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# Sinhala as the medium of instruction in medical education: Perception of medical students in Sri Lanka

Thilanka Seneviratne<sup>1</sup>, Kosala Somaratne<sup>2</sup>, Deelaka Bandara<sup>1</sup>, Vindya Alahakoon<sup>1</sup>, Dilan Bandara<sup>1</sup>, Randima Munasinghe<sup>1</sup>, Nabil Ilyas<sup>3</sup>, Thilini Subasingha<sup>4</sup> & P. V. R. Kumarasiri<sup>5</sup>

<sup>1</sup>Department of Pharmacology, Faculty of Medicine, University of Peradeniya, Sri Lanka; <sup>2</sup>Base Hospital, Rikillagaskada, Sri Lanka; <sup>3</sup>Teaching Hospital, Peradeniya, Sri Lanka; <sup>4</sup>Lady Ridgeway Hospital, Colombo, Sri Lanka; <sup>5</sup>Department of Community Medicine, Faculty of Medicine, University of Peradeniya, Sri Lanka

#### Abstract

**Introduction:** English is the medium of instruction in the medical faculties in Sri Lanka, although the majority of the students who admit to the medical faculties completed their secondary school education with Sinhala as their first language. This disparity presents a potential barrier to their assimilation of knowledge in medical education.

**Objective:** To assess the medical students' perception of the medium of instruction in medical education.

**Method:** The medical students of the Faculty of Medicine, University of Peradeniya, Sri Lanka, enrolled from 2013 to 2017, whose first language is Sinhala were included in the study. Perceptions about the medium of instruction in medical education were assessed through an anonymous self-administered questionnaire, which used a five-point Likert scale for responses.

**Results:** From the total of 837 medical students, 665 (79.5%) participants had studied the General Certificate of Education - Ordinary Level (GCE O/L) in Sinhala and 172 (20.5%) in English. Eighty-eight percent (87.8%) had obtained an "A" grade for English Language in the GCE O/L examination. Over half (53.4%) of students responded that if medical textbooks were available in Sinhala, it would have increased their understanding of medical concepts. Nearly two-thirds (61%) responded that they perceived their performance in clinical examinations would have improved if those were carried out in Sinhala.

**Conclusion:** The findings reveal the positive perception of students towards using their first language in medical education. Specifically, students feel that concepts of medicine would be better understood if medical textbooks were available in Sinhala and that they could have performed better if examinations were done in Sinhala, their first language.

Keywords: Mother Tongue, Native Language, First Language, Sinhala, English, Medical Education

#### Practice Highlights

- Students perceive that learning will be easier if medical textbooks were in Sinhala.
- Students opined that they can perform better if examinations are done in Sinhala.
- Learning medicine would be easier if medical teaching is supported in Sinhala.

#### I. INTRODUCTION

The medium of instruction used in different levels of education in Sri Lanka varies, with the main languages used being Sinhala (the native or first language or 'mother tongue') and English (the second or additional language for most Sri Lankans). Though Sinhala is used in primary education in all the government schools, certain schools offer secondary education in English, as

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a medium of instruction. At the secondary level, a small percentage of students select the English medium up to General Certificate of Education - Ordinary Level (GCE O/L) exam; while a lesser number of students select the English medium for General Certificate of Education -Advanced Level (GCE A/L) studies. Whilst English has been the official medium of instruction in undergraduate medical education since its inception, most of the students who enter the medical faculty had completed both their primary and secondary education in the Sinhala medium, yet have to switch over to the medium of English at the university level.

This change of the medium of instruction at the university level hinders some students from performing well in their university studies (Nyika, 2015). For students whose first language is not English, English language proficiency is shown to be one of the most important predictors of academic success (Ahmed, Ahmed, & Al-Jouhari, 1988; Al-Mously, Salem, & Al-Hamdan, 2013; Ariyasinghe & Pallegama, 2013; Lucas et al., 1997).

A study carried out by Ellili-Cherif and Alkhateeb (2015) in which medicine was taught in both English and in the students' first language, identified the students' positive perception in learning through their first language. Dutcher and Tucker (2012) and Laguarda and Woodward (2013) found that using learner's first language in teaching helps them to acquire knowledge and skills with ease. However, Sri Lankan students are deprived of the benefits of learning medicine through Sinhala, as the medical schools in Sri Lanka have never tried teaching medicine in the native language.

It is interesting to note that, medical education in the majority of high-income countries is carried out in their respective native language. The practice of using a language other than the native language is particularly seen in some countries of South/South East Asia, Middle East and Africa (Kirkpatrick, 2014; Narayan, 2013; Telmesani, Zaini, & Ghazi, 2011).

Students' perceptions of the impact of the medium of instruction, on teaching and learning medicine, have not been sought so far in Sri Lanka. Thus, we thought of probing into this important aspect of medical education.

Our objective of this study was to assess the student perception of the medium of instruction in undergraduate medical education, among the medical students whose mother tongue is Sinhala. Also to assess the effect of medium of study in school education, level of English proficiency, stage of clinical education (clinical vs preclinical), on the student perception of the medium of instruction.

#### II. METHODS

#### A. Study Design and Setting

A descriptive study was conducted at the Faculty of Medicine, University of Peradeniya during June 2018.

#### B. Inclusion Criteria

All medical undergraduates enrolled at the Faculty of Medicine, Peradeniya from 2013 to 2017 were included in the study.

#### C. Exclusion Criteria

Students whose first language is not Sinhala were excluded.

#### D. Study Sample

The sample size was calculated to be 422 using the formula given below. Statistically, precision was set at 5% and power at 95%.

$$N = \frac{Z_{1-\frac{\alpha}{2}}^{2} p(1-p)}{d^{2}}$$
(Lwanga & Lemeshow, 1991)  
$$d = .5$$

Since one of the objectives was to compare the perceptions according to the stage of learning, 422 students were selected from pre-clinical and clinical stages each by simple random sampling (so in total 844 students).

#### E. Variables and Data Collection Tool

Data were collected using a self-administered, anonymous questionnaire. The first part of the questionnaire asked for demographic details of the participants.

The second part sought information about the medium of instruction at school education (GCE O/L and GCE/AL) and the grade obtained for the English language in school exams (GCE O/L and GCE A/L).

The third part of the questionnaire asked about their perception of the medium of instruction. A questionnaire was adapted from the study carried out by Ellili-Cherif and Alkhateeb (2015) and pre-tested. The questionnaire consists of 15 items on student perception of the medium of instruction, measured using a five-point Likert scale, whereby '1' indicates strongly agree and '5' indicates strongly disagree.

#### F. Implementation

844 eligible students were invited to participate in the study who were all approached on the same day and time. The students were briefed about the study by the researchers and questionnaires were distributed with a copy of the information sheet and the consent forms. Participation was anonymous and voluntary. Written consent was obtained from the students who volunteered to participate. Researchers were there in person to clarify any doubts raised by the students. They were given 30 to 45 minutes to complete the questionnaire under the supervision of the researchers. The completed questionnaires were then collected by the researchers from the students.

#### G. Statistical Analysis

Results were entered into an Excel spreadsheet and then transferred into SPSS (version 23) for descriptive analysis. Initial descriptive details were calculated for demographic data. The percentage of students in the categories of strongly agreed, agreed, undecided, disagreed, and strongly disagreed with the statements was calculated. Their perceptions were analysed with regard to the following differences using chi-square test (P < .05):

- 1) Clinical vs preclinical stages of medical education;
- School education (GCE O/L) in the Sinhala medium (Sinhala medium school education [SM]) vs school education (GCE O/L) in English medium (English medium school education [EM]); and
- 3) The grade for the English language in GCE O/L examination grade 'A' vs other grades (B, C and S).

The GCE A/L examination in Sri Lanka is a competitive examination for selection to university. Marks gained by students for the GCE A/L English are not taken into consideration when scores are calculated. Therefore, students tend to neglect the English language during their A/L studies. Students do however pay attention to GCE O/L English language because the grade for English is sometimes considered by employers and for admission to certain courses of higher studies. Therefore, the grade for English for GCE O/L is a better representative of English proficiency of particular students than that of A/L. Thus, for this study, English grade for GCE O/L was taken as a representative figure of student's English proficiency.

Percentage of students who agreed (agree + strongly agree), disagreed (disagree + strongly disagree) and undecided was used when doing the chi-square analysis.

#### H. Ethical Issues

Data were collected anonymously. No sensitive questions were included in the questionnaire. Ethical approval for the study was obtained from the Ethical Review Committee of Faculty of Medicine, Peradeniya, Sri Lanka.

#### III. RESULTS

#### A. Participants' Demographics

A total of 837 medical students (65.03% of the total students in the faculty) volunteered for the study. 416 of them were from the pre-clinical stage (66.14% of the total pre-clinical students) while 421 were from the clinical stage (64.08% of the total clinical students). In our study sample, 60.93% of the participants were female and 39.07% were male (In the study population 58.28% were females and 41.72% were males). The mean age of the participant students was 24.4 ( $\pm$  1.83). Refer to Table 1.

Items	N (no. of students)	%	
Age Groups			
21-24	436	52.09	
25-28	401	47.91	
Gender			
Male	327	39.07	
Female	510	60.93	
Batch			
Pre-clinical	416	49.7	
Clinical	421	50.3	

Table 1. Demographic characteristics of the study participants

## B. Level of English Proficiency and the Medium of Instruction in School

For GCE O/L, 79.5% had studied in Sinhala and 20.5% in English. As for GCE A/L, 94.7% had studied in Sinhala while only 5.3% had studied in English. For GCE O/L English language, 87.8% of participants had obtained an 'A' grade while 12.2% had obtained other grades. For GCE A/L English language, 40.7% had scored an 'A' grade while 59.3% had scored other grades.

#### C. Perception of the Medium of Instruction

1) Acquisition of knowledge in medicine: More than half the students (53.4%) responded that if medical textbooks were available in Sinhala, it could have led to a better understanding of concepts of medicine. Regarding classroom teaching, 44.9% of students responded that the classroom atmosphere would be more conducive for learning if the teacher taught in Sinhala rather than English. Nearly two-thirds of students (61%) were of the opinion that they could perform better if clinical examinations were done in Sinhala.

2) Adopting students' first language in medical education: One quarter (25.3%) of the students agreed with adopting Sinhala as the medium of teaching in medical education and 16.5% agreed with using Sinhala in postgraduate education.

*3) Use of both Sinhala and English in lessons:* The majority of students (73.2%) felt that using both English and Sinhala within the same lesson can facilitate learning.

The summary of the responses for the 15 item questionnaire on the perception of the medium of instruction is set out in Table 2.

Item	•	Percentage of Responses %						
No.	Item	1	2	3	4	5		
1	All the developed countries in the world use mother tongue* as the medium of higher education. It may be a sensible practice to be adopted in Sri Lanka as well	11.9	20.4	18.5	31.8	17.4		
2	I can obtain higher marks answering examination questions in Sinhala	24.3	26.4	23.7	16.1	9.5		
3	I feel that I can write better in Sinhala than in English	30.2	31.5	15.2	14.1	8.1		
4	I can express ideas better if clinical examinations were to be conducted in Sinhala	30.6	30.4	21.1	12.8	5.1		
5	Teaching should use Sinhala as the main medium of instruction at the beginning of the term, gradually increasing the use of English as a medium of instruction, so that students can get used to studying in English step by step	17.6	29.5	23.9	19.2	9.3		
6	I believe my parents would like me to study all subjects in English	16.2	34.3	34.7	10.0	4.7		
7	I think the greatest difficulty in using English to study is learning a great many new words	13.7	44.8	19.0	19.0	3.4		
8	If medical textbooks were available in Sinhala, it could have saved a lot of study time	13.8	26.0	24.5	23.7	12.0		
9	If medical textbooks were available in Sinhala, it could have led to a better understanding of the concept of medicine	17.6	35.8	20.1	17.7	8.7		
10	Problems of learning are created if Sinhala is the instructional language in the primary school while English is the instructional language in the university	29.5	39.7	21.5	7.5	1.7		
11	I support adopting mother-tongue education in the Medical Faculty	5.8	19.5	34.3	26.8	13.7		
12	I support adopting mother-tongue education for postgraduate students as well	4.8	11.7	33.3	31.0	19.3		
13	I feel that teachers using both English and Sinhala within the same lesson can facilitate students to study medical subjects	25.2	48.0	15.1	8.7	3.1		
14	If the teacher teaches in Sinhala, the classroom atmosphere would be more helpful for learning	12.0	32.9	37.1	13.9	4.1		
15	I feel that it will be more useful if medical terminology related to English classes/courses are introduced under the Medical Faculty English Language Teaching Unit (ELTU)	33.5	38.9	14.8	7.2	5.6		

Note: 1 – Strongly Agree, 2 – Agree, 3 – Undecided, 4 – Disagree, 5 – Strongly Disagree.

\*The term 'mother tongue' was used in the adapted questionnaire as this is the term typically used for the first or native language in Sri Lanka. Table 2. Percentage distribution of overall student responses on the medium of instruction

## D. Comparison of Responses Between Pre-clinical and Clinical Students

A significantly higher percentage of students in the clinical years agreed with the statements that they would obtain higher marks answering examination questions in Sinhala (55.8% vs 45.5%, p = .01) and that medical concepts would be better understood if students were provided with textbooks in Sinhala (55.6% vs 51.2%, p = .01), see Table 3.

## E. Comparison of Responses of SM Students with EM Students

Of the students who studied O/L in SM, 67.8% opined that it would be better if examinations were held in Sinhala. Among EM students 34.3% agreed with this, while 31.3% were undecided.

Among SM students 51.2% felt that concepts of medicine could be better understood if textbooks were available in Sinhala, among EM students this percentage was 33.7%, the difference was significant (p < .001).

Table 4 summarises the student responses for selected items on the medium of instruction according to their O/L medium.

#### F. Comparison of Responses of Students Who Obtained 'A' Grade for English in GCE O/L, with Those Who Obtained Other Grades

A significantly higher percentage of students with other grades in English opined that exams would be better performed in Sinhala (81.8% vs 58.1%, p < .001) and that medical concepts would be better understood if textbooks were available in Sinhala (70.1% vs 51.2%, p = .001).

It is interesting to note that more than half of the students who got "A" grades for English had also opted for "Exams in Sinhala" and "Textbooks in Sinhala", 58.1% and 51.2% respectively.

Table 5 summarises distribution of student responses for selected items on the medium of instruction according to their English competency at GCE O/L examination.

Item No.	Datah	Agree		Undecide	d	Disagree	•	Total	
	Batch	N	%	N	%	N	%		
	Pre-Clinical	188	45.5	105	25.4	120	29.1	413	$\chi^2 = 9.252$
2	Clinical	234	55.8	92	22.0	93	22.2	419	df = 2
	Total	422	50.7	197	23.7	213	25.6	832	<i>p</i> = .01
	Pre-Clinical	233	57.0	81	19.8	95	23.2	409	$\chi^2 = 15.585$
4	Clinical	267	65.0	92	22.4	52	12.7	411	df = 2
	Total	500	61.0	173	21.1	147	17.9	820	p = .000
	Pre-Clinical	198	48.9	94	23.2	113	27.9	405	$\chi^2 = 30.855$
7	Clinical	279	68.0	61	14.9	70	17.1	410	df = 2
	Total	477	58.5	155	19.0	183	22.5	815	<i>p</i> < .001
	Pre-Clinical	210	51.2	73	17.8	127	31.0	410	$\chi^2 = 9.244$
9	Clinical	230	55.6	93	22.5	91	22	414	df = 2
	Total	440	53.4	166	20.1	218	26.5	824	<i>p</i> = .01
15	Pre-Clinical	279	67.9	67	16.3	65	15.8	411	$\chi^2 = 9.404$
	Clinical	314	77.0	54	13.2	40	9.8	408	df = 2
	Total	593	72.4	121	14.8	105	12.8	819	p = .009

Table 3. Distribution of student responses for selected items on the medium of instruction according to their stage of clinical training

Item No.	Medium	Agree		Undecided		Disagree		Total	
		n	%	п	%	n	%		
	Sinhala	226	34.5	128	19.5	301	46.0	655	$\chi^2 = 14.409$
1	English	38	22.8	25	15.0	104	62.3	167	df = 2
	Total	264	32.1	153	18.6	405	49.3	822	p = .001
	Sinhala	396	60.0	147	22.3	117	17.7	660	$\chi^2 = 140.831$
2	English	22	13.2	50	29.9	95	56.9	167	df = 2
	Total	418	50.5	197	23.8	212	25.6	827	<i>p</i> < .001
	Sinhala	440	67.8	120	18.5	89	13.7	649	$\chi^2 = 65.973$
4	English	57	34.3	52	31.3	57	34.3	166	df = 2
	Total	497	61.0	172	21.1	146	17.9	815	<i>p</i> < .001
	Sinhala	334	50.9	160	24.4	162	24.7	656	$\chi^2 = 26.756$
5	English	54	32.5	39	23.5	73	44.0	166	df = 2
	Total	388	47.2	199	24.2	235	28.6	822	<i>p</i> < .001
	Sinhala	406	62.4	106	16.4	134	20.7	646	$\chi^2 = 27.467$
7	English	67	40.9	49	29.9	48	29.3	164	df = 2
	Total	473	54.4	155	19.1	182	22.5	810	<i>p</i> < .001
	Sinhala	287	44.5	163	25.2	195	30.3	645	$\chi^2 = 45.825$
8	English	35	21.1	36	21.7	95	57.2	166	df = 2
	Total	322	39.7	199	24.5	290	35.8	811	<i>p</i> < .001
	Sinhala	380	51.2	120	18.4	153	23.4	653	$\chi^2 = 31.987$
9	English	56	33.7	46	27.7	64	38.6	166	df = 2
	Total	436	53.2	166	20.3	217	26.5	819	<i>p</i> < .001
	Sinhala	178	27.7	230	35.8	235	36.5	643	$\chi^2 = 21.245$
11	English	25	15.2	48	29.3	91	55.5	164	df = 2
	Total	203	25.2	278	34.4	326	40.4	807	<i>p</i> < .001
	Sinhala	479	74.5	96	14.9	68	10.6	643	$\chi^2 = 4.515$
13	English	113	67.7	27	16.2	27	16.2	167	df = 2
	Total	592	73.1	123	15.2	95	11.7	810	<i>p</i> = .105
	Sinhala	463	71.6	98	15.5	86	13.3	647	$\chi^2 = 1.102$
15	English	126	75.4	23	13.8	18	10.8	167	df = 2
	Total	589	72.4	121	14.9	104	12.8	814	<i>p</i> = .576

Table 4. Distribution of student responses for selected items on the medium of instruction according to their O/L medium

Item No.	Grade	Agree		Undecie	led	Disagre	e	Total	
		n	%	п	%	n	%	п	
	"A" Grade	224	30.9	136	18.8	365	50.3	725	$\chi^2 = 5.251$
1	Other Grades	43	42.2	17	16.6	42	41.2	102	df = 2
	Total	267	32.3	153	18.5	407	49.2	827	<i>p</i> = .072
	"A" Grade	341	46.7	183	25.1	206	28.2	730	$\chi^2 = 41.553$
2	Other Grades	81	80.2	14	13.9	6	5.9	101	df = 2
	Total	422	50.8	197	23.7	212	25.5	831	p < .001
	"A" Grade	418	58.1	163	22.6	143	19.3	720	$\chi^2 = 20.625$
4	Other Grades	81	81.8	10	10.1	8	8.1	99	df = 2
	Total	499	60.9	173	21.1	147	17.9	819	p < .001
	"A" Grade	335	46.2	173	23.9	217	29.9	725	$\chi^2 = 4.854$
5	Other Grades	56	54.9	26	25.5	20	19.6	102	df = 2
	Total	391	47.3	199	24.1	237	27.6	827	<i>p</i> = .088
	"A" Grade	416	57.8	134	18.6	170	23.6	720	$\chi^2 = 40815$
7	Other Grades	61	64.2	21	22.2	13	13.6	95	df = 2
	Total	477	58.5	155	19.0	183	22.5	815	p = .09
	"A" Grade	265	36.8	176	24.4	279	38.8	720	$\chi^2 = 30.652$
8	Other Grades	60	63.2	23	24.2	12	12.6	95	df = 2
	Total	325	39.9	199	24.4	291	35.7	815	<i>p</i> < .001
	"A" Grade	372	51.2	148	20.4	206	28.4	726	$\chi^2 = 14.318$
9	Other Grades	68	70.1	17	17.5	12	12.4	97	df = 2
	Total	440	53.5	165	20	218	26.5	823	p = .001
	"A" Grade	169	23.6	238	33.3	308	43.1	715	$\chi^2 = 18.260$
11	Other Grades	36	37.9	39	41.1	20	21.1	95	df = 2
	Total	205	25.3	277	34.2	328	40.5	810	p < .001
	"A" Grade	517	72.2	109	15.2	90	12.6	716	$\chi^2 = 4.091$
13	Other Grades	79	80.6	13	13.3	6	6.1	98	df = 2
	Total	596	73.2	122	15	96	11.8	814	p = .129
	"A" Grade	525	73	105	14.6	89	12.4	719	$\chi^2 = 1.456$
15	Other Grades	67	67.7	16	16.2	16	16.2	99	df = 2
	Total	592	72.4	121	14.8	105	12.8	818	p = .483

Table 5. Distribution of student responses for selected items on the medium of instruction according to their English competency at GCE O/L examination

#### **IV. DISCUSSION**

The main objective of this study was to assess the students' perceptions of the medium of instruction in medical education. It is interesting to note the positive perception shown by the medical undergraduates towards using their native language in the studies.

The majority (more than 90%) of the students entering Peradeniya Medical School are those who performed the best in their GCEA/L examination (University Grants Commission, 2017). Most of these students had studied their ordinary level and advanced level subjects in Sinhala as the medium of instruction (79.5% at GCE O/L and 94.7% at GCE A/L).

Hence, it is not surprising that the change in the instructional language from Sinhala to English in medical school is perceived as a barrier for more than two-thirds of the students (69.2%). This finding is supported by the studies done by Lucas et al. (1997) and Mandal et al. (2012).

#### A. Acquisition of Knowledge in Medicine

Various studies note a positive correlation between the use of the learner's first language as a medium of instruction in education and learners' conceptual development and academic performance in science (Nomlomo, 2007). The use of textbooks for learning medicine is an integral part of the medical curriculum. A study done by Al-Sebaee found that students saved 50% of their time when reading medical textbooks in their first language (as cited in Farhat, 2012). Lucas et al. (1997) found that the English language was a barrier to the acquisition of anatomical knowledge among Hong Kong university students. These studies support the view that the use of students' first language as the medium of instruction in university education is advantageous for the students in understanding the facts and principles of a subject. How we should use these previous research findings and our own findings need to be explored further so we can support our students to learn more effectively and efficiently.

More than 50% of the students in our study felt that if medical textbooks were available in Sinhala, it would have led to a better understanding of the concepts in medicine. Clinical students felt more strongly about this than the pre-clinical students (p = 0.01, see Table 3). This could possibly be due to the fact that students in the clinical years (having completed at least three years of medical training) are more conversant with the problems encountered when using textbooks written in a language other than their first language. It is also noteworthy that more than 50% of the students who scored an 'A' grade for English (GCE O/L) also agreed with this.

The majority of high-income countries in the world use their native language as the medium of instruction in medical education (e.g. UK, US, Germany, France, Japan, Spain, Scandinavian countries; Kozu, 2006; Murray & Dingwall, 2001; Taavitsainen & Pahta, 2003). Furthermore, textbooks and other study materials in medicine are made amply available in their native languages. However, none of the medical textbooks is available in Sinhala, in Sri Lanka. Preparing medical textbooks in Sinhala would require a lot of input from experts in the translation of medical and scientific terms to Sinhala. In this matter the option of adopting English terms "as it is" could be considered, taking example from using Latin terms "as it is" in English and other European medical literature, which should make the task of translation much easier. However it should be noted, students in this study expressed their need to have medical textbooks in their first language. This should not be disregarded or neglected, as this basic educational facility is enjoyed by their counterparts in many other countries.

#### B. Performance in Examinations

Performances of medical students at medical school depend on many factors (Mandal et al., 2012). The study carried out by Ellili-Cherif and Alkhateeb (2015) indicates that using students' first language as the medium of instruction positively affects student performance. In our study, more than 50% of students responded that they felt they could obtain higher marks answering examination questions in Sinhala (the first language). The findings are more significant when considering clinical examinations, with 61.0% of all the students responding that they felt they could express their ideas better if the clinical examinations were done in Sinhala. When students with higher English proficiency were analysed separately, it is interesting to note that even among them, 58.1% also agreed with the statement. In Sri Lanka, students have to examine native language speaking patients and gather information using the native language even though the examination is performed in English. Similar issues were raised in the study by Ellili-Cherif and Alkhateeb (2015) where Kuwait university students encountered difficulties when taking examinations in English.

#### C. Adopting Sinhala in Medical Education and Integration of Sri Lankan Trained Doctors to Globalised Medicine

English is the main career/business language in Sri Lanka and this is reflected in the fact that none of the medical faculties in Sri Lanka teaches medical sciences in Sinhala.

At this point, it may be pertinent to explore the medical education in Germany where the teaching is exclusively done in German language and the textbooks are in German as well (this is seen in Scandinavia and rest of the Western European mainland as well; Taavitsainen & Pahta, 2003). Yet, the German doctors are able to integrate amicably with the Anglophone scientific community (Simmgen, 2004). The same stands true for the Netherlands and the four Nordic nations (Norway, Sweden, Finland and Denmark) as well (Baker, 2018).

Taking these examples, it is anticipated that the integration of the Sri Lankan trained doctor in globalised medicine should not be a problem as long as their English language proficiency is good. An increasing number of postgraduate trainees in various specialities of medicine fail to go to Anglophone destinations (UK, Australia and New Zealand) for their overseas training as they are unable to achieve the required score in the English language testing systems (e.g. IELTS; Raheem, Medawattegedara, & Miththapala, 2007). This happens irrespective of the fact that they undertook their undergraduate and post-graduate medical education in English. This phenomenon exemplifies the fact that having the English language as the medium of instruction in the medical school and possessing an acceptable level of English language proficiency are entirely two different matters. Thus, learning medicine through first language efficiently, having a good grasp of the principles of medicine, and learning English as a language for communication may be a better way to handle the globalised medicine.

It is also of note that many overseas doctors trained in their first language, practice in Anglophone countries and making excellent career progressions (Simmgen, 2004). This raises questions for medical schools which want to produce 'global' doctors, whether the medium of instruction needs to be an 'international' language to achieve this purpose. Rather the learning could be in students' first language, and doctors who want to work internationally could master the language of their chosen destination country.

#### D. Limitations of the Study

This study describes the experience from a single medical faculty in Sri Lanka (though the majority of those students come through merit basis and represents a wide geographic area of the country). Their English proficiency is at a higher level as well.

The study is confined to students whose first language is Sinhala, yet it represents the large majority of the country.

The present study describes the perceptions of the students. Further studies to look into the actual objective difficulties in learning through a second language are suggested.

#### V. CONCLUSION

The primary need for successful medical education is to make the students understand key principles and essential facts in medicine. For this to happen smoothly, what is taught should be in a language which the student can comprehend without much additional effort. Thus, strong consideration should be made to utilise the first language in medical education, so that the student of medicine gain the maximum benefit from the education.

This includes having medical textbooks and materials in students' first language in order to acquire a clear understanding of the basic concepts in medicine.

#### Notes on Contributors

Dr Thilanka Seneviratne, MD, MRCPCH, is a consultant paediatrician and senior lecturer in the Department of Pharmacology of Faculty of Medicine, University of Peradeniya. She was involved in conception, design, acquisition of data, analysis, interpretation, drafting and revising the final paper.

Dr Kosala Somaratne, MD, MRCS, FAMS, is a consultant surgeon working at the Base Hospital, Rikillagaskada. He was involved in conception, design, analysis, interpretation, drafting and critically revising the final version of the paper.

Vindya Alahakoon, BSc; Dilan Bandara, BSc; Deelaka Bandara, BSc; and Randima Munasinghe, BSc, are The Asia Pacific Scholar, Vol. 4 No. 3 / September 2019 Copyright © 2019 TAPS. All rights reserved. assistant lecturers at the Department of Pharmacology, Faculty of Medicine, Peradeniya. They were involved in the acquisition of data, analysis, and interpretation, drafting and revising the final paper.

Dr Nabil Ilyas, MBBS, is an intern Medical Officer working at the SBSCH, Peradeniya; Dr Thilini Subasingha, MBBS, is an intern Medical Officer working at the lady Ridgeway Hospital, Colombo. They were involved in the design, acquisition of data and analysis.

Professor P. V. R. Kumarasiri is a Professor in Community Medicine in the Department of Community Medicine, Faculty of Medicine, University of Peradeniya. He was involved in the design, statistical analysis, interpretation and critically revising the paper.

#### Ethical Approval

Ethical approval was obtained from the Ethical Review Committee of Faculty of Medicine, Peradeniya, Sri Lanka (Approval No: 2018/EC/14).

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#### Declaration of Interest

Authors have no conflict of interest.

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\*Thilanka Seneviratne

Department of Pharmacology, Faculty of Medicine, University of Peradeniya, Sri Lanka 20400 Email: thilanka.medi@gmail.com