

KNOWLEDGE REGARDING SUSTAINABLE DEVELOPMENT GOALS (SDG) AMONG MEDICAL STUDENTS AT A PRIVATE UNIVERSITY IN SHAH ALAM, MALAYSIA

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ABSTRACT

Introduction : Sustainable development goals are big challenge to the nation and they represent a critical encounter to be achieved with the current unsustainable condition worldwide. The aim of the current study was to find out the level of knowledge regarding sustainable development goals (SDG) among medical students at a private university in Shah Alam, Malaysia. **Methods:** A cross-sectional study was conducted among 203 medical students at a Private University in Selangor Malaysia using convince sampling method. **Results:** Only (77.8%) of the respondents heard of Sustainable development goals (SDG) and the main source of information was internet (35.5%). Two-thirds of them knew that SDG should be achieved by year 2030. Only half of the respondents knew the correct numbers of SDG which is 17 goals and (45.3%) knew that SDG consist of 169 targets. **Conclusion:** as a conclusion, medical students have adequate knowledge regarding sustainable development goals, but more education and promotion are needed, especially for future medical doctors as they will be the frontlines in achieving those goals.

Keywords : Knowledge, Sustainable development goals, Medical students

Introduction

Sustainable Development Goals (SDG) emerged after the Millennium Development Goals (MDG) as an update and upgraded version, it is also known as the Agenda 2030, as refer to the year where the SDG shall be achieved in 2030 (UN, 2015). The MDGs, although it lasted as a motivation of the human's and global growing plan and carried about real collaboration, partnerships and significant expansion to both developing and developed countries (UN, 2015). The SDG signifies an additional comprehensive programme than the MDGs with seventeen goals, 169 targets and well above 200 indicators (IAEG-SDG 2016). The SDG includes a five "Ps" outline: people, prosperity, planet, peace and partnership and these five "Ps" are for all nations and peoples of the world (UN, 2015, IAEG-SDG 2016). Before the SDG was set in motion, universal discussions were held between various administrations / sectors, civil society organisations, the private sector, experts, academics and individual populations. The education sector was therefore not excluded from its design.

In order to achieve the SDG, the position of education (with clarification of SDG as the focus) is crucial. Equally important is primary health education. The Organization for Education and Science (UNESCO) distinguishes that educational education is a key tool for the sustainable development of its announcement: "Not technological solutions, political regulation or financial instruments alone can achieve sustainable development. We must change our way of thinking and acting. Good education and learning for all will be

needed for sustainable development (UNESCO, 2017).

Possibly the delay affects to the MDG was possibly not unrelated with the reduced alertness and information on the MDGs between the general public. It is conceivable if the societal understanding is elevated, different sponsors of many fields able to contest governments in order to apply worldwide progressive plans nationally. Universities are the higher education body regularly considered as the pillars of taught, and accordingly, it is essential that the level of knowledge and understanding on the SDG have to be discovered in the high level of education platform so that any defects would be diagnosed. The higher education settings is constructed of many teaching and learning methods like lecturers who give the knowledge, students who absorb and administrative staff who shows caring to both students and staff. The education on the SDG are thus crucial in the university setting, to all members including the academic employments, students and the supporting staff as its so important to all to know about it and implement in these SDG (Omisore et al., 2017).

The "Sustainable Development Goals," or the Transformation of Our World, and the Global Goals: the 2030 Agenda, tackles specific concerns related to sustainable development for countries, such as poverty eradication, hunger, healthy health and education, environmental disparities, etc. By 2030, the 193 member states agreed to achieve the brand new targets; these 17 targets are further divided into 169 numerical goals, best measured by 40

observable metrics. The main focus of the SDG is health. The three aims are precisely health-related and other objectives are related to health-related elements (SDG, 2015).

The Agenda 2030 with its 17 Sustainable Development Goals (SDG) provides the path towards the global development and cooperation among all United Nation (UN) members. Achieving this agenda depends crucially on whether civilization can optimize synergies and overcome established trade-offs between the SDGs (Kroll et al., 2019). Previous studies (Pradhan, 2016; Schmidt et al., 2015) has relate the interlinkages between the 17 goals. Pradhan (2016) indicated that the SDG 1 (No poverty) is linked to several goals in synergy, while the SDG 12 (Liability in consumption and production), in particular economic growth, is linked with trade-offs. SDG interaction factors were also established in other research, including energy (SDG 7) and other SDG. interactions (Nerini et al., 2018). Nevertheless, it will rely critically on achieving Agenda 2030 to reduce trade-offs across the entire goals of the SDG and simultaneously to optimize synergies between objectives.

The purpose of this study was to find out how much knowledge medical students at a private university in Shah Alam, Malaysia have about sustainable development goals (SDG's).

Methods

A cross-sectional study was conducted among 203 medical students at a private University in Selangor, Malaysia using convince sampling method. Data collection was done throughout October to December 2019.

Questionnaires consist of Part A, B and C. Part A about socio-demographic characteristics such as age, gender, educational level, working status. While Part B is about Sustainable development goals (SDG) such as how many goals, how many targets, launching year, should be achieved which year and how many goals related to health. Part C regarding student's perception regarding the SDG and whether they are better than Millennium development goals (MDG).

Data were analysed using JASP version 0.10 software. All respondents signed the consent form prior to answering the questionnaires. Ethical approval was obtained by Management and Science University.

Results

A total of 203 medical students participated in the current study. Majority of the respondents were females (57.6%) with bachelor's degree (86.7%) currently studying (86.7%) and only (7.8%) currently working. The mean age was 23.73 ± 3.57 years as shown in table 1.

Table 2 shows the knowledge of the respondents. Only (77.8%) of the respondents heard of Sustainable development goals (SDG) and the main source of information was internet (35.5%) followed by TV (30.0%) and education (26.6%).

Regarding the SDG knowledge question, two-thirds of them knew that SDG should be achieved by year 2030. Only half of the respondents knew the correct numbers of SDG which is 17 goals and (45.3%) knew that SDGs consist of 169 targets. Regarding the indicators, only (17.2%) knew the correct numbers which is 241. Majority knew the correct launching date which in 2015 (60.6 %).

A total of (56.2%) of the respondents knew the correct numbers of countries that signed the SDG and only 46.8% answered correctly the numbers of Sustainable development goals (SDG) that is related to health which is 6 as shown in table 2.

Table 3 shows student's perception regarding the Sustainable development goals SDG, as two-thirds of them (74.4 %) think that SDG will be achieved by year 2030 and almost everyone (98.5%) think that SDG is better than the Millennium development goals (MDG)

TABLE 1: Socio-demographic characteristics of the respondents

	N		%	
Gender				
Male	86		42.4	
Female	117		57.6	
Educational level				
Bachelor	176		86.7	
Diploma	14		6.9	
Postgraduate level	8		3.9	
Others	5		2.4	
Currently studying				
No	27		13.3	
Yes	176		86.7	
Currently working				
No	187		92.2	
Yes	16		7.8	
	Min	Max	Mean	SD
Age	19	41	23.73	3.57

Table 2: Knowledge about Sustainable development goals (SDG)

	N	%
You heard about Sustainable development goals (SDG) before?		
No	45	22.2
Yes	158	77.8
Source of information regarding SDG		
Internet	72	35.5
Education	54	26.6
TV	61	30.0
Newspaper	16	7.9
SDG should be achieved by?		
2020	47	23.1
2025	33	16.3
*2030	123	60.6
How many SDG Goals		
10	30	14.8
15	18	8.9
*17	109	53.7
20	46	22.7

How many Targets in SDG		
160	19	9.3
165	29	14.3
*169	92	45.3
170	63	31.1
How many indicators listed in SDG?		
200	19	9.4
*241	35	17.2
244	119	58.6
250	30	14.8
SDG were launched in		
*2015	123	60.6
2016	46	22.7
2017	34	16.7
How many countries signed the SDG?		
*193	114	56.2
195	35	17.2
200	54	26.6
How Many SDG goals related to Health?		
5	33	16.3
*6	95	46.8
9	41	20.2
10	34	16.7

*Indicate correct answer

Table 3: Respondent's perception towards SDG

	N	%
Do you think that SDG goals will be achieved?		
No	52	25.6
Yes	151	74.4
Do you think that SDG is better than MDG		
No	3	1.5
Yes	200	98.5

Discussion

Sustainable development goals are big challenge to the nation and it is a critical encounter to be achieved with the current unsustainable condition worldwide. Unsustainable condition has contributed to resource exhaustion, environmental pollution and climate change problems that we face today. The current study found different ranges of knowledge among the private university students, overall moderate to high level of knowledge was found and this finding is in line with another study done in Malaysia, in Selangor among university students as well, in which they found high level of knowledge but moderate level of attitude and practice among the students. (Nurul Ruwaidah & Mariani, 2018)

While our study finding showed that 77% of our respondents have heard about the sustainable development goals and this finding was not in line with another study done in Nigeria in which they found different finding to us, they discovered that only 43% of the respondents did hear about the SDG goals and only 4.2% had a good level of knowledge. (Omisore et al., 2017) Our study found that the internet is the main source of information regarding the sustainable development goals, that finding was parallel with the Selangor study in which they discovered social media is the number one source of developing knowledge for them. (Nurul Ruwaidah & Mariani, 2018)

In the current study the mean age was 23, while the mean of age for another study subjects in a University Community in Southwestern Nigeria was 26 years. (Omisore et al. 2017) Our respondents were mostly with high knowledge and with Bachelor level of study and that's somehow consistent with the study in Nigeria in which majority of respondents who having good knowledge of SDG were either from the academia or they do personal revision or study on the SDG or through other ways (Omisore et al., 2017).

That brings to the attention that SDG and related knowledge should be part of the educational settings materials and to enhance the academic curricular modifications (Akinlolu et al., 2017). While another study in Anand district, India showed mean age of peripheral health workers (PHWs) was 36.459 ± 7.58 , among them the highest sex group of 138 (86.6%) were female and minority were males. The main marital status was those married with 134 (84.4%) and these findings are slightly same to our findings in terms of the majority sex was among females as well but with only 57.6% (Talpada & Sarate, 2019).

In relation to the level of knowledge, a study in the district of Anand in India found that 96.9 percent had average knowledge and no good knowledge of SDG from the peripheral health professionals and found no significant correlation between knowledge score and demographic variable (Talpada & Sarate, 2019). In China, an online survey data of 4128 valid subjects, they study and investigated the main predictors that affected the public support for SDG and describes how the people create a supportive attitudes. They found evidences in China that public support is mostly affected by

demographic factors (sex, age, and level of education), and the level of SDG-relevant knowledge. They found as well that the Chinese public considers the use of SDG as a part of the development policy rather than environmental policy (Guan et al., 2019).

Conclusion

In conclusion, medical students have adequate knowledge regarding Sustainable development goals, but more education and promotion are needed, especially for future medical doctors as they will be the frontlines in achieving those goals.

Conflicts of interest

The authors declare no conflicts of interest.

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