

## **Reaching out to Stroke Survivors as the Language Centre's Service to the community**

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### **Abstract**

This study looks into the interaction between community and students' development and Service Learning Malaysia-University for Society, SULAM, practiced amongst forty students. This Community Service project involved stroke survivors, with students helping them become self-reliant again. The project has four objectives; namely cultivating entrepreneurs amongst stroke survivors and students, helping to increase the household economy of the stroke survivors and students, transforming the stroke survivors' and students' mindsets on starting businesses of their own, and nurturing students to become change agents. Students got to mingle with the stroke survivors and learned from them. Both the stroke survivors and students answered online questionnaires on Google Form. The study reveals stroke survivors had the opportunity to gain knowledge and skills through the courses held at the Hulu Langat Community College, used the knowledge and skills gained when they participated in the Youth Entrepreneurship Fairs, and started thinking and planning a particular business which is suitable to them. While the participation in the fairs did not immensely increase the stroke survivors' household income, they got to experience getting profit from cash sales. The students discovered the meaning of community service where they had interactions with the stroke survivors, helped and learned from them, and experienced doing community service, apart from many other benefits. Finally, this study demonstrates that university learning and community engagement have social incentives (acceptance of stroke survivors to the help offered by students vice versa) which give a sense of fulfillment and motivate students as community service agents.

**Keywords:** community service, stroke survivor support, university learning and community engagement, Service Learning Malaysia SULAM

## **Background**

In Malaysia, stroke is one of the top five leading causes of death [1] and is one of the foremost contributors to functional disability [2]. It has been reported that six new stroke cases occur in Malaysia every hour [3]. Stroke is a syndrome or damage in the brain. Broadly, there are two types of stroke, either ischemic (in 85% of cases) or hemorrhagic (in 15% of cases) [4]. After suffering from a stroke, the body structures and functions become impaired and, as a result, the individual might experience difficulties in performing basic activities of daily living. Restrictions in participation have also been reported [5][6][7], regardless of stroke severity [8]. This is due to psychological effects after stroke where a stroke patient is said to go through mood disturbance and may present as depression or anxiety. A stroke patient experiences difficulties with the activities of daily living, such as talking, eating, walking, writing, driving, etc. Apart from physical and psychological disability, another effect of stroke is losing the source of household income. After a stroke, patients are frequently unable to return to work, unwilling or unable to continue their rehabilitation once discharged from the hospital, and clinically depressed [9]. With the increasing number of stroke cases annually, more government and non-government organisations should be involved in prevention strategies, and stroke support initiatives.

Community engagement is increasingly seen as crucial to achieving high quality, efficient and collaborative care. However, organisations are still searching for the best and most effective ways to engage citizens in the shaping of health and care services [10]. University to community engagement that involves some reciprocal interaction between graduate education (through students and faculty) and the public, an interaction that betters both the discipline and the public or set of stakeholders for whom the work is most relevant [11]. Community engagement has been advanced as a useful strategy for improving people's health and as a means of enabling people who lack power to gain control over their lives – and thereby improve their own health [12]. In Malaysia, there are organisations such as the National Stroke Association of Malaysia (NASAM), Stroke Community Rehabilitation Centre (SCORE), and the Cheras Rehabilitation Hospital (HRC) which focus on community engagement initiatives to help stroke survivors.

This project aims to engage with the community (Stroke Survivors community) and help them to “get up again” and “start a new life”. The study uses community engagement pedagogies which combine learning goals and community service in ways that can enhance both students' growth and the common good. Community engagement pedagogy is said to help incorporate adult learning theories and reduce the cultural distance between academics and the communities, hence empower education [13] Through a project which was initiated by the UPNM's Language Centre and students doing the course Intercultural Communication (LLS3314); students worked hand in hand with stroke survivors in helping the latter who are in need to “get up again” and “start a new life”. According to [14] stroke survivors experience the changed body which has direct correlation to physical and functional limitations. This does not only affect their relationships with others but also transformed their identities and roles in their social context. Hence, the project aims at helping Stroke Survivors to empower themselves so that they can at least be knowledgeable and confident in generating income for daily living (or at least do something while recuperating from stroke).

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The project collaborated with the Cheras Rehabilitation Hospital who handpicked the names of the Stroke Survivors. The Stroke Survivors had to meet certain criteria, such as they have to be mobile which means they are capable of moving from one place to another on their own and they are from the Klang Valley. The other organisation that collaborated with this project is the Hulu Langat Community College. Their task was to select and deliver courses which are appropriate and relevant in enhancing the independence of the Stroke Survivors, focusing on their entrepreneurship skill. The Stroke Survivors who were selected and the students undertook activities which involved acquiring entrepreneurship knowledge and skills to give them some added values in forming businesses which can be conducted from home and generate income.

At UPNM, Intercultural Communication (LLS3314) is offered as a compulsory course for students doing the Bachelor of Social Sciences (Languages and Cross Cultural Communication) at the Language Centre. This course helps students to be aware that they are human beings with multiple identities compounded by different cultures, hence creating awareness amongst the students on the importance of intercultural communication. Apart from providing students with knowledge in communication, the course includes the importance of differences in cultural encounters through communication. Four out of fourteen weeks in a semester, through this course, students get the opportunity to be involved in community engagement activities with Stroke Survivors. These activities vary for every batch of first year students who do this course. However, for every new intake of students, it is found that the students have never been exposed to community service (especially one that involves stroke patients) before thus it is imperative that they get the exposure so that they understand SULAM better and become the bridge that links the university and the community.

## **Objectives**

This study investigated whether the project reached its four (4) specific objectives. The objectives are:

1. to cultivate entrepreneurs amongst stroke survivors and students,
2. to help increase the household economy of the Stroke Survivors and students,
3. to transform the Stroke Survivors' and students' mindset on starting businesses of their own, and
4. to nurture students to become community change agents.

## **Methodology**

### *Samples*

There are 10 stroke survivors and 40 students who were involved in this study.

### *Questionnaires*

#### 1. The questionnaire for the stroke survivors

The questionnaire for the stroke survivors has nine qualitative questions. These questions are simple questions, keeping in mind that the stroke survivors have certain stroke impairments. Questions are “sharing of experience” type of questions where the stroke survivors responded to questions like “Tell me how you feel about...” The summary of qualitative data is then automatically saved into a Google Sheets spreadsheet which can easily be read and analysed thematically.

#### 2. The questionnaire for students

The questionnaire for the students has 20 questions, a combination of linear scale (15 questions), long answer (paragraph) (2 questions) and multiple choice (3 questions) answer type questions. The questions are constructed and arranged in the questionnaire with reference to the study’s objectives. Data from students’ responses are automatically sent to Google Sheets spreadsheet (excel), then uploaded into SPSS for the mean score of each objective and to see if this study has reached its objectives.

### **Results and Discussion**

From the questionnaire, below are the stroke survivors’ responses regarding their background before and once they get the stroke.

#### *Q4-Do you feel that you have recovered from stroke?*

All ten stroke survivors when asked about their present condition, chose the option, “Yes, I have recovered from stroke but partial recovery”. They have recovered means they are already back into the society but they still have certain impairments from the stroke such as one still depends on a cane for walking or another can only move and use one of her hands. All stroke survivors still have ongoing rehabilitation appointments.

#### *Q5-Can you share your experience of getting stroke?*

All ten stroke survivors mentioned that they were caught by surprise, did not expect stroke to happen to them and they were doing their normal daily activities when stroke happened. One was exercising at a gymnasium (It came unexpected as I was exercising at the gym) and another when she was taking her bath (It happened when I was bathing, I suddenly heard a loud shot in my head, and I was unconscious or fainted until evening).

*Q6-Can you tell us about your stroke recovery process?*

All stroke survivors mentioned physio therapy as a part of their stroke recovery process. There were a few who mentioned Chinese Medicine, acupuncture and massage; as contributors to their recovery. They also mentioned the importance of having support, whether from family members, friends or care takers. All the stroke survivors are doing rehabilitation at Cheras Rehabilitation Hospital except one, who goes to Tun Razak Rehabilitation Centre (TRRC) Melaka.

*Q7-What is your occupation before and after stroke? And what are you doing now?*

All stroke survivors were working before stroke and could not do what they were doing before, after the stroke. Below is a list of their occupations before stroke and what they are doing now in 2021. It can be seen that most Stroke Survivors ventured into small from home business related to food.

Name	Occupation	Name	Occupation
1. Chew Say Siong	Programmer	6. Tuan Nornadhira Tuan Aznan	Restaurant Manager
2. Atiqah Putri Ab R	Diploma student/model	7. Ismaiel Ibrahim	Driver
3. Kasroh Hj Abd Karim	Interior Decorator	8. Roziana Mohd Johari	Account Executive
4. Noorin Hayati Ismail	Bank Manager	9. Aw Wan Fai	Marketing Manager
5. Siti Sabariah Abd Rahman	Science and Math teacher	10. Zuraida Hussein	Head of Customer Service Operation

Name	What they do now in 2021	Name	What they do now in 2021
1. Chew Say Siong	Homemade Sour dough bread	6. Tuan Nornadhira Tuan Aznan	Popia carbonara
2. Atiqah Putri Ab R	<i>Kaftans</i> , pre-loved items	7. Ismaiel Ibrahim	Ayam sihat
3. Kasroh Hj Abd Karim	Deceased	8. Roziana Mohd Johari	Home maker
4. Noorin Hayati Ismail	Running a toy shop and Izz-e cube	9. Aw Wan Fai	Tupperware
5. Siti Sabariah Abd Rahman	Recuperating from various health conditions	10. Zuraida Hussein	Bliciousseries cookies

*Q8-Can you please share your hopes for the future?*

In general, the stroke survivors want to share their experience so that it can help others. All of them hope to recover fully but they are grateful to be able to do their daily activities. Few comments from the stroke survivors are quoted as,

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*“My hope is no other person go through what I go through. Stroke education is important so that everyone especially the younger generation know how to care about their health.”*

*“Now, after the stroke, I am more relaxed. I want to plants flowers, bake cakes and live life happy.”*

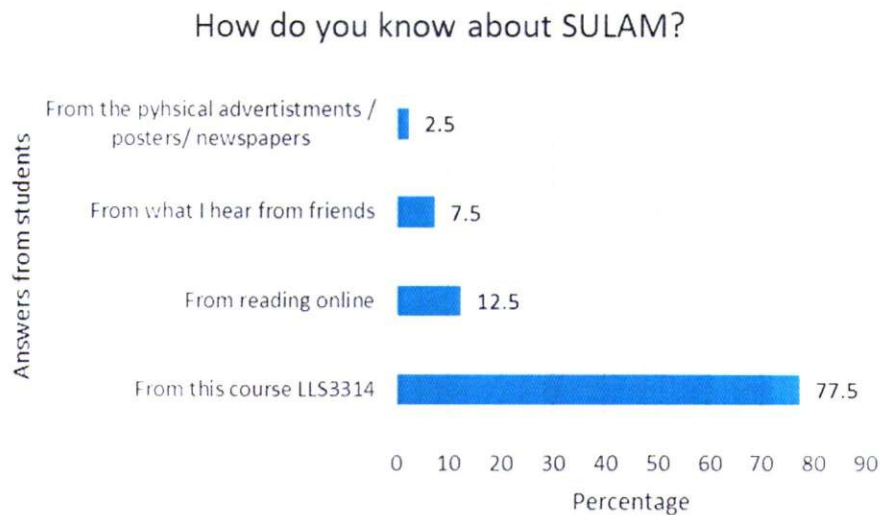
**Q9-What have you achieved from this SULAM project?**

From the analysed data, the stroke survivors collectively agreed that the project gave them knowledge and skills. They can use what they have learned to generate income. The project also increases their confidence and fills up their time. One avid participant mentioned,

*“I sell caftans. This project teaches me how to sell my caftans, how to promote sales and other things you need to know before doing any business. I was involved in three entrepreneurship fair where I had the opportunity to interact with people. It is difficult for people like us, the society tends to look down on us. Thank you UPNM for giving us a chance to succeed, for transporting me to the fairs, we still have mobility problem.”*

Next are the students’ responses:

The students’ responses for **Q1.6 How do you know about SULAM?** is as shown in Figure 1.

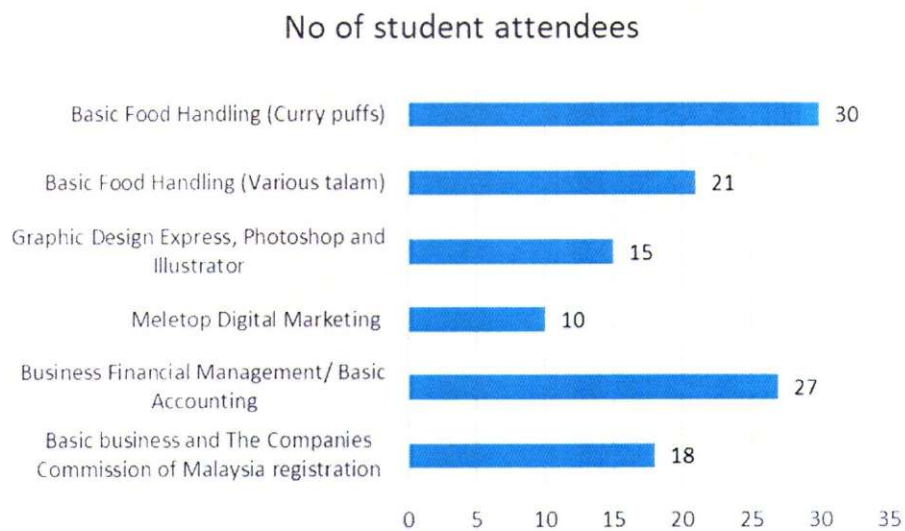


**Fig. 1. Response for Q1.6 How do you know about SULAM?**

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From the forty students, 75.5% know about the SULAM project when they joined the Intercultural Communication (LLS3314) class, 12.5% knew about SULAM from their reading online, only 7.5% from friends, and 2.5% read or saw physical advertisements or posters on SULAM or even in newspapers. This emphasised the importance of to continue embedding SULAM in university courses, that students have no option but to get to know about it while doing their academic courses.

For the next question, Q1.7, the instruction is “Below is a list of courses conducted in the project. Tick the ones you attended” (as shown in Fig. 2).



**Fig. 2.** Response for Q1.7 Courses offered to participants of the project

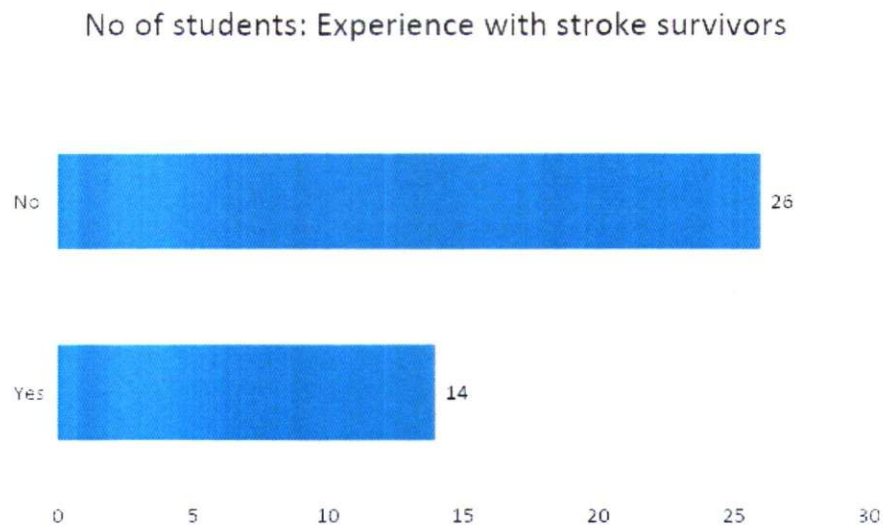
The students attended the courses held at the Hulu Langat Community College. The lower number of attendees was mainly because the dates that the courses were offered collided with students’ activities such as the ROTU or *Palapes* trainings that they could not avoid. The course with the most number of students is “Basic Food Handling (Curry puffs)” and the least number of students is “Explosive Digital Marketing”. There is no particular reason to why they chose to be at a course or not except that unavailability of students due to other academic commitments as all courses were conducted during academic semester.

For question Q1.8 which asked students about their view on the entrepreneurship courses offered by the project, all the students looked at the courses positively. They mentioned the words “Very interesting, good project, very intriguing, great, helpful, useful, attractive” in describing the courses. The students commented how the courses gave them entrepreneurial knowledge and skills, like what was mentioned by the stroke survivors. They mentioned the need to repeat or have similar projects in future and suggested the availability of project to be circulated through social media so no students are left out. One of the comment suggested,

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*“The courses are attractive and there is a need to repeat the project. This project should be made known or open to all students through the university’s WhatsApp group of Facebook page, so that all students will get the opportunity to experience community service.”*

Another interesting result to be highlighted is response for Q3.4, “Before this project, I had the experience of interacting with stroke survivor(s) for example relatives or friends”.



**Fig. 3.** Response for Q3.4 Experience with stroke survivors

Referring to Figure 3, only 14 students have had the experience of interacting with stroke survivors prior to the project and the rest are first timers. Not even half of the students have the experience of knowing stroke survivors before their involvement in this project.

*Q4.3 Do you think project such as this one should be continued? If yes, why?*

All students agreed that this project should be continued. Their reasons they gave are: because it is a very beneficial project where communication or soft skills are involved. The best thing about this project is, they get to help other people. This project gives more information to the students about the importance of helping the stroke survivors, because we need to support them. Almost all stroke survivors felt they cannot do anything about generating income after they had stroke. The reason is this project gives opportunity to students to open their minds in helping and cultivating the spirit of entrepreneurship with the stroke survivors.

*“This project gives the space and opportunity especially to group such as the OKU to generate income. It also gives the opportunity to use the knowledge and skills from the courses in helping the stroke survivors” commented one of the students.*

Data from all the other questions in the student questionnaire are presented below in a table. Table 1 shows the frequency of responses and mean scores from the students regarding questions related to the four objectives. It can be said that the majority are positive and gave good feedback in-line with the project objectives.

The highest mean score is 4.325 for Q1. *This project has successfully given me new entrepreneurial or business skills.* On the other hand, the lowest mean score is 3.775 for Q1.5 *This project has successfully made me an entrepreneur or business person.* These findings are expected as they had participated in six courses that give the knowledge and skills to help in business. However, becoming an entrepreneur requires more than just attending these few courses. It requires the passion, astuteness and determination of oneself to transform him or her [15]. Another main point that the project is lacking is that to provide business mentor to each participants. Mentorship perhaps is more important and ideal to nurture successful entrepreneurs besides related courses.

Table 2 shows the descriptive statistics of this finding. It shows that Objective 1 has a mean score of 4.16 and a standard deviation of 0.65. Objective 2 has a mean score of 4.06 and a standard deviation of 0.67. Objective 3 has a mean score of 4.18 and a standard deviation of 0.66. Lastly, Objective 4 has a mean score of 4.26 and a standard deviation of 0.74. The highest mean score in 4.26 for Objective 4: To nurture students to become community change agents, and the lowest mean score if for Objective 3: To transform the Stroke Survivors' and students' mindset on starting businesses of their own.

Cronbach's alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. George and Mallery (2003) provided the following rules of thumb: “\_ > .9 – Excellent, \_ > .8 – Good, \_ > .7 – Acceptable, \_ > .6 – Questionable, \_ > .5 – Poor, and \_ < .5 – Unacceptable” (p. 231).

**Table 1.** Results from quantitative questionnaire from the students

<b>Gender</b>		<b>Male : 12</b>			<b>Female : 28</b>		<b>Mean Score</b>
<b>Section 1</b>		<b>Strongly agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly disagree</b>	
<b>Objective 1</b>	I want to run a business of my own preferably from home.	18	13	8	0	1	4.175
	This project has successfully exposed me to entrepreneurship.	16	17	7	-	-	4.225
	This project has successfully given me new entrepreneurial or business knowledge.	17	17	6	-	-	4.275

Objective 2	This project has successfully given me new entrepreneurial or business skills.	19	15	6	-	-	4.325 (.7157)
	This project has successfully made me an entrepreneur or business person.	10	15	11	4	-	3.775 (.9470)
	<i>Section 2</i>	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean Score
	This project can generate income.	14	20	6	-	-	4.200
	I need more money for my studies, that is why I am interested with this project.	16	14	8	2	-	4.100
	I prefer to have my own business rather than an employee in a company after I graduate, that is why I am interested with this project.	12	14	12	1	1	3.875
Objective 3	<i>Section 3</i>	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean Score
	I got to communicate with the stroke survivors in the project.	14	16	8	2	-	4.050
	I emphasised with the stroke survivors and I think they are strong.	19	13	7	1	-	4.250
	I feel responsible to help the stroke survivors.	17	16	7	-	-	4.250
	This project has introduced me to the term "community engagement".	14	17	9	-	-	4.125
	Community service can be defined as providing services or training to socially deprived or disabled persons using profits for socially oriented purposes, organising self-help groups for community actions, etc.	16	17	7	-	-	4.225
Objective 4	<i>Section 4</i>	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean Score
	This project has increased my knowledge and entrepreneurial skills as a student community change agent in helping the stroke survivors.	17	17	5	1	-	4.250
	In my opinion, project such as this one is able to give awareness to students and enhance students' interest on community-student development (supporting the community in need).	18	16	5	1	-	4.275

**Table 2.** Descriptive Statistics for quantitative survey

	N	Minimum	Maximum	Mean	Std. Deviation	Cronbach Alpha	Level of Reliability
Objective1	40	2.80	5.00	4.1550	.64448	.847	Good

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Objective2	40	2.33	5.00	4.0583	.66619	.668	Questionable
Objective3	40	3.00	5.00	4.1800	.65914	.889	Good
Objective4	40	2.00	5.00	4.2625	.74238	.896	Good

Objective 1 has a Cronbach Alpha value of .847 which means 84.7% variability in composite score of the 5 items under Objective 1 is reliable variants.  $\alpha = .847$  shows a good level of reliability. Secondly, Objective 3 has a Cronbach Alpha value of .889 and Objective 4 has a value of .896, both reliability of scale is good. Lastly, Objective 2 has a value of .668 which is a questionable reliability. Cronbach Alpha for Objective 2 can be made better (.752: acceptable) if Item 1 of Objective 2 is deleted.

## Conclusion

It is a dire hope that embedding SULAM in the course Intercultural Communication has served its objectives specially in enhancing the sense of social responsibility, and tolerance towards differences in the community. It is also hoped both Stroke Survivors and students got to enhance their skills such as the ability to work well with others, critical and creative thinking skills and leadership and communication skills. This project portrayed the transformation of a person into an entrepreneur requires more than merely sending them to related courses. It could be seen from the study that the Stroke Survivors who are more in need to be entrepreneurs were more keen to try becoming one as compared to the students who obviously do not need it yet. The platform that the project offered to the participants to test their business skills at the Youth Entrepreneurship Fair was a safe place for them to motivate them to do business. It did not increase the participants' household income, however they got to learn the ups and downs of doing business from the experience as some days they got more and some days when the crowd was not so many, they got less. Nonetheless, all participants now have some entrepreneurship knowledge and skills and they can keep on learning to be a real entrepreneurs and students who had the experience of working with the stroke survivors' community could continue becoming the change agent for the community.

The best realisation from this project is instilling in the students the sense of social responsibility towards the community in need. It opened their minds to more ideas of reaching out to the community, of how they can play a role in bridging the university to community (Stroke Survivors) by appreciating differences, creating prosperity, and fostering social change. It is no doubt when students stand for their beliefs and understand the impact of their actions, they can represent their university and communities with pride, courage, and ability.

## Acknowledgement

We would like to thank *Hospital Rehabilitasi Cheras* and *Kolej Komuniti Hulu Langat* for their support in this project.

## References

- [1] Loo, K. W. and Gan, S. H. (2012). Burden of Stroke in Malaysia. *International Journal of Stroke* © 2012 World Stroke Organization Vol 7, February 2012, 165–167.
- [2] Minino AM MS, Xu J, and Kochanek KD. (2011). Deaths: final data for 2008. *National Vital Statistics*.
- [3] Krishnamoorthy, M. (2007). Killer stroke: six Malaysians hit every hour. 2007 Available at <http://thestar.com.my/news/story.asp?file=/2007/4/24/nation/17524877&sec=nation> (accessed 5 September 2011). Understanding Stroke by the National Stroke Association of Malaysia (Nasam). Available at <http://www.nasam.org/>.
- [4] Musuka, T. D., Wilton, S. B., Traboulsi, M., and Hill, M. D. (2015). Diagnosis and management of acute ischemic stroke: speed is critical. *CMAJ: Canadian Medical Association journal = journal de l'Association medicale canadienne*, 187(12), 887–893. doi:10.1503/cmaj.140355.
- [5] Maleka, M., Stewart A.S. and Hale L., 2012, 'The experience of living with stroke in low urban and rural socio-economic areas of South Africa,' *South African Journal of Physiotherapy* 68(3), 25–29. 10.4102/sajp. v68i3.21.
- [6] Rouillard S., De Weerd W., De Wit L. and Jelsma J., 2012, 'Functioning at 6 months' post stroke following discharge from inpatient rehabilitation,' *South African Medical Journal* 102(6), 545–548. 10.7196/SAMJ.5488.
- [7] Rhoda A., Cunningham N., Azaria S. and Urimubenshi G., 2015, 'Provision of inpatient rehabilitation and challenges experienced with participation post discharge: Quantitative and qualitative inquiry of African stroke patients,' *BMC Health Services Research* 15(1), 23 10.1186/s12913-015-1057-z.
- [8] Wolf, T. and Koster, J., 2013, 'Perceived recovery as a predictor of physical activity participation after mild stroke,' *Disability and Rehabilitation* 35(14), 1143–1148. 10.3109/09638288.2012.720635.
- [9] McGuire, J. R and Harvey, R. L. (1999). The prevention and management of complications after stroke. *Physical Medicine and Rehabilitation Clinics of North America*, 10(4):857–873.

- [10] De Weger, E., Vooren, N. V., Luikjx, K. G., Baan, C. A., and Drewes, H. W. (2018). Achieving successful community engagement: a rapid realist review. *BMC Health Services Research*, 18 (285) <https://doi.org/10.1186/s12913-018-3090-1>.
- [11] O'Meara K. A. and Jaeger, A. J. (2006). Preparing Future Faculty for Community Engagement: Barriers, Facilitators, Models, and Recommendations *Journal of Higher Education Outreach and Engagement*, Volume 11, Number 4, p.3.
- [12] Brunton, G., Thomas, J., O'Mara-Eves, A., Jamal, F., Oliver, S., and Kavanagh, J. (2017). Narratives of community engagement: a systematic review-derived conceptual framework for public health interventions. *BMC public health*, 17(1), 944. doi:10.1186/s12889-017-4958-4.
- [13] Rubin, C. L., Martinez, L. S., Chu, J., Hacker, K., Brugge, D., Pirie, A., Allukian, N., Rodday, A. M., & Leslie, L. K. (2012). Community-engaged pedagogy: a strengths-based approach to involving diverse stakeholders in research partnerships. *Progress in community health partnerships: research, education, and action*, 6(4), 481–490. <https://doi.org/10.1353/cpr.2012.0057>
- [14] Nasr, N., Mawson, S., Wright, P., Parker, J., & Mountain, G. (2016). Exploring the Experiences of Living with Stroke Through Narrative: Stroke Survivors' Perspectives. *Global Qualitative Nursing Research*. <https://doi.org/10.1177/2333393616646518>
- [15] Teng, R. (2018). Can Entrepreneurship Be Taught? Are Entrepreneurs born or can their innovative characteristics be trained? *Entrepreneur Insight* July 2018.