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Development of Epilepsy Action Plan: An Innovation of Disease Management

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ABSTRACT

Epilepsy is a chronic non-communicable disease which interferes with the brain cell that affects people of all ages. It causes frequent seizures and starts at any age but usually in childhood and people over 60. It is often lifelong, but sometimes gets better over time. Epilepsy sufferers experience hurdles with their quality of life (QOL) and sometimes face problems due to unexpected seizure episodes in public. People with epilepsy often do not receive appropriate care from their surroundings, which often results in their illness remaining untreated, affecting both their physical and psychological health. The objective of this study is to design a campaign to raise awareness of epilepsy on how it can be well managed as it is highly treatable. Besides, it can increase the public's knowledge, especially the caretaker of this neurological condition which affects nearly 50 million people worldwide. This epilepsy campaign was designed using an informative and attractive video that has information about the emergency treatment and post action care to overcome seizure. In this video, the first aid training demonstration to prepare everyone when they are facing emergency situations that involve epilepsy was presented. The feedback gained from 50 viewers of the video reported that about half of the respondents are aware of epilepsy but are not aware of how to handle it. All in all, this campaign has successfully made the community understand and realize the importance of treating and helping epilepsy patients when needed does increase the interest of the public to know more about these diseases.

Keywords: Epilepsy; disease; management; campaign

INTRODUCTION

Epilepsy is a common neurological disorder that affects the brain and causes recurring seizures. Seizures are bursts of electrical activity in the brain that temporarily affect how it works. People over 65 years of age have the highest incidence of epilepsy of any age, accounting for almost a quarter of cases of new onset epilepsy. Many people with epilepsy have more than one type of seizure and may have other symptoms of neurological problems as well. Having seizures and epilepsy can affect your safety, relationships, work, driving, and so much more [1]. Public misunderstanding and treatment of people with epilepsy are often bigger problems than actual seizures [2].

Thus, in this workpaper, we are focusing on methods and precautions that can eventually be done in order to manage epilepsy from prolonged duration and to reduce the chances of developing epilepsy. This includes physical and emotional support from close friends or family members, where they will comfort and give advice to the epilepsy sufferer. For example,

something soft should be put behind them for better comfort and prevent others from crowding near the sufferer [3]. This is crucial for them to feel better and prevent them from unnecessary stress that might worsen the epilepsy [4]. This is because prolonged epilepsy may lead to death [5, 6]. So, an innovation development of epilepsy management is made to raise awareness to public about this serious health issues.

INNOVATION DEVELOPMENT

In order to raise awareness of epilepsy among the community, we decided to create an informative and attractive video. The purpose of this video is to give information about emergency treatment and post action care to overcome seizure. In this video, we explained the overview of epilepsy as people might not be familiar with this disease. We also explained about symptoms and causes for this disease so that people will be aware of this condition. However, the aim of this video is to give knowledge to the community about emergency treatment when they face this situation. We make a first aid training demonstration in this video to help people to know how to handle this emergency situation as most of us usually rely on the expert to treat them when actually we can do it by ourselves.

After the video is ready, we upload it into our Youtube channel under the name of our leader, Amirah Rushdi. We also made a survey using Google form and distributed the form to society through social media such as Whatsapp. In this google form, we also put our video link to enable the respondent to access and watch the video easily. Some questions were asked in this google form to test the understanding of respondent towards epilepsy. Lastly, we gathered the information and data obtained from the respondents.

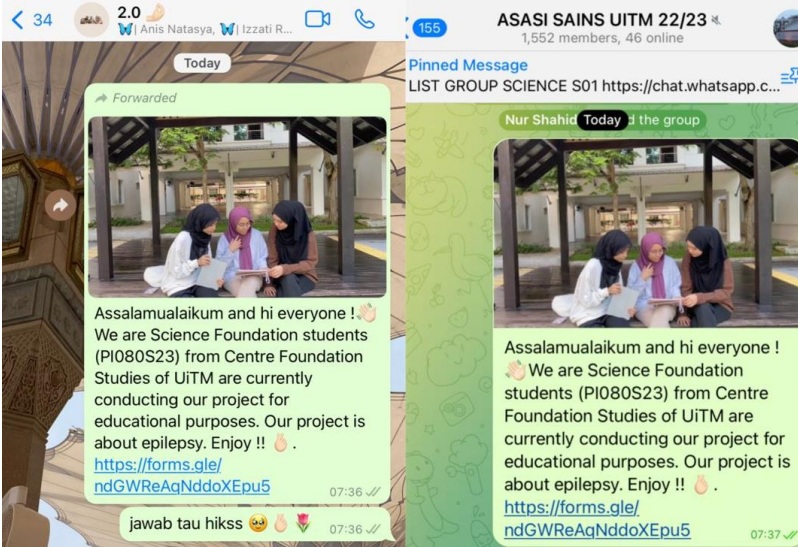


Figure 1: Sharing platform.

I know how to help epilepsy sufferers.
40 responses

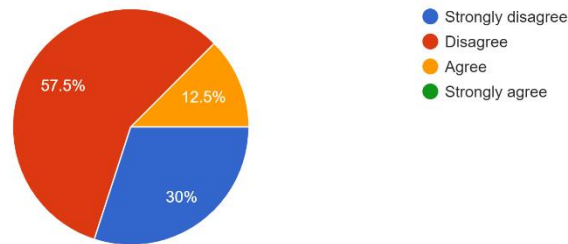


Figure 2: Before watching the video.

I know how to help epilepsy sufferers
40 responses

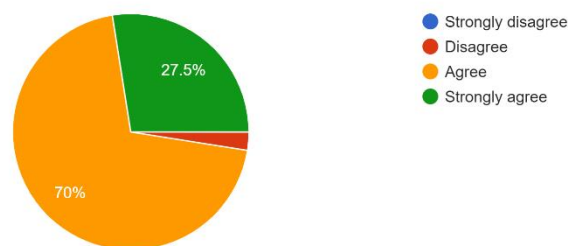


Figure 3: After watching the video

COMMERCIAL POTENTIAL

Epilepsy is a chronic noncommunicable disease of the brain that affects people of all ages. In our society, some of us may be aware of this disease and some may not. To make sure that what we are going to share with the public is correct, we interviewed Muhammad Nazirul bin Ahmad Husni, a final year student at USMKLE in India. From the interview, Dr. Nazirul mentioned that the cause of this disease is checked by blood investigation, complete blood count (CBC), glucose level, serum electrolyte, MRI, and CT scan. If all are normal, then the doctors will proceed to do Electroencephalogram (EEG). Because epilepsy varies, the diagnosis requires tests, history, and clinical examination. This way, we can see that accurate diagnosis of seizure type and where seizures begin are crucial for finding an effective treatment. In our project, we are focusing on the treatment of the disease and giving first aid to those who have an epilepsy attack. In short, our video can help to raise awareness in the community. This is because we believe that not many people know how to give first aid to a person with epilepsy attack [7].

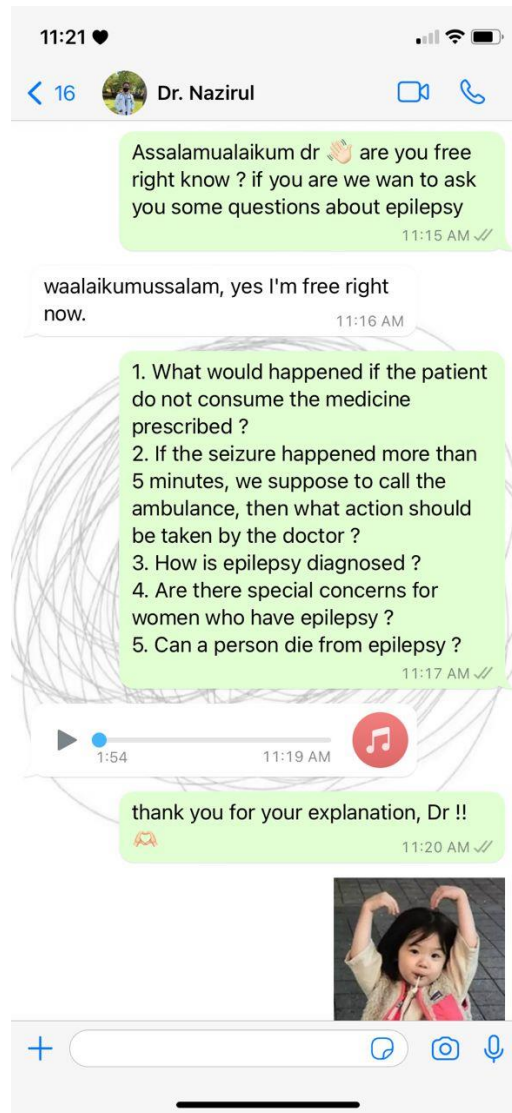


Figure 4: Interview with Dr. Nazirul via WhatsApp.

From our video, the public can understand more clearly about epilepsy treatment and first aid. This way, those who have an epilepsy attack can be rescued. It is very important to do a correct first aid because epileptic patients can be threatened to death when someone gives a wrong first aid and treatment to them. Nowadays, there are already some technologies that are being created for epileptic patients. For instance, Embrace2 is FDA-cleared wrist-worn wearable for epilepsy [8]. Since there is no cure for this disease, future generations can do more research and make more technological inventions and innovations for people with epilepsy to use. We believe that this may be one of the positive feedback from our video.



Figure 5: An epileptic patient wearing Embrace2.

CONCLUSION

To sum up, this awareness campaign on epilepsy has been successful in spreading essential facts on epilepsy to the society. This five-minutes video that has been uploaded on Youtube have been able to educate people on the strategies and techniques to minimize seizure duration, its causes, symptoms and misconceptions on epilepsy to create more accepting society for people with epilepsy. This video also highlighted some treatment done by the health educators if seizures happen for more than five minutes and additional knowledge on the nature of epilepsy in our video. A survey also was made to test the understanding of respondent towards epilepsy. There are many other methods on raising awareness on epilepsy and it is very important continue to improve the strategies to ensure it reaches the public from time-to-time over generations. In the future, steps that could be done to raise awareness is by collaboration with healthcare professionals and organizations that are in charge in achieving this goal. In addition, people that are diagnosed with epilepsy themselves can be invited to talk about their experiences and provide more knowledge and advice to the individuals who have recently been diagnosed. All in all, by working together with continued efforts to educate people on epilepsy, it can create more supportive environment with people who suffered and encourage early diagnosis and treatment.

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After doing many discussions together, we have decided to spread awareness on how epilepsy can be well managed as it is highly treatable. Besides, it can increase public's knowledge especially the caretaker of this neurological condition which affecting nearly 50 million people worldwide.

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