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## Health Information Searching Behaviour Among College Students in Hong Kong: An Exploratory Study

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#### ABSTRACT

The study aims to investigate the current utilization of health information for disease prevention and health promotion among college students in Hong Kong, to understand how they acquire health information through different electronic media and to what extent they trust these health information. A cross-sectional study was performed between October and November 2015, 821 questionnaires were distributed to respondents in different tertiary

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institutions in Hong Kong, data were collected and analysed through SPSS programme. The findings showed that the respondents were mostly likely to look for health information when they were feeling sick (50.4%). Both male (63.5%) and female (64%) respondents reported that they lacked appropriate health knowledge and it was important for them to obtain this kind of information. A majority of respondents used internet (85.4%) and social media (67%) as their main sources of health information. There were also 60% of respondents who demonstrated doubts towards the reliability of information from the internet (23.3%) and social media (32.9%). There was no significant gender difference in terms of how this health information was acquired. These results showed that internet and social media were the principle sources of health information for college students in Hong Kong. However, most of them were unsure about the validity and trustworthiness of this information. To prevent students from obtaining potentially unreliable health information on the internet or from social media platforms, more health promotion is recommended to be carried out among local tertiary institutions on enhancing students' awareness in obtaining reliable health information.

**KEYWORDS:** Health Information Searching Behaviour, Health Informatics, College Students, University Students, Internet, Social Media, Health Promotion

#### 1 INTRODUCTION

According to the Department of Health (2015), the life expectancy at birth in Hong Kong was ranked among the top in the world. This phenomenon is a potential result of the high-quality health professionals and provision of quality health services in Hong Kong. However, this does not imply that the citizens have sufficient health knowledge. The health information asymmetry gap seems to remain large between health professionals and patients around the world, it is a situation in which health professionals has a lot more or superior information compared to citizens. The citizens are not only lacking the appropriate knowledge and information about their health conditions, but they are also unable to judge those information provided by health professionals. As health professionals in Hong Kong always play a dominant role throughout the consultation processes, empowering the patients with more health information would not only narrow down the health information asymmetry gap, but can also help patients to become more engaged during the consultation process. As a result, this can potentially enhance their interaction by changing their method of communications from a one-way consultation to a two-way discussion (Xie, 2007).

Traditionally, health information is primarily obtained from health professionals such as doctors, physiotherapists, occupational therapists, pharmacists and nutritionists, and/or from pamphlets distributed among health centers, local library, family and friends, and/or from media such as newspaper, magazines, radio channels and television, etc. Nonetheless, obtaining health information from these types of sources is not convenient enough when compared to using the internet. With an increased in public awareness on their health conditions, especially during the post SARS era, the general public are becoming more interested in obtaining information regarding disease prevention method, symptoms, as well as the methods of treatment, the use of internet for retrieving such health information is increasingly common in recent years. Various studies reported that up to 40% adults and 25% adolescents had searched for health information by the use of internet (Yan, 2010). The internet acts as a platform for consumers' health education through various formats such as emails, text-based information, social media platform, and chat rooms. These educations might even have a potential in improving their individual health status (Eng et al., 1998; Robinson et al., 1998).

On the other hand, social media platform is found to be the most persuasive and seductive influence in college students as they spend most of their time in the electronic world (Dalton and Crosby, 2013). Nevertheless, not all of the health information obtained on the social media is reliable. It is not easy for students to verify which sources of information are trustworthy. A current study reviewed that college students were one of the important target populations for health promotion effort (Kwan et al., 2010). Therefore, social media platform can be used as one of the platforms for health promotion among them. It is believed that health promotions on choosing reliable sources of health information through social media can make these sources more accessible, provide sufficient knowledge to college students to enable them becoming more engaged in these health promotion activities, and also enhance the overall development of friendship among them (Dalton and Crosby, 2013).

As many literatures pointed out gender difference in the usage of internet for obtaining health information (Dholakia et al., 2004; Escoffery et al., 2005; Lenhart et al., 2010; Yasin and Özen, 2011), the session of gender difference will be added in this study. The study aims to determine and evaluate the current utilization of health information for disease prevention and health promotion among college students in Hong Kong, to examine whether there is any gender difference among them so as to investigate their health awareness, and to study the acquisition of health information as well as to what extent the students trust these health information.

## 2 LITERATURE REVIEW

Escoffery et al. (2005) surveyed around 750 undergraduate students to examine their health-seeking behaviours, internet use, and attitudes related to the use of internet to obtain health information. More than half (53%) of the students would like to get health information online because of convenience and the abundance of information. Most of the respondents (73%) have obtained health information online, and more than 40% respondents frequently searched for health information from the internet. They often found health information via various search engines and multiple Web sites, but the majority of them did not always find the desired health information. Therefore, student believed the most important criteria for health web sites were accuracy, credibility of the author, and currency of information.

An exploratory study (Yan, 2010) described the patterns and prevalence of internet health information. About 450 individuals were surveyed and only 44% of them were identified as health surfers. Digital divide is one of the major reason why higher educational level and young people were more likely to search for health-related information. With regards to sources of health information, Yan (2010) suggested that traditional mass media, such as newspaper, television and radio, remained as the major source of health information. The reasons why people search for health information from the internet were that they wanted to surf for disease-specific information as well as general information on maintaining a healthy lifestyle. Although more than half of the respondents found online health information useful, over 40% doubted the veracity and reliability of health information from the internet. For reducing the inaccuracy of information, the majority of respondents tended to visit professional websites, such as government official websites, hospital and non-profit organization's websites. Hence, the currency, the authority of source, and the ease of use were the key criteria for health surfers to consider whether or not to browse these health websites.

A recent study (Kwan et al., 2010) surveyed 1202 students at the University of Toronto in Canada to examine the students' reception, believability and sources of health-related information. It depicted that students were lacking health awareness because nearly half (46%) of the respondents did not search for any type of information about health topics. Physical activity, fitness and sexual health were the three most searched topics among students. internet was the most common source of health information, but it was perceived as the least believable source. The three most believable sources of health information were health center medical staffs, health educators and health-related media (e.g. pamphlets). Even though individuals were more likely to obtain health information from the internet, they relied more on the information acquired from health professionals.

Another study (Hesse, 2005) surveyed a total of 6,369 persons who were18 years or older to discover the levels of trust, source preference and online health activities. It showed that there were around 63% of the adult to use the internet to access health related website and to use e-mail to seek health information. The majority of them (87%) sought the online health information at home. Although more than half respondents obtained information from the internet, nearly 75% of respondents expressed a low level of trust for information provided by the internet. In contrast, the vast majority of respondents (91%) believed the health information provided by health professionals, especially physicians. Meanwhile, the least believable source included radio (10%), magazines (15%), friends (18%).

The study (Yan, 2010) found differences in health surfers by gender, age, and educational level. Health surfers tended to have higher education level and were mostly younger females aged between 20 and 29. In addition, the chi-square test depicted that female students were more likely to obtain health information online comparing to male student (Escoffery et al., 2005). Another research (Lenhart et al., 2010) also found that the female was more likely than male to seek sensitive health information from internet. This study found that there were significant differences in internet use for health information by gender.

However, there was no any explanation to explain this phenomenon. They guessed women asked more questions and obtained more health information when compared to men.

## **3** METHODOLOGY

This is a cross-sectional study supported by data collected from a self-administered questionnaire, including mainly quantitative and some qualitative questions. It consisted of 13 questions and these questions was divided into 3 sections, including level of health awareness, sources of the acquisition of health information, and reliability of health information obtained from different sources. The comprehensive questionnaire could be found in the appendix.

During October and November 2015, 821 questionnaires were distributed in the College of Professional and Continuing Education (CPCE). The target population was fulltime college students. The subjects were chosen by simple random sampling. Data collected from the survey were entered into the Statistical Product and Service Solutions (SPSS) programme for statistical analysis by utilizing descriptive analysis.

## 4 RESULTS ANALYSIS

Escoffery et al. (2005) surveyed around 750 undergraduate students to examine their health-seeking behaviours, internet use, and attitudes related to the use of internet to obtain health information. More than half (53%) of the students would like to get health information online because of convenience and the abundance of information. Most of the respondents (73%) have obtained health information online, and more than 40% respondents frequently searched for health information from the internet. They often found health information via various search engines and multiple Web sites, but the majority of them did not always find the desired health information. Therefore, student believed the most important criteria for health web sites were accuracy, credibility of the author, and currency of information.

## 4.1 Information Obtained from Various Sources

#### The platforms of acquiring health information

Collected data (Table 1 and 2) showed that majority (85.4%) of the respondents frequently and very frequently use internet and a vast majority (67%) of them frequently and very frequently use social media such as Facebook, WhatsApp, WeChat as sources of health information. Only 45%, 32.9%, 25.3%, 14.6% choose to obtain information from television or radio, health-related media like pamphlets or journals, newspaper or magazines, and print advertisement frequently and very frequently respectively (Table 3, 4, 5 and 6). College students are seen prefer to use the internet and social media to search for health information than the other sources.

			Where d	lo you usually ob	tain health i	nformation? (Ir	nternet)	
			Not frequently at all	Not frequently	Neutral	Frequently	Very frequently	Total
Gender	male	Count	1	12	54	235	123	425
		Expected Count	2.2	9.6	50.0	235.5	127.6	425.0
		% within Gender	0.2%	2.8%	12.7%	55.3%	28.9%	100.0%
	female	Count	3	5	35	184	104	331
		Expected Count	1.8	7.4	39.0	183.5	99.4	331.0
		% within Gender	0.9%	1.5%	10.6%	55.6%	31.4%	100.0%
Total		Count	4	17	89	419	227	756
		Expected Count	4.0	17.0	89.0	419.0	227.0	756.0
		% within Gender	0.5%	2.2%	11.8%	55.4%	30.0%	100.0%

Table 1Obtaining health information in internet

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			Where do you	Where do you usually obtain health information? (Social Media Platforms like facebook, whatsapp, wechat)				
			Not frequently at all	Not frequently	Neutral	Frequently	Very frequently	Total
Gender	male	Count	17	38	91	197	82	425
		Expected Count	15.2	37.7	87.1	209.7	75.3	425.0
		% within Gender	4.0%	8.9%	21.4%	46.4%	19.3%	100.0%
	female	Count	10	29	64	176	52	331
		Expected Count	11.8	29.3	67.9	163.3	58.7	331.0
		% within Gender	3.0%	8.8%	19.3%	53.2%	15.7%	100.0%
Total		Count	27	67	155	373	134	756
		Expected Count	27.0	67.0	155.0	373.0	134.0	756.0
		% within Gender	3.6%	8.9%	20.5%	49.3%	17.7%	100.0%

Table 2Obtaining health information in social media platforms

Table 3	Obtaining health information in television/ radio
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			Where do y	ou usually obtain	health inform	ation? (Televis	ion/ Radio)	
			Not frequently at all	Not frequently	Neutral	Frequently	Very frequently	Total
Gender	male	Count	38	58	141	171	17	425
		Expected Count	42.7	65.8	125.4	177.6	13.5	425.0
		% within Gender	8.9%	13.6%	33.2%	40.2%	4.0%	100.0%
	female	Count	38	59	82	145	7	331
		Expected Count	33.3	51.2	97.6	138.4	10.5	331.0
		% within Gender	11.5%	17.8%	24.8%	43.8%	2.1%	100.0%
Total		Count	76	117	223	316	24	756
		Expected Count	76.0	117.0	223.0	316.0	24.0	756.0
		% within Gender	10.1%	15.5%	29.5%	41.8%	3.2%	100.0%

 Table 4
 Obtaining health information in health-related media

			Where do you	Where do you usually obtain health information? (Health-related Media like pamphlets or journals)					
			Not frequently at all	Not frequently	Neutral	Frequently	Very frequently	Total	
Gender	male	Count	33	94	147	133	18	425	
		Expected Count	32.6	94.4	158.0	124.2	15.7	425.0	
		% within Gender	7.8%	22.1%	34.6%	31.3%	4.2%	100.0%	
	female	Count	25	74	134	88	10	331	
		Expected Count	25.4	73.6	123.0	96.8	12.3	331.0	
		% within Gender	7.6%	22.4%	40.5%	26.6%	3.0%	100.0%	
Total		Count	58	168	281	221	28	756	
		Expected Count	58.0	168.0	281.0	221.0	28.0	756.0	
		% within Gender	7.7%	22.2%	37.2%	29.2%	3.7%	100.0%	

 Table 5
 Obtaining health information in newspaper/ magazines

			Where do you	ı usually obtain h	ealth informatio	n? (Newspaper,	/ Magazines)	
			Not frequently at all	Not frequently	Neutral	Frequently	Very frequently	Total
Gender	male	Count	40	124	147	108	6	425
		Expected Count	43.8	123.7	150.1	100.6	6.7	425.0
		% within Gender	9.4%	29.2%	34.6%	25.4%	1.4%	100.0%
	female	Count	38	96	120	71	6	331
		Expected Count	34.2	96.3	116.9	78.4	5.3	331.0
		% within Gender	11.5%	29.0%	36.3%	21.5%	1.8%	100.0%
Total		Count	78	220	267	179	12	756
		Expected Count	78.0	220.0	267.0	179.0	12.0	756.0
		% within Gender	10.3%	29.1%	35.3%	23.7%	1.6%	100.0%

			Where do yo	ou usually obtain	health informa	tion? (Print Adv	ertisement)	
			Not frequently at all	Not frequently	Neutral	Frequently	Very frequently	Total
Gender	male	Count	51	150	155	63	6	425
		Expected Count	51.2	154.6	157.4	57.3	4.5	425.0
		% within Gender	12.0%	35.3%	36.5%	14.8%	1.4%	100.0%
	female	Count	40	125	125	39	2	331
		Expected Count	39.8	120.4	122.6	44.7	3.5	331.0
		% within Gender	12.1%	37.8%	37.8%	11.8%	0.6%	100.0%
Total		Count	91	275	280	102	8	756
		Expected Count	91.0	275.0	280.0	102.0	8.0	756.0
		% within Gender	12.0%	36.4%	37.0%	13.5%	1.1%	100.0%

 Table 6
 Obtaining health information in print advertisement

## The websites that they choose to browse for health information

Nearly one third (29.5%) of the respondents will frequently and very frequently obtain health information from The Hong Kong Government official website; while 28.3%, 26.1%, 10.3% and 5.8% of them frequently and very frequently obtain health information from forum, Wikipedia, World Health Organization and other websites respectively (Table 7).

			What types o	f websites do yo	ou use the most f	or getting health	information?	
			Wikipedia	Forum	Hong Kong Government offical websites (e. g. HA, DH, CHP)	World Health Organization	Others	Total
Gender	male	Count	110	130	122	38	25	425
		Expected Count	110.7	120.3	125.4	43.8	24.7	425.0
		% within Gender	25.9%	30.6%	28.7%	8.9%	5.9%	100.0%
	female	Count	87	84	101	40	19	331
		Expected Count	86.3	93.7	97.6	34.2	19.3	331.0
		% within Gender	26.3%	25.4%	30.5%	12.1%	5.7%	100.0%
Total		Count	197	214	223	78	44	756
		Expected Count	197.0	214.0	223.0	78.0	44.0	756.0
		% within Gender	26.1%	28.3%	29.5%	10.3%	5.8%	100.0%

 Table 7
 Types of websites that college students use the most for getting health information

#### How students trust health information from various sources

Although majority of the respondents choose to use internet and social media as a source to acquire health information, around 60% of them not sure whether this information is trustworthy and about one in fourth even thought that this information from internet (23.3%) (Table 8) and social media (32.9%) (Table 9) is not reliable. Nearly half of the students tend to trust television or radio (66%) (Table 10), and nearly 90% of them think that health-related media is trustworthy (Table 11).

 Table 8
 Level of trustworthiness that college students believe health information from the internet

			How trustwo	orthy do you beli	eve these source (Internet)	s of health inforn	nation are?	
			Not trustworthy at all	Not trustworthy	Neutral	Trustworthy	Very trustworthy	Total
Gender	male	Count	8	91	270	52	4	425
		Expected Count	6.2	92.8	269.3	52.3	4.5	425.0
		% within Gender	1.9%	21.4%	63.5%	12.2%	0.9%	100.0%
	female	Count	3	74	209	41	4	331
		Expected Count	4.8	72.2	209.7	40.7	3.5	331.0
		% within Gender	0.9%	22.4%	63.1%	12.4%	1.2%	100.0%
Total		Count	11	165	479	93	8	756
		Expected Count	11.0	165.0	479.0	93.0	8.0	756.0
		% within Gender	1.5%	21.8%	63.4%	12.3%	1.1%	100.0%

				ai meaia pi				
				y do you believe Media Platforms			on are? (Social	
			Not trustworthy at all	Not trustworthy	Neutral	Trustworthy	Very trustworthy	Total
Gender	male	Count	20	112	252	35	6	425
		Expected Count	21.4	118.6	249.0	32.0	3.9	425.0
		% within Gender	4.7%	26.4%	59.3%	8.2%	1.4%	100.0%
	female	Count	18	99	191	22	1	331
		Expected Count	16.6	92.4	194.0	25.0	3.1	331.0
		% within Gender	5.4%	29.9%	57.7%	6.6%	0.3%	100.0%
Total		Count	38	211	443	57	7	756
		Expected Count	38.0	211.0	443.0	57.0	7.0	756.0
		% within Gender	5.0%	27.9%	58.6%	7.5%	0.9%	100.0%

# Table 9 Level of trustworthiness that college students believe health information from social media platforms

Table 10	Level of trustworthiness that college students believe health information from
	television/ radio

			How trustworthy do you believe these sources of health information are? (Television/ Radio)					
			Not trustworthy at all	Not trustworthy	Neutral	Trustworthy	Very trustworthy	Total
Gender	male	Count	4	7	94	283	37	425
		Expected Count	4.5	6.2	96.7	280.5	37.1	425.0
		% within Gender	0.9%	1.6%	22.1%	66.6%	8.7%	100.0%
	female	Count	4	4	78	216	29	331
		Expected Count	3.5	4.8	75.3	218.5	28.9	331.0
		% within Gender	1.2%	1.2%	23.6%	65.3%	8.8%	100.0%
Total		Count	8	11	172	499	66	756
		Expected Count	8.0	11.0	172.0	499.0	66.0	756.0
		% within Gender	1.1%	1.5%	22.8%	66.0%	8.7%	100.0%

## Table 11 Level of trustworthiness that college students believe health information from health-related media

			How trustworthy do you believe these sources of health information are? (Health-related Media like pamphlets or journals)					
			Not trustworthy at all	Not trustworthy	Neutral	Trustworthy	Very trustworthy	Total
Gender	male	Count	3	7	43	200	172	425
		Expected Count	2.8	5.1	40.5	206.9	169.8	425.0
		% within Gender	0.7%	1.6%	10.1%	47.1%	40.5%	100.0%
	female	Count	2	2	29	168	130	331
		Expected Count	2.2	3.9	31.5	161.1	132.2	331.0
		% within Gender	0.6%	0.6%	8.8%	50.8%	39.3%	100.0%
Total		Count	5	9	72	368	302	756
		Expected Count	5.0	9.0	72.0	368.0	302.0	756.0
		% within Gender	0.7%	1.2%	9.5%	48.7%	39.9%	100.0%

## 4.2 Gender and Health Awareness among College Students

The result showed that around two-third of respondents for both males (63.5%) and females (64%), personally thought that they do not have sufficient health knowledge (Table 12) while there is a majority of male respondents (91.6%) and female respondents (90.3%) thought that it is notably important for them to acquire information about health knowledge (Table 13). The finding indicates that college students in Hong Kong have a positive attitude toward health and are willing to obtain health-related resources despite recognizing the fact that they had inadequate health knowledge.

	Table 1	2 I CISOliai percep	buon on their level c	n nearth knowledge	
			Yes	No	Total
Gender	male	Count	155	270	425
		Expected Count	154.0	271.0	425.0
		% within Gender	36.5%	<b>63.5%</b>	100.0%
	female	Count	119	212	331
		Expected Count	120.0	211.0	331.0
		% within Gender	36.0%	<b>64.0%</b>	100.0%
Total		Count	274	482	756
		Expected Count	274.0	482.0	756.0
		% within Gender	36.2%	63.8%	100.0%

Table 12Personal perception on their level of health knowledge

			Not important at all	Not important	Neutral	Important	Very important	Total
Gender	male	Count	2	3	31	254	135	425
		Expected Count	1.7	3.4	33.2	250.7	136.0	425.0
		% within Gender	0.5%	0.7%	7.3%	59.8%	31.8%	100%
	female	Count	1	3	28	192	107	331
		Expected Count	1.3	2.6	25.8	195.3	106.0	331.0
		% within Gender	0.3%	0.9%	8.5%	58.0%	32.3%	100%
Total		Count	3	6	59	446	242	756
		Expected Count	3.0	6.0	59.0	446.0	242.0	756.0
		% within Gender	0.4%	<b>0.8%</b>	7.8%	59.0%	32.0%	100%

## 4.3 Reasons of Students Finding Health Information During Sick

381 (50.4%) of the respondents looked for health information mostly when they felt sick or knew someone is sick (Table 14).

	Table	T Thie is	0				mostry		
			When do you look for health information mostly?						
			Academic purpose	Feeling sick/ Knowing someone is sick	Personal interests	Seeking for information related to disease prevention (e.g. vaccination, health screening, etc.)	Others	Total	
Gender	male	Count	83	224	87	27	4	425	
		Expected Count	82.6	214.2	93.3	32.0	2.8	425.0	
		% within Gender	19.5%	52.7%	20.5%	6.4%	0.9%	100.0%	
	female	Count	64	157	79	30	1	331	
		Expected Count	64.4	166.8	72.7	25.0	2.2	331.0	
		% within Gender	19.3%	47.4%	23.9%	9.1%	0.3%	100.0%	
Total		Count	147	381	166	57	5	756	
		Expected Count	147.0	381.0	166.0	57.0	5.0	756.0	
		% within Gender	19.4%	50.4%	22.0%	7.5%	0.7%	100.0%	

 Table 14
 Time for college students to look for health information mostly

## 5 DISCUSSION

#### 5.1 Information Obtained from Various Sources

#### Platforms of acquiring health information

The reason of majority of the respondents chooses to browse on the internet to search for health information is that the internet has a potential to influence healthcare through different channels. The key way of this is to enhance the provision of health information. Searching of health information ranked on the top three reasons of using the internet (Seidman, 2003). People can be beneficial from this fast flow of information by searching their effects on the use of healthcare and improving their ability to interact with healthcare professionals efficiently. The internet may even help them to reduce the need to spend an expensive fee to seek consultations from healthcare professionals by making them more able to care for themselves with sufficient healthcare knowledge (Baker et al., 2013). Additionally, social media are engaging for young adults that a new dimension of personal identity development has evolved. They spend much time for networking online. They tend to obtain most of the information, including health information, from the social media. Hence, social media are said to be the public conduit of their lives (Dalton and Crosby, 2013). The usage of television or radio, health-related media and print advertisement are comparatively lower because these sources of health information are relatively difficult to obtain compared to the browse of internet. People can access to the internet to search for health information anytime. but they may not able to find out this information in every moment.

#### Websites students chose to browse for health information

The internet provides access to health information from various organizations. Nevertheless, not all of these websites are reliable. The accessed website may contain information that is not accurate. A website containing high quality of health information should include currency and sources of information, reliability, relevance, and accuracy (Shepperd et al., 1999). Among those options in the questionnaires (i.e. Wikipedia, forum, Hong Kong government websites, World Health Organization), only health information from the Hong Kong government websites such as website of Hospital Authority, Department of Health and Centre for Health Protection, and World Health Organization have contained all of these criteria, and are considered to be reliable. As the information from Wikipedia and forum usually do not provided sources of information and the information can be edited by everyone, they are most likely not accurate and trustworthy.

#### Reliability of health information from various sources

Obtaining information from the internet is relatively convenient and simple than obtaining from other sources such as print advertisement and health professionals despite the information obtained from the internet may not be accurate and reliable compared to the others. College students tend to trust the health information from television and radio, and print advertisement because these kinds of information usually are prepared by the health professionals.

## <u>Reasons for obtaining health information from internet rather than from health</u> <u>professionals</u>

The reason of why students preferred to find health information from media mostly rather than from health professionals is based on the nature of information acquisition and the information itself. A great number of respondents thought that media was a convenient and easy way to obtain health information within a short time than consulting health

professionals, and the information is diverse. As mentioned before, internet and social media platforms were used mostly among college students. Nowadays, it can be seen that people used mobile phone and mobile data have continuously increased with a rapid pace in Hong Kong (Office of the Communications Authority, 2015), especially college students who frequently use smartphone as a communication tool to share information with others, visit the websites and use various kinds of social media platforms. Social media refers to internet-based tools that allow individuals and communities to gather, communicate and share information and ideas, which include social networking such as Facebook and Google, media sharing like YouTube, knowledge or information aggregation like Wikipedia, etc. These social media are accessible from both desktop and mobile devices (Ventola, 2014). Searching health information on the internet and social media provides numerous convenience, as people can search and review information without limitation of time and place. As long as they have needs to search for health information, they can use their social media platforms every time and everywhere.

Besides convenience as an advantage of using media to obtain information, diversity of information also promotes the usage of media. For instance, Wikipedia is a public forum website containing text and multimedia content, in which the information can be edited by everyone (Grajales III et al., 2014); Facebook is a platform for public to share information. The health information including individuals' self-experience of many social media and websites can be generated and edited by everybody, hence, the freedom of information sharing and exchange provides the diversity of information.

However, it is notable that personal privacy as one concern affected the preference for medical consultation in this study. Some people may be sensitive or feel embarrassed about their medical conditions, or they do not have sufficient trustfulness and confidence in the professionals. Thus, media becomes an individualized platform for them and they can ask the questions through forum or other media by using an anonymous identity.

#### 5.2 Gender and Health Awareness among College Students

Though there are discussions of gender differences on the health information- seeking behaviours through the uses of internet in some literatures, this study finds that there is no significant gender difference in using the internet to obtain health information. Several literatures indicated that women were more likely to search for health-related knowledge through the internet (Ackard and Neumark-Sztainer, 2001; Beier and Ackerman, 2003). Still, the gender differences in the acquisition of online health resources exist mostly when applying with the age factor, which means an individual's health information seeking behaviour is positively associated with increasing age (Ek, 2013). There are smaller gender differences in those younger generations like college students (Helsper, 2010). In this case, as the target group of this study focuses on college students, such findings concerning the influences of health information- seeking behaviour on different genders and ages may not be able to apply in this situation.

Similar results regarding the acquisition of health information in both males and females from this study can reveal that no significant gender inequality in the usage of the internet occurs in Hong Kong. This implies that gender is not the main concern in affecting the local college students in the acquisition of online health information even though several literatures supported that the females were more likely to have higher motivation of searching online health resources and also a higher chance in utilizing the internet as a tool for searching and receiving health information. With regards to the health-information seeking behaviour among college students, this study highlights the similar characteristics of both male and female students, which reflects that male students also have high health and nutrition awareness, health consciousness as well as great sense of responsibility for their own health. They also tend to be interested in health-related issues. These results correspond to the

increasing health information conveyed from various online platforms. It shows there are relatively positive perceptions and attitudes toward health-related knowledge among both male and female college students nowadays.

Another reason for no such significant gender difference in the acquisition of online health information among local college students may be due to the more accessible internet service in Hong Kong. Students become easier to access and acquire health knowledge through different websites on the internet (Gray et al., 2005). Due to the higher education level among college students in Hong Kong, both males and female students have more health awareness and confidence in using online health resources (Yan, 2010). With regards to more accessible and available online platform, they can access and obtain extensive online health-related resources that can help them care for themselves and people around them (Gray et al., 2005). They are more likely to utilize the internet for the acquisition of health and wellness information with their beneficial experiences in using online platform.

#### 5.3 Reasons to Seek for Health Information When Feeling

Respondents were most likely to obtain health information during sick or people they know were sick. They may want to know as much as possible about the disease and even the diagnosis after consultation. A study conducted by Korp (2006) reviews that an increase in specificity and severity of patient's diagnosis, accompanied with an increase in likelihood of seeking information and advice on the internet among them. Thus, individual with greater severity of diagnosis poses a higher opportunity to search information on internet. People who access the information and knowledge about their signs and symptoms, and diseases have the same purpose, either with or without making consultation to physicians. The purpose is to gain the health knowledge and to find out various treatment methods by proactively engaging in their illness, so as to increase the control of the existing illness or discomfort, and cope with everyday life following the onset of the disease (Korp, 2006).

There is another potential reason of acquiring health information during sick or knowing others are sick. In a face-to-face consultation with a health professional, many people feel restless and experience stress, resulting in forgetting to ask all the questions they had planned to ask. If they access information already, they can become better informed and knowledgeable, and likely to ask more relevant and critical questions when they meet the health professionals due to early preparation (Korp, 2006).

#### **6 RECOMMENDATIONS**

In this study, since most of the respondents obtained health-related information from social media platform, internet and television, however, they preferred to trust health information from television rather than from social media platform and internet. According to Dutta (2007), the study depicted that people who do not learn health information from a variety television programs are less health oriented than people who learn health information from those television programs. Dutta also found that there was a positive effect of television, especially in the realm of incorporating health content into entertainment-based television programs because of attractiveness and interestingness. Hence, the government and health-related authority should increase the presence of health-related information on television and cooperate with entertainment-based television program producer for enhancing the public health awareness.

## 7 LIMITATIONS

This study contains several limitations. The study population is only a random sample of 821 college students in HHB campus, the sample sizes seem too small and may not be

accurate and generalize enough for representing all college students in Hong Kong. Furthermore, we have investigated the extent to which the college students obtain health information from internet and social media; however, it is difficult to define whether social media platform is a part of internet. Respondents may confuse if they should consider social media, such as Facebook, Instagram, Twitter, be the part of internet or social media platform. Any of their choices may alter the results of the questionnaires. Last but not least, there is no previous study investigating the acquisition of health information among college students in Hong Kong. Since this is the first study on this topic, it still has many improvements, further similar studies are recommended.

## 8 CONCLUSION

With respect to the health information seeking behaviour, no gender difference was found, and Hong Kong college students mostly sought information when sick or knew someone is sick. They seem most likely to seek health information via television, internet and social media such as Facebook. However, most of them were not sure that the information obtained from internet and social media is trustworthy. As unreliable health information potentially appeared in internet and social media, and these platforms are popularly used among college students nowadays, it is needed to provide more promotion on enhancing students' awareness in obtaining reliable health information that is beneficial to their health and quality of life. For further improvement of similar studies, revising the design of questionnaire can increase the internal validity; increasing sample sizes and broadening research locations are able to increase the external validity and generalization.

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