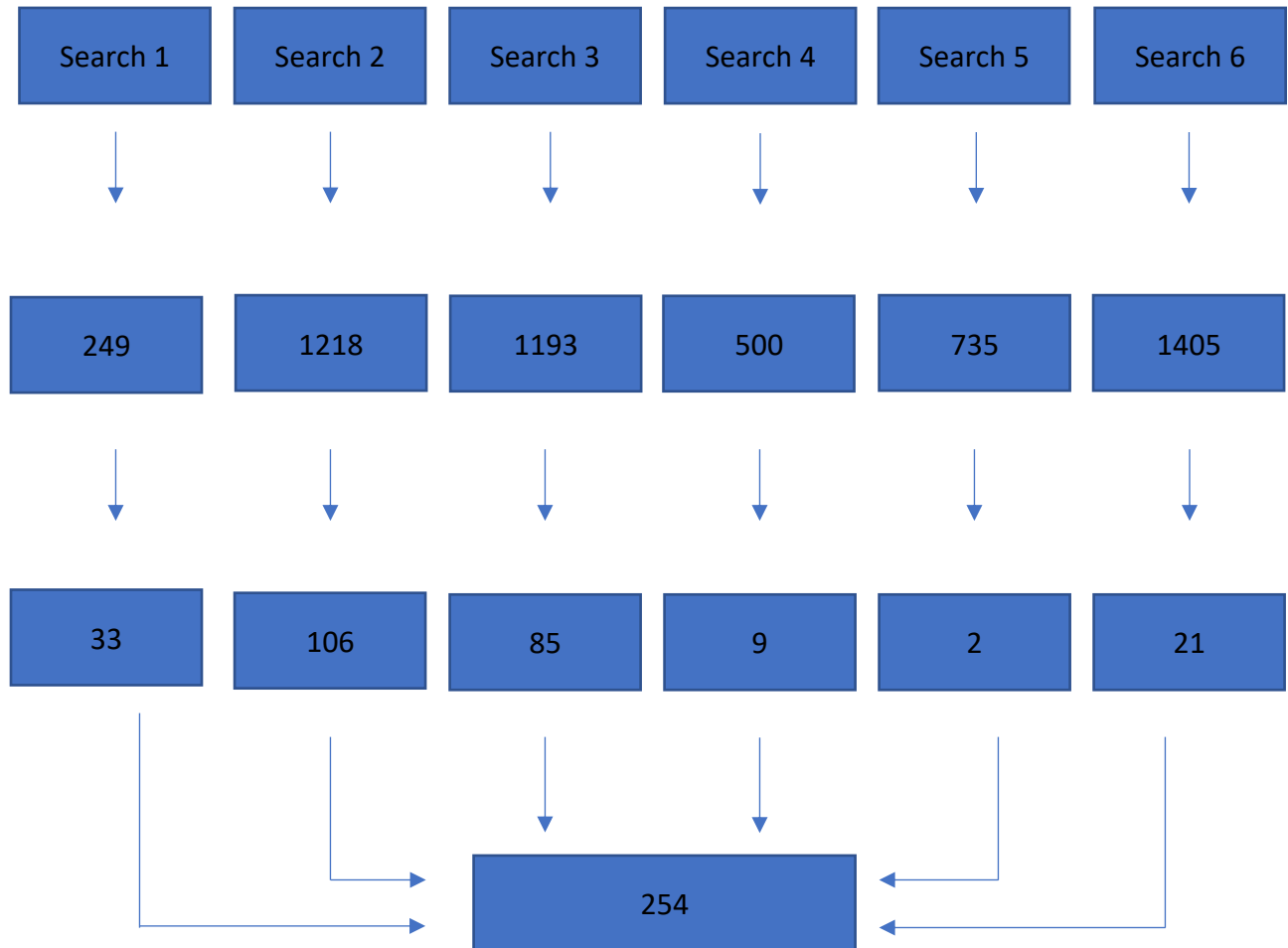
Data collation

After the search was completed, the titles of the articles obtained from the databases were reviewed for relevance to the research question and irrelevant articles and duplicates were removed. The abstracts of the remaining articles were reviewed and literature with free access were mostly used for the project write-up.

TABLE 1- SUMMARY OF THE LITERATURE SEARCH PROCESS.

Database	Filters
Health Evidence	Published from 2008 -2019 Review quality Rating- Strong and Moderate Topic Area- All Population – All Setting – All Intervention Strategy – All Intervention delivery method – All Review Type – All Text Options – All
PubMed	Article type – Clinical Trial and Reviews Text availability – Abstract, Free full text, full text Publication dates – 10 years Species – Humans

FIGURE 1- PUBMED SEARCH FLOW CHART



Key

Search 1: Social Marketing AND Disease prevention

Search 2: Social Marketing AND Health promotion

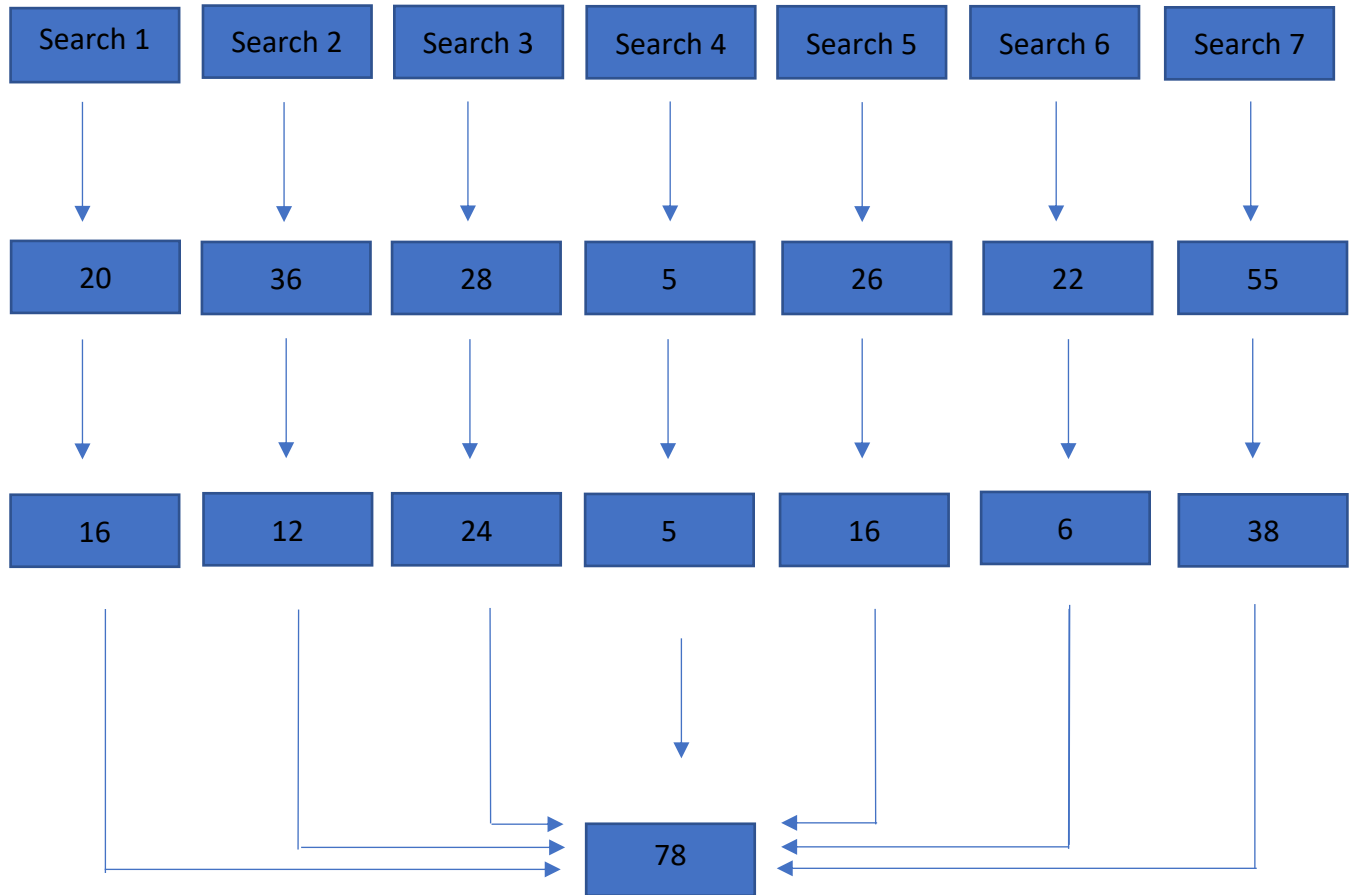
Search 3: Social Media AND Health Promotion

Search 4: Social Media AND Disease Prevention

Search 5: Mass Media AND Disease Prevention

Search 6: Mass Media AND Health Promotion

FIGURE 2- HEALTH EVIDENCE SEARCH FLOW CHART



Key

Search 1: Mass Media AND Health Promotion

Search 2: Mass Media AND Disease Prevention

Search 3: Social Media AND Health Promotion

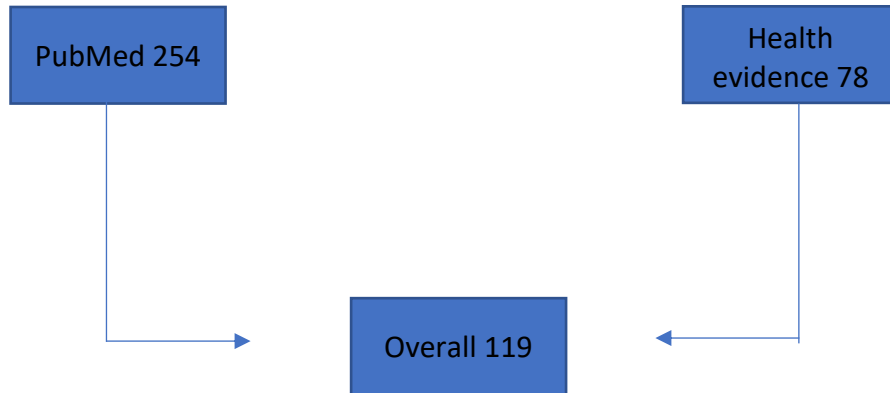
Search 4: Social Media AND Disease Prevention

Search 5: Social Marketing AND Health promotion

Search 6: Social Marketing AND Disease prevention

Search 7: (Social Marketing OR Social Media OR Mass media) AND (Health promotion OR Disease prevention)

FIGURE 3- OVERALL RESULTS FROM PUBMED AND HEALTH EVIDENCE



After removing duplicate data, the left-over data were 119 articles which were used in the write up of this project.

RESULTS

Literature review of case studies with successful social marketing strategies are shared here to give insights on the best practices for social media marketing for health promotion.

Having clear and well defined objectives

Having clear objectives helps to build a better social media communication strategy (CDC, 2011). It is important to set realistic goals while bearing in mind that social media alone may not be sufficient to meet all the needs of the target population (CDC, 2011). For example, “Tips From Former Smokers” campaign, had 3 clearly well-defined goals prior to starting the campaign which were: building public health awareness of the immediate health damage caused by smoking and exposure to second hand smoke, encouraging smokers to quit and make free help available, and lastly encouraging non-smokers to protect themselves and their families from exposure to second hand smoke. These clearly defined goals were instrumental to the success of the campaign (CDC, 2019).

Conducting Market analysis

Considering the health needs of the target population is crucial to the success of any social marketing campaign. It is important to determine what matters most to the audience before starting out a campaign. This can be achieved through focus group discussions or surveys using questionnaires (CDC, 2011). Formative research has been described as an important process in the development of any health promotion intervention. It helps to define the target audience,

describe the target audience and understand their unique characteristics as well as factors that influence their behaviour and the best methods to reach this population (Lefebvre and Flora, 1988). The Spiral Technology Action Research (STAR) model has recognised identifying user needs, and planning ways that technology meets these needs as important for social media based health promotion programs (Skinner et.al, 2006).

This model was used in the development of the “Smoking Zine” web-based campaign which promoted prevention and cessation of smoking among youths (Skinner et.al, 2006). The first cycle of the campaign involved analysis of data from 10 focus group discussions of a larger smoking cessation campaign “CyberIsle”. This cycle also involved market research, community forums and the engagement of stakeholders. The findings from this helped in the creation of enhanced web-based smoking cessation and prevention resources which were relevant and accessible to the target audience and making the program effective (Skinner et.al, 2006).

In the “Get your life back” asthma campaign, the researchers were able to determine that older adults’ value family time with grandchildren and this was a motivator for seeking information and taking action on asthma (Evers et.al, 2013).

In the “Don’t know? Don’t drink” campaign to reduce alcohol exposure in pregnancy and thus fetal alcohol spectrum disorders in New Zealand. The New Zealand Health Promotion Agency used Facebook as an advertising channel to reach women between the ages 18-30 who were the population likely to drink before discovering they were pregnant. The campaign included 1 video and 3 banner adverts on Facebook. The user engagement was described as high, showing the

success of this channel in communicating health messages. However, the message was not received favourably by the target population. The recommendations made to improve this for future campaigns was to conduct a survey of the target population, include theoretical frameworks in the development of the campaign and ensure a two-way communication for more effective messages (Parackal et.al, 2017).

Using theoretical framework to guide interventions/programs

The use of behavioural theories to guide health promotion interventions has made those interventions effective and successful (Korda & Itani, 2013). The integration of theory-based frameworks when designing health promotion interventions increases the effectiveness of such interventions.

An example is the “pounds off digital study,” an intervention to promote weight loss.

Participants were randomly assigned into 2 groups. Both groups received 24 episodes of weight loss podcasts, the control group received an ordinary weight loss podcast while the intervention group received a weight loss podcast based on the social cognitive theory. The intervention group achieved greater weight loss and decrease in BMI when compared to the control group. This finding suggests that interventions which are carefully designed to promote cognitive processing are likely to produce behaviour change in weight management (Turney-McGrievy et.al, 2009).

The “Smoking Zine” smoking prevention program developed by the TeenNet research incorporated theoretical concepts into each of their 5-stage interactive website. The theories used

were stages of change theory, social learning theory, health belief model and theory of reasoned action. Incorporating these theories increased the effect of the intervention which was to reduce or prevent smoking behaviour among youths (Skinner et.al, 2009).

Using key elements of social marketing in developing the program

Many successful social marketing campaigns have identified incorporating the key elements of social marketing while developing the campaign.

For example, the “Get your life back” campaign had considered all the elements of social marketing in the development of the campaign. One of the key strengths identified in this campaign was segmentation of the target group into 4 groups, those who already had a diagnosis of asthma with symptoms, those who had a diagnosis of asthma without symptoms, those who had recent respiratory symptoms without an official diagnosis of asthma and those who had no asthma and no symptoms. This helped the researchers identify the main target group for their intervention (Evers et.al, 2013).

The “Madres para la salud” (Mothers for all) is a social marketing campaign conducted to initiate and sustain walking, as a means to facilitate weight management among post-partum Hispanic women. This campaign was successful because the key elements of social marketing were integrated into all aspects of the campaign (Keller et.al, 2012).

A review of school based interventions aimed at reducing childhood and youth obesity showed that the inclusion of at least 5 social marketing principles improved childhood obesity. The major

social marketing principles included in childhood obesity prevention programs have been consumer orientation, behaviour, segmentation and methods mix (Acebes- Martins et.al, 2016).

Choosing a theme/creating a brand for the program

Creating a brand for social media campaign has been shown as a means of increasing its effectiveness (DeBarr, 2009, Ashley and Tuten, 2015, Haines-Saah et.al, 2015).

A case of brand effectiveness is seen in one of America's largest and most successful youth smoking prevention campaign "TRUTH". The campaign which was launched initially as a traditional media campaign in 2000 targeting youths ages 12-17 years was relaunched in 2014 to target youth 15-21 years. The relaunched campaign was adapted to suit the present needs of the target group. This evolution involved the use of TV ads, online banner ads, online video ads, homepage takeovers, paid promotion on social media sites, branded social media sites and branded campaign websites. This change ensured that the message remained culturally relevant and compelling to the target audience. A study on the effectiveness of the campaign brand showed a significant relationship between the brand equity and smoking behavior. Increasing levels of brand equity was associated with decreased likelihood of smoking in the preceding 30 days and higher intentions to quit smoking 1 year later. An overall estimate of 300 00 youths was prevented from smoking in 1 year as a result of the campaign (Vallone et.al, 2017). This shows that building brand equity among young people improves message recall and improves behaviour outcomes (Vallone et.al, 2017).

Another case example of branding to increase effectiveness of a social marketing campaign was seen in the "HEALTHY" study. This was a 3-year randomised controlled multicentre and

multifaceted middle school based intervention to decrease risk factors for type 2 diabetes mellitus. Social marketing based communications elements such as branding, messaging, use of student peer communicator, sponsored events, premiums and incentives were used to promote the interventions in the study. The interventions included a modification of the school food service environment, enhanced physical education classes and a behavioural program to motivate students to improve their food choices and increase physical activity.

Before a brand was developed, formative research and a focus group discussion were conducted among stakeholders including staff, students and parents to develop an appealing logo which described the nature of the study. Contributions from the stakeholders led to the development of project brand “HEALTHY”. The logo was used on all study materials including T-shirts which were worn by the students and staff, this created publicity and served as a good advertisement tool for the project (DeBarr, 2009). Incorporating this social marketing based communication strategy in the study was instrumental to its impact and effectiveness.

Brand and logo creation for effective social media campaign was also used in the “Picture Me Smokefree” campaign which used social media and digital photography to engage young adults in tobacco reduction and cessation. This branding helped to promote the study through online channels like Twitter, Facebook and offline channels by creating flyers, posters and magnets with the brand logo which served as advertisement tools in the local campuses and communities (Haine-Saah et.al, 2015).

Using the most appropriate social media channel/tools for the message

Once the objectives of the health promotion campaign have been defined and the target group chosen, the channel to promote the intended message becomes important. There are various social media channels and tools that can be used for health promotion. The choice of which will depend on the target population to be reached and the purpose of the message. Is it purely to disseminate information or engage the users? (CDC, 2011). It is important to carefully consider the resources, expertise and support available prior to choosing a platform or tools (CDC, 2011).

Social media use differs by age, gender, race, education and health status. Non-internet users are likely to be older, less educated, belong to an ethnic minority and less healthy (Chou et.al, 2009). The largest proportion of social media use is found between the ages of 18 and 24. When compared to older adults, younger adults are more likely to participate in blogging and social networking sites (Chou et.al, 2013). Facebook, Instagram, YouTube, Snapchat and Twitter are the most popular apps being opened daily (Panko, 2018). In the business world, Microblogs (e.g. Twitter), social networking sites (e.g. Facebook), microsites, video sharing (e.g. YouTube) and discussion forums have been recognised as the most popular tools used by top brands in social media marketing because consumer reach is higher in those channels (Ashley and Tuten, 2015).

Each social media platform attracts different populations of users and differs in level of engagement, content and community norms (CDC, 2011). Using established social networking sites may be of advantage when developing health promotion programs given that such networks already have established users and there will be little need for attracting end users (Gold et.al, 2011, Haines-Saah et.al, 2015).

In the case study of Fitbit and Garmin as activity trackers for health promotion, Facebook was found to have more likes but Instagram had more user posts when compared to both Facebook and Twitter. In this case study, Twitter was next to Instagram in user engagement, while Facebook had lowest engagement (Edney et.al, 2018).

In a study evaluating the preferences of diabetic social media users regarding health promotion interventions in a Norwegian population, most respondents reported Facebook as a preferred platform to find content on health promotion, however Instagram was the preferred platform for participants younger than 18 years and among those who chose Twitter, more were males (Gabarron et.al, 2018).

In other social marketing domains, Instagram was also reported to have more user engagement when compared to Twitter when used in health risk communication (Guidry, 2017). The users of Instagram are generally younger and more females (Duggan, 2018). Identifying the right social media platform was identified as an important step to using social networks in the prevention of childhood obesity (Li et.al, 2013). When Twitter was compared to Facebook as a brand promotion channel, Facebook was found to have a wider reach for most audiences while Twitter was described as fast-paced and more appealing to world leaders, politicians and journalists. The downside of Facebook however was that it was more competitive and might require spending more time to get the attention of its target audience (Carter, 2018).

Generating and stimulating user participation

User participation in any social media campaign is crucial to its effectiveness for sustained behaviour change (Edney et.al, 2018). The case study of Fitbit and Garmin for creating engaging health promotion campaigns on social media showed that the use of creative contents such as highlighting new or improved product features, using self-improvement themes and using images of the product improved user engagement. In situations where the end product of the social campaign is intangible, the product can be represented on the campaign by a tangible product which focuses on the end health benefits (Edney et.al, 2018).

Another case study on creating user engagement is that of “Adelante”, a branded primary prevention social marketing campaign developed and implemented by the Avance Centre for the Advancement of Immigrant/Refugee Health in Washington DC, USA. The goal of this campaign was to address risk factors for co-occurring substance use, sexual risk and interpersonal violence and ultimately improve risk prevention behaviours and norms among Latino youths between the ages of 12-19 in Washington DC suburb. A part of this campaign involved the creation of a Facebook fan page as a platform for social marketing. This page featured messaging through the use of adverts and user generated videos which featured Adelante youths to increase reach and engagement among these youths. Findings from the social media arm of this campaign showed that posts in Spanish language and posts with photos increased user engagement. Also, contents such as program updates, youth achievement showcases, new links, social marketing campaign posts which featured local youths, and prevention topics such as a safe sex, prevention of sexually transmitted infections and substance abuse increased user participation. The strength of

this study was the use of peer-peer model for health promotion which generated user interest and engagement (Andrade et.al, 2018).

Using adverts to customise social network sites to user preferences has been described as a strategy for attracting and retaining users on social media websites (Nguyen et.al, 2013).

Advertisements on social media campaign sites generates curiosity and encourage user participation (Levac & O’Sullivan, 2010). For example, in the Facebook campaign “Say Yes to the Test” there was maximal user participation when the site had used adverts. The numbers of fans and participants declined after the advertisements on the Facebook page stopped (Syred, 2014).

Maintaining a level of activity on social media channels to attract users

This has also been identified as a key to an effective social media campaign and engaging end users. For example, a study exploring patients and parents’ attitudes on an internet portal tailored towards patients with type I diabetes and their parents showed that regular reminders of the use of the portal through emails or newsletters was important to engage users and enhance the use of the portal. Participants also reported that declining activity by other participants such as health care providers could create a perception of lack of commitment and could discourage continued engagement by other users. Other patient or parent users were also advised to keep an interactive website by including their comments or experiences regularly, this would enhance peer to peer communication and retain users on the forum (Nordfeldt, 2010).

Ensuring easy access to communication forums

Easy access to communication forums attracts users, to social media platforms. Restricted access to these platforms for health promotion has been cited as barriers to its use. For example, in a patient and parent diabetes discussion forum, using a password for login was a deterrent for new users and returning users. Some found it difficult to create passwords and replace old passwords and this was reported as a reason for not participating on the website (Nordfeldt, 2010). This finding was also similar in a qualitative study on patients' and caregivers' requirements for interactive health communication for managing long-term conditions (Kerr et.al, 2008). In the "Break it off" campaign for smoking cessation users were allowed to download a free "Break it off" smoking cessation app on their smartphones which provided support during moments of relapse. This enabled free access and enhanced smoking cessation in the study group (Baskerville, 2015).

Social media should complement traditional media campaigns.

It is important that social media campaigns do not replace traditional media campaigns. Online advertisements through digital videos are cost effective and have been described as a complimentary tool to traditional media advertisements for health promotion programs (Davies et.al, 2016).

For example, "Say Yes to the Test" social media campaign to generate discussion on Chlamydia and Chlamydia testing was part of a larger multimedia campaign "Sex Worth Talking About"

developed by Public Health England. Both the efforts of these campaigns increased Chlamydia testing rates among high risk groups (Gobin et. al, 2013).

Also, the “Break it off” campaign which was a multicomponent intervention for smoking cessation had combined social media advertising (through Facebook, google and yahoo) with a website and traditional media. This campaign was part of a larger campaign developed and implemented by Canadian Cancer Society and funded by Health Canada. The campaign targeted young adult smokers aged 19-29. This young adult had access to a website that guided them through the stages of smoking cessation and also provided information about other resources for smoking cessation. Users could upload a video on YouTube about their experience with smoking cessation and also share their smoking status on Facebook. The campaign was more effective for smoking cessation when compared with the use of smokers’ hotlines alone. The quit rates for the digital social media intervention group was double that of the smokers’ hotline (Baskerville, 2015).

“Picture Me Smokefree” a smoking cessation campaign had also used both online (Facebook) and traditional media adverts (Flyers, posters) to recruit its study participants. The Facebook advert and traditional media advert accounted for the top 3 referral sources of the study participants (Haines-Saah, et.al, 2015).

In the United States, national tobacco education campaign “Tips from Former smokers” a 12-week nationwide campaign featuring adverts from real people living with smoking related diseases and disabilities. The US Centers for Disease Control and prevention had used television, radio, print, billboard, digital and website advertisements for the campaign. The combination of

both traditional and social media adverts had stimulated further discussions on blogs, social media platforms and increased public awareness on smoking. Though the intensive campaign through traditional media has subsided, social media has promoted a platform for ongoing campaign 7 years after the campaign was launched (CDC, 2019).

Using mobile technology interventions to complement social media interventions

Mobile devices are becoming more useful in health promotion and disease management. Its advantage includes being cost effective to reach a large number of the population irrespective of location, ease of use and ability to adjust messages to suit the target audience. The use of mobile phones and other mobile devices to access social media channels has increased user engagement and access to social media platforms which makes social media interventions all the more effective in behaviour change (Haines-Saah et.al, 2015)

The use of mobile technology interventions in disease management and health behaviour change is mixed (Free et.al, 2013). In high income countries that have good tobacco control policies, mobile phone based smoking cessation interventions have proven to have long term benefits (Whittaker et.al, 2016). The “Break It Off” campaign had used a smartphone app which provided immediate support to participants when they encountered a stressor that could trigger smoking. This timely support helped the participants to access information which could help overcome immediate smoking gratification (Baskerville et. al, 2015).

Evaluating the social media marketing project.

It is important to put necessary evaluation steps in place when planning social marketing campaigns (Lefebvre and Flora, 1988, O'Grady et.al, 2009). Developing an integrated and impact framework for evaluation is crucial to the development of social media health promotion programs (Gold et.al, 2013). It plays an important role in high quality design, development and effective implementation of health promotion programs. Evaluation should be on going all through the campaign and after the campaign as well. The on-going evaluation will help recognize areas which need to be adjusted or corrected before the final product. And should lead to provision of recommendations for improved future projects (Skinner, 2006). There are many metrics on social media which can be used to evaluate effectiveness (CDC, 2011). These metrics include those that report usage and monitor trends thus providing useful information for further improvements. The level of engagement, number of views, links shared, comments generated and the impact of the message are also ways of monitoring effectiveness (CDC, 2011). When feedback is analysed it helps reshape strategy and processes for future projects. Some methods such as social network analysis, validated machine learning models, data mining and cloud based computing techniques have been proposed to evaluate the effectiveness of social media interventions (Chou et.al, 2013).

Using the case study of project FaceSpace which used videos and social networking sites for sexual health promotion targeting young adults (ages 16-29) and Men having Sex with Men (MSM). The project was developed and implemented in 2 phases (the youth arm and the MSM arm). At the end of the first phase the project was evaluated using both health and information technology process which included diaries, focus group discussions, questionnaires and metrics

such as site usage, interaction statistics and expert reviews. Findings from the first arm of the project guided the development and implementation of the MSM phase of the project. It also guided modifications to extended seasons of the MSM phase after the project was completed (Gold et.al, 2012).

DISCUSSION

Findings from research show that social media is a useful tool for health communication and interventions in areas of physical activity, mental health, sexual health, health and fitness, water intake, and chronic diseases such as Type I diabetes (Cavalla et.al, 2012, Chou et.al, 2013, Nguyen et.al, 2013 Gold et.al, 2011). It can be described as a new and effective way of expanding the reach of health-related messages to consumers and the general public, empowering them to make healthier decisions (CDC, 2011). The characteristics of social media such as personalization (adapting content to individual needs), participation (engaging the public to communicate meaningfully and presentation (available and accessible content in different formats and contexts) make it a great tool for health communication (CDC, 2011).

Like traditional health promotion campaigns, social media programs targeted at health behaviour change should have clearly defined goals and objectives. Goals and objectives help define the program plan and usually come before planning, monitoring and evaluation strategies. Goals can be described as a long-term change to be achieved while objectives are immediate changes that lead towards the overall goal (Health Victoria, 2010). Objectives should be SMART (Specific - including a defined population and clear action, Measurable, Attainable- realistic within available

resources, Relevant- to program goals and Time bound) (Health Victoria, 2010). Goals and objectives must be continually reviewed during the planning, monitoring and evaluation phase of any health promotion program to make it more realistic and achievable (Health Victoria, 2010, Women's Health West, 2012).

When a thorough research on the needs of the target audience is not explored when designing social marketing campaigns it might be ineffective despite social marketing showing promising results in health promotion. An example of this was seen when social marketing proved ineffective in finding new cases of COPD in a campaign for COPD screening in a community where smoking rates were high. For the campaign, a communication model was used and a market analysis was conducted. High visibility posters, information leaflets and automated telephone information lines providing general information on COPD, how to get tested and available resources for COPD management were used in the campaign. Though the campaign involved a lot of financial cost, its limitations were a short campaign period, the use of only print media, specific distribution sites and lack of focus group discussion prior to developing the campaign. Taking this factors into consideration might have led to improved case finding for COPD (Jose et.al, 2009).

Despite the proven benefits of incorporating theoretical frameworks in guiding social media interventions, not all theoretical frameworks have been proven beneficial. The use of behaviour change techniques such as providing feedback, goal setting, providing information on consequences of behaviour, tailoring, prompt self-monitoring of behaviour and identifying barriers to behaviour via SMS, MMS, videos and software applications showed short term

benefits for asthma control, physical activity and psychological support and little or no benefits for diabetes control, and diet in weight management (Free et.al, 2013).

Though reviews from social marketing interventions targeted at behaviour change show an inconsistent use or reporting of the benchmark criteria in single studies (Gracia-Marco et.al, 2012).

Any successful social marketing intervention should include the 8 key elements of social marketing. These principles called the benchmark criteria are a set of integrated concepts which improve outcomes of social marketing interventions (NSMC, 2011). They include:

Behaviour- The intervention should aim at not only increasing knowledge but behaviour change. Both the problem behaviour and the desired behaviour should be extensively researched and analysed.

Customer orientation- This should focus on understanding the needs and characteristics of the target the audience using both quantitative and qualitative research methods from different sources.

Theory: After thorough research on consumer orientation, then an appropriate theoretical framework needs to be chosen to develop the required intervention. The theoretical framework should take into consideration the biophysical, social, environment and psychological domains.

Insight: This focuses on what motivates the target audience and also identifies the physical and emotional barriers to behaviour change to help with the development of the intervention.

Exchange: This considers the costs and benefits of behaviour change by maximizing the benefits and reducing the costs which creates an attractive offer to the target audience. Competition: This attempts to explore the competing factors for behaviour change such as time and attention. It also learns from competing factors to create a methods-mix.

Segmentation: Involves categorizing the audience into groups based on common characteristics such as readiness to change. It helps in tailoring interventions to population needs.

Methods mix: Involves the combination of the appropriate market mix (Price, product, place and promotion) and intervention methods to create a brand which is appropriate to the target audience and able to cause behaviour change (NSMC, 2011)

When choosing a social media tool for health promotion, it is important to consider available resources including funds and technical expertise. Starting with less demanding tools which do not require large resources is a great way to start and build experience with use of social media (CDC, 2011). Buttons, badges, image sharing, podcast posting, widget posting, eCards sharing, online video sharing and RSS feeds require both low technical and financial resources.

Microblogs, blogs, podcast creation, online video creation require both moderate technical and financial resources, while mobile technologies, while virtual worlds require a mix of both moderate and high technical and financial resources respectively. Social networks however, require low cost but high technical resources (CDC, 2011).

The Centres for Disease Control and Prevention (CDC) is an organization known to use social media marketing effectively for health promotion. They have developed social media campaigns on disease outbreaks, immunization and chronic diseases. Lessons learned from their past experiences include: making strategic choices and understanding the level of effort in social media, going where people are, adopting the use of low risk tools first, ensuring messages are evidence based, creating a portable content, facilitating viral information sharing, encouraging user participation, leveraging networks, providing multiple formats, considering mobile technologies, setting realistic goals and learning from the metrics and evaluating social media effort (CDC, 2011).

Health branding is the use of marketing principles to influence behaviour change by establishing relationships between the customers and the products (Evans, 2014). Branding is a well-established marketing strategy to influence a consumer's perception about a message (Vallone et.al, 2017). Social and health branding integrate social cognitive theory and the theory of planned behaviour (Evans, 2014). It is important that program brands consider the brand which appeals to the target group (Andrade, 2018). There are several options for branding on social media and they include: paid advertisements, publishing brand content on social channels, participating in social networks as a brand persona, and creating opportunities for consumers to participate in brand engagement (Ashley and Tuten, 2015). Branded social media campaigns are shown to increase consumer engagement and also deepen consumer-brand relationships by encouraging continuous interaction with the target audience and the brand (Ashley and Tuten, 2015). Consumer-oriented branding strategies also help promote engagement in message content

and thus behaviour change (Vallone et.al, 2017). Creating culturally relevant and compelling brands require a study of the target group to better understand their preferences and interests (Evans et.al 2014). A new concept called branding equity is now used in determining the effectiveness of branding for health promotion campaigns. It is a multidimensional measure which has the advantage of assessing effectiveness of branding across all campaign media which includes traditional and social media (Vallone et. al, 2017).

Understanding and enhancing user engagement maximizes the effectiveness of social media health interventions (Edney et.al, 2018, Korda & Itani, 2013, Andrade et.al, 2018). To achieve behaviour-change in any health promotion intervention on social media networks, it is necessary that network sites are interactive, users generate content, comment and modify discussions to keep the site active (Gold et.al, 2011). When a user finds the message/content of a campaign interesting and feels a connection to the message it usually stimulates participation and engagement (Evans, 2016). Users can also maintain their interest and remain engaged in the content when there is easy access to the communication forum and new contents for discussion are generated at timely intervals (Syred et.al, 2014). Active user communities are created by updating social media contents to keep them fresh and interactive (Korda and Itani, 2013) and also by using creative elements and appealing contents (Edney et.al, 2018).

Developing effective evaluation strategies for social media programs may be challenging, it requires considerable investment of time and resources (Gold, 2012). Evaluation helps to determine effective processes, strengths and weaknesses of the methods, gain insight on behaviour of target audience and improve interventions, remain accountable to stakeholders and

plan extension programs (NSMC, 2011). To evaluate social media projects there should be a structure which assesses inputs, activities, outputs and short- and long-term benefits (CDC, 2011). A dynamic framework for evaluating web-based programs and interventions was proposed by O'Grady et.al, 2009. This framework includes formative, summative and outcome evaluation indicators for 5 themes: people (identification of stakeholders needs and characteristics), content (credibility, quality, utility, understandability and relevance), technology (system robustness, performance, security, privacy, features and functionality), health systems integration (ethics and liability, definition and evaluation of metrics and processes) and computer intervention(usability, accessibility, sociability and interactivity) (O'Grady et.al, 2009).

CONCLUSION AND RECOMMENDATIONS

The main aim of this project was to find the best practices for using social media marketing to promote health. Literature review has shown that strategies such as: i) having a clearly defined health promotion goal, ii) using theoretical frameworks to guide interventions or programs, iii) using key elements of social marketing in developing the program, iv) choosing a theme or brand for the program, v) using the most appropriate social media channel for the message, vi) generating and stimulating user participation on the social media sites, vii) maintaining a level of activity on the social media channels to attract returning users, viii) using social media to complement traditional campaigns, ix) using mobile technology interventions to complement social media interventions and developing an effective process to evaluate the social media marketing process are effective for social media marketing in the area of health promotion.

We hope that future projects will build on this research by empirically documenting the effective strategies in social marketing interventions which can guide future health promotion programmes.

A limitation of this study is that it did not use statistical analysis in the review of its findings but rather multiple case studies to describe possible best practices. Case studies are a useful method of research when giving insights to new research such as the best practices described in this project. However, they are prone to subjective bias by the researcher. This bias might be in the collection, or interpretation of data. This project also did not use a wide based data search, it is possible that some other findings in other databases were missed which could limit the credibility of the study.

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