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Original Research Article

Effectiveness of 2 different campaigning methods in reaching the public: Conventional pamphlet campaign vs social media campaign - A pilot study

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ABSTRACT

Background: Cost effective campaigning method to attract people to an awareness program need to be identified. Conventional Pamphlet Campaign remain popular despite the expanding range of Social Media Campaign that have potential to reach large number of people at low cost.

Materials and Methods: Two different methods of awareness campaigns were used to attract people to an awareness program. The Conventional Pamphlet was distributed manually and Social Media Campaign was done in Facebook as a paid promoted post. The budget was fixed to Rs.1200/- for each group. People with interest are invited to scan the provided QR code which directs to an Electronic form (e- form). The number of sign up were estimated in each method.

Results: A total of 17 people signed up to participate in awareness program. Of which Conventional Pamphlets Campaign showed 6 sign up and Social Media Campaign showed 11 sign up. The cost per sign up for Conventional Pamphlet Campaign and Social Media Campaign are Rs.200/- and Rs. 109.09 respectively. The Social Media Campaign was the cost effective method and reached larger number of sign ups when compared to Conventional Pamphlet Campaign.

Conclusions: Overall, our results demonstrate that Social Media Campaigning is the cost-effective method in attracting people than Conventional Pamphlets Campaigning.

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1. Introduction

Early childhood caries (ECC) remains a major public health problem in children.¹ ECC has been defined as “the presence of one or more decayed (non-cavitated or cavitated lesions), missing (due to caries), or filled tooth surfaces” in any primary tooth in a child under the age of 6 years.² The etiology of ECC is multifactorial and is mainly a time-specific interaction of microorganisms with sugars on a tooth surface.³ Diet and feeding practices also play an important role in acquisition of the infection and development of caries.^{4,5}

The prevalence of ECC is determined by a complex interaction between sociodemographic and behavioural factors.¹ ECC can be prevented or controlled if treated appropriately.^{6,7} It is not only the responsibility of the dental profession but also that of society as a whole.¹ Low parental knowledge could be one of the reasons for more prevalence of ECC which can be prevented by creating awareness among people.^{8,9} This can be done by conducting awareness programs. These programs can produce positive changes or prevent negative changes in health-related behaviours among large population group.¹⁰

There are different campaigning methods to recruit people to join the awareness program. Traditional

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methods including leaflets, posters, and newspapers are still commonly used by many researchers and health professionals for campaigning.¹¹ It is targeted at individuals rather than groups. Mass media include communication channels such as television, radio, newspapers, and internet are widely used to reach large numbers of people.^{10,12}

Evaluation of mass media campaigns are required to improve understanding about the effectiveness of these campaigns in recruiting people to join awareness program. Additionally, research is needed to assess the cost effectiveness of campaign. But there were limited number of studies using mass media to draw conclusions about their effectiveness.¹² It is unknown whether Web-based campaigning is more effective in reaching the public than print-based campaigning. There are only few studies which measures cost effectiveness of different methods.¹¹

Thus, the aim of our study is to compare the effectiveness of 2 different campaigning methods (Social Media Campaign and Conventional Pamphlet Campaign) in recruiting people to join awareness program on prevention of ECC.

Table 1: Total number of signups in each group and cost per sign-up.

	Total cost	Sign up	Cost per sign up
Group A – Conventional Pamphlet Campaign	Rs.1200/-	6	Rs. 200/-
Group B – Social Media Campaign	Rs.1200/-	11	Rs. 109.09/-
Total	Rs.2400/-	17	-

Table 2: Demographic data of the people signed up– Mean age and Gender

	Mean age	Male	Female
Group A – Conventional Pamphlet Campaign	35	3	3
Group B – Social Media Campaign	31	3	8

2. Materials and Methods

This study recorded and analysed 2 different methods of campaigning to recruit people to participate in the awareness program. The campaigning methods were divided into Group A - Conventional Pamphlet Campaign and Group B – Social Media Campaign. An awareness program on prevention of ECC was planned to conduct at Tagore Dental College and Hospital for people who join through the campaigns. Data collection was done between 1st February 2023 till 28th February 2023.

To recruit people to participate in awareness program, a pamphlet was designed containing information regarding prevention of ECC, invitation to join the awareness program with a contact number.

2.1. Group A - Conventional pamphlet campaign

A QR code was added to the pamphlet. This QR code provided link to a e-form which was used to collect information about people expressing interest to join the awareness program.

Printed version of the designed pamphlet was distributed manually in and around Rathinamangalam, Chennai area. People interested in joining the awareness program were invited to scan the QR code and fill the e-form or contact through the number provided.

2.2. Group B - Social media campaign

A paid campaigning was done using the same designed pamphlet through Facebook Business Page of Tagore Dental College and Hospital. This campaign was setup to geographically target people living in and around Rathinamangalam. Instead of QR code, a Sign up button was provided along with campaign message by clicking which, people with interest can join the awareness program by filling the e-form.

Total number of people shown interest to join the awareness program through each group was calculated. The number of participants reflect the effectiveness of methods in reaching people.

Participants were excluded from the study if they were under the age of 18 years. People above 18 years of age living in and around Rathinamangalam were included in the current study. The research has been approved by the Institutional Ethical committee (IEC/TDCH/173/2022)

2.3. Cost

The total cost of each method in recruiting people for awareness program was also calculated. The cost for Conventional Pamphlets included designing charges, printing charges and distribution charges. The cost for Social Media Campaign included the amount spent on paid promotion. To standardize the methods, the budget of Rs.1200/- was fixed for each group. Thus, the total amount spent was Rs.2400/-.

Cost per sign up was calculated by dividing total number of people joined through each campaign by total amount spent on each campaign (Rs.1200/-)

3. Results

3.1. Participant numbers

The strategies implemented led to total of 17 sign-ups.11 people showed interest to join the awareness program by

signing up through Social Media Campaign (Facebook campaign) and 6 people joined through Conventional Pamphlet Campaign (Table 1).

3.2. Cost

Maximum budget of Rs.1200/- was fixed for each group. With this Rs.1200/-, a total of 500 copies of Conventional Pamphlets were printed and distributed in and around Rathinamangalam.

The Social Media Campaign was geographically targeted to Rathinamangalam in Facebook. Total budget was fixed at Rs.1200/-. The cost per sign up was calculated which showed Rs.200/- for Conventional Pamphlet Campaign and Rs.109.09/- for Social Media Campaign.

3.3. Demographic data

The data included the mean age of people in each group, total number of male and female shown interest in each group. The mean age of people joined the awareness program through Conventional Pamphlet Campaign was 35 and Social Media Campaign was 31 (Table 2).

4. Discussion

Multiple researches have been emphasized the association between parental knowledge and development of ECC.^{8,9} Hashim et al.¹³ reported that parent's education, especially the mother's educational level, was associated with ECC-the higher the education, the lower the prevalence.⁸ Putting prevention as the main focus, in order to decrease the risk factors for ECC development, it is essential to establish partnerships with the children's family members so they can be informed and educated with the issues at hand.¹⁴

The awareness program is one of the means to educate the people. The majority of awareness programs tend to focus on prevention instead of symptom education and early detection. People can be recruited to this program by various campaigning methods in which the Conventional Pamphlet Campaign and Social Media Campaign been evaluated in this study. Evaluation of campaigning methods in recruiting people to join the awareness program is required to improve understanding about the effectiveness of these campaigns in public health education.¹²

An awareness program on prevention of Early childhood caries was planned to conduct during the first week of March at Tagore dental college and hospital. To recruit people to participate in the program, two campaigning methods - Conventional Pamphlet Campaign & Social Media Campaign were used.

It is hypothesized that Social Media Campaign will be more effective in recruiting people to join awareness program than the Conventional Pamphlet Campaign.

A total of 500 pamphlets were designed and printed. The total cost involved in designing, printing and distribution

was Rs.1200/-. These Pamphlets were distributed in and around Rathinamangalam. The distribution of pamphlet was completed in first week of February and the data collection was done till the end of February. The number of people shown interest to attend the awareness program was calculated by counting the number of people filled the e-form by scanning the QR code provided with the Conventional Pamphlet.

Another campaigning was done through Social media (Facebook) as a paid campaign with the same designed pamphlet. The total cost for paid campaigning was fixed at Rs.1200/-. This campaign was geographically targeted to people living in and around Rathinamangalam. The number of people interested to attend the awareness program by clicking the sign-up button and filling the e-form was counted.

A total of 17 people signed up to attend the awareness program. Of which 11 people joined through the Social Media Campaign and 6 people joined through Conventional Pamphlet Campaign. The results demonstrate the cost per sign up for Conventional Pamphlet Campaign and Social Media Campaign are Rs.200 and Rs.109.09 respectively. This shows that Social Media Campaign was cost effective when compared with Conventional Pamphlet Campaign. This is in line with the findings from Gilligan et al.,¹⁵ that Facebook advertisements to be 10 times more cost-effective at recruiting mothers than traditional media like letterboxing, leaflets, posters, newspaper articles.

The mean age of people joined the awareness program through Conventional Pamphlet Campaign was 35 and Social Media Campaign was 31. This shows the people reached through Social Media Campaign were younger than those in Conventional Pamphlet Campaign.

In addition to these findings, the Social Media Campaign has other advantages including, 1. The approximated number of people reached can be estimated before campaigning 2. The number of people actually reached through the campaign can be calculated. 3. The total number of male and female signed up can be calculated and can also be targeted separately 4. Reduced amount of time needed 5. Reduced amount of manpower needed.

All these additional information cannot be assessed in Conventional Pamphlet This further supports the use of Social Media Campaign to attract large numbers of people to join the awareness program with a wide reach.

4.1. Limitation

As it is a pilot study with minimum sample, the results obtained cannot be generalised that Social Media Campaign is effective in recruiting people than Conventional Pamphlet Campaign. Also, there are number of social media platforms available for campaigning but we have used only Facebook in this study.

5. Conclusion

Our findings reveal that Social Media Campaigning recruited more number of people to awareness program. The pamphlet reached only a limited number of sign-ups. In summary, our findings suggest that Social Media Campaigning is comparatively cost-effective method to attract people to awareness program than Conventional Pamphlet Campaigning.

6. Ethical Approval

Approved by the Institutional Ethical committee (IEC/TDCH/173/2022).

7. Source of Funding

None.

8. Conflict of Interest

None.

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