

Category 4: Resource Development

Group 4-071

Project HypoSugar

Project Written Report

Hee Roy Kit Thaddeus (3P3)
Lee Xuan De Ryan (3A2)

Our project aims to increase the awareness of diabetes mellitus among youths and young adults in Singapore.

Abstract

The Ministry of Health's War on Diabetes campaign that has been ongoing since 2016 does not engage youths and young adults.

Hence, we set up our project objectives to (1) confirm that youths and young adults lacked awareness on diabetes through a baseline survey and (2) develop new resources for a social media campaign to raise their awareness on diabetes and lifestyle changes needed to reduce the risks of diabetes.

Using surveys, a pilot test and a social media campaign, our project methodology took the approach of reiterative tests and validation to determine if the objectives were met.

In the baseline survey, 135 respondents confirmed that the target audience lacked awareness of diabetes, especially in areas of treatment, management and monitoring of diabetes and the risk factors that may cause diabetes.

26 factlets and an animated video were developed. Post-pilot test, adjustments were made, and the revised resources were deployed in a social media campaign to determine if the resources were effective in raising the awareness of the target audience.

The post-campaign survey of 43 respondents, all followers of our social media account, showed an increase of awareness amongst the target audience, scoring 60% better on average with improvements in all areas tested.

We concluded that existing public education programmes have not been effective with our target audience and that social media is an effective platform to convey information to this specific group.

1. Introduction

Singapore's Health Minister declared the War on Diabetes in 2016. It aimed to raise awareness of diabetes in Singapore. However, this national effort to tackle diabetes is lacking in resources devised specifically for youth and young adults.

With this view, we embarked on our project to ascertain if there is sufficient awareness on diabetes by youths and young adults and if not, conduct a social media campaign to determine if social media platforms are suited to engage the target audience to achieve a higher level of awareness. The project objectives were to (1) confirm that youths and young adults lack awareness of diabetes and (2) develop new resources for a social media campaign to raise their awareness on diabetes itself and the lifestyle changes needed or encouraged to reduce their risks of diabetes.

We first devised a baseline survey to fulfil objective (1). We then created a series of factlets, in the form of posters, and an informative video, all of which shared information on diabetes and recommendations for lifestyle changes.

The baseline survey confirmed the need for new resources to raise the awareness of diabetes among youths and young adults and these resources were successfully deployed in a social media campaign which fulfilled objective (2).

2. Review

A 2002 study released by National University of Singapore (Wee, H. L., Ho, H. K., & Li, S. C., 2002) found that people were generally informed about diabetes and mass and print media will play key role in dissemination and outreach. It was inconclusive on how effective public education had encouraged lifestyle changes to reduce risk of developing diabetes.

Ministry of Health, Singapore launched a nation-wide campaign “War on Diabetes” in 2016 to raise awareness about diabetes. The government campaign was reviewed by a panel of 78 citizen juries over 7 weeks in 2017 and 2018 using the below framework.

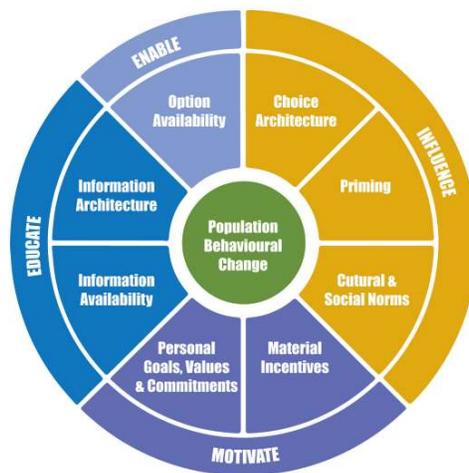


Figure 1: Evaluation framework used by the citizen jury



In the area of public education and awareness, efforts were focused on at-risk solitary, elderly, illiterate (88% implemented) and children (100% implemented) with public outreach programs targeted at the heartlands (89% implemented). 78% of the panel recommended the use of social / mass media to raise the awareness of diabetes

Health minister, Mr Gan KY acknowledged that it will require another 10 to 15 years to yield significant results from the campaign (Baker, J. A, 2018)

3. Methodology

Our project methodology took the approach of reiterative tests and validation.

- Baseline survey to test the validity of the project objective and needs
- Development and pilot-testing of new resources
- Social media campaign to test the effectiveness of new resources

3.1. Baseline Survey

A baseline survey with 135 respondents to validate the premise of the project objectives and confirm the needs analysis was conducted; testing five areas of diabetes on

1. General Knowledge
2. Risk Factors
3. Symptoms and Complications
4. Treatment, Management and Monitoring
5. Awareness of current government efforts

The survey confirmed that the intended target audience lacked awareness in diabetes, especially in categories (4) Treatment, Management and Monitoring, and (2) Risk Factors. The survey results also suggested that social media would be the platform of choice to engage youths and young adults.

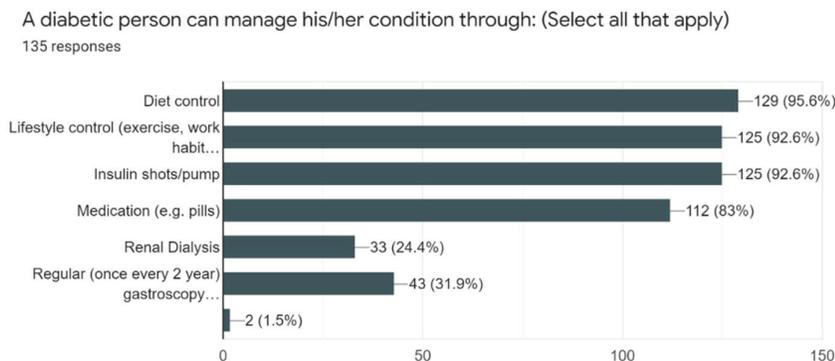


Figure 2: Baseline survey responses on management on diabetes

Which of the following are risk factors for diabetes? (select all that apply)

135 responses

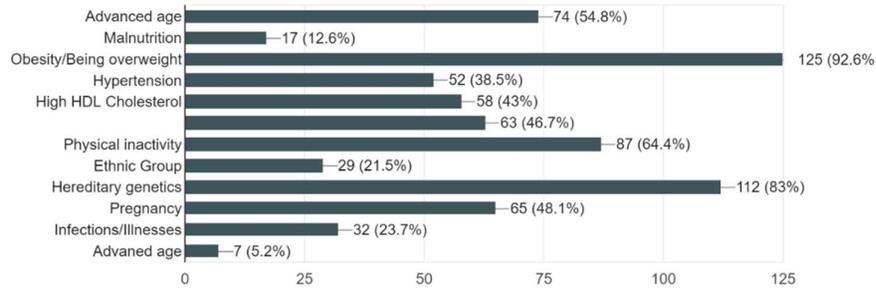


Figure 3: Baseline survey responses on risk factors for diabetes

Which of the following channels, in your opinion, is an effective way of reaching out to youths?

(Select all that apply)

135 responses

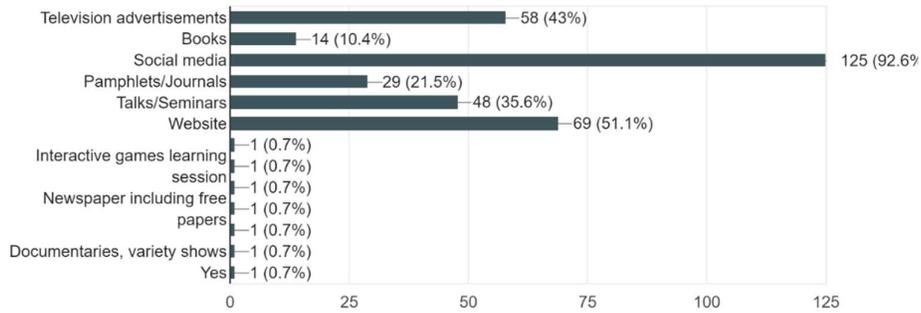


Figure 4: Baseline survey response on platform to engage youths

3.2. *Development and Pilot Test*

To effectively engage youths and young adults, it was necessary to design bite-sized new resources that can be easily “consumed” and understood. Youths and Millennials were found to have short attention span when using social media platforms, often moving on to new interests extremely quickly. We decided to use factlets to break down information on diabetes for easy user consumption on our social media platform of choice. A total of 26 factlets were made, 14 had information on diabetes and 12 had messages targeting lifestyle changes in the aspects of food and nutrition. A short animated video was also developed.



Figure 5: A factlet designed to induce lifestyle changes in diet



Figure 6: A collage of some of the factlets designed for the social media campaign

A pilot test was done with a small control group of 10 youths; rating the new resources for the social media campaign. 89% of the factlets received a 7 or higher rating. The video was separately reviewed and enhanced before it was ready for use.



Figure 7: Comparison of video animation (Left: Original; Right: Revised)

3.3. Social Media Campaign

A two-week social media campaign was carried out on Instagram from 24 July 2020 to 6 August 2020 in which the designed factlets were posted, alternating between information on diabetes and food nutrition information. The video was posted on the 2nd week of the campaign. The growth of our following was tracked and measured to help determine if the campaign was successful.



Figure 8: A screen capture of our account from the end of the campaign

Based on data (Myers, L, 2020), it was recommended that a social media presence should have 3 postings per week on IG and in general, a growth rate of followers of 7% or higher would be considered good.

A survey of 43 respondents after the campaign showed an increase of awareness in our target audience group, scoring 60% better on average with improvements in all areas tested, especially in the Risk Factors category¹. The campaign growth rate was an astounding 372%².

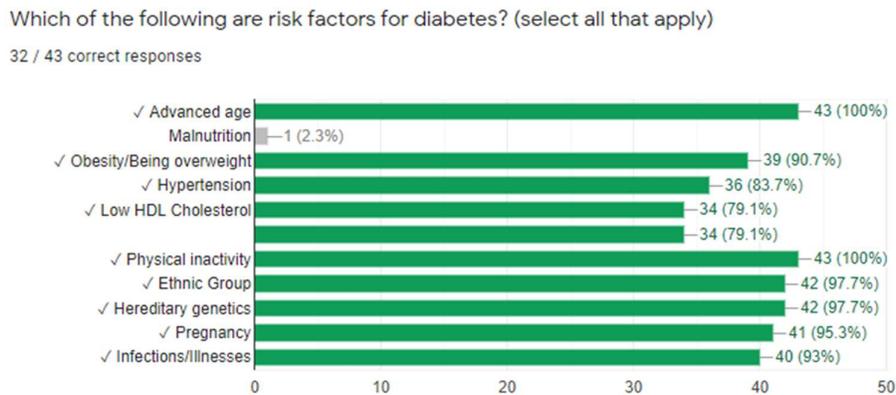


Figure 9: Improved post campaign survey responses on risk factors for diabetes

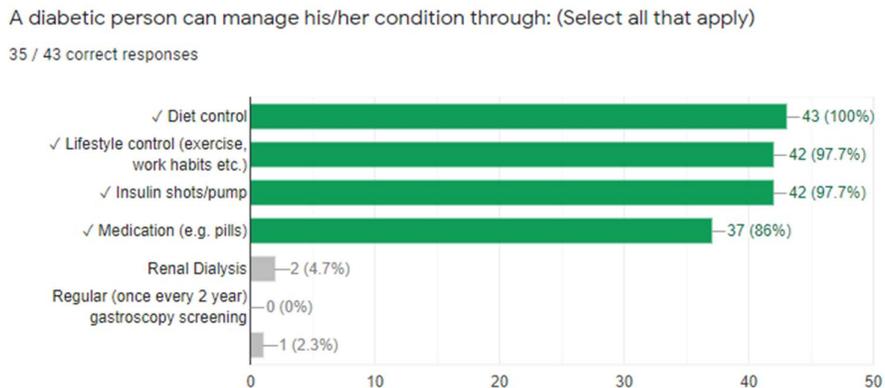


Figure 10: Improved post-campaign survey responses on the management of diabetes

¹ Knowledge on Risk Factors category scored badly in the baseline survey

² Campaign had 11 followers by end of week 1; this increased to 52 followers (372%) at the end of week 2.

4. Outcome and Discussion

The project results showed that youths and young adults lacked awareness on diabetes and the social media platform is indeed the right platform to reach out to our target group.

Our findings were in line with that of the 2018 panel findings in which the existing public education and awareness efforts were targeted at specific user groups which were more prone to risks. Traditional community outreach methods were focused on face to face interactions and used mainly mass and print media. Even when approached, the Health Promotion Board refused to support the project endeavour, disagreeing to even allow the project team to communicate with subject matter experts, citing standard operating principles. The team was directed to refer to the HealthHub website for consolidated curated materials on diabetes.

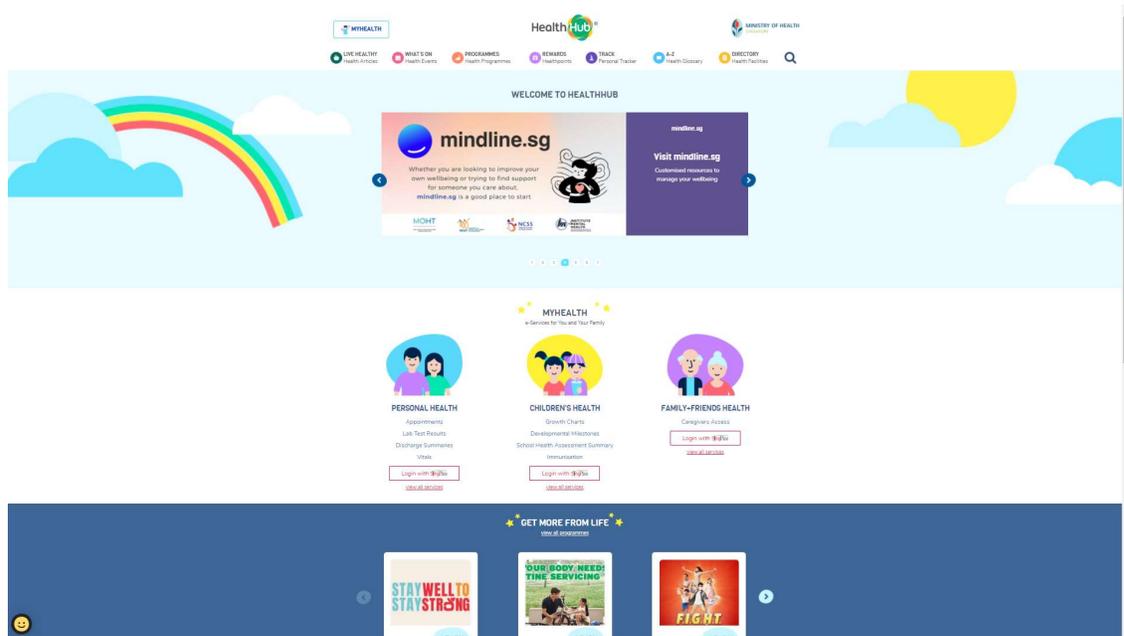


Figure 11: Traditional website format used by Health Promotion Board

Curated information contents, both print and mass media, tended to be lengthy and boring. The same can be said of materials found on most websites. This was contrary to the behavioural traits of youths and young adults, who preferred data consumption to be done in small bite-sized contents. Hence, singular traditional contents were broken up into multiple different factlets which were then posted on the social media platform for the project. The video animation in the project was kept at around 30 seconds to sustain user interest.

When using the social media platform, we had to be mindful that the outreach was driven by user communities sharing and liking the factlets' posts and the short shelf-life of each post. Based on Louise Myers³ (Myers, L, 2020), a growth rate of 7% was considered healthy and postings were to be sustained at least 3 posts per week.

One limitation we observed was that by covering only a single health topic, we ran the risk of quickly reaching limits on the materials that could be posted, as there is only so much one can say about a certain topic. Future efforts could take a more holistic approach in covering a broad spectrum of topics found within HealthHub.

The improved video animation was well-received; while future content could include short, regular, podcasts and interviews by and of experts to elicit greater interest.

³ Louise Myers is a graphic design expert who had provided consultancy to big corporations like Disney, Macy's and WalMart and is responsible for the award winning marketing blogs on Instagram, Twitter and Facebook.

5. Conclusion

The project results showed that youths and young adults were lacking in awareness about diabetes. Existing public education programmes had not been effective with this group. It can also be concluded that social media was an effective platform to convey information to this target group.

However, it was not possible to measure the effectiveness of heightened awareness on diabetes will imbue desired lifestyle changes and reduce the risk of diabetes. Future projects could delve into this aspect.

We learned useful skills on poster design and video animation; faced challenges in getting support from the health authorities. However, our project positively demonstrated improved outreach to the target group; the resource design considerations can be harvested to improve future education programmes.

(1451 words)

6. References

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