

Original Research Article

Descriptive Study on Nursing Students' Interest in Using Digital Communication and Social Media in their Field after Covid-19

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Abstract

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This paper is about Descriptive study of nursing students' interest in using Digital communication in their field after Covid 19. Digital communication and social media have massive social interaction among community users that generate an extensive amount of data. The study was conducted in the faculty of nursing at Najran University, King Dome of Saudi Arabia (KSA). A descriptive correlational research design was followed in this study Sample: 300 nursing students. The first tool: is the interview sheet. Include two parts: Part (1) student personal data. Part (2) the nursing students' interest in Digital communication and social media. The second tool: - a questionnaire to Measure nursing students' knowledge about using Digital communication and social media in their field. Results: (74.7%) of nursing students were interested in Digital communication, and more than half (55.3 %) knew about Digital communication and social media, there's a statistical association between the academic level and students' interest. Provide special education about Digital communication to improve students' knowledge in the health field for using after covid 19, In-service Training for Various Digital communication and social media platforms. dissemination of the findings of this research study to the public and private healthcare organizations

Keywords: COVID-19, Digital communication, Interest, Social media

INTRODUCTION

In recent years health teams have built prediction models of the disease spread outbreak by using health-related data team extracted from the Internet. and utilization of Google Search queries, a Web-based tool used for real-time surveillance of disease outbreaks (Dukic et al., 2009). Using digital communication (DC) nowadays is a new trend for Disease-following systems are the backbone e of general health and prevention. Also, many universities and university colleges have used a variety of digital platforms as a possibility for teaching modernization and efficacy. The digitalization of nursing education has typically involved E-learning initiatives and virtual simulations (Shellenbarger et al., 2015), Svendsen et al. (2023). Students and university/college teachers were worried about the fluctuating quality of digital pedagogy. There were concerns that the students educated during this period would have reduced clinical

competencies so (Aiello et al., 2020) address the use, promise, perils, and ethics of social media (SM) and internet-based data collection for following public health and highlight untapped opportunities for integrating digital surveillance in public health, and current applications that could be improved through better integration, validation and clarity on rules surrounding ethical considerations. Promising developments include hybrid systems that couple traditional surveillance data with data from search queries, social media posts, and crowdsourcing. In the future, it will be important to identify opportunities for public and private partnerships, train public health experts in data science, reduce biases related to digital data (gathered from internet use, wearable devices, etc.), and address privacy. We are on the precipice of an unprecedented opportunity to track, predict, and prevent global disease burdens in the population using digital

data. Many study engine search inquiries to develop prediction of disease model disseminate outbreaks, The use of social media has higher exponentially in recent years rather than before (hulth et al., 2009). Number of active internet users reaches 42% of all humanity (Chyjek et al., 2015). Since the advent of the internet, and especially of Web 2.0 technology (the second generation of the World Wide Web that has allowed higher interactivity among users), the number of people who use this technology both professionally and recreationally has increased steadily, that estimated in the year 2012 was 2.4 billion of users (European Travel Commission, 2016). It provides an opportunity to improve knowledge and communication. there is a highly significant deficiency of empirical evidence that supports the efficacy and outcomes of these strategies (Ross et al., 2017). SM helps users to collaborate and connect with others in real-time and with simple words. there has been a revolution in the way people are communicating through SM removing the barriers of boundaries, (Rakesh et al., 2016).

DC&SM enhances education and increases the knowledge base regarding privacy, ethics, the policy of health, staff professionalism, and communication, It also helps nurses to build a professional identity and communicate with the profession (Ariana and Sorana, 2016).

Nowadays exchange an information on health failure, research data, the possibility of maintaining close contact with patients and families, reaching new audiences for education and health care services, and dissemination of organizational achievements, numerous other online communities related to nursing aimed at communicating with the public (Health Research Institute, 2016). (Ana Claudia Mesquita, 2017).

Nurses shared data through such tools on the intervention of case studies or consult another health team about their experiences. (Asiri H, Househ M, 2016)

DC&SM improves the quality and safety of general health care delivery. Patients can get detailed information about the diseases through Wikis' also open dialogue between consumers and providers, allowing for continuous feedback (Rakesh et al., 2016).

there is a projected increased change in health team and nursing employment of 16% from 2014 to 2024. nursing applicants for professional DC&SM communication can confound an already challenging process of filling positions within facilities. (Bureau of Labor Statistics, 2015).

DC&SM enables nurses to find peers working in the same field in the world and share experiences. Health team Meetings and conferences are attended online for a safe time and effort. DC&SM not only helps to exchange information but also find jobs, The World Health Organization has a Facebook and Twitter page to keep people informed during a disease outbreak or disaster, For example, WHO used Twitter during an influenza or

coronavirus epidemic which had more than 11,700 followers; this shows that it is an effective tool in making people aware of the corona disease and its prevention. (Rakesh K Gorea¹, Abhinav Gorea and Arshdeep Gorea, 2016).

DC&SM distractions during handoffs are another concern. Interruptions by SM during handoffs may prevent the nurse from attention to key information AND asking questions (Piscotty et al., 2015).

Major concerns remain related to the accuracy and academic rigor of this freely available content. Nurses observe online professionals and etiquette while visiting and commenting on blogs, chats, and forums to avoid harm (Nurse without Borders, 2015).SM Increased availability of information and communication technology are changing the way nursing professionals communicate with each other (Australian College of Nursing, 2015). Benefits of DC&SM are improved communication coordination of patient care, and improved outcomes. Safe the time of treatment (Piscotty et al., 2015)

DC&SM creates nurses' sense of security who believe the voicing opinions, entering discussions, and posting under the protection of privacy settings. In addition, deleting images from an SM account does not mean completely removed Results of posting inappropriate posts on SM lead to varying levels of discipline – all of these dependent upon the action in question, workplace regulations, and any SM policies already in effect. Abuse SM caused employers to come under scrutiny and . Nursing.org, at least 50 employees, including the nurses, at Northwestern Memorial Hospital in Chicago, were fired in May 2019 post allegedly viewing the actor Jessie Smollett's medical records post-treated at the hospital. the employees were simply curious about the case, but improperly viewing patient medical records and files for any reason is considered a HIPAA violation (Every Nurse, 2018).

Nurses posting on SM or blogging sites should follow their organizational policies and procedures about SM (National Council of State Boards of Nursing, 2018).

posting unprofessional content on SM can be grounds for firing, and posting negative comments about the workplace is considered unprofessional because leads to dismissal. (Reinbeck et al., 2019)

Consumers can be referred to SM groups which present support and information for individuals with specific long-term. Groups can created by health care institutes for consumers with specific long-term states, (Frieda Paton, M.Cur, RN, 2017).

Material and Method

Aim: Descriptive study for nursing students' interest in using Digital communication and social media in their field after Covid 19

Research questions

- 1- Does a nursing student have good knowledge of using DC&SM after the COVID-19 pandemic?
- 2- How much are the nursing students interested about using DC& SM in the health field?
- 3- How does personal nursing student data affect student interest about using DC&SM after the COVID-19 pandemic?

Research design: Descriptive correlational research design

Setting: The study was conducted in the faculty of nursing at Najran University male and female section.

Sample: The total sample is 300 students, Nursing students who study in level 1 are excluded.

Tool of data collection

Collect data through two electronic tools: 1st tools: - interview questionnaire sheet, quoted from. (Shalby, et al, 2019) after that tested & piloted by the investigator. Include two parts: Part (1) student personal data. Which consisted (of age, sex, Marital status, Interest in Using technology Methods, having a method for tech., having an account on the sites, Web access method, and preferred methods of social communication. Part (2) assessment of the nursing students' interest in the DC&SM includes (Student interest in DC& SM and the need to learn them, evaluation of students' level themselves in the use of DC&SM, methods used by the students to develop their skills in SM through the web. this tool is used to assess student knowledge and interest in DC&SM. The second tool: - a questionnaire to Measure nursing students' style practical about using DCB&SM in the health field after a pandemic.

Procedure: reviewing recent and past, local, and international related literature, to develop the data collection tools.

Tools validity: The tools of data collection will be developed by the researcher then it will be tested for content validity by a jury of 3 of expertise in the medical surgical and nursing administration fields.

Pilot study: Before performing the actual study, a pilot study was carried out on 10% of the total Students. Based on the findings some modifications were done on the tools.

Fieldwork: The data was collected through an electronic

Google forum drive sheet After that the researchers explained the aim of the study to the students and their teachers in male and female sections to gain their cooperation and take oral informed consent after explaining the method of filling the tool of data collection. the time used to fill the sheet ranged from 5-7 minutes to assess student interest in DC&SM and knowledge of using DC&SM in the health field after the pandemic.

Ethical considerations

Explain the objective of the study to students, ensure anonymity and confidentiality of student's data, and the right to withdraw from the study at any time, consent was taken; from each student.

Statistical Design

The obtained data were analyzed by using the statistics package program for social sciences. Data were presented using descriptive statistics in the form of frequencies and percentages. Statistical significance was considered at $P \leq 0.05$, highly significant at $P < 0.001$ and insignificant was considered at $P > 0.05$.

RESULTS

Table 1: it showed more than half (54%) of nursing students were from the 20 to 22 age group., while only about (1%) of them were from the 18 to 20 age group, the majority (77.30 %) of them used smartphones, the most (71.30%) were preferred all accounts for SM and use of DC, followed by (16%) of them were preferred WhatsApp for social media. While only (1.70 %) of them preferred Facebook.

Fig. (1) Demographical characteristics of nursing students according to gender type:

In figure 1: it is shown that most (86 %) of nursing students were female. While only about (14%) of them were male.

Fig. (2) Demographical characteristics of nursing students according to academic level:

it is shows that most (17%) of nursing students were in the fifth trimester of academic level. While only about (0.70%) of them were in the first trimester

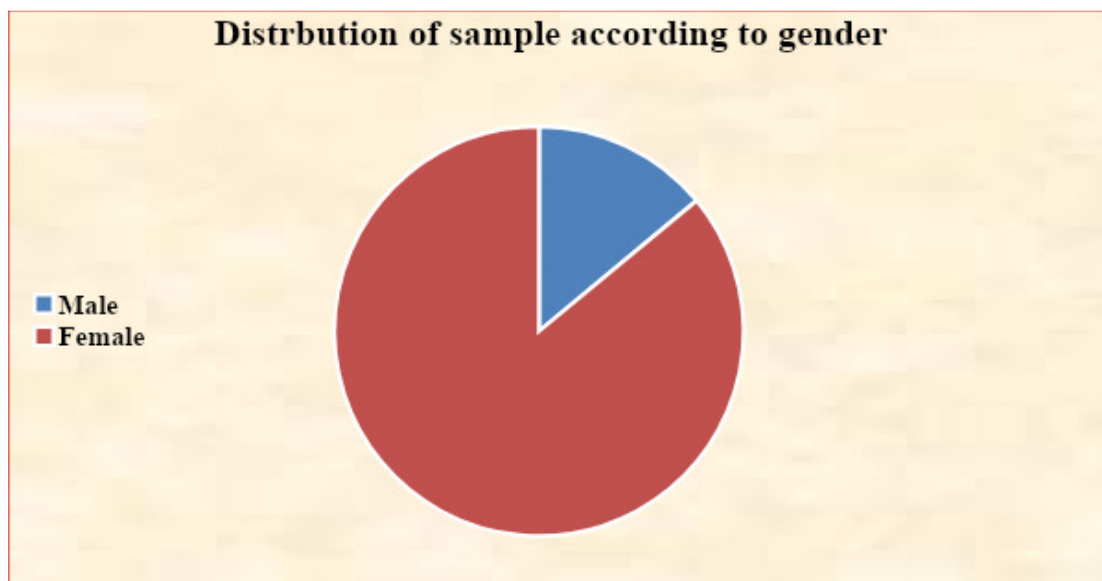
Table 2. nursing students' responses according to interests toward SM&DC:

It showed the most (74.7%) of nursing students were had agree interesting for the DC&SM after Covid 19 pandemic. While only (3%) of them were had disagree interesting.

Table 3 Distribution of nursing students' responses according to knowledge of DC&SM:

Table 1. Demographical characteristics of nursing students (n= 300).

Demographical characteristics		N	%
Age	18-20	3	1.0%
	20-22	162	54.0%
	>22	135	45.0%
Longing for technology use	Eighth Trimester	41	13.7%
	Not Interesting	36	12.0%
	Somewhat interesting	124	41.3%
Account type	Interesting	140	46.7%
	WhatsApp	51	17.0%
	Tweeter	18	6.0%
	Facebook	16	5.3%
	All accounts	203	67.7%
A Preferred Method	Other	12	4.0%
	WhatsApp	48	16.0%
	Tweeter	16	5.3%
	Facebook	5	1.7%
	All accounts	214	71.3%
	Other	17	5.7%

**Figure 1.** Distribution of nursing students according to gender (n= 300)

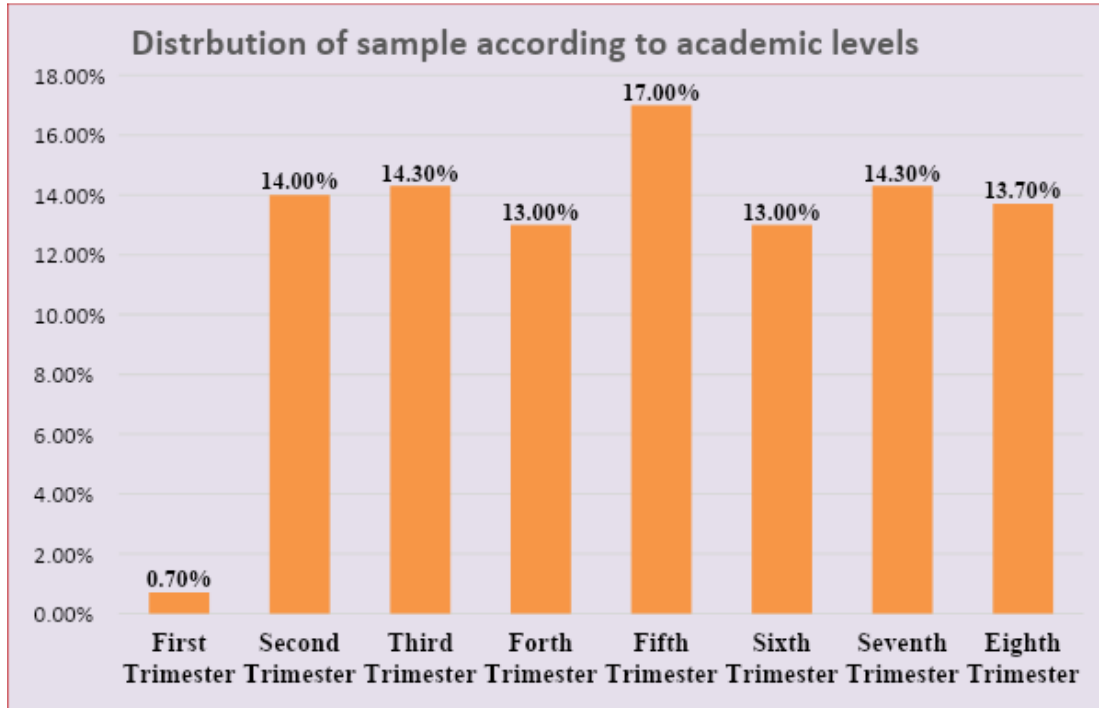


Figure 2.

Table 2. Interesting of students toward digital communication and social media n=(300)

	Agree n(%)	Somewhat Agree n(%)	Disagree n(%)
DC&SM via the web is essential in medicine, nursing, and scientific research.	224(74.7)	67(22.3)	9(3.0)
Learning DC&SM via the web is a necessity and must master it.	179(59.7)	108(36.0)	13(4.3)
Proficiency in DC&SM via the web develops many skills.	182(60.7)	93(31.0)	25(8.3)
The computer and the web are currently the main communication tool in all hospitals.	169(56.3)	117(39.0)	14(4.7)
Computer proficiency and access to the web helps to provide excellent employment opportunities and a better standard of living.	185(61.7)	94(31.3)	21(7.0)
interested in improving my DC&SM skills.	173(57.7)	98(32.7)	29(9.7)

Table 3. Distribution of students knowledge

Knowledge of students toward DC&SM n=(300)	I know n(%)	Somewhat I know n(%)	I don't know n(%)
Do you have enough information about DC&SM?	166(55.3)	108(36.0)	26(8.7)
Does DC&SM affect raise the level of culture in general?	121(40.3)	147(49.0)	32(10.7)
Does the DC&SM provide an effective role in the health field?	155(51.7)	112(37.3)	33(11.0)
Do you know the important role of DC&SM in the health field?	148(49.3)	122(40.7)	30 (10.0)
Do you know the impact of DC&SM on the health care workers performance?	155(51.7)	115(38.3)	30(10.0)

Table 3: It shows more than half (55.3 %) of nursing students had knowledge of social media. While only (8.7 %) of them were had I don't know.

Table 4. Association between the demographical

characteristics of nursing students and responses to concern and interest toward social media.

Table 4: It shows there's a statistical association

Table 4. A statistical association of Demographic Data with student interest and students knowledge

		Interesting	Assessment of knowledge
		Means	Means
Age	18-20	16.33±1.52	13.66±1.52
	20-22	15.34±2.42	12.01±2.08
	>22	15.30±2.66	12.08±2.34
	p value	0.783	0.434
Sex	Male	15.40±2.64	11.97±2.57
	Female	15.32±2.51	12.07±2.13
	p value	0.851	0.782
Academic levels	First Trimester	15.00±4.24	12.00±4.24
	Second Trimester	15.45±2.76	11.33±1.88
	Third Trimester	15.39±2.17	12.04±1.91
	Forth Trimester	14.07±3.23	11.76±2.45
	Fifth Trimester	15.70±1.81	12.17±2.00
	Sixth Trimester	15.33±2.50	12.69±2.47
	Seventh Trimester	15.95±2.43	13.13±2.09
	Eighth Trimester	15.26±2.43	11.24±1.99
	p value	0.058	0.001
Interesting for technology use	Not Interesting	14.13±2.82	11.05±2.26
	Somewhat interesting	15.35±2.56	12.07±2.17
	Interesting	15.62±2.32	12.31±2.14
	p value	0.006	0.009

between the academic level, and students' interest, at p-value less than (0.05). There's no statistical association between other demographical characteristics of nursing students and others' responses toward DC&SM at a p-value of more than (0.05).

DISCUSSION

Regarding student personal data the present study showed that more than half of nursing students were from the 20 to 22 age group, the most of the nursing students were female, from the fifth trimester of academic level. Less than half of nursing students were interested in technology use, the majority of nursing students used smartphones for communication, two-thirds of nursing students were using all accounts, and had Wi-Fi method for web entrance and preferred all accounts for DC&SM. had agreed interest for the DC&SM via the web is essential in medicine, nursing, and scientific research, more than half of nursing students were had to agree to make an assessment for the most important obstacles I encounter, is not communicated via DC&SM during a pandemic and more than half of nursing students were had I know toward DC&SM by them were have enough information about DC&SM.this may be due to The result of the students 'high financial return and their habit of using communication fluid from a young age

There's a statistical association between the academic level, and students' interest in using it after disseminating COVID-19, also association between interest in

technology use, and assessment toward DC&SM at a p-value less than (0.05), also showed statistical association between the types of device communication, account type and all students responses toward DC&SM at p-value less than (0.05).this may be due to high quality of internet in king doom Saudi Arabia also the new generation of interesting of using social media

According to (Tuominen, Stolt and Salminen, 2014). In this study about DC&SM in Nursing Education, who reported by the majority (92%) of the nursing students were female, their mean age was 24 years (SD 5 years, median 22, and range 19–52), and they were educated mainly (82%) in high school Students. SM applications were considered relatively interesting. Almost one-fifth (17%) of the students showed only a slight interest in DC&SM applications. Also, the various DC&SM applications were seen as generally interesting and necessary to use in nursing education. DC&SM creates possibilities to share information and to develop communication skills (Mahdy & Mahfouz, 2016). Working together via social media nationally and internationally, can lead to innovative solutions to transform old methods and ways of thinking.

Anthers study about how Health Care Professionals Use DC&SM to Create Virtual Communities (Rolls et al., 2016). Reported the "technology acceptance model" (n=3) suggests that social media use is mediated by an individual's positive attitude toward and accessibility of the media.

Also, another study about Use of DC&SM By Nurse Educator Students for (Lahti, Haapaniemi-kahala and

Salminen, 2017). Who found that many nurses students do not use social media at all. Facebook was most common (53% use it every day) and YouTube (17%) was the second most common form of social media used to support daily living. The participants reported using YouTube (6% use it every day) and Facebook (4%) most often as support in their studies.

Nurses and nursing students are increasingly participating in online DC&SM but evidence is emerging from studies, legal cases, and media reports that the use of social networking can pose risks for health professionals. Inappropriate online behavior can potentially damage personal integrity, nurse-patient/client relationships, nurse-colleague relationships, and current and future employment opportunities (Mansfield, 2019).

Concerns of Social Networking, with the increase in technology, also come some concerns for the profession. inappropriate sharing of personal or work information that reflects poorly on the nurse and professionalism in nursing is a concern for all of us (Crystal and Harris, 2011).

The use of DC&SM technologies offers many opportunities to influence all aspects of nursing practice, and they can be wonderful educational tools for both nursing students in the classroom and practicing nurses in continuing education (Association, 2012).

The sociotechnical theory states that social and technical aspects of work must be balanced to achieve optimal performance. Social media technology has changed the way society communicates. Nurses have begun to participate in this evolution of workplaces, bringing some balance to work systems but nurses must further develop the ways they use social media to keep up with contemporary society (Casella et al., 2014).

CONCLUSION

- 1- (67.70%) of nursing students were used on all accounts. (75.70%) were had Wi-Fi (74.7%) had agreed and interesting for the DC&SM.
- 2- There's a statistical association between the academic level, and students'
- 3- concern and interest, in knowledge assessment after Covid 19 pandemic, at a p-value of less than (0.05)

RECOMMENDATIONS

- 1- Provide special education about DC&SM to improve students' knowledge during the COVID-19 pandemic in the health field for use during a pandemic.
- 2- In-service Training for Various DC&SM platforms
- 3- Dissemination of the findings of this research study to the public and private healthcare organizations.

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