ORIGINAL ARTICLE

Factors Associated With Trust in Primary Care Doctors Among University Students in Cyberjaya

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ABSTRACT

Introduction: Trust is essential in all patient-physician relationships as trust allows a patient to voluntarily share their information wholeheartedly with the doctor, thus improving the patient's management and quality care plan. Hence, the aim of this study is to investigate the prevalence of trust and the factors associated with it among undergraduate students. **Methods:** A cross-sectional study was conducted among undergraduate students of the University of Cyberjaya (UoC), Cyberjaya, Selangor from 4 different faculties. Respondents were selected through a random sampling method and data has been collected through an online form using validated questionnaires which consists of sociodemographic data, Trust In Physician Scale, and an open short answer question themed on reasons influencing trust towards doctors. **Results:** The result showed that 92.3% of students believed in primary care doctors. The highest prevalence of trust towards primary care doctors are among females (93.1%), 21-years-old and above (93.2%), Year 1 and 2 (94.6%), Muslim (94.6%), and Malay (94.6%) students. Moreover, a list of factors contributing to trust towards primary care doctors were collected, and the highest factor was communication skills (21.3%). **Conclusion:** There were no statistically significant factors associated with trust towards primary care doctors among students in the University of Cyberjaya. A majority (92.3%) of the respondents trust their primary care doctors and the biggest reason that contributed to it was communication skills.

Keywords: Trust, Physician-Patient Relationship, Students, Cyberjaya

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INTRODUCTION

A patient-physician relationship should depend on trust. According to a study done in 2017, trust acts as the foundation of describing a patient's issue to someone who they are not familiar with as well as accepting a treatment plan from them (1). Based on Cambridge Dictionary, trust is defined as believing that someone is good, honest and will not harm you, or that is safe or reliable to you (2). As we all know, to diagnose and ameliorate a patient's disease and symptoms, we equipped ourselves with professional knowledge, clinical practical skills and the latest information which needs to be updated from time to time to offer the best therapy or treatment plan for the patients. Without trust, patients will have lesser health-seeking behaviour and tend to be reluctant to accept treatments, which actually contradicts the purpose of being a physician because most clinical decision-making is deeply influenced by the patient's understanding and cooperation (3-4). On the other hand, gaining a patient's trust can reduce the demand in seeking second opinions and unnecessary frequent tests, and thus, enhancing the patient's trust and satisfaction (5-6). So to be brief, trust is the foundation in commencing a good patient-doctor relationship which aims to diagnose patients and provide the best option from various therapies without causing any undesirable consequences. It is also the level of trust from the patients that can be integrated as an indicator in offering high quality of healthcare services.

Focusing on the purpose of the research, we decided to collect data to identify the prevalence of trust and factor(s) that influence patients' trust towards primary care doctors. We hypothesised that there were no associated factors with trust towards primary care doctors, as it was more of a personal touch & skills that cannot be evaluated generally. By doing

this research, we understand more on factors that influence the patients trust hence allowing us to avoid any behaviour and action that reduces them.

MATERIALS AND METHODS

A descriptive cross-sectional study was carried out in University of Cyberjaya (UoC), Selangor, which consisted of approximately 3500 students who enrolled in more than 30 programs ranging from undergraduate degree to postgraduate research courses handled by 7 faculties (Centre of Foundation Studies, Faculty of Medicine, Faculty of Pharmacy, Faculty of Allied Health Sciences, Faculty of Traditional & Complementary Medicine, Faculty of Safety and Health and Faculty of Business Management). We chose 4 out of 7 faculties based on systematic random sampling using an online randomizer. Then, students from each faculty were chosen by simple random sampling using matric numbers as their unique ID. International and postgraduate students were excluded from this study. Students who refused to answer the questionnaire after two approaches, and who did not complete the questionnaire were deemed as non-respondents.

A sample size of 360 was calculated using one proportion formula: without finite population correction based on the expected prevalence of patients who trusted their doctors, 76% with 95% level of confidence. We also included 10% of non-respondent probability in our sample size.

Data collections were conducted using questionnaires which were prepared in English and were distributed online through the respondent's respective email address. The purpose and significance of the study, the confidentiality of the data, and the consent from the respondents were included in the beginning of the questionnaire before they started answering. The questionnaire consists of 3 parts, personal identification and socio-demographic factors of the respondents in part 1 were collected.

Part 2: Trust In Physician Scale developed by Anderson and Dedrick, 1990 (7). This scale was developed to quantify patient's trust in their physicians, with a Cronbach alpha of .90. Trust is measured by using these 11-item questions, then scaled using a 5-point Likert scale from 0-4 (0=strongly disagree, 1=disagree, 2=neither disagree nor agree, 3=agree, 4=strongly agree. Negatively worded items were reversed scored. Respondents who scored less than 22 were deemed not trust, 23-34 as trust, and 35-44 as strongly trust.

Part 3: Reasons associated with trust towards primary care doctors. This section was designed as an open short answer question where respondents provide their personal opinion on the question *"Based on your own opinion, what do you think is the GREATEST reason that makes you trust your doctor when seeking their help? "*. The purpose of it being an open short answer question was to avoid personal bias and the probability of including pre-added reasons influencing their personal opinion. The comments in part 3 were concluded into a noun, which can represent the summary of the comments.

A pre-test of the questionnaire was done using an online survey with the same method on 25 students of the University of Cyberjaya. The pre-test was used to evaluate the questions whether it is relevant and understandable to avoid misconceptions. No misconception was reported during the pre-test and those who have taken it were not included in the study.

Statistical analysis was done by using SPSS version 23. Descriptive analysis was used to describe the sociodemographic factors, trust level, and trust factor presented as frequencies and percentages. Association between categorical variables was determined using Pearson's Chi-squared test and Pearson Correlation with a p-value of <0.05 deeming the data statistically significant.

Participant Data

Participants' demographic data were collected through the questionnaire. These included gender, age group, races, religion, year of study, and their faculty. We managed to achieve a total of 98% response rate. There were 352 participants, which consisted of 243 (59%) Malay, 60 (17%) Chinese, 39 (11.2%) Indian and 10 (2.8%) Bumiputera.

ETHICAL CLEARANCE

This study was approved by the University of Cyberjaya Research Ethics Review Committee with the reference number of UOC/CRERC/ER/250.

RESULTS

Prevalence of Trust in Relation to Socio-Demographic factors

Our results showed that the prevalence of trust towards primary care doctors is the highest among females (86.9 %), age group <20 years old (87.4 %), Malays (87.2 %), Muslims (87.4 %), those studying in year 2 (93.2 %), and those in other faculties (85.8%).

The sociodemographic factors are found to be insignificantly associated with trust towards the primary health care doctors as p-value > 0.05.

Table I : Description of Demographic variables

Sociodemographic factors		Total	Percentage (%)
Gender:	Female	245	69.6
	Male	107	30.4
Age Group	<20	103	29.3
	20-29	244	69.3
	30-39	5	1.4
Race	Malay	243	69.0
	Chinese	60	17.0
	Indian	39	11.2
	Bumiputera	10	2.8
Religion	Islam	247	70.2
	Buddhism	45	12.7
	Christian	26	7.4
	Hinduism	34	9.7
Year of Studies	Year 1	149	42.3
	Year 2	74	21.0
	Year 3	47	13.4
	Year 4	67	19.0
	Year 5	15	4.3
Faculty	Faculty of Medicine	204	58.0
	Faculty of Allied Science	70	19.9
	Faculty of Pharmacy	62	17.6
	Faculty of Safety and Health	16	4.5

Prevalence of Trust Towards Primary Care Doctors Among Students in UoC

The result showed that there is a higher prevalence of respondents having trust towards primary care doctors compared to the respondents who do not have trust (85.2% and 7.1%, respectively).

Reasons Contribute to Trust Towards Primary Care Doctors

The result showed a total of 12 reasons that contributed to the trust towards primary care doctors. The most common reason that altered the trust towards primary care doctors will be the communication skills of which 21.3% of respondents apprise of and then followed by empathy which is apprised by 18.5% of the respondents. The third in the ranking will be the knowledge of the primary care doctors which consists of 17.0% of respondents. In other way round, the least influencing reasons will be reasonable fees which only 0.6% of the respondents agree with and then followed by the appearance of the doctor (2.0%) and past encounter (2.3%).

DISCUSSION

This study consisted of 352 participants from students of the University of Cyberjaya. The study illustrated a total number of 327 (92.9%) participants consented that they were in trust (85.2%) or strongly trust (7.7%) towards the primary care doctors, which is higher compared with a previous study in Shanghai, China, which showed 67% of the public were in trust or strongly trust with their primary care doctors (8). Other than that, the result of this study also showed a lower trust level compared to a study regarding UK cancer patients' trust in physicians that showed 94.4% of patients completely trust their doctors (9). Moreover, our study result also achieved a higher level of trust compared to a global survey organized in 2014 which was used to

Table II : Prevalence of Trust in relation to Socio-Demographic factors

Sociodemographic factors		Trust Level			Total,	P-value
		Not Trust n (%)	Trust n (%)	Strongly Trust n (%)	n (%)	
Gender:	Female	17 (6.9%)	213 (86.9%)	15 (6.1%)	245 (100%)	0.243
	Male	8 (7.5%)	87 (81.3%)	12 (11.2%)	107 (100%)	
Age Group	<20	8 (7.8%)	90 (87.4%	5 (4.9%)	103 (100%)	0.433
	>20	17 (6.8%)	210 (84.3%)	22 (8.8%)	249 (100%)	
Race	Malay	13 (5.3%)	212 (87.2%)	18 (7.4%)	243 (100%)	0.147
	Others	12 (11.0%)	88 (80.7%)	9 (8.3%)	109 (100%)	
Religion	Islam	13 (5.3%)	216 (87.4%)	18 (7.3%)	247 (100%)	0.101
	Others	12 (11.4%)	84 (80%)	9 (8.6%)	105 (100%)	
Year of Studies	Year 1	8 (5.4%)	127 (85.2%)	14 (9.4%)	149 (100%)	0.081
	Year 2	4 (5.4%)	69 (93.2%)	1 (1.4%)	74 (100%))	
	Year 3 and Year 4	13 (10.1%)	104 (80.6%)	12 (9.3%)	129 (100%)	
Faculty	Faculty of Medicine	13 (6.4%)	173 (84.8%)	18 (8.8%)	204 (100%)	0.545
	Other Faculty	12 (8.1%)	127 (85.8%)	9 (6.1%)	148 (100%)	

[1]Trust level is concluded into 3 groups of not-trust, trust and strongly trust from a questionnaire with a Likert scale of 1-5. Bivariate was used for the statistical analysis. (Table I)

Table III : Factors Contribute to Trust Towards Primary Care Doctors

FACTORS	FREQUENCY	PERCENTAGE (%)
APPEARANCE	7	2.0
COMMUNICATION SKILLS	75	21.3
CONFIDENTIALITY	11	3.1
COURTESY	23	6.5
EMPATHY	65	18.5
EXPERIENCE & SKILL	23	6.5
HONEST	19	5.4
KNOWLEDGE	60	17.0
PAST ENCOUNTER	8	2.3
PROFESSIONALISM	48	13.6
QUALIFICATION	11	3.1
REASONABLE FEES	2	0.6
TOTAL	352	100

estimate the citizens' trust in physicians among different countries. The top of the list was Switzerland with 83% of citizens having either trust or strong trust among their physicians in the country (10). The patients' trust level is essential as this favours a better outcome of treatment, especially compliance (11). Other than that, a better level of trust also reduces doctors' burnout rate, which allows better quality of care to be provided to patients (12).

The result of our study showed that females have higher trust towards primary care doctors (86.9 %). In Canada, a study was conducted regarding the influence of gender on health seeking-behaviours, whereas women seek more health care in response to both physical and mental health concerns. Even when accounting for increased health care needs unique to women (e.g., pregnancy and related care), research has demonstrated that women visit family physicians more often and report longer consultation times than men (13). However, this contradicts the study done by Kim, 2018 where women were less likely to put their confidence in doctors (14).). Studies of the generalized or interpersonal trust suggested that women were less trusting because they tend to fear risks and they, compared with males, are more likely to be discriminated against (15). In addition, several other attributes can explain the lower trust in physicians among women, they tend to have more negative perceptions of their own health and the current healthcare system (16).

Moreover, Malays were more confident and had trust toward primary care doctors as 87.2% and 7.4% of Malay trusted or strongly trusted doctors respectively. Each ethnicity is heavily affected by its own distinctive cultural and social factors. Such diversity may have caused differences between the various races in Malaysia in the reasons for consultation, the types of primary care centers visited, and the types of medical care received (acute vs. chronic) (17). Therefore, ethnicity may be a contributing factor that affects trust and confidence in primary care physicians.

Other than that, based on religion, our study showed that Muslims (94.7%) trust their primary care doctors more than other religions (Buddha, Christian, Hindu & others combined) (93%). However, this data is not statistically significant and would not be considered as a factor. One study done in Canada found that regardless of religious and spiritual beliefs, or whether it was known or not, would not affect their doctor-patient relationship (18). Patients would continue to fully accept their advice and management plan without hesitation because they are certified doctors and family physicians. Other sociodemographic factors such as socioeconomic status and affordability with trusting their doctors cannot be assessed in our study because the majority of the respondents were still students, and most of them were still under parents' care.

Lastly, reasons contributing to the trust toward primary care doctors were collected from short-answer questions and the factors included appearance, communication skills, confidentiality, courtesy, and reasonable fees. The reason with the highest prevalence was the communication skills with 21.3% of respondents suggesting this factor. The research done in 2017 corroborated this and concluded that good communication skills contributed to better satisfaction which ultimately entailed a better outcome of the treatment plan (19).

Limitation as this study was solely focused on students whose ages were in the range of 19-30 years old. This only allowed the opinions of students to be shared, comments from adults or elderly whose age were over 30 were missed. Secondly, they were interrelated with the medical field which might affect their first opinion and trust level towards primary care doctors. Therefore, a comprehensive evaluation of society should be conducted to generate a guideline for a doctor to obtain trust from patients as soon as possible.

CONCLUSION

In conclusion, there are no statistically significant factors associated with trust towards primary care doctors among university students in Cyberjaya. The majority (92.3%) of the respondents trust their primary care doctors. The most common reason that contributes to trust towards primary care doctors among the respondents is communication skills. Further study is needed to study the significance of each reason in affecting trust toward primary care doctors and proceed with a more detailed evaluation. This will allow further assessment of each factor to identify the factors affecting trust toward primary care doctors.

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