

**Deanship of Graduate Studies  
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**Assessment of the effects of the internet and social media use  
on work performance of physicians and nurses at the  
hospitals in the south of Palestine**

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**Assessment of the effects of the internet and social media use on  
work performance of physicians and nurses at the hospitals in the  
south of Palestine**

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## **Thesis Approval**

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## **Dedication**

To my cousin Issa Abo-Iram without his patience and support nothing would be done.

To my mother and father.

To my brothers and sisters.

To my friends and teachers.

Nida Fayeze Ismael Hamamadeh

**2020**

## **Declaration**

I certify that this thesis submitted for the degree of master, is the result of my own research, except where otherwise acknowledged, and that this study (or any part of the same) has not been submitted for a higher degree to any other university or institution .

Signed :



**Nida Fayez Ismael Hamamdeh**

**Date :26,7, 2020**

**Date: July,2020**

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Thanks to all who supported and contributed in the completion of my research.

**Nida Fayez Ismael Hamamadeh**

**Date :26,7,2020**

**Abstract**

**Background:** The internet and social media applications in the workplace have increased dramatically. It has both beneficial and harmful effects. Also, it seems to be the tool that affects the job performance in workplace.

**Aim:** This study was conducted to assess the beneficial and harmful effects of internet and social media applications use at workplace on work performance of physicians and nurses in the major referral hospitals in Hebron and Bethlehem cities.

**Methodology:** A cross sectional study was conducted by using self-reported questionnaires: the socio-demographic data sheet, Work related Social Media Questionnaire (WSMQ) and William Anderson Work Performance Scale. The sample of the study included 409 participants (169 physicians and 240 nurses) from four hospitals in Hebron and Bethlehem cities which were Hebron Governmental Hospital, Al- Ahli Hospital, Beit-Jala Hospital and Arab Society for Rehabilitation.

**Results:** Pearson correlation test showed a weak positive statistically significant relationship was found between the WSMQ and William Anderson Work Performance Scale( $r=0.198$ ;  $p=.000$ ). On other hand, the findings revealed that the overall mean score for WSMQ was high (mean score 3.57), and the higher mean was for the beneficial WSMQ (mean score 3.17) compared with (2.08) for the harmful WSMQ. The mean for William Anderson Work Performance scale was moderate Performance (3.35), the higher mean was for Organizational Citizenship Behavior-Individual(OCBI) (3.68) followed by In Role-Behavior (IRB) with a mean of (3.24) and the lowest was for Organizational Citizenship Behavior-Organization (OCBO) with a mean of (3.15).

Further, the study results showed that the independent variables such as monthly income, specialization, professional title, devices used to access internet and social media applications and network used to access internet and social media applications had significant relationships with WSMQ. In addition, the findings showed that gender, marital status, monthly income, employment status and had obstacles prevented from using internet and social media applications which showed significant relationships with work performance.

Multiple linear regression analysis revealed that only specialization had a statistically significant relationship with WSMQ and gender, employment status, and had obstacles prevented from using internet and social media applications were a statistically significant

relationships with the work performance. Linear regression revealed that there was a significant linear relationship between social media and work performance (P-value=0.000).

**Conclusion:** This study revealed that there is a weak positive statistically significant relationship between the internet and social media applications and work Performance in workplace among Palestinian physicians and nurses. However, the beneficial effects of social media was higher than harmful in the workplace and the mean for William Anderson Work Performance scale was moderate (3.35). Therefore, the Palestinian health care professionals should be encouraged to use internet and social media applications to improve health outcomes, develop a professional network, increase awareness of new discoveries, and provide health information to the community other than communication. Also, the administrative staff and policy makers in the Palestinian hospitals should regulate the use of internet and social media applications in hospitals by developing a clear policy for their use in the hospitals.

تقييم استخدام تطبيقات الإنترنت ووسائل التواصل الاجتماعي في مكان العمل على الأداء الوظيفي للأطباء  
والمرضى في المستشفيات في جنوب فلسطين.

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إشراف: الدكتورة منى حميد

## ملخص الدراسة

**المقدمة:** انتشرت تطبيقات الإنترنت ووسائل التواصل الاجتماعي في مكان العمل بشكل كبير. لها آثار مفيدة وضارة. أيضا، يعتقد أنها الأداة التي تؤثر على الأداء الوظيفي في مكان العمل.

**الهدف:** أجريت هذه الدراسة لتقييم الآثار الايجابية والسلبية لاستخدام تطبيقات الإنترنت ووسائل التواصل الاجتماعي في مكان العمل على الأداء الوظيفي للأطباء والممرضين في المستشفيات الرئيسية في مدينتي الخليل وبيت لحم.

**منهجية الدراسة:** تم استخدام المنهج الوصفي في الدراسة باستخدام استبيانات ذاتية، حيث احتوت على البيانات الاجتماعية والديموغرافية والمتغيرات الأخرى ذات الصلة، ومقياس استخدام وسائل التواصل الاجتماعي المتعلقة بالعمل ومقياس ويليام أندرسون لقياس الأداء الوظيفي، واشتملت العينة على 409 مشاركًا (169 طبيبًا و 240 ممرضًا) من مستشفيات مدينتي الخليل وبيت لحم وهم مستشفى الخليل الحكومي والمستشفى الأهلي ومستشفى بيت جالا الحكومي والجمعية العربية للتأهيل.

**النتائج:** أظهر اختبار بيرسون وجود علاقة ايجابية ضعيفة ذات دلالة إحصائية بين استخدام تطبيقات الإنترنت ووسائل التواصل الاجتماعي ومقياس الأداء الوظيفي ( $r=0.198$ ،  $p=.000$ ). من ناحية أخرى أظهرت النتائج أن المعدل العام لمقياس استخدام الانترنت ووسائل التواصل الاجتماعي في مكان العمل هو ( $M=3.57$ )، في حين كان الأعلى تأثيرا هو المقياس الايجابي ( $M=3.17$ ) مقارنةً بالمقياس السلبي ( $M=2.08$ )، بينما كان المعدل العام بالنسبة لمقياس ويليام أندرسون للأداء الوظيفي هو ( $M=3.35$ )،

حيث كان المعدل الأعلى ( $M=3.68$ ) لـ OCBI متبوعاً بـ IRB بمعدل ( $M=3.24$ ) وأدنى معدل لـ OCBO ( $M=3.15$ ).

بالإضافة إلى ذلك، أظهرت النتائج أن المتغيرات المستقلة مثل دخل الأسرة والتخصص والمسمى الوظيفي والأجهزة المستخدمة للوصول إلى تطبيقات الإنترنت ووسائل التواصل الاجتماعي والشبكات المستخدمة للوصول إلى تطبيقات الإنترنت ووسائل التواصل الاجتماعي يوجد لها علاقة ذات دلالة إحصائية مع مقياس استخدام الإنترنت ووسائل التواصل الاجتماعي في مكان العمل . كما أظهرت النتائج أن المتغيرات المستقلة مثل الجنس والحالة الاجتماعية ودخل الأسرة والحالة الوظيفية ووجود عقبات تحول دون استخدام تطبيقات الإنترنت ووسائل التواصل الاجتماعي يوجد لها علاقة ذات دلالة إحصائية مع مقياس الأداء الوظيفي للمشاركين.

تحليل الانحدار الخطي المتعدد أظهر أن التخصص فقط يؤثر بشكل كبير على استخدام وسائل التواصل الاجتماعي في مكان العمل. من ناحية أخرى، أظهر التحليل أن الجنس، والحالة الوظيفية و المعوقات المانعة من استخدام تطبيقات الإنترنت تؤثر بشكل كبير على الأداء الوظيفي. أظهر الانحدار الخطي عن وجود علاقة خطية ذات دلالة إحصائية بين وسائل التواصل الاجتماعي والأداء الوظيفي (قيمة  $P=0.00$ ).

**الخلاصة:** كشفت هذه الدراسة عن وجود علاقة إيجابية ضعيفة ذات دلالة إحصائية بين تطبيقات الإنترنت ووسائل التواصل الاجتماعي والأداء الوظيفي بين الأطباء والممرضين الفلسطينيين في مكان العمل على الرغم بان التأثيرات الايجابية لوسائل التواصل الاجتماعي كانت أعلى من التأثيرات السلبية. و أيضاً كان متوسط مقياس الأداء الوظيفي وليام أندرسون معتدلاً ( $3.35$ ). لذلك يجب تشجيع الطواقم الصحية في فلسطين على استخدام تطبيقات الإنترنت ووسائل التواصل الاجتماعي من اجل تحسين الخدمات الصحية، بناء شبكة مهنية للتواصل و التشبيك، وزيادة الوعي بالاكشافات الجديدة، وإعطاء المعلومات الصحية للمجتمع و ليس فقط استخدامها للاتصال و التواصل مع الآخرين. كما يجب على الموظفين الإداريين

وصانعي السياسات في المستشفيات الفلسطينية تنظيم استخدام الإنترنت وتطبيقات التواصل الاجتماعي في  
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### **List of abbreviations**

WSMQ	Work related Social Media Questionnaire
WSMQ (+)	Beneficial Work related Social Media Questionnaire
WSMQ (-)	Harmful Work related Social Media Questionnaire
OCB	Organizational Citizenship Behaviors
OCBI	Organizational Citizenship Behaviors-Individuals
OCBO	Organizational Citizenship Behaviors-Organization
IRB	In Role-Behavior
PCBS	Palestinian Central Bureau of Statistics
MOH	Ministry of Health
WHO	WORLD Health Organization
SPSS	Statistical Package for Social Science
PEPI	Computer Programs for Epidemiologists
NIS	New Israeli Sheqel
US	United States of America

# **Chapter one**

## **Introduction**

# Chapter one

## 1.1 Introduction

Social media is a group of online network that allows individuals to search for information, interact with each other and with their communities. It composed of large quantity of online websites applications that range from online web journals to photo and video sharing applications, social networking, educational and information sites (Kaplan and Haenlein, 2010).

The internet and social media applications continue to grow fast worldwide, according to the new Global Digital suite report (2020), the number of internet users was 4.5 billion, and the number of social media users is 3.8 billion, which increased by 7% compared with year 2019. In Palestine, according to the new Global Digital suite report (2020), there is an increase in the percentage of using the internet among individuals. The percentage of internet users had increased to 64% in 2020 with 3.25 million Palestinian users. Moreover, the number of active users of social media reached 2.70 million with an increase by 20% from the previous year 2019.

Due to the increasing of mobile and internet access, larger population has the ability to share what they are doing and thinking. Within the healthcare providers, this means that the internet and social media applications can be used for different purposes such as patient engagement encouragement and health promotion programs (Fox, 2011).

The role of internet and social media applications among healthcare professionals have been reported in both beneficial and harmful manners. The benefits are providing medical education to healthcare workers, knowledge sharing, improving quality of care, skills promotion, emergency management and tool for patients providers interaction (Mattingly., 2015 'Kaplan and Haenlein, 2010).

The harmful outcomes of using the internet and social media applications related to violation of patient privacy and confidentiality, breaches of personal professional boundaries, damage the

professional image and interruptions during work time (Piscotty et al., 2015; Ventola, 2014; Spector and Kappel, 2012).

Job performance is the measurement of workers behaviors and internet and social media applications may enhance the capacity of the employees in the workplace because they acquire new knowledge, reduce the workload, increase perform assigned tasks and achieve positive emotions (Fusi and Feeney, 2016). In contrast, the internet and social media applications may negatively affect job performance. For example, workers misused organizational resources, official time and violating the standard procedures of the organization (Kühnel et al., 2017). Many studies indicated that the policy makers can increase the efficiency and productivity of workers by adoption and controlling the internet and social media applications in the work process (Levy, 2013; Fox, 2011; Ventola, 2014).

## **1.2 Study justification**

Social media is defined as an internet based platform which enables its user to connect, collaborate, and communicate with others in real time (Ressler and Glazer, 2010). Social media is the most widely used platforms to share information and maintain contact with people. Also, social media allows professionals to develop connections with their colleagues and peers for exchange of knowledge and information (Fraser, 2011).

The introduction of internet and social media applications in the workplace has increased dramatically. As the number of users increased, the organizations try to contact with employees more than the past (Apple et al, 2020).

Campbell (1990) defined work performance as the “actions or behaviors of an individual’s that are related to the organization goals”. So, the work performance focuses on behaviors or actions of an employee’s instead of the outcomes of their behaviors or actions (Rotundo and Sackett, 2002).

For health care system the internet and social media applications have a positive impact on it. It is considered as a tool to share health information, discuss health issues, communicate with patients,

promote the primary health care behaviors, and it can be a useful tool for collaboration. It enables the health care professional to make a dialogue with their colleagues and peers and keep them up to date with the recent healthcare developments (Ventola, 2014). Health care professionals including physicians and nurses can use internet and social media applications to improve health outcomes, develop a professional network, increase awareness of new discoveries, communicate with patients during the delivery of care, and provide health information to the community (Bernhardt et al., 2014).

Despite the benefits of social media to the organizations and individuals as mentioned above, the use of social media in the workplace had many challenges. For example, nurses are working in a complicated situation which are vulnerable to trouble by social media (Brady et al., 2009). Many studies found that modern technology such as mobile phones could be a risk factor in making interruptions among nurses when they are providing care to patients. At the time of work, social networking messages may introduce errors in medication calculation or administration and cause severe damage to patients or even death (Piscotty et al., 2015; Gill et al., 2012).

The literature showed that the productivity of workers decreased by 1.47% due to use of facebook in the workplace (Cain, 2011). One study showed that the use of facebook every day for 15 minutes decreased of work efficiency by 1.5% (Moqbel, 2012). According to Wilson (2009) study, there are five risks associated with the use of the internet and social media applications, for instance, loss in staff productivity, leakage of information from staff in an open environment, damage to a business's reputation, cyber crooks practices and the loss of information due to outdated passwords. A study conducted by Erer and Çobaner (2016) showed that the majority of the nurses (80%) believed that the use of social media has various risks. The percentage of the increased risk for inaccurate information, unprofessional behaviors, violation of patient privacy and the organizational risks was relatively considerable (62%, 58%, 53%, 33%, respectively). Also the study showed that despite the risks, nearly 26% of participants stated there is a need for informative education or guidelines controlling the use of social media within the workplace.

### **1.3 Study problem**

- The use of social media and internet is becoming very popular in Palestine and you can find a free connection at workplaces. This phenomenon is becoming very popular in hospitals and access to information through internet is becoming very useful to health workers if it is used properly. However, no study was conducted in Palestine to assess the beneficial and harmful effect of internet and social media applications use at workplace on work performance among Palestinian physicians and nurses.
- This study may help policy makers and managers in the Palestinian Ministry of Health and private hospitals in planning and implementing safety measures and guidelines on the use of internet and social media applications in hospitals and other healthcare settings.

#### **1.4 Main objective**

The aim of the study to assess the beneficial and harmful effects of internet and social media applications use at workplace on work performance among physicians and nurses in the major referral hospitals in Hebron and Bethlehem cities.

#### **1.5 Specific objectives**

- 1) To assess the relationship between socio-demographic variables (age, gender, place of residency, marital status, educational level and monthly income) and the use of internet and social media applications among physicians and nurses in the selected hospitals.
- 2) To assess the relationship between work related variables (specialization, professional title, workplace, years of experience, work department, work shift pattern, number of working hours and employment status) and the use of internet and social media applications among physicians and nurses in the selected hospitals.
- 3) To assess the relationship between internet related variables (frequency of internet and social media applications use, hours spent on internet and social media applications, devices used to access internet and social media applications, network used to access

internet and social media applications, add patients as friends or followers and had obstacles prevented from using internet and social media applications) and the use of internet and social media applications among physicians and nurses in the selected hospitals.

- 4) To assess the relationship between socio-demographic variables (age, gender, place of residency, marital status, educational level and monthly income) and work performance among physicians and nurses in the selected hospitals.
- 5) To assess the relationship between work related variables (specialization, professional title, workplace, years of experience, work department, work shift pattern, number of working hours and employment status) and work performance among physicians and nurses in the selected hospitals.
- 6) To assess the relationship between internet related variables (frequency of internet and social media applications use, hours spent on internet and social media applications, devices used to access internet and social media applications, network used to access internet and social media applications, add patients as friends or followers and had obstacles prevented from using internet and social media applications) and work performance among physicians and nurses in the selected hospitals.

## **1.6 Definition of terms**

**1.6.1 Social media:** is a set of technology tools that are used to mediate opportunities for bringing people together and encouraging social networking and dialogic communication (Eckler et al., 2010)

**1.6.2 Social networking sites:** is a web based service which allows individuals to construct a public or semi public profile within a bounded system, articulate a list of other users with whom they share a connection, and view their list of connections within the system (Boyd and Ellison, 2007).

- 1.6.3 Internet:** a collaboration of more than hundreds of interconnected networks of communicating devices (Forouzan,2007).
- 1.6.4 Work performance:** is a behaviors or actions that relevant to the goals of the organization (Campbell,1990). Job performance is associated with the ability of the employees being aware of assigned targets, fulfilling expectations and achieving targets or accomplishing a standard set of tasks for the organization (June and Mahmood, 2011).
- 1.6.5 Physician:** is a professionals who diagnose, treat and prevent illness, disease, injury, and other physical and mental impairments and maintain general health in humans through application of the principles and procedures of modern medicine. They supervise and evaluate the implementation of care and treatment plans by other health care providers. They assume responsibility for the provision of continuing and comprehensive medical care to individuals, families and communities (WHO, 2010).
- 1.6.6 Nurse:** is a professionals who provide support and care services for people due to the effects of ageing, illness,injury, physical or mental impairment, according to the practice and standards of modern nursing. They assume responsibility for the planning and management of patients care, including the supervision of other health care workers, working in teams with medical doctors and others in the practical application of preventive and curative measures in clinical and community settings (WHO, 2010).
- 1.6.7 Referral hospital:** Any hospital that receive referrals from lower to higher levels of care. Referral is the process in which a health worker at a one level of the health system, having insufficient resources such as drugs, skills and equipments to manage a clinical condition, seeks the assistance of a better or differently resourced facility at the same or higher level to assist client's case (Al-Mazrou et al .,1990).

## **1.7 Summary**

- The literature revealed there is a lack of studies that are conducted to assess the beneficial and harmful effects of internet and social media applications use in workplace and its effects on work performance among Palestinian physicians and nurses.
- The aim of the study to assess the beneficial and harmful effects of internet and social media applications use at workplace on work performance among physicians and nurses in the major referral hospitals in Hebron and Bethlehem cities.
- This chapter presented the problem statement, study objectives, research questions, ethical consideration and feasibility of the current study.

The next chapter discussed the literature review of the current study

# **Chapter two**

## **Literature review**

**Chapter two**

## 2.1 Introduction

The internet and social media applications are a group of internet based applications that built on the ideological and technological foundations of Web 2.0, that introduced a new communication network, enable its users to create profiles for social activities without time and space constraints (Carr and Hayes, 2015; Kaplan and Haenlein, 2010).

The global system of networked computers, servers and routers known as the internet has changed many aspects of social interaction. For example, the online distribution of goods and services, has influenced every industry and commerce-oriented technological development has been a rise in term of social media. One of the most significant evolution connected to social media is the growth of social network sites such as, Facebook, LinkedIn, MySpace, and Google Plus. In 1997, was the first emerge of social networking sites, which become a phenomenon in 2003, when Friendster attracted mass media attention. Nowadays, millions of people of all ages have connected to social network sites around the world and the numbers still increasing. Globally, there are more than 3 billion social media users and 2.6 billion Facebook monthly active users in 2020 (Anderson and Bernoff, 2010 ;Clement,2020).

Safko and Brake (2009) showed that social media refers to activities, practices, and behaviors of people who share information online, knowledge, and opinions. Weinberg, (2009) indicated that social media refers to the exchange of knowledge, information and experiences through community websites. Social media is an online applications that encourage communication, collaboration and the transmission of information (Universal McCann report, 2008).

Social media in the workplace has increased dramatically worldwide and a platforms of social media within the organizations provides a flexible tools for management, such as Facebook, Twitter and LinkedIn are playing an important role in human interaction within organizations. Therefore, these applications at the workplace increase the efficiency and effectiveness of employees and organizations (Daowd, 2016;Cao and Ali, 2018)

This chapter discussed the following topics:

Section one: Health organizations and work performance.

- Dimensions of work performance.
- Factors affecting work performance.

Section two: Internet and social media applications.

- Internet and social media applications types
- Internet and social media applications use theories.

Section three: Internet and social media applications use among healthcare professional in workplace.

- The prevalence of internet and social media applications among physicians and nurses.
- Beneficial and harmful effects of internet and social media applications among physicians and nurses in workplace.

Section four: Studies that assess the relationship between internet and social media applications and work performance among physicians and nurses.

## **2.2. Section one: Health organizations and work performance**

The use of internet and social media applications was increased among health care organizations such as hospitals, healthcare systems, pharmaceutical companies and healthcare professional, for instance, 70% of health care organizations in the United States used social media. The main reasons for using social media applications to communicate with patients and community, health promotion, source for knowledge and continuous education, marketing products and services, organizational development, reading recent news and providing services and support for patients (Ventola, 2014).

The World Health Organization (2006) identified that the framework for any healthcare system should be contained six building units to be functional system. These building units included leadership and governance, human resources, health financing, pharmaceutical management, health information systems and health service delivery.

Hospitals are the major instrument of the health organizations system for care coordination and integration, supporting healthcare providers, community outreach and home based services. They are an educational setting for physicians, nurses and other healthcare professionals. They must be resilient and able to maintain and scale up services in emergency situations. They can be classified according to the interventions they provide, the roles they play in the health system and educational services they offer to the communities (WHO, 2015).

Referral can be defined as the process in which the health care providers at lower levels of the health system seeks complex assistance of another healthcare providers in higher level facilities for additional diagnostic and therapeutic procedures of clinical patients (Mehrotra et al., 2011).

The effective referral system play a significant role to build handy relationship between every level of health care system determining the patients health needs and receiving the optimal utilization of health care regardless to their residence. Moreover, there are many reasons for patient referral, for example, needs for diagnostic or therapeutic advice from experts, performs additional diagnostic, seeking better treatment, and availability of high diagnostic tools. However, the type of health structure and health insurance and the type of healthcare providers whether public or private can influence the referral process of patients to specialists (Gupta et al., 2017)

The referral hospitals characterized by three features, the availability of specialized personnel, developed diagnostic technologies, and advanced therapeutic technologies that simplified the diagnosis and treatment process of complex patients conditions. There are various healthcare system requirements needed for well-functioning, such as therapeutic services, trained staff, availability of essential drugs, supplies, and equipments. Moreover, accountability for providers performance, transport arrangements between facilities should be available through the health policy of the referral system and governmental support(Diaz et al., 2016)

The Palestinian health care system is a complex, fragmented, and less coordination between its components. The Palestinian Ministry of Health is considered as the main provider of secondary and tertiary health care services in Palestine with 3.462 beds in 27 hospitals from the total 82 hospitals working in Palestine. Hospitals divided based on the source of financing into two categories: the governmental hospitals which are managed and financed by the government and MOH, the second category is nongovernmental hospitals which can be a private, or managed by charitable society. The governmental hospitals cover almost all specialties, including general surgery, services and subspecialties, internal medicine, pediatrics, emergency, hemodialysis, psychiatric and other specialties. However, rehabilitation and physiotherapy units are offered by nongovernmental organizations such as Arab Society for Rehabilitation. Moreover, in 2018 the total number of patients referred to treatment outside MOH facilities inside and outside Palestine was 89133, 20685 patients respectively with an estimated cost of 724 million NIS (MOH, 2018).

In addition, the private sector owns 17 hospitals with a bed capacity of 631 beds which comprised 9.8% of the total hospital beds in Palestine. Also, the Non-governmental organizations (NGOs) had 35 hospitals, with a total beds capacity of 2,141 beds, 33.2% of the total hospital beds, the Palestinian Medical Military Services manage 3 hospitals, and UNRWA operates one hospital with bed capacity of 63, and there are 7 referral hospitals in Jerusalem with a bed capacity of 716 beds (MOH, 2018).

Some of the challenges in health referral systems in most developing countries include delays in referral completion, high numbers of referrals, weak health information systems to capture referral data, and inadequately resourced referral facilities. WHO described that rural areas have few or no

health care facilities or the means to transport people for medical assistance. For example, 75% of maternal deaths can be prevented through timely access to child-birth related care (Ramdas, 2003).

Moreover, the capacity of health care workers performance is considered to be a combination of staff being available and responsive for emergency situations. For example, the human and financial resources in developing countries are the major challenging to referral hospitals within a national health system and health system planning. Also, referral guidelines are the other challenging should be promoted as a means for improving the appropriateness of referrals. It seeks to formalize and clarify those aspects of the referral process including which conditions should be managed by specialists or primary care physicians, what type of communication is preferred by the referring and specialist physicians before and after a referral, and what tests should be ordered before a referral (Kamau et al., 2017).

The transfer is one of the greatest problems in the referral process. Communicating patient's information at the time of specialty referral is essential to high quality consultation and coordinated safe patient care. Both primary and specialist physicians value this information exchange for shared patient (Kamau et al., 2017).

One of the major challenges for building a functional Palestinian healthcare system is the Israeli Separation Wall between the West Bank, Gaza Strip and Jerusalem, the restrictions on the pharmaceutical import and export and its movement on the border crossing, the high cost of transportation to reach hospitals, chronic shortages of medicines, equipments, supplies and services, lack of health insurance and universal health coverage, restrictions on the accessibility of healthcare professionals movement and shortage of human resources, and the limitation of financial resources which are donor dependent (Divide and Conquer, 2015)

Nurses and physician are considered the major components of healthcare professional team in hospitals. Nursing is a professionals who provide treatment, support and care services for aged, injured, and ill people based on the knowledge and practice standards of nursing. They take the responsibility for the planning and management of the care of patients, supervision of other health care workers, working with teams of physicians and other healthcare professionals for the provision of preventive and curative care in clinical and community settings (WHO, 2010).

Further, a professional nurse is considered to be able to complete the overall requirements of practical knowledge, patient care, cultural competency, critical thinking skills, decision making skills and communication skills within a healthcare institutions (Ebsco Nursing Resources, 2017).The nursing profession requires people with variety of practices and skills in different specialization fields including the operating room, nursing home, neonatal ward, maternity ward and other words (Chaska, 2001).

The Nursing and Midwifery Council (2014) stated that a professional nurse required to meet the physical and mental needs of people suffering from illness with different age groups. Recently, the nursing profession is facing challenges due to the new innovation and high technology medical devices. For instance, more technology use has decreased the direct contact with patients and focused on the awareness of evidence based practices (Saver, 2006). In Palestine, the number of nurses work in different units of MOH was 3911 nurses with rate of 8.1 per 10000 of Palestinian population (MOH, 2018)

In addition, nurses need to adapt to the new ways of communication using information technology. This will enhance nurse to nurse collaboration and nurse to patient interaction and therefore will improve the quality and safety of healthcare (Casella et al., 2014). There is a few evidence based information emphasize on the implementation of social media among nursing profession (Kung and OH, 2014).

Also, physicians are a professionals who diagnose, treat and prevent illness, disease, injury, physical and mental impairments and maintain health of people by the application medical principles and procedures. They take the obligations and work in a team with other healthcare professionals for the provision of continuous medical care to individuals and communities by planning, supervision, implementation of the treatment plans and evaluate it based on medical principles and practices (WHO, 2010).

A doctor can be found in several settings, including public health organizations, teaching facilities, private practices, group practices and hospitals. They have some of the most diverse and challenging

careers available and are part of a universally well-respected profession. The number of physicians worked in different units of the Palestinian MOH was 2525 physicians with rate of 5.2 per 10000 of Palestinian population (MOH, 2018).

Social media has transferred the patient physicians interaction from one way to two way communication in which the two parties are communicating and listening to each other while the physicians is seeking the important information and providing advice about the patients fear and concerns (Pentescu et al., 2015).

Physicians use social media to communicate with their coworkers and trainees, search for medical information, publish articles in scientific journals, discuss health related issues, research medical developments, improve medical practices, consult colleagues regarding patient issues (Sharma and Kaur, 2017). According to referral MD (2017) indicated that the usage of internet among physicians exceeds 80% for personal interactions, professional communication and research for information. Physicians have also been joined to the social media in society, which has significantly grown in the recent years. Many physicians have started to attract the social media tools for personal or official purposes in their organizations (McGowan et al.,2012)

Another critical issues in healthcare system particularly hospitals is work performance which is the scope of this study

### **2.2.1.Work performance**

There are different ways to enhance employee job performance, and it has been a concern for organizations and researchers. Job performance refers to behaviors or actions that achieve the goals of the organization, it is a multidimensional variable in which every job has different performance components. job performance is the outcomes rather than behaviors because these are easier and more objective to define than the personal traits (Viswesvaran and Ones, 2000).

However, Murphy (1989) pointed that job performance defined in terms of behaviors instead of outcomes because the measure based on the results are not functional to the organization, when

employees are trying to maximize results at the expense of other things. Murphy also defined performance as behaviors that are related to the goals of the organization. Similarly, Campbell (1990) defined performance as those actions or behaviors that undertaken by individuals that related to the organization's goals, and it can be measured based on the individual's skills level.

In addition, productivity is another term that is confused with job performance. It has been defined as the ratio of outputs relative to inputs into some production process. Outputs can include the number of units produced, where inputs can include materials, time and effort. Although productivity has been used as an index of how well an organization is doing (Pritchard, 1992).

Edem et al (2017) study found that health worker's productivity and performance can decrease due to poorly planned workplace environment, and it becomes a challenge for the management to provide a safe work environment for the workers to ensure health, efficiency, productivity and good performance. Similarly, the relationship between the health worker, work and the workplace environment is very significant and important for the level of performance.

### **2.2.2 Dimensions of work performance**

Work performance dimensions is the level of analysis of workers behaviors that are most relevant to organization goals. The goals of an organization must be more specific and clear. Once the relevant goals of an organization can be a homogeneous set, the process of defining performance dimensions is relatively straight forward. According to Koopmans, (2012) there are four dimensions for individuals job performance.

#### **Task performance**

Task performance described job specific task proficiency and it is the most important dimension of individual work performance. It is defined as behaviors skillfulness with one performs central job task. It requires more cognitive ability and is primarily facilitated through task knowledge, task skill and task habits. Therefore, the primary task performance is the ability to do the job and prior experience. Other labels used for task performance are job specific task proficiency, technical

proficiency, or in-role performance. It includes work quantity, work quality, and job knowledge (Conway, 1999).

Moreover, in the organizational context, task performance is a contractual understanding between a manager and a follower to accomplish required task. It is shared into two parts, technical administrative task performance and leadership task performance. Leadership task performance is classified through the setting of strategically goals, standard process, motivating and directing subordinates to accomplish the job through encouragement, recognition and constructive criticisms (Tripathy, 2014).

Similarly, the study of Daneshkohan et al (2015) found that motivating factors for health workers were supervisors and managers workers support are more motivated when their managers provide them with a clear sense of vision and mission, listen to them, and make them feel recognized and valued no matter what their job.

### **Contextual performance**

Contextual performance is a set of behaviors that doesn't directly related to organizational performance but supports the social and psychological environment of the organization. It affects the performance of the organization by enhancing task performance and it includes informal part activities of job description. There are several labels exist for this dimension, such as non-job-specific task proficiency, extra-role performance, organizational citizenship behavior or interpersonal relations (Parker et al., 2006).

In addition, all concepts refer to discretionary behaviors outside the formal job description of the individuals and not recognized by the reward system which enhance the functioning of the organization (Organ,1988).

However, Borman and Motowidlo (1997) showed that there are five categories of contextual performance including personality, natural culture, organizational culture and leadership. Consciences and emotional stability had higher validities with the interpersonal support

dimensions of contextual performance, for example of contextual performance are explaining by high extra effort, organizational rules, policies, and collaboration with others .

Contextual performance was measured in various ways. The stabilizing contextual performance known as organizational citizenship behavior (OCB). This describes the employee behaviors which are not recognized as a part of the formal role in the person's contract with the organization, or rewarded by the formal reward system (Organ, 1997). OCB consists of five components, altruism and helping others, compliance to the organization, keeping up with issues that affect the organization, consulting with others before taking actions and not complaining about insignificant issues (LePine et al., 2002). However, Williams and Anderson (1991) divided the dimensions of OCB into three different types: in-role behavior, OCBO-behaviors that are beneficial the organizations, and OCBI-behaviors which are benefited the individuals and indirectly affected the organizations.

In addition, the proactive contextual performance includes concepts such as personal initiative through taking charge and proactive behavior. Personal initiative is considered as active approach involve activities that go beyond what is formally required, so employees can show personal initiative when their behavior fit to an organization's mission, and they are capable of finding solutions for any situations (Parker et al., 2006).

### **Adaptive performance**

Adaptive performance is the ability of an individual's to provide support to the job profile in workplace. Similarly, Huang et al (2014) found that when the employees added an improvement to their job, they try to adapt their attitude and behavior change in the requirements of their job. Adaptive performance is the efficiency of the employees to deal with the changeable work conditions. There are different dimensions for adaptive performance that include collaboration in crisis situations, work stress management, solving problems, dealing with uncertain work circumstances, learning technologies and procedures, interpersonal and cultural adaptability and physical ability (Pulakos et al., 2000).

## **Counterproductive work behavior**

Counterproductive workplace behavior refers to an intentional behavior that viewed by the organization as opposed to the organizational rules. It considered as a risk for both individual and organization. It includes various types of behavior, ranging from minor actions like leaving early, working slow and overuse of the internet in the workplace, destruction of equipments of the organization, harassment or physical violence toward employees of the other sex in the organization (Sackett and DeVore, 2002).

Similarly, Sackett and DeVore (2002) classified the counterproductive behaviors into categories as follows: theft and related behavior, destruction of organizations possessions, misuse of information, wasting of time and resources, poor attendance, poor work quality, drug and alcohol abuse, inappropriate verbal and physical actions toward other members.

Moreover, Kelloway et al (2010) stated that counterproductive behavior is a form of complaint process, drawn attention, dissatisfaction and sense of job unfairness in which the member express their behaviors within the organization. They believe that there are two forms of counterproductive behavior individual and collective with two types of targets the individual or the organization, by combining these types resulting in four-dimensional model as the following:

1. Individual action, organizational target, like leaving early, working slow or major and stealing equipment.
2. Collective action, organizational target like working slowly, taking long lunch breaks, legal strikes and sabotage or theft
3. Individual action, individual target , act of interpersonal violence or aggression.
4. Collective action, individual target such as obsession behaviors.

### **2.2.3. Factors affecting work performance**

According to Naseem et al (2012)there are different factors that affected employees performance positively or negatively including:

## **Leadership styles**

Leadership defined as the process in which a manager can guide and influence workers behavior to achieve organizational goals. The main leadership function is the ability of the manager to encourage the employees to work together as a group (Iqbal et al., 2015). Similarly, Edem et al (2017) study found that the majority of health workers (84%) said that supervisor encouragement enhance the performance of the organization.

According to Carter (2005), there are three types of leadership that significantly affected the employee performance autocratic, democratic and laissez faire. A study conducted by Mawoli et al (2013) to study the relationship between managers style and workers performance at Federal Medical Centre. The study found that democratic leadership style has strong significant influence on the job performance of health workers while autocratic and laissez-faire leadership styles have low effect on the job performance of health workers.

## **Organizational culture**

Organizational culture defined as collection of values and norms that are shared by people and groups within an organization and formulate the way of interaction with each other and with outside the organization. It is a set of important values, beliefs and perception that shared among workers which help managers to make decision and arrange the activities of the organization (Winanti, 2013) .

However, there are some benefits of organizational culture such as, enhancement of workers performance, individual satisfaction, problems solving and social system stability (Hellriegel and Woodman, 2001)

## **Working environment**

It is the environment in which the workers perform their work, while an effective workplace is an environment where results can be achieved as expected by management. For example, task performed in the workplace can be influenced by the surrounding physical environment that have direct impact on the human sense and interpersonal interactions. There are a specific workplace features preferred by workers that have highly significant positive influence to workers productivity and satisfaction, such as lighting, furniture, place temperature and free air movement of windows (Sedarmayanti, 2003 ; Humphries, 2005).

Similarity, Edem et al (2017) study who found that the physical environment such as office design, ventilation and lighting have a positive impact on the performance of workers.

## **Motivation**

Motivation is the most important factors that affected individual performance and described as the one of the managers policies to increase the efficiency of job management and performance (Lambrou et al., 2010). Moreover, the motivation of the employees related to self-satisfaction, achievement and commitment to produce high quality of work within an organization, motivation increased the job performance and provides the energy for an employee by making the work more meaningful (Verhellen,1994 ;Shulze and Steyn, 2003).

However, the total rewards is the combination of financial and non-financial rewards available to the employees. Financial rewards include health insurance, vacation paid, beneficial loans, insurance cover, and company cars given to an employee or group of employees as a part of organizational membership. While, nonfinancial rewards add attraction to life on the job. For example, achievement, autonomy, recognition, scope to develop skills, fulfillment, empowerment and the position or rank of a person in the organization (Armstrong, 2009 ;Stredwick, 2005). Moreover, Aduo-Adjei et al (2016) found that that job satisfaction, financial reward, accommodation, transportation, logistic provision are intrinsic motivating factors that affect the work performance of health workers.

## **Training and development**

Training is a planned and systematic type of activity to enhance the level of skills and knowledge that are required to complete work. Training has influenced employee performance positively through the development of employee knowledge, skills, ability and behaviors to improve the performance which has a benefits for the employees and organizations (World Bank, 2011;Lakra, 2016).

In addition, most of managers provide training to their employees to increase productivity, achieve organizational goals and invest in employees for success in the unpredictable work environment. Effective training and development programs are improving the performance of the workers through fill the gap between the current performance and the standard performance (Jaoude, 2015).

The next section discussed internet and social media applications and its effect on work performance in workplace.

### **2.3. Section two: Internet and social media applications**

During the 21 century, the communication revolution increased internet utilization and changed the way of people communicate and connect with each other. Internet is defined as a medium for dissemination of information through a network of millions of computers around the world that are connected to each other without area limitation. There are many people highly dependent on internet connections because it is simplify their lives (Ruzgar, 2005).

The global system of networked computers, servers and routers known as the Internet has changed many aspects of social interaction. For example, the online distribution of goods and services, has influenced every industry and commerce-oriented technological development has been a rise in term of social media. One of the most significant evolution connected to social media is the growth of social network sites such as, Facebook, LinkedIn, MySpace, and Google Plus. In 1997, was the first emerge of social networking sites, which become a phenomenon in 2003, when Friendster attracted mass media attention. Nowadays, millions of people of all ages have connected to social network sites around the world and the numbers still increasing. Globally, there are more than 3

billion social media users and 2.6 billion Facebook monthly active users in 2020 (Anderson and Bernoff, 2010 ;Clement,2020).

In addition, social media is computer based technology that facilitates the sharing of ideas, thoughts, and information through the building of virtual networks and communities. The social media applications are defined as a web based services that allow people to create a public profile within a closed system, articulate of other users, share a connection, view and cross their list of connections by others within the systems (Boyd and Ellison, 2007).

This section discussed the following topics:

2.3.1. Internet and social media applications types

2.3.2. Internet and social media applications theories

### **2.3.1 Internet and social media applications types.**

There are many different types of social media, it covers different kinds of websites and applications and most types start with user creating a profile and usually by providing a name and an email such as Facebook, Whatsapp, YouTube, Twitter, Google, Instagram and LinkedIn.

#### **Facebook**

Facebook is one of the top leading social network worldwide, it was founded by Mark Zuckerberg in 2004. It is a popular free social networking website that allows users to create profiles, upload photos, send messages, and connect with friends, family and colleagues (Phillips, 2007).

Today, Facebook considered as the highest users site and the revenue grew up from 7.87 billion in 2013 to 70.7 billion U.S dollars in 2018 which make it the first type of social media companies in its annual revenues (Clement, 2020). The mission of Facebook is to empower individuals to have the ability to learn, share and make the world more connected and open, helps the users to connect with family and friends and keep in touch with what is happening around the globe. Facebook is the easiest to use website and even a small 14 year old can easily understand all the

features that are included on the website. One can text, comment, like posts of others by just a click of the mouse. So this is the most prominent reason for the website gaining worldwide popularity (Kimberly et al., 2009 ; [www.facebook.com](http://www.facebook.com))

## **WhatsApp**

WhatsApp is a massaging platform that depends on the internet connections for the transmission of text and voice messages, and it is available for Android, IOS and Windows phone platforms. The service was begun in 2009 by Brian Acton and Jan Koum. It is a cheap application alternative to SMS text messaging which enables users to share text, image, video, voice messages and free calling to others (Kumar and Sharma, 2017).

Moreover, the monthly users of WhatsApp reach to two billion compared with one billion in 2016. It provides a status feature that allows users to share photos, videos and text that disappear after 24 hours. In 2014, WhatsApp was acquired by Facebook which reported that about 2.7 billion people were using at least one of the company core products such as Facebook, WhatsApp, Instagram or Messenger each month (Clement, 2020).

According to WhatsApp sites there are 8 features introduced in 2018 which were group video and voice calling, WhatsApp stickers, WhatsApp payments, picture in picture support, group chats, media visibility, forwarding restrictions and labeled forwarded messages, and WhatsApp data download ( [www.whatsapp.com](http://www.whatsapp.com)).

## **YouTube**

YouTube is a website designed for sharing video clips. It was created in 2005 and then acquired by Google in later year. It has grown and become the biggest online video platform worldwide. When posting a video on YouTube, everyone can share the video and sending it to other person and the viewers can comment or rate to the clips. YouTube has become an archive includes storing clips, songs and jokes, and a marketing site for companies to offer their goods and services (Zhuo et al., 2016).

YouTube users reach to 1.68 billion users in 2019 with particularly younger active users, who access YouTube many times per day for entertainment and updates news and more than 500 hours of videos uploaded every minute. The global revenues were over than 15.15 million U.S. Nowadays companies have realize that they can expand the outreach to potential customers by creating their accounts for advertising and marketing purposes (Mohsen, 2020).

## **Twitter**

Twitter was founded in 2006, according to the global web index rank of Twitter in 2013, it is considered as the fastest growing social media platform in the globe (Tom, 2013). Twitter is a social networking service that allows members to answer the question, "What are you doing?" by sending short text messages 140 characters in length, called "tweets", to friends, or "followers.". Twitter is a great way to keep in touch with friends and quickly broadcast information for business (William, 2009).

Tweets are sent using the Twitter website directly, as a single SMS and displayed on user's profile page, on the home page of each of the user's followers and in the Twitter public timeline. Twitter is a network that connects users to the latest stories, ideas, opinions and news about what they find interesting (Twitter, 2013).

Moreover, Twitter had 152 million daily active users worldwide, and has become a prominent platform in international policies so the most of world leaders and presidents have an official accounts on Twitter to interact with their citizens and promote policies (Pew Research Center, 2020).

## **Google**

Google is the research design that open the door for people interact offline more closely than other social networking services, such as Facebook and Twitter. The project's slogan is Real life sharing thought for the web. The key features of Google are circles and hangouts. Circles are like categories for connections to share updates selectively with different group. Users outside a circle

can see a list of member names but not the name of the circle. Hangouts are an option for video chat for up to 10 people at any given time (www.Google.com, 2017).

Pictures and videos taken can be uploaded to a private photo album and users can then decide whether to share them and which circles to share them with. Streams are similar to Facebook news updates but the user can see updates for particular circles rather than updates for everyone at once. Google is integrated with other Google applications, such as Gmail, Google Maps and Google Calendar (www.Google.com, 2017).

## **Instagram**

Instagram is a photo and video sharing application was founded in 2010. The name Instagram comes from a combination of the words “instant” and “telegram”. Instagram facilitates the sharing of images and photos on multiple platforms. The monthly users of Instagram were 928 million (Global Digital Report, 2020).

Uploading is made fast and efficient, photos can be shared on Flickr, Facebook, and Twitter. Many ‘selfies’ or self-portrait shots are shared via Instagram and users can follow others and share photos as they post them. Using the "Profile" icon located on the lower menu of the Instagram screen, members can search for friends by name or find friends that are already connected them or other social networks like Facebook or Twitter (www.Instagram., 2018)

Moreover, the most popular features of Instagram is stories, the users can share their photos, videos and lives content for their friends or followers for 24 hours before it disappear. In 2019 the company reported that there were 500 million daily active Instagram users (clement, 2020).

## **LinkedIn**

LinkedIn is a prominent social networking sites used for business professionals with more than 663 million active users. The goal of the site is to allow registered members to establish and

document networks of people they know and trust professionally, discover opportunities, business deals and getting the latest news, inspiration, and insights (Reinhart, 2020).

A LinkedIn member's emphasize employment history and education, professional network news feeds and a limited number of customizable modules. Basic membership for LinkedIn is free. Network members are called connections. LinkedIn requires connections to have a pre-existing relationship. The connection up to three degrees away are seen as part of the member's network, but the member is not allowed to contact them through LinkedIn without an introduction. Premium subscriptions can be purchased to provide members with better access to contacts in the LinkedIn database (LinkedIn, 2018).

### **2.3.2. Internet and social media applications use theories.**

Theories are used to analyze behaviors on social media applications and develop automatic intelligent services for users and developers. Many theories such as social capital theory and media synchronicity theory have been suggested the use of social media application as the following:

#### **Social Capital theory**

There are various definitions of social capital theory, Bourdieu (1986) defined social capital as the overall of the possibility resources which are embedded within an individual's or an organization. Coleman (1988) stated that social capital is defined by its function. It consists of aspects of a social structure that facilitate actions of individuals who are connected within this structure. Lin (2001) pointed out that social capitals resources embedded in social networks that used by its members and social capital represents resources embedded in social relationships rather than individuals.

Social capital is a multidimensional concept, which divided into a structural, relational and cognitive dimension. The structural dimension describes the overall pattern of connections between members, the relational dimension refers to the resources embedded in the social

relationship that represents commitment, reciprocity and trust. The cognitive dimension refers to the context that enhances the understanding among people such as shared language, codes and goals. For the members of a network, the social capital benefits include broader sources of information and opportunities that are otherwise unavailable (Nahapiet and Ghoshal, 1998).

People's behavior is a product of their social network and behavior is modified by that environment. Social capital benefit is explored by knowledge transfer, which can be regarded as a process of task related communication. The knowledge transfer from one unit to another has been recognized as the dominating contributor for organizational performance (Baum and Ingram, 1998; Bandura, 1989).

### **Media synchronicity theory**

Dennis et al (2008) assume that synchronicity is the state in which individuals are working together at the same time with a common focus. Synchronicity is a predictor of communication performance. This theory argues that tasks are composed of sets of fundamental conveyance processes and convergence processes. Conveyance processes involve the exchange of large quantities of new information, while convergence processes focus on reaching a common understanding information (Dennis et al., 2008)

Media synchronicity theory suggests that social media are not a single media, but a combination of media. Since the tasks consist of a series of communication processes, different media capabilities are needed. When different capabilities are used to perform a task, the communication performance will be enhanced and this leading to better task performance. According to time, when people working with others, three functions at the same time are done, getting the mission or task completely, maintain and support the relationship with team members and promote activities for personal development (Dennis et al., 2008).

Communication is the most important approach for people to implement work and function. It can be classified into two types, task related production communication that relies on exchanging the work information to form task performance, while social communication refers to the

reinforcement of relationships. One of the most prominent contributions of this theory is to provide a framework to connect the internet and social media with communication and task performance. As shown in Figure1 (Dennis et al., 2008).

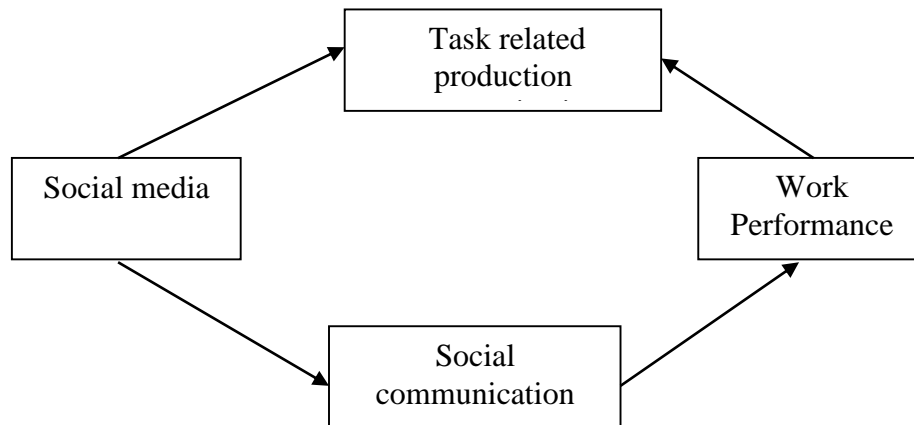


Figure (2.1): showed the framework to connect the internet social media applications with communication and task performance. (Source: Cao et al., 2016).

#### **2.4.Section three: Internet and social media applications use among healthcare professionals in workplace**

Internet and social media applications use among healthcare professionals is providing a new way of communications and professional development which can enhance the expansion as a healthcare professional who skilled with social media (Belt et al., 2015). Social media increases the networking capabilities of the healthcare providers by allow them to search for new information about health conditions and become up to date with new procedures and treatments that may be of benefit to their communities (Lawson, 2014).

Alshakhs and Alanzi (2018)showed that the use of social media among healthcare professionals was a beneficial tool to improve the healthcare services, enhance professional knowledge, source for health and medical information, tool for patient education and public health awareness. However, 20% of the participants believed that social media has many disadvantages such as ethical or legal challenges that can damage the image and professional status, risk to patient's

health status or the breaching of the privacy and confidentiality of the patients. Another study of Podichetty et al (2006) found that 97% of the healthcare professionals accessed to the internet and 71% of them for updating medical or professional knowledge. Moreover, about 62% believed that social media was beneficial for healthcare professionals patients interaction, and 70 % had trusted on the quality of medical web sites information (Podichetty et al., 2006).

#### **2.4.1. The prevalence of internet and social media applications among physicians and nurses**

Internet and social media applications may introduce a new frontier for physicians and nurses, by increase the opportunities for interpersonal collaboration, knowledge translation patients care delivery, maintaining contact with patients and their families (Chopra and McMahon, 2011).

Piscotty et al (2013) stated that social media is become an integral part of many career and nursing is not an exception to it. However, within the nursing profession there is a significant difference in the way of social media has been adopted by hospitals and their regulations that manage its uses. A study conducted by Kung and OH (2014), found that 97% of nurses were used social media in their working life for searching health related information whereas 1% of the participants claimed they don't know how to use the it at all. Social media become one of the most significant network among healthcare professions (Ferguson, 2013).

Social media can be a useful tool for collaboration and establishing a new communication method for the health professionals. For nurses, it provides opportunities to participate in an online forums, pose questions, contact with peers and colleagues, discuss health issues and exchange ideas about treatment plans (Ventola, 2014). In addition, Chang et al (2012) showed that the use of social media among nurses are very useful for sharing information, development of knowledge and experience, improvement of patient safety and the quality of health care.

In addition, physicians use social media to communicate for educational purposes and improve health outcomes and it provides continuous medical education for physicians to enhance better clinical practice (Prasad, 2013). Therefore, learning is a motive for physicians to participate in the social media because it allow him to share knowledge, discover the new in healthcare and access

information with different personal and professional members backgrounds (Gilbert, 2016). For example, physicians in Denmark use social media for follow up treatments and searching for information about their patients' health. The physician looks up for information about patients from their Facebook profile, so the physician can gather evidence on whether the patient is committed to treatment or has a complex medical history that the patient didn't explain it to their physicians (Andersen et al., 2012).

Furthermore, social media are a powerful communication tool for promoting public health. For example, using social media for campaigns to explain the dangers of smoking or dietary interventions, social media will increase the reach of these campaigns to largest proportion of people (Chou et al., 2009). So the public health information transfers faster through social media and more people will be informed about important health related information (Gupta et al., 2013).

Social network disseminates information very quickly which influences people lives, and social media can be used in healthcare to improve the patient physician interaction, enhance patient promotion, increase awareness, provide accurate information and allow engagement to health community. Some physicians use social media in their profession to find health information about health related problems, communicate with colleagues and peers, disseminate research and interact with patients in terms of clinical care (Hyman et al., 2012). A study of Irfan et al (2018) found that there higher use of social media among physicians (95.4%) and 51% of them checked them four times per day. Romano et al (2012) found that 71.9% of pediatricians used the Internet during clinical practice. Another study was conducted by Al-Ghamdi (2009) who found that 91.0% of the physicians used the internet in the workplace for updating medical information

Furthermore, a study of long et al (2017) showed that there is a dramatic increase in social media use among Chinese urologists which rise from 50.3% in 2014 to 82.7% in 2016. Other study conducted by Podichetty et al (2006) showed that 71% of the physicians use the internet and social media applications for medical and professional updating. Morandeira Rivas et al (2019) found that 86% of surgeons were social media users, and the most were Facebook users.

Similarly, Quisenberry et al (2016) showed that the percentage of doctors and nurses who used social media was identical at 88% for each group. Also, another study was conducted by Wang et al (2019) who indicated that all nurses were social media users. In addition, a study of Erer and Cobaner (2016) showed that 83.8% of nurses used social media, 46.9% used social media one to three hours per day. In addition, a study of Kung and Oh (2014) showed that about 94% of nurses were using social media. Moreover, Piscotty et al (2016) found that the majority of nurses were social media users (89.3%) and they spent less than one hour per day.

#### **2.4.2. Beneficial and harmful effects of internet and social media applications use in workplace**

The use of the internet and social media applications are varied among organizations. The productivity of an organization is tightly connected with it. Organizations are facing opportunities, risks, threats, weakness and strength from using internet and social media applications (Kane, 2017). The internet and social media applications provide opportunities in a way that competitor can pass information about their strategies which can be benefit for the organization and sometimes social media became strength when it is used to grow up relations between employees (Ashraf and Javed, 2014).

A number of studies showed that employees who are more social and are connected to other people through social media sites are better persons, which means they are more skilled at interacting with others and solving problems, and they are more productive in the workplace. Fahmy (2009) found that employees who use social media sites are 9% more productive than who do not use it, 70% who used internet for personal surfing resulted in an increasing of employee's concentration. Bridge Consulting (2009) claimed that the use of social media in the workplace increases employee engagement, foster employee innovation, enhance customer relationships and employee productivity.

Moreover, the use of internet and social media applications in the workplace is a useful tool for developing a professional networks and strengthening the relationship between employees, so

workers use social media to share information, meet friends and build relationships especially when employees work at different locations (Atsan and Çetinkaya, 2015).

In addition, North (2010) concluded that the use of social media applications in the workplace is beneficial, which can be used to strengthen the existing relationships and build a new relationships within an organizations. Furthermore, Ellison et al (2007) found that the capability of employees to use Facebook in the workplace to connect with family, friends and colleagues is considered as was a great motive for the organizational commitment. Bennett et al (2010) found that the use social media in the workplace could benefits the employees job performance through the development of knowledge, enhance productivity and improved morale.

For health care system, the internet and social media applications have a positive impact on it as a whole. It is considered as a tool to share health information, discuss health issues, communicate with patients and promote the primary health care behaviors, and it can be a useful tool for collaboration. It enables the health care professional to make a dialogue with their colleagues and peers and keep them up to date with the recent healthcare developments (Ventola, 2014). Health care professionals can use social media to improve health outcomes, develop a professional network, increase awareness of new discoveries, communicate with patients during the delivery of care, and provide health information to the community (Bernhardt et al., 2014)

In addition, the internet and social media applications can be used as a powerful tool for health promotion. For example, during the pandemic of H1N1 in 2009, the Center for Disease Control and Prevention has used Twitter to increase awareness among users by creating an emergency information account that attracted more than 1.2 million followers, and another account for swine flu with more than 46,000 followers. Korp (2006) who found that the health promotion by social media has maintained an opportunities for patients to engage actively in their care, because patients who use social media become learner more about their problems through communicating with their doctor, compared to those who did not use the social media as a communication mediator.

Despite the benefits of social media applications to the organizations and individuals as mentioned above, the use of social media in the workplace had many challenges. According to Wilson (2009)

found that there are five risks associated with the use of social media, for instance, loss in staff productivity, leakage of information from staff in an open environment, damage to a business's reputation, cyber crooks practices and the loss of information due to outdated passwords. Moreover, Peacock (2008) noted that the use of social media among workers during the working hours is a wasting time, decreasing productivity and increasing the risks of security and privacy to the organizations.

Househ (2013) found that there is an increasing in the use of social media among health care professionals. A survey of more than 4,000 physicians conducted by Ferguson et al(2013) found that more than 90% of physicians use some form of social media for personal activities, whereas, only 65% of the participants use these sites for professional reasons. Physicians use social media to read new articles, listen to medical experts, research development and consult colleagues regarding patient issues, in addition to personal purposes (George et al, 2013). Moreover, Surani et al (2017) indicated that 87.9% of health care professionals used social media, and they spent approximately one hour on social media every day.

For nurses, the internet and social media applications can be used as a source for clinical education and training. It used to deliver professional training and have influenced the nursing educational experience. For instance, according to Nursing and Midwifery Board of Australia (2014) registered nurses who work in rural areas can use social media websites to access the online courses to ensure their registration in spite of the geographical distances (Jackson et al., 2014).

Gaudin (2009) showed that 77% of employees who use social media during working hours resulted in 1.5% decrease in employee productivity, this drop in the productivity of employees is due to the excessive browsing and uploading photos which were not related to the workplace. Social media becomes a threat, when employees shared the internal and secret information on social media applications which can go towards the competitive advantage. Risk through social media is that employees can share and show their organization secret information in the world. It became weakness of an organization when employees use social media during their work time and it has a negative effect on the organization efficiency (Ashraf and Javed, 2014).

Also, the main disadvantages of social media usage in health care is poor quality of online health information, these information may be incomplete or informal and this makes people confused at work, people who were searching for health information may be misled by the incorrect information that may cause harm to their health and patients (Moorhead et al., 2013).

In addition, violation of privacy and confidentiality is another negative effect of using social media in the healthcare workplace. The violation can be either intentional or unintentional and can happen in many different ways. Health care professionals may breach the privacy of patients information, they posted photos or videos of a patient on social media without any valid consent. However, these actions make patients feel lose their dignity and destroy the relationship between health workers and patients, health care professionals might face potential consequences such as penalties or termination of the job (Ventola, 2014). In summary, social media may display many benefits for organizations, but if it managed poorly, it may bring some threats to the organization (Berthon et al., 2012). Therefore, it is important to develop some social media guidelines to reduce the risks or misleading information of the organization and its employee who uses social media should have enough knowledge, skills and time to eliminate the negative impact of social media usage (Picazo-Vela et al., 2012).

Social media applications have an impact on job performance, the organization workers use social media for official and personal uses and social media makes the communication process more efficient and thus increase the work performance for employees (Louie et al, 2016). However, some organizations have a positive point of views about the use of social media in the workplace. The impact of social media in the workplace is a useful tool for developing a professional networks and strengthening the relationship between employees, so workers use social media to share information, meet friends and build relationships especially when employees work at different locations (White, 2014 ;Atsan and Çetinkaya, 2015).

Ali-Hassan et al (2015) found that social media has a positive effect on both the routine and innovative job performance of an employees. Lu et al (2015) showed that blog network has positive impact on job performance. Moreover, Cao et al (2016) found that social media can enhance the formation of employees' social capital that is manifested by network ties, shared

vision and trust, which can facilitate knowledge transfer as the mediator, so shared vision and knowledge transfer subsequently affects work performance positively. The intensive use of social media in the workplace has the great impact on the employees performance through enhancing their job satisfaction which leads to organizational commitment, also the moderate use of social media results in making balance between the personal and the professional issues of an employees. In addition, the use of social media increases the overall performance of an employees. It helps the employees to improve their skills, knowledge, productivity and enhance communication (Maturi, 2018).

On the other hand, the use of social media in the workplace might lead to loss of workers productivity. For instance, Haith (2008) showed that the intensive use of social media among workers may develop a risk of internet addictive behaviors which may result in reducing productivity in the workplace. Moreover, Nucleus, (2009) found that the use of Facebook in the workplace results in a 1.5% decrease in employee productivity. Social media use can lead to distraction and reducing individuals performance, social media use by organizational members might cause leisure issues that conflict with job responsibilities, resulting in diminishing job performance (Allen et al, 2000).

#### **2.5. Section four: Studies that assess the relationship between internet and social media applications and work performance among physicians and nurses**

Few studies were conducted to assess the influence of social media use on work performance among physicians and nurses in workplace.

For example, a study was conducted by Hazzam and Lahrech (2018) in the United Arab Emirate to assess the frequency of social media use among health care professionals and the purposes of their use. The study included 973 of physicians, pharmacists and other health care professionals. The study found 65.5% of the participants were WhatsApp users. Regarding the reasons of social media use, (53.6%) of them used social media for updating medical information, 53.2% for interpersonal communications and 34.9% for productivity enhancement (Hazzam and Larech, 2018).

Furthermore, a study was conducted by Surani et al (2017), in South Texas, to assess the use of social media among healthcare providers and its effects on the quality of healthcare. A convenience sample of 366 health care workers were used. The findings showed that 87.9% of them were social media users, and they spent 1 hour per day. The most frequent users were aged below 40 years old and there was no significant difference between physicians and nurses regarding the use of social media. Furthermore, 40% were unaware of social media policy in the workplace. Also, larger number of physicians reported awareness of a social media policy compared with nurses (Surani et al., 2017).

In addition, a descriptive cross sectional study was conducted by Alshakhs and Alanzi (2018) in Saudi Arabia, to evaluate the use of social media among healthcare workers. The sample size was 120 health care professionals and the data was collected through an online based questionnaire. The study results showed that social media was a beneficial tool to improve the healthcare services, enhance the professional knowledge, source for health and medical information, tool for patient education and public health awareness. However, 20% of the participants believed that social media has several risks such as ethical challenges that can damage the professional image, risk to patient's health status or the breaching of patients privacy and confidentiality (Alshakhs and Alanzi, 2018).

A study conducted by Quisenberry et al (2016), in Texas, to assess the use of social media among physicians and nurses. The study sample included 69 doctors and 152 nurses. The study findings showed that the use of social media among physicians and nurses was identical at 88% for each group. The time spent on social media among physicians and nurses was more than 30 minutes per day. In addition, 37.9% of doctors and 47.5% of nurses believed that the medical information on social media were correct and 61.5% of the participants advised their patients to use social media to read about their diseases. Moreover, about 72.2% of nurses and 38.2% of doctors were aware of the social media policies in their hospitals (Quisenberry et al., 2016).

Moreover, a qualitative study was conducted by Panahi et al (2014), in USA, to identify the benefits and challenges of adopting social media by physicians. The study sample included 24

physicians. The data was collected by using semi structured interview. The study revealed that the main reasons of social media use for communication with colleagues, networking with patients and community, sharing knowledge, continuing medical education, up to date with clinical practice and learning, while the main obstacles were fear of privacy and confidentiality, lack of active participation of other physicians, insufficient time, lack of trust, lack of workplace understanding and support. Moreover, the study provided an opportunity for healthcare professionals for better understanding of social media and its impact on healthcare, and assisted them for efficient use of social media and maximize its benefits for the community (Panahi et al., 2016).

Another cross sectional study was conducted by Al-Ghamdi (2009), in Saudi Arabia, to assess the use of internet among dermatologists for medical practices and identify the reasons for its use and nonuse. Self-administered questionnaire was distributed to 160 dermatologists .The findings revealed that 91.0% of the participants used the internet in the workplace for updating medical information. The median time spent on internet was 120 minutes per week for professional purposes. Only 13% used internet during patient consultation. While the main obstacles limited the use of internet were no internet access in the consultation room, lack of time, possible interference with the physician patient relationship, and the perception that social media was time consuming (54%, 37%, 30%,10%) respectively (Al-Ghamdi, 2009).

Moreover, a study conducted by Al-anzi and Al-Yami (2019), in Saudi Arabia, to assess the attitudes of physicians regarding the use of social media for professional purposes. The sample was 235 physicians. The data was collected by questionnaire. The findings showed that the most commonly used platform was Facebook, and they spent 1-3 hours on social media daily, the majority of physicians (76.0%) indicated that social media improved their knowledge and practices. Moreover, most of them didn't feel comfortable of conducting an online consultation with patients (53.0%). 44.3% claimed that the patients couldn't trust the medical advice if a physicians obtained the medical information from social media, and pointed that there were an ethical issues should be taken into consideration while using social media in patient care (Alanzi and Al-Yami., 2019).

Further, a cross sectional study was conducted by McGrown et al (2012), in USA, to determine the factors that influence the use of social media among physicians and to identify how physicians used social media to exchange medical information with professionals. The sample was 485 of

oncologists and primary health care physicians. The tool was a questionnaire. The results of the study revealed that (24.0%) of the participants used social media daily to search for medical information. Regarding the attitude toward the use of social media, 57.9% of physicians reported that social media was useful in providing the patient care more effectively. Moreover, the main factors that affect the use of social media by physicians for medical information were the perception of ease of use and usefulness, the physicians who had a positive attitude toward the use social media were more susceptible to use it to search and exchange medical information. The gender had no significant impact on the use of social media (McGrown et al (2012).

Further, a prospective cohort survey study was conducted by Adilman et al (2016), in Canada, to assess the social media use among oncology physicians and trainees, and identify use pattern among aged physician generations. The study sample included 680 oncology physicians and trainees. The data collected by questionnaire. The study found that 72% of the participants used social media, Facebook was the most commonly used platform by the participants (86.0%) and there a significant difference between the use of social media. According to age group, the participants who aged 25-34 years were the more social media users (93%) compared with 39% in age group 45-54 years. This indicated that there a significant gap in social media use between younger and older users. Moreover, lack of time was the main barriers prevented from using social media. The study concluded that the gap in social media use between age groups may have negative implications for communication in oncology. (Adilman et al .,2016).

Also, another quantitative study was conducted by Wang et al (2019), in China, to assess social media use and professionalism among nurses. The sample of the study included 658 of registered nurses. The study tool was a questionnaire. The findings revealed that all the study participants were social media users and 84.5% of them reported that social media affected their performance positively. WeChat was the most frequently used platform (93.5%) and 56.4% of them spent one to three hours on social media daily. The main reasons of social media among the participants were sending and receiving messages at work, communication with peers and entertainment. About 50.0% of nurses reported that their institution had social media policy and guidelines, and around half of the participants reported they accept patient friend request (Wang et al., 2019).

Also, a descriptive study was conducted by Erer and Cobaner (2016), in Turkey, to assess of the reasons of internet and social media use by nurses. The sample included 260 nurses. The study tool was a questionnaire. The findings of the study showed that 83.8% of nurses used social media, 72.7% of the participants used the internet and social media every day, 46.9% used social media one to three hours per day, and 72.7% of participants believed that social media has role in nurses professional development and relationships of nursing. However, 80% of nurses believed that the use of social media has various risks such as inaccurate information, unprofessional behaviors and violation of patient privacy (Erer and Cobaner, 2016).

In USA, a cross sectional study conducted by Piscotty et al (2016) to assess the use of social media among nurses in the workplace. The study sample was 140 registered nurses. The data was collected through questionnaire. The findings of the study revealed that the majority of nurses (89.3%) were social media users and 61.9% of them spent less than one hour per day. Half of nurses reported using social media in the workplace (50.7%), and the majority of them (67.2%) used mobile devices to access social media. The main advantages for social media use were access to health information, enhance communication, improve patient safety, evidence-based practice and drug information while the main risks are breaches of patient privacy and confidentiality (Piscotty et al., 2016).

For work performance, one study conducted by Umrani et al (2019) in Pakistan, to assess the relationship between the job security, organizational support, job satisfaction and physicians job performance. The sample was 361 physicians. The data was collected by self-administered questionnaire. The findings revealed that the job security and organizational support had a positive effect on physicians work performance. In addition, the job satisfaction mediated the relationship between the job performance and job security and organizational support. The study concluded that the job performance of physicians can be enhanced by maintaining the job security and organizational support for physicians. Also, physicians satisfaction can be enhanced by improved working environment and job stability that affected the physicians practices and the quality of medical care (Umrani et al ., 2019).

Another study conducted by Arshad and Osman (2016) in Malaysia, to determine the factors that affect nurses job performance at Mawar Renal Medical Centre. A questionnaires were distributed

to 100 staff nurses. The study results revealed that there is a significant positive relationship between job satisfaction, working environment, job discrimination and job performance among nurses. Moreover, the working environment is the most influential factors for job performance (Arshad and Osman, 2016).

Furthermore, a cross sectional study conducted by Ali and Qun (2019), in Bangladesh, to determine the effects of salary, human resource management practice, working environment, motivation, promotion, job satisfaction on job performance of nurses. The sample was 160 randomly selected nurses to fill in the questionnaire. The findings showed that there were a positive statistically significant relationship between salary, human resource management practice, work environment, motivation, and promotion with job satisfaction and performance of nurses. Also, there was a strong positive correlation between nurses' job satisfaction and job performance (Ali and Qun, 2019).

Further, a study conducted by Urus et al (2019) in Indonesia, to assess the factors that affect the nurses job performance influences in Sorong District Hospital. A questionnaire was distributed to 120 nurses. The study findings revealed that motivation, work rotation, rewards and punishment had a significant positive effects on nurses job performance, while there were no significant relationship between age, work period, work discipline, work rotation and punishment and the performance of nurses (Urus et al.,2019).

Moreover, a cross sectional study was conducted by Qtait and Sayej (2016), in Palestine, to determine the level of performance and the related factors among nurses in Hebron hospitals. The sample was 185 randomly selected nurses and the study tool was questionnaire. The results showed that the performance of nurses in Hebron hospital was high (71%). However, the nursing performance was not affected by demographic variables such as gender, academic degree, experience or qualification of the participants (Qtait and Syej, 2016).

Another cross sectional study was conducted by Maryyan and Al-Faouri (2008), in Jordan, to investigate the relationship between nurses career commitment and job performance and the predictors of nurses' career commitment and job performance. The sample included 640 nurses who filled in the questionnaires. The findings revealed that there was a significant positive

relationship between the nurses career commitment and job performance. Moreover, job performance, gender, and marital status were the best predictors of nurses' career commitment, they explained 21.8% of variance of nurses' career commitment. Also, nurses' career commitment, time commitment, marital status, and years of experience were the best predictors of nurses' job performance, they explained 25.6% of variance of nurses' job performance (Maryyan and Al-Faouri, 2008).

In addition, a cross sectional study was conducted by Fujino and Kawamoto(2013), in USA. The aim of the study was to assess the influence of information technology use on nursing performance. The questionnaires were the Six-Dimension Scale of Nursing Performance were distributed to 556 nurses. The findings showed that the nurses performance was enhanced among participants who used computers for sending and receiving e-mails, but it decreased for those who used cell phones for e-mail. Moreover, the nursing performance may be adversely influenced when information and communication technology are used inappropriately (Fujinoand Kawamoto, 2013).

Finally, a study was conducted by Javed et al (2019), in Pakistan, to assess the relationship of social networking sites addiction on the performance of nurses. The sample included 461 nurses and a web based questionnaire was used. The findings revealed that the social networking sites addiction and task distraction reduces the nurses performance, while the self-management as a mediating factor reduced the negative impact of social networking sites and enhance the nurses performance (Javed et al., 2019).

## 2.6 Summary

- There are various types of the internet and social media applications such as Facebook, Twitter, YouTube, Whatsapp, Google, Instagram, LinkedIn .
- There are negative and positive outcomes of using internet and social media applications in the workplace.
- There is a high prevalence of using the internet and social media applications among physicians and nurses in the workplace.
- In Palestine, there is a lack of studies that assess the influence of internet and social media applications on work performance among physicians and nurses.

The next chapter discussed the conceptual framework of the study.

# **Chapter three**

## **Conceptual framework**

## **Chapter three**

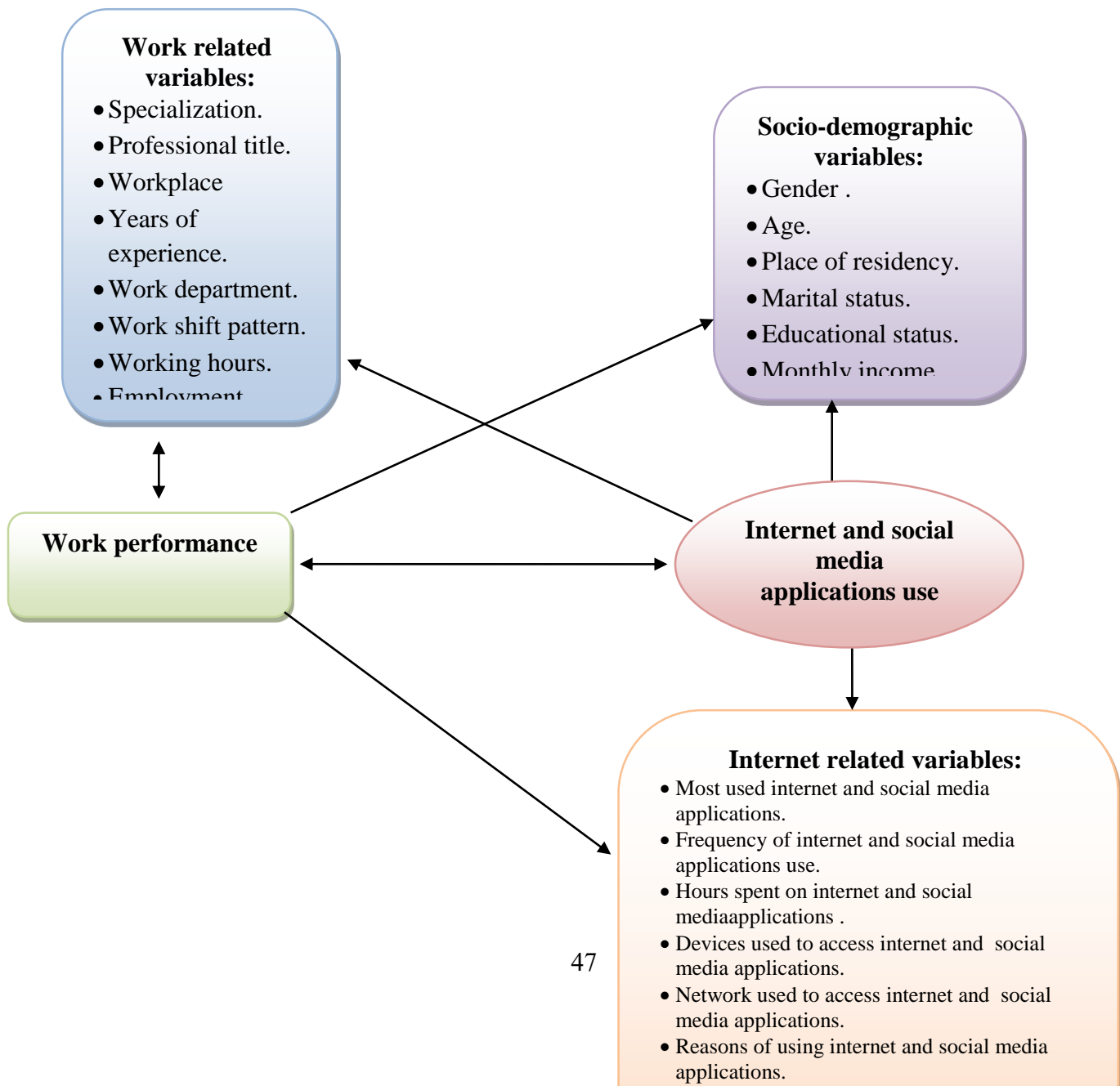
### **3.1 Introduction**

Conceptual framework is a tool formulated from a set of different and broad ideas, theories, assumptions, concepts, expectations, and beliefs taken from relevant field of enquiry that can support the researchers to properly identify the problem that they are looking for, direct their investigation, form their questions, and search for suitable literature. Most of academic researchers use the conceptual framework at the beginning of their work because it provides a focus and a rationale design for integration and interpretation of information; thus, it can help the researcher to clarify the research question and aims (Polit et al., 2004).

Furthermore, conceptual framework has different purposes. It can help the researcher to notice the study variables clearly, and it provides a general structure for data analysis. It can summarize the major dependent and independent variables of the research so as to give direction to the study (Smyth, 2004).

The major concepts of the current framework included work performance, socio-demographic and other related variables as independent variables, and the use of internet and social media

applications in the workplace as dependent variables as seen in figure (3.1). Each concept is discussed in more details below:



**Figure (3.1): Framework of current study including social media and other independent variables**

**3.2 Independent variables:**

In the current study, independent variables included socio-demographic variables, work related variables, internet related variables and work performance related questions.

**3.2.1 Socio-demographic variables**

These variables including the following:

- 1) Gender: It refers to the roles and responsibilities of men and women that are created in families, societies and cultures. Gender roles and expectations are learned. They can change over time and they vary within and between cultures. Systems of social differentiation such as political status, class, ethnicity, physical and mental disability, age and more, modify gender roles (Palestinian Central Bureau of Statistics. 2014). Question number (1) assessed this variable in the questionnaire as male or female.
  
- 2) Age: Is the completed age in years of the person enumerated, which is the difference between the date of birth and the survey reference period (Palestinian Central Bureau of Statistics. 2013). Respondents in the current study were classified into four age groups

which were from 20-30 years, more than 30-40 years, more than 40-50 years and more than 50 years and question number (2) in the questionnaire assessed it.

- 3) Religiosity : is a characteristic of individuals and collectivities that displays various features of beliefs about the supernatural and how individuals and social groups engage in behaviors related to the supernatural (International Encyclopedia of the Social and Behavioral Sciences, 2015). Question number (3) assessed this as Islam and Christianity.
- 4) Place of residency: It refers to the name of the locality in which the person spends most of his time during the year, irrespective of whether it is the person's same place of existence during the survey or the place in which he works and performs related activities or the place is his original place (Palestinian Central Bureau of Statistics. 2012). In the current study, a question number (4) assessed this as city, village and camp .
- 5) Marital status: Is defined as the status of those older than 12 years old in terms of marriage traditions and laws in the country (Palestinian Central Bureau of Statistics, 2012). Marital status in the current study was divided into 2 categories: single and married (included previously married, divorced or widowed). Question number (4) assessed it.
- 6) Educational status: It referred to the highest successfully completed educational attainment level, the educational level for persons aged 10 years and over (Palestinian Central Bureau of Statistics. 2013). In this study it had 3 categories diploma, bachelor, and postgraduate (master and doctorate), and question number (5) assessed it.
- 7) Monthly income: It is defined as cash or in kind revenues for individual or household within a period of time, could be a week or a month or a year (Palestinian Central Bureau of Statistics, 2012). In the current study it had two categories of the monthly income: (5000 NIS and less), and (more than 5000 NIS) and question number (7) assessed it.

### **3.2.2 Work related variables**

- 1) Specialization: It refers to the name of the subject the person successfully completed. It is the most important subject that a student is studying in university such as medicine, nursing etc (Palestinian Central Bureau of Statistics, 2012). In this study it was divided into two categories medicine and nursing and question number (8) assessed it.
- 2) Professional title: is a term that describes the position held by an employee and describe the level of the position or the responsibilities of the person holding the position(The balance career, 2018). In this study, professional title was categorized into four categories specialist doctor, resident doctor, head nurse and nurse. Question number (9) assessed it.
- 3) Workplace: In the current study, the workplace was divided into four categories and question number (10) assessed this as the following:
  - (a) Hebron Governmental Hospital.
  - (b) Al- Ahli Hospital.
  - (c) Beit-Jala Hospital.
  - (d) Arab Society for Rehabilitation.
- 4) Years of experience: The years of familiarity with a skill or field of knowledge acquired over months or years of actual practice that resulted in superior understanding or mastery (Business dictionary, 2016). In this study, it was categorized into 3 categories and question number (11) assessed it as the following:
  - (a) 3 years and less
  - (b) From 3-10 years
  - (c) More than 10 years
- 5) Work department :It is a distinct part of anything arranged in divisions, a division of a complex whole or organized system (Dictionary.com, 2014). In the current study, question number (12) assessed it as internal medicine, surgery, pediatrics and gynecology department.

- 6) Shift pattern: is a type of pattern of working created by an employer or manager for a team of people with similar job titles and roles who work a variety of different shifts to meet the need of an organization and in accordance with their employment (Definitions.net, 2016). In the current study, it was divided into one shift and mixed shift and question number (13) assessed it.
  
- 7) Number of working hours: is the time spent by employed person in his/her main occupation (Palestinian Central Bureau of Statistics, 2012). In this study, question number (14): the number of working hours assessed it as :  
(a)Less than 8 hours                      (b)From 8-16 hours                      (c)More than 16 hours
  
- 8) Employment status: is a type of employee classification based on the hours worked and the expected duration of the job (Payscale, 2020). In this study, it was classified as full time and part time and question number (15) assessed it.

### **3.2.3 Internet related variables**

- 1) Internet and social media applications: is a web based application that supports information publishing and sharing of information as text, video, audio or photo, the building of personal profiles and connecting within the community (IGI global disseminator of knowledge, 2018). In the current study, they were divided into 3 categories and question number (16) assessed it. The question was: Which of the following internet and social media applications do you use?  
(a) One applications used.  
(b) Two applications used.  
(c) More than two applications used
  
- 2) Most used internet and social media applications: in this study, they were divided into 7 applications, and question number (17) assessed it. The question was: Which of the is the most used internet and social media applications?  
(a) Facebook                      (b) Twitter                      (c) Youtube                      (d) Whatsapp

(e) Instagram      (f) Google      (g) Others

- 3) Frequency of internet and social media applications: in the current study, it divided into two categories, daily-most of the time and once per day and question number (18) assessed it.
- 4) Number of hours spent on internet and social media applications per day. In the current study, it had 3 categories and question number (19) assessed this as the following:
  - (a) Less than 1 hour.
  - (b) From 1-3 hours.
  - (c) More than 3 hours.
- 5) Number of hours spent on internet and social media applications in the workplace. In the current study, it had 3 categories and question number (20) assessed this as the following:
  - (a) Less than 1 hour.
  - (b) From 1-3 hours.
  - (c) More than 3 hours.
- 6) Number of hours spent on internet and social media applications outside the workplace. In the current study, it had 3 categories and question number (21) assessed it as:
  - (a) Less than 1 hour.
  - (b) From 1-3 hours.
  - (c) More than 3 hours.
- 7) Devices used to access internet and social media applications: In this study, question number (22) assessed it as phone mobile and other devices such as laptops, ipads and tablets.
- 8) Network used to access internet and social media applications: In this study, the networks were classified into 3 categories, participants own SIM card, hospital network, or used mix of SIM card and hospital network and question number (23) assessed it.

9) Reasons for using internet and social media applications: In the current study, the reasons were divided into 10 categories and question number (24) assessed this as the following:

- (a) To communicate with colleagues.
- (b) To communicate with patients.
- (c) Skills development.
- (d) To emphasize patients safety.
- (e) For research and knowledge updating.
- (f) To look for Job vacancies.
- (g) To Read recent news.
- (h) For entertainment.
- (i) For chatting.
- (j) All of them.

10) Add patients as friends or followers: Also study question (25) was used to assess adding patients. The question was. Do you add your patients as friends or followers on your social media? Yes / No

11) Have obstacles prevented from using internet and social media applications: In the current study, question number (26) was created to assess it. The question was: Do you have obstacles that prevented you from the use of internet and social media applications in the workplace? Yes / No.

If yes, which of the following reasons do you have:

- (a) Concern of privacy.
- (b) No interest in using internet and social media applications.
- (c) No confidence internet and social media applications.
- (d) Lack of time
- (e) Lack of experience.
- (f) Internet and social media applications usage is a waste of time.
- (g) Internet and social media applications not useful.
- (h) There is a blocking for Internet and social media applications within the hospital.
- (i) Institution policies prevent usage of internet and social media.
- (j) No internet connection in the hospital.

12) Awareness of the disadvantages of using internet and social media applications in the workplace. Study question number (27) assessed this as: Are you aware of the disadvantages of using internet and social media in the workplace- as a violation of patient privacy and professional and legal consequences? yes / No

- 13) Awareness of internet and social media applications in hospital policies. In the current study, question number (28) assessed this as : Are you aware of internet and social media applications policy in your hospital? Yes / No
- 14) Organizations informed their staff awareness about internet and social media applications use policy. The question number (29) assessed this as: Does your organization emphasize staff awareness about policy and the laws of internet and social media applications use at work? Yes /No.
- 15) The impact of internet and social media applications use on work performance from the point of views. Study question number (30) assessed this as positive effect, not at all and negative effect.

### **3.2.4 Independent variable: Work performance**

As mentioned in the previous chapter, work performance refers to behaviors or actions that achieve the goals of the organization and it is a multidimensional variable in which every job has different performance components. Job performance is the outcomes rather than behavior, because these are easier and more objective to define than the personal traits (Viswesvaran and Ones, 2000).

Murphy (1989) pointed that work performance defined in terms of behaviors instead of outcomes because the measure based on the results are not functional to the organization, when employees are trying to maximize results at the expense of other things. Murphy also defined performance as behaviors that are related to the goals of the organization.

In the current study, work performance was assessed by William and Anderson Work Performance scale (1991). Williams and Anderson (1991) divided the dimensions of organizational citizenship behaviors (OCB) into three different types: in-role behavior, organizational citizenship behaviors-organizations (OCBO) which are behaviors that beneficial to the organizations, and organizational

citizenship behaviors- individuals (OCBI) behaviors which are beneficial to the individuals and indirectly affected the organization. It was included 21-items, participants were asked to indicate their level of agreement for each statement by using a 5 likert scale ranged from strongly disagree to strongly agree where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree.

**Table (3.1): Items of William and Anderson Work Performance Scale (1991)**

Scale	Item text
WP1	I help others who have been absent
WP2	I help others who have heavy workloads
WP3	I assist my supervisor with his/her work (when not asked)
WP4	I take time to listen to co-workers' problems and worries
WP5	I go out of my way to help new employees
WP6	I take a personal interest in other employees
WP7	I pass along information to co-workers
WP8	My attendance at work is above the norm
WP9	I give advance notice when unable to come to work
WP10	I conserve and protect organizational property
WP11	I adhere to informal rules devised to maintain order
WP12	I adequately complete my assigned duties
WP13	I fulfill the responsibilities specified in my job description
WP14	I perform the tasks expected of me
WP15	I meet the formal performance requirements of the job
WP16	I engage in activities that will directly affect my performance
WP17	I take undeserved work breaks
WP18	A great deal of my time is spent on personal phone/email –communications
WP19	I complain about insignificant things at work
WP20	I neglect aspects of my job that I am obligated to perform
WP21	I fail to perform essential duties

### **3.3. Dependent variable: Internet and Social media applications use**

Social media is defined as a group of Internet-based applications that build on the technological and ideological foundations, enable its users to create and exchange of user generated content (Kaplan and Haenlein, 2010). Steenkamp and Hyde-Clarke, (2014) stated that social media is a platform which allows the users to exchange and share information. In addition, social media refers

to a web-based applications that allow users to share and add geographical information to user generated content (Ouirdi et al., 2014).

Social networking sites have become an everyday social activity for peoples across the world. It is web based services that allow people to construct to public profile within a closed system, articulate of other users, share a connection, view and cross their list of connections by others within the system. The nature of these connections are varied from site to site (Boyd and Ellison, 2007).

In the current study, the Work related Social Media Questionnaire (WSMQ) was utilized to assess internet and social media applications in the workplace, and it included 17 items that represented the short form of ( WSMQ). The scale was divided into two subscales, the first one was the beneficial WSMQ (8 questions) and the second was harmful WSMQ had (9 questions).

The participants were asked to indicate their level of agreement for each statement by using a 5 likert scale ranged from strongly disagree to strongly agree where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree.

Further, the beneficial WSMQ (+) assessed the major items as the following: q1 assessed the information gathering, q2 assessed the communicating with existing client, q3 assessed the new client outreach, q4 assessed the crowdsourcing, q5 assessed the intra-office communication, q6 assessed the participation in online work community, q7 assessed the organizational reputation management, q8 assessed the social media as a technical solution,

While the harmful WSMQ (-) assessed the major items as follow: q9 assessed the creating offensive content, q10 assessed the time theft, q11 assessed the disparaging others, q12 assessed the multitasking, q13 assessed the representing organization poorly, q14 assessed the diminishing personal reputation, q15 assessed the establishing inappropriate relationship, q16 assessed the plagiarism, and q17 assessed the relationship refusal as seen in the table (3.2).

**Table (3.2): The items of Work related Social Media Questionnaire (WSMQ)**

<b>Scale</b>	<b>Item text</b>
WSMQ(+) Information Gathering	I've found tutorials and lessons on social media to help me learn how to perform my job better
WSMQ(+) Communicating with Existing Client	I communicate with existing customers or clients via social media.
WSMQ(+) New Client Outreach	I reach out to potential new customers and clients using social media
WSMQ(+) Crowd-sourcing	I request help from people on social media when I am having trouble solving a problem at work
WSMQ(+) Intra-office Communication	I use social media to contact my coworkers when I am unable to reach them by other means
WSMQ(+) Participation in Online Work Community	I use my organization's official social media presence to network
WSMQ(+) Organizational Reputation Management	If I find something on social media that will harm the reputation of my coworkers or our organization, I let people know
WSMQ(+) Social Media as Technical Solution	I have taken advantage of the technical features of social media (like file sharing or scheduling functions) to accomplish work tasks
WSMQ(-) Creating Offensive Content	Other people at work have been offended by something I posted on social media
WSMQ(-) Time Theft	I've used social media when I should have been working
WSMQ(-) Disparaging Others	I have discussed negative feelings towards clients, customers, or coworkers on social media
WSMQ(-) Multitasking	I access social media while I am doing other work
WSMQ(-) Representing Organization Poorly	I have done poor quality work using my organization's social media accounts
WSMQ(-) Diminishing Personal Reputation	Clients or customers have posted information about me on social media that harmed my reputation at work

WSMQ(-) Establishing Inappropriate Relationship	I have invited a personal relationship with a client or coworker that I shouldn't have
WSMQ(-) Plagiarism	I've stolen information or other content from social media and used it as if it was my own work
WSMQ(-) Relationship Refusal	I've created an uncomfortable situation by refusing connections with coworkers, supervisors, or customers via social media

**3.4. Summary**

- This chapter presented the conceptual framework which developed based on literature review.
- It had two major concepts: Dependent variables included the internet and social media applications use and the independent variables included socio-demographic variables, work related variables, internet related variables, and work performance.

The next chapter discussed the methodology of the current study.

# **Chapter four**

## **Methodology**

## **Chapter four**

### **4.1 Introduction**

This section discussed the study setting, population, sampling method, inclusion and exclusion criteria, study instruments and data analysis, its validity and reliability and the ethical consideration. To achieve the purpose of the study, a cross sectional design was utilized.

### **4.2 Study design**

A cross-sectional design was utilized using self-reported questionnaires because it is a cheap, saves time and effort, it is highly useful for descriptive purposes, and it shows both the determining factors and the outcome at the same time (Polgar and Thomas, 1997).

### **4.3. Study population**

The target population of this study was the physicians and nurses from the four hospitals in Hebron and Bethlehem cities. The hospitals were Hebron Governmental Hospital, Al-Ahli Hospital, Beit-

Jala Hospital and Arab Society for Rehabilitation. The total population of the current study was 1307 distributed as 367 physicians and 940 nurses as seen in table (4.1).

**Table (4.1): The total population description of the four hospitals.**

Hospital	Hospital type	Governorate	Number of population		Total
			Physicians	Nurses	
<b>Hebron Governmental Hospital</b>	Governmental	Hebron	154	300	454
<b>Al- Ahli Hospital</b>	Private	Hebron	80	340	420
<b>Beit-Jala Hospital</b>	Governmental	Bethlehem	93	172	265
<b>Arab Society for Rehabilitation</b>	Private	Bethlehem	40	128	168
<b>Total population</b>			<b>367</b>	<b>940</b>	<b>1307</b>

#### 4.4 Study sample

The total population of physicians and nurses from the four hospital was (1307). The study sample was calculated by proportional method for physicians and nurses in each hospital by using the computer software (PEPI-for-windows) using the following formula and the sample size was found to be 297 participants (www.raosoft.com).

$$S(\text{StanderdSampleSize}) = Z^2 \times (P) \times (1-P) / C^2$$

$$=(1.96)^2 \times (0.5) \times (1-0.5) / (0.05)^2$$

Formula description:

SS = Standard sample size

Z = Confidence level at 95% (standard value of 1.96)

P = Percentage picking a choice, expressed as decimal (here 0.5)

C= Margin of error at 5% (standard value of 0.05)

Then the correction for finite population: 1307

$$\text{Samplesizeofthestudy} = \frac{SS}{1 + (SS-1) / \text{Pop}}$$

$$= \frac{384.16}{1 + \frac{(384.16 - 1)}{1307}} = 297$$

The sample size of participants from each hospital was calculated proportionally according to participants percentages in the population and the sample number was (297). It represented (23%) of the total population equal (1307) as seen in table (4.2). The sample size from each hospital = The total population of nurses and physicians from each hospital/ total population (1307) multiply by (297). The sample proportion for each hospital= no of sample from each hospital/ total sample (297) multiply by 100%.

**Table:(4.2):The proportional number of the sample of physicians and nurses from the four hospitals**

Hospital	Sample size	Sample proportion%	Physicians		Nurses	
			No.	Prop.%	No.	Prop.%
Hebron Governmental Hospital	103	34.7	35	11.8	68	22.9
Al-Ahli Hospital	95	32.0	18	6.1	77	25.9
Beit-Jala Hospital	60	20.2	21	7.1	39	13.1
Arab Society for Rehabilitation	39	13.1	10	3.3	29	9.8
<b>Total</b>	<b>297</b>	<b>100%</b>	<b>84</b>	<b>28.3%</b>	<b>213</b>	<b>71.7%</b>

In the current study, 500 questionnaires were distributed and 409 questionnaires were returned back. It represented (31.6%) instead of (23%) of the total population and the response rate was (100%). See table (4.3)

**Table:(4.3): The sample numbers of physicians and nurses from the four hospitals**

Hospital	Sample size	Sample%	Physicians	Nurses
Hebron Governmental Hospital	116	28.4	52	64
Al- Ahli hospital	115	28.1	40	75
Beit Jala hospital	95	23.2	43	52

Arab Society for Rehabilitation	83	20.3	34	49
<b>Total</b>	<b>409</b>	<b>100</b>	<b>169</b>	<b>240</b>

#### **4.5 Sampling technique:**

The convenient sampling method was utilized. It is a form of non-probability sampling in which the data collection from study population individuals who are conveniently available to participate in study by some purposive method in a deliberate and nonrandom fashion to achieve a certain goal (Polgar and Thomas, 1997) .

#### **4.6 The inclusion criteria were:**

The inclusion criteria of the current study were:

- 1) Physicians and nurses who work in the hospitals in Bethlehem and Hebron which are Hebron Governmental Hospital, Al-Ahli Hospital, Beit-Jala Hospital and Arab Society for Rehabilitation. These hospital were selected because they were the biggest referral hospitals in Hebron and Bethlehem cities.
- 2)Physicians and nurses who had direct contact with patients.
- 3) Males and females nurses or physicians aged over 18 years.

#### **4.7 The exclusion criteria were:**

The exclusion criteria of the current study were:

- 1) Other health care professionals such as pharmacists, medical technologists, radiologists and physiotherapists who they don't have direct contact with patients.
- 2) Non-health workers such as managers, accountants, receptions, maintenance drivers, secretaries, securities and cleaners.

#### **4.8 Setting of the study**

This study was conducted in four major referral hospitals in Hebron and Bethlehem which were Hebron Governmental Hospital, Al-Ahli Hospital, Beit-Jala Hospital and Arab Society for Rehabilitation.

**4.8.1 Hebron Governmental Hospital:** It was built in 1957 operating in the West Bank in the Hebron governorate, considered one of the largest health institutions among the southern West Bank hospitals. Its clinical capacity is 237 beds, with 596 employees. In 2017, the hospital occupancy rate was the highest among government hospitals 155% and provided services to more than 800,000 citizens through its various departments: emergency, operations, surgery, urology, orthopedic, neurosurgery, internal medicine, intensive care, pediatric, obstetrics and gynecology, nursery, laboratory and blood bank, radiology, outpatient clinics, physiotherapy, management departments(www.moh.ps)

**4.8.2 Al-Ahli Hospital :**Is a private hospital in the southern Hebron governorate of the West Bank. It is one of the achievements of the Friends of the Patient Association. It was built in 1988 with a capacity of 250 beds. Currently, Al Ahli Hospital employs more than 600 staff members in all its medical and administrative departments. The hospital has different departments, such as the unit for the treatment of electrical heart problems and catheterization and unit for nuclear medicine, emergency, outpatient clinics, surgery, gynecology, obstetrics, children, internal medicine, intensive care, day care, physiotherapy, sterilization. Moreover, the hospital has a College of Nursing for teaching nursing, midwifery and anesthesiologists (www.ahli.org).

**4.8.3 Beit-Jala Hospital :**Is one of the Palestinian hospitals established in 1955 in Beit-Jala city with beds capacity of 131 beds and 363 employees to provide medical services to the residents of the area due to the increase in population and the need of the population. In 2013, the hospital was adopted as a pediatric oncology center in Palestine. The hospital occupancy rate in 2016 was about 97%, where it served more than 200 thousand patients through its different departments: emergency, general surgery and vascular surgery, operations, gastroenterology unit, intensive care unit, internal medicine, obstetrics and gynecology, nursery, Huda Al-Masri center for pediatric oncology, outpatient clinics, physiotherapy, radiology, pharmacy, laboratory and blood Bank ( www.moh.ps).

**4.8.4. Arab Society for Rehabilitation:** It was established in 1960 as a one of Leonard Cheshire’s home to provide medical services to the residents of the area due to the increase in population and the need of the population and provides health and rehabilitation services to people with disabilities. It has worked to enhance the overall quality of life of persons with disabilities and other vulnerable groups and it developed innovative programs and services to meet the emerging needs of the Palestinian community. The hospital has different departments, such as the emergency, outpatient clinics, surgery, internal medicine, intensive care, day care, physiotherapy and rehabilitation departments with a bed capacity of 102 beds in 2016. (www.basr.org).

#### 4.9 Instrument of the current study

Data collection tools used in this study were self-administrated questionnaires including socio-demographic and other variables self-administrated sheet, Work related Social Media Questionnaire (WSMQ) and William Anderson Work Performance scale as seen in table (4.4).Both scales were translated into Arabic and English and back translation was done.

**Table (4.4): Instruments of the current study and the numbers of their questions**

No	Instruments	Number of questions in each instrument
1.	Socio-demographic self- administration sheet, work related variables and Internet related variables.	<ul style="list-style-type: none"> <li>▪ Socio-demographic data (7 questions)</li> <li>▪ Work related questions (8 questions)</li> <li>▪ Internet related data (15 questions)</li> </ul>
2.	Work related Social Media Questionnaire (WSMQ)	<ul style="list-style-type: none"> <li>▪ 17 questions.</li> </ul>
3.	William Anderson work performance scale	<ul style="list-style-type: none"> <li>▪ 21 questions</li> </ul>

Each one of the study instrument is discussed in more details as the following:

**4.9.1 Socio-demographic data sheet:** It was developed for the purpose of this study and it included different questions such as age, gender, religion, place of residency, marital status, educational level and monthly income. Also, it included the work related questions such as specialization, professional title, workplace, years of experience, work department, shift patterns,

number of working hours and employment status. Further, it had the internet related questions such as most used internet and social media applications, frequency of internet and social media use, hours spent on internet and social media applications, devices used to access internet and social media applications, network used to access internet and social media applications, reasons of internet and social media applications use, add patients as friends or followers, obstacles prevented from using internet and social media applications, perception of the risks of using internet and social media in the workplace, and the awareness about internet and social media applications policies in hospitals.

**4.9.2. Work related Social Media Questionnaire (WSMQ):**The WSMQ was developed by Landers and Callan, (2014) to assess the degree in which employees are using social media in the workplace. The WSMQ long form included 38-items distributed as 18 questions for beneficial social media, 18 questions for harmful and two questions for Relaxation and Leisure Behavior of social media. In the current study, the short form of the scale(17) was used, it contained two subscales beneficial WSMQ(8) questions and harmful WSMQ(9) questions, and the participants were asked to indicate their level of agreement for each statement by using a 5 likert scale ranged from strongly disagree to strongly agree, where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree.

Further, the beneficial WSMQ (q1-q8) assessed the major items as the following: q1 assessed the information gathering, q2 assessed the communicating with existing client, q3 assessed the new client outreach, q4 assessed the crowdsourcing, q5 assessed the intra-office communication, q6 assessed the participation in online work community, q7 assessed the organizational reputation management, q8 assessed the social media as a technical solution,

While the harmful WSMQ (q9-q17) assessed the major items as follow: q9 assessed the creating offensive content, q10 assessed the time theft, q11 assessed the disparaging others, q12 assessed the multitasking, q13 assessed the representing organization poorly, q14 assessed the diminishing personal reputation, q15 assessed the establishing inappropriate relationship, q16 assessed the plagiarism, and q17 assessed the relationship refusal as seen in table (4.5).

**Table (4.5): Taxonomy of beneficial and harmful social media work behaviors**

No.	<b>Taxonomy1:Beneficial social media related work behaviors</b>	
Q1	Information Gathering	I've found tutorials and lessons on social media to help me learn how to perform my job better
Q2	Communicating with Existing Client	I communicate with existing customers or clients via social media.
Q3	New Client Outreach	I reach out to potential new customers and clients using social media
Q4	Crowdsourcing	I request help from people on social media when I am having trouble solving a problem at work
Q5	Intra-office Communication	I use social media to contact my coworkers when I am unable to reach them by other means
Q6	Participation in Online Work Community	I use my organization's official social media presence to network
Q7	Organizational Reputation Management	If I find something on social media that will harm the reputation of my coworkers or our organization, I let people know
Q8	Social Media as Technical Solution	I have taken advantage of the technical features of social media (like file sharing or scheduling functions) to accomplish work tasks
<b>Taxonomy2: Harmful social media related work behaviors</b>		
Q9	Creating Offensive Content	Other people at work have been offended by something I posted on social media
Q10	Time Theft	I've used social media when I should have been working

**Table (4.5) cont.: Taxonomy of beneficial and harmful social media work behaviors**

Q11	Disparaging Others	I have discussed negative feelings towards clients, customers, or coworkers on social media
Q12	Multitasking	I access social media while I am doing other work
Q13	Representing Organization Poorly	I have done poor quality work using my organization's social media accounts
Q14	Diminishing Personal Reputation	Clients or customers have posted information about me on social media that harmed my reputation at work
Q15	Establishing Inappropriate Relationship	I have invited a personal relationship with a client or coworker that I shouldn't have
Q16	Plagiarism	I've stolen information or other content from social media and used it as if it was my own work
Q17	Relationship Refusal	I've created an uncomfortable situation by refusing connections with coworkers, supervisors, or customers via social media

**4.9.3. William Anderson Work Performance Scale:** It was developed by William and Anderson (1991), it had 21-items to measure the separate dimensions of work performance including the performance of organizational citizenship behaviors (OCB) and the employee performance of in-

role behavior(IRB). The OCB had two broad categories: OCBO-behaviors that benefit for the organization in general and OCBI-behaviors that benefit for specific individuals and indirectly contribute to the organization (William and Anderson, 1991).

The OCBI part of the scale had 7 questions from the (q1-q7), OCBO also had 7 questions from (q8-q14) and IRB had 7 questions (q15-q21). The participants were asked to indicate their level of agreement for each statement by using a 5 likert scale ranged from strongly disagree to strongly agree where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree as seen in table (4.6).

**Table (4.6): Items of William Anderson Work Performance Scale**

No.	Dimensions	Items
Q1	OCBI	I help others who have been absent
Q2	OCBI	I help others who have heavy workloads
Q3	OCBI	I assist my supervisor with his/her work (when not asked)
Q4	OCBI	I take time to listen to co-workers' problems and worries
Q5	OCBI	I go out of my way to help new employees
Q6	OCBI	I take a personal interest in other employees
Q7	OCBI	I pass along information to co-workers
Q8	OCBO	My attendance at work is above the norm
Q9	OCBO	I give advance notice when unable to come to work

**Table (4.6): Items of William Anderson Work Performance Scale**

No.	Dimensions	Items
Q10	OCBO	I take undeserved work breaks
Q11	OCBO	A great deal of my time is spent on personal communications
Q12	OCBO	I complain about insignificant things at work
Q13	OCBO	I conserve and protect organizational property
Q14	OCBO	I adhere to informal rules devised to maintain order
Q15	IRB	I adequately complete my assigned duties
Q16	IRB	I fulfill the responsibilities specified in my job description
Q17	IRB	I perform the tasks expected of me
Q18	IRB	I meet the formal performance requirements of the job
Q19	IRB	I engage in activities that will directly affect my performance
Q20	IRB	I neglect aspects of my job that I am obligated to perform
Q21	IRB	I fail to perform essential duties

#### 4.10 Reliability and validity of the instrument

Reliability refers to the stability or consistency of information that is obtained when a measurement is performed more than once. It also can be defined as the degree to which an instrument yields the same data each time it used under the same conditions and with the same subjects (Polgar and Thomas, 1997).

There are two ways by which reliability is commonly estimated (Polgar and Thomas, 1997):

- (1) Test/retest: which checks whether repeating the test questionnaire under the same conditions produces the same results.
- (2) Internal consistency of measures: It is an indicative of the homogeneity of the items in the measure that tap the construct by examining whether the items in the instrument are highly correlated. Cronbach coefficient was the most popular test to measure this.

Cronbach's Alpha coefficient was developed by Lee Cronbach in 1951 to provide a measure of internal consistency of items in a scale. Rubin and Bobbie (2005) indicated that when alpha coefficients level is about 0.9 or above, the internal consistency reliability is considered to be excellent. When the alpha coefficient level is from 0.80 to 0.89, reliability is considered too good. In this study, the overall Cronbach's Alpha reliability test for overall WSMQ, WSMQ(+), WSMQ(-) and William Anderson Work Performance scale were (0.77, 0.71, 0.80, 0.80) respectively as seen in table (4.7).

**Table (4.7): Internal reliability (Cronbach's Alpha) of Work related Social Media Questionnaire (WSMQ) and William Anderson Work Performance Scale**

The scale	No. of items	Cronbach's Alpha
Overall WSMQ	17	0.77
WSMQ(+)	8	0.71
WSMQ(-)	9	0.80
William Anderson Work Performance scale	21	0.80

Validity refers to the adequacy with which the method of measurement is able to measure the issues or phenomena under study (Abramson, 1999). Cook and Campbell (1979) defined validity as the best available approximation to the truth or falsity of given inference, proposition or conclusion.

Validity has many different types such as:

1- Criterion validity: a correlation coefficient between scores on a test and scores a criterion measure or standard, it involves determining the correlation between scores (Barker et al, 2002).

2- Construct validity: this tests link between the measure and the underlying theory. If a test constructs validity, you would expect to see a reasonable correlation with test measuring related areas (Shields and Twycross,, 2004).

3- Content validity: refers to how accurately an assessment or measurement tool taps into the various aspects of the specific construct in question. In other words, do the questions really assess the construct in question, or are the responses by the person answering the questions influenced by other factors (Yaghmal, 2003).

Content validity of the questionnaires in the current study was examined by a committee of three experts of public health who hold doctoral degree (PhDs) from Al-Quds University. A few changes were required by them regarding the language or the content. In addition, the Work related Social Media Questionnaire and William Anderson Work Performance Scale were translated into Arabic language by the researcher and a back translation was done by an English translator after doing content validity.

#### **4.11 Data collection process**

After getting the approval from the Public health faculty at Al- Quds university and the approval from the Ministry of Health and the general director of the private hospitals, the process of distributing of the questionnaire was started, and the researcher by herself distributed and

recollected the questionnaires from the participants in the four selected hospitals in Hebron and Bethlehem cities.

The data was collected during the period from December of 2019 to January of 2020. The researcher used convenience sampling approach. All the participants filled in the questionnaires by themselves. The researcher was available to answer any question from the participants in their workplace.

#### 4.12 Statistical analysis

The data was analyzed by using the statistical package for Social Sciences (SPSS) version 23. The data were checked for entry errors (data clearance). The relationship between socio demographic data, Work Related Social Media Questionnaire and William Anderson Work Performance Scale were analyzed by the using parametric test such as frequency, T-test, ANOVAs test Pearson test. Multiple linear regression analysis was done to investigate the significant association between the study variables.

The level of the mean scores for Work related Social Media Scale and William Anderson Work Performance scale were determined by the following formula (Nguli, 2017):

$$\frac{\text{Highest point in likert scale} - \text{Lowest point in likert scale}}{\text{The number of the levels used}} = 5 - 1/5 = 0.8$$

**Table (4.8): Scale analysis for both scales**

Level	The mean scores
Very low	From 1-1.8
Low	More than 1.8-2.6
Moderate	More than 2.6-3.4
High	More than 3.4-4.2
Very High	More than 4.20

#### 4.13 Ethical considerations

- Ethical approval was obtained from Al-Quds University and permission was obtained from the Ministry of Health. Before starting the survey, the proposal was also submitted to the Public Health Faculty at Al-Quds University and approval to conduct this study according to the thesis preparation guide of the Faculty of Graduate Studies was obtained.
- The general directors of the four hospitals (Hebron Governmental Hospital, Al-Ahli Hospital, Beit-Jala Hospital, and Arab society for rehabilitation) were formally approached via an introductory letter which presented information about the proposed study and its purpose. Consent form was obtained verbally and they agreed to participate in the study and to fill in the questionnaire without written consent forms.
- The participants were provided with an information sheet about the study including the aim of the study; objectives, procedures, and they were informed that they had the rights to refuse to participate in the study.
- Confidentiality and privacy were assured for all participants and they were informed that all information would be kept strictly confidential and they had the right to refuse to participate. In addition, data was protected and appropriately stored; all files were stored on computer and were protected by a password and nobody was allowed to access it except the researcher and the supervisor. No names or codes or any other mechanisms were used to trace responses back to an individual participant.

#### **4.14 Summary**

- A cross-sectional design was utilized in this study because it is cheap, quick and ethically safe.
- The data collection tools used in this study were a self-reported questionnaires including socio-demographic and other related variables data sheet, Work related Social Media Questionnaire (WSMQ) and William Anderson Work Performance Scale.

- The data was processed through SPSS statistical package testing. This was done according to international and local standards of research taking into consideration the ethical and scientific rules and obligations.
- Validity and reliability of the questionnaires were examined.
- The total population of the study was 1307 distributes as 367 physicians and 940 nurses from the four hospitals. The sample size was 409 participants.
- Different ethical issues including informed consent forms and confidentiality were discussed

The next chapter discussed the results of the study

# Chapter Five

## Results

### Chapter five

#### 5.1. Introduction

As mentioned in previous chapter, a cross sectional study was utilized. The sample included 409 participants who agreed to participate in this study. Data was collected by Work Related Social Media Questionnaire (WSMQ) and William Anderson Scale for Work Performance, in addition to self-reported socio-demographic and other related variables sheet. This chapter presented the findings of the current study as the following:

- 1) The characteristics of the participants and other related variables.
- 2) The results of Work Related Social Media Questionnaire and William Anderson Work Performance scale.
- 3) The relationship between the dependent and independent variables of the study.

## **5.2. Section one: The characteristics of the participants and other related variables:**

The characteristics of the participants and other related variables were assessed by three major groups. First, socio-demographic variables, work related variables and internet related variables. Each of them is discussed in more details below.

### **5.2.1 Socio-demographic variables of the participants and other related variables**

Table 5.1 presents the socio-demographic characteristics. It shows that 59.1% of the participants were males and 58.5% of the participants were from 20 years old to 30 years old. With regards to religion, the results revealed that the majority of the participants (97.5%) were Muslims.

Also, for place of residency, 52.8% of the participants lived in village and 41.5% were from cities. For the marital status, the results showed that the majority of the participants (64.1%) were married or previously married.

For the educational level, the 69.0% a bachelor's degree but only 13.2% had post graduates certificates. For the monthly income, 71.1% of the participants had an income of 5000 NIS and less.

**Table (5.1): Socio-demographic variable of the participants**

<b>Variables</b>		<b>Percentage (N)</b>
<b>Gender</b>	Male	59.1% (241)
	Female	40.9% (167)

	Total	100% (408)
<b>Age</b>	From 20-30 years	58.5% (239)
	>30-40 years	29.1% (119)
	>40-50years	11.2% (46)
	>50 years	1.2% (5)
	Total	100% (409)
<b>Religiosity</b>	Islam	97.5% (398)
	Christianity	2.5% (10)
	Total	100% (408)
<b>Place of residency</b>	City	41.5% (162)
	Village	52.8% (206)
	Camp	5.7% (22)
	Total	95.4% (390)
<b>Marital status</b>	Single	35.9% (147)
	Married and previously married	64.1% (262)
	Total	100% (409)
<b>Educational status</b>	Diploma	17.8% (73)
	Bachelor	69.0% (282)
	Postgraduate	13.2% (54)
	Total	100% (409)
<b>Monthly income</b>	5000NIS and less	71.1% (291)
	More than 5000NIS	28.9% (118)
	Total	100% (409)

### 5.2.2 Work related variables of the participants

The work related variables of the participants as presented in table (5.2). The specialization distribution showed that 58.7% of the participants were nurses and 41.3% were physicians. The professional title of the participants ranged from doctor specialist, doctor resident, head nurse to nurse. Moreover, for years of experience, about half of the participants had an experience of 3 years and less, 29.3% of them had an experience of more than 3-10 years, while 25.0% of the participants had an experience of more than 10 years. In regard to workplace, 28.3% of the participants worked in Hebron Governmental Hospital, 27.9% worked in Al-Ahi Hospital, 23.5% worked in Beit-Jala Hospital and 20.3% worked in Arab Society for Rehabilitation.

Further, for the work department, about half of the participants (48.9%) worked in the internal medicine department, 27.6% worked in gynecology and pediatrics department, while 23.5% of them worked in surgery department. The work shift distribution pattern showed that 74.3% of participants had mixed shift while (25.7%) of them had one shift per day. Furthermore, about 60%

worked from 8 to 16 hours and about 20% worked for more than 16 hours. Finally, the majority of participants (87.8%) had full time job, while (12.2%) of them had part time work as seen in table (5.2).

**Table (5.2): Work related variables of the participants**

<b>Variables</b>		<b>Percentage (N)</b>
<b>Specialization</b>	Medicine	41.3% (169)
	Nursing	58.7% (240)
	Total	100% (409)
<b>Professional title</b>	Doctor specialist	7.8% (32)
	Doctor resident	34.5% (141)
	Head nurse	3.7% (15)
	Nurse	54.0% (221)
	Total	100% (409)
<b>Workplace</b>	Hebron Governmental Hospital	28.3% (116)
	Al-Ahi Hospital	27.9% (114)
	Beit-Jala Hospital	23.5% (96)
	Arab Society for Rehabilitation	20.3% (83)
	Total	100% (409)
<b>Years of experience</b>	3 years and less	45.7% (187)
	>3-10 years	29.3% (120)
	>10 years	25.0% (102)
	Total	100% (409)
<b>Work department</b>	Internal medicine	48.9% (200)
	Surgery	23.5% (96)
	Gynecology and pediatrics	27.6% (113)
	Total	100% (409)

**Table (5.2): Work related variables of the participants**

<b>Variables</b>		<b>Percentage (N)</b>
<b>Work shift pattern</b>	One shift	25.7% (105)
	Mix	74.3% (303)
	Total	100% (408)
<b>Number of working hours</b>	<8 hours	21.1% (86)
	8-16 hours	59.1% (241)
	>16 hours	19.8% (81)
	Total	100% (408)
<b>Employment status</b>	Part-time	12.2% (50)
	Full-time	87.8% (359)
	Total	100% (409)

### **5.2.3 Internet and social media applications related variables.**

This part addressed the use of internet and social media applications among physicians and nurses as presented in table (5.3). The findings showed that the majority of participants (64.3%) used more than two internet and social media applications, 18.7% of them used two applications, and 17.0% used one application. In regard to the most used applications, Facebook was the most used platform (72.0%), then WhatsApp (13.1%), and 7.0% used Twitter. The lowest percentage of used applications were for YouTube (3.7%), Instagram (2.5%), Google search platform (1.7%).

Moreover, the participants were asked about the frequency of their use of the internet and social media applications and 71.9% reported that they used social media daily and most of time, while 28.1% of the participants reported that they used social media once per day. When the participants were asked about how many hours they spent on internet and social media applications per day, 45% reported from one to three hours and one third of them (33.5%) reported less than one hour, while 21.5% of the participants reported more than three hours.

Also, 76.7% reported that they spent less than one hour on internet and social media applications in the workplace, 16.9% of them reported from 1-3 hours, and only 6.4% of them spent more than 3 hours. Regarding the number of hours spent on internet and social media applications outside the workplace, 44.3% of the participants spent from 1-3 hours, one third of them reported that they spent less than one hour (33.5%), while 22.2% of the participants reported more than 3 hours.

Furthermore, 95.4% of the participants reported that used phone mobile to access internet and social media applications and only 4.6% of them used other devices such as computers, laptops, ipads and tablets. The majority of the participants (70.6%) used their own internet SIM card to link internet and social media applications, 16.6% used their hospitals network, while 8.4% used both hospital network and their own internet SIM cards.

Moreover, when the participants were asked about the reasons of using internet and social media applications, 62.0% reported to communicate with their colleagues, 18.6% for skills development

and research, 10.3% to communicate with their patients, 4.9% to read recent news, while 4.2% reported other reasons such as entertainment, chatting. job vacancies and patient safety.

Similarly, when the participants were asked if they had obstacles that limited the using of the internet and social media applications in the workplace, 45.4% of the participants reported they didn't have an obstacles, while the lack of time was the main obstacles for(25.9%), followed by fear of privacy and confidentiality (15.2%) and the institution policies and hospital blocking of the internet connections (7.4%).

Further, the participants were asked if they added patients as friends or followers on internet and social media applications, and 65.5% of the participants answered “ no”. Furthermore, when the participants were asked if they were aware the disadvantages of internet and social media applications use in the workplace, the majority of the participants (88.7%) answered “ yes“.

Furthermore, the participants were asked if their institutions had a policy that regulated the use of internet and social media applications in the workplace, and more than half of the participants (52.3%)reported that their institution didn't had a policy for internet regulation, while 47.7% of them reported that their institutions had such a policy. Also, the participants were asked if their institutions informed staff about their policy of internet and social media applications use in the workplace, 58.2% of them answered “ no“.

Regarding the effect of internet and social media applications use on their job performance from their point of views, the results ranged from extremely positive effect to extremely negative effect. For example, 61.5% of the participants reported that they affected their performance positively, 22.8% answered that they didn't affect them at all, while 15.7% reported that they had a negative effect on their work performance as seen in table in table (5.3).

**Table (5.3): Internet related variables of the participants**

Variables	Percentage (N)
	One application used
	Two applications used

<b>Internet and social media applications</b>	More than two applications used	64.3% (258)
	Total	100% (401)
<b>Most used internet and social media applications</b>	Facebook	72.0% (291)
	WhatsApp	13.1% (53)
	Twitter	7.0% (28)
	YouTube	3.7% (15)
	Instagram	2.5% (10)
	Google	1.7% (7)
	Total	100% (404)
<b>Frequency of internet and social media applications usage</b>	Daily-most of time	71.9% (294)
	Once per day	28.1% (115)
	Total	100% (409)
<b>Hours spent on internet and social media applications per day</b>	<1 hour	33.5% (137)
	From 1-3 hours	45.0% (184)
	>3 hours	21.5% (88)
	Total	100% (409)
<b>Hours spent on internet and social media in the workplace</b>	<1 hour	76.7% (313)
	From 1-3 hours	16.9% (69)
	>3 hours	6.4% (26)
	Total	100% (408)
<b>Hours spent on internet and social media outside the workplace</b>	<1 hour	33.5% (137)
	From 1-3 hours	44.3% (181)
	>3 hours	22.2% (91)
	Total	100% (409)
<b>Devices used to access to internet and social media</b>	Phone mobile	95.4% (390)
	Other devices	4.6% (19)
	Total	100% (409)

**Table (5.3)cont.: Internet related variables of the participants**

<b>Variables</b>	<b>Percentage (N)</b>	
<b>Network used to access to internet and social media</b>	SIM card	70.6% (288)
	Hospital network	16.6% (68)
	Mix	8.4% (34)
	Other	4.4% (18)
	Total	100% (408)
<b>Reasons for using internet and social media in the workplace</b>	Communicate colleagues	62.0% (253)
	Communicate with patients	10.3% (42)
	Skills development and Research	18.6% (76)
	Read recent news	4.9% (20)
	Entertainment. Job vacancies Chatting and Patient safety	4.2% (17)

	Total	100% (408)
<b>Which obstacles prevented from using internet and social media applications</b>	There were no obstacles	45.4% (186)
	Lack of time	25.9% (106)
	Fear of privacy and confidentiality	15.2% (62)
	Institution policies and blocking internet connections	7.4% (30)
	No interest, social media is waste of time and Lack of experience	6.1% (25)
	Total	100% (409)
<b>Add patients as friends or followers</b>	Yes	34.5% (141)
	No	65.5% (268)
	Total	100% (409)
<b>Aware of disadvantages of internet and social media use</b>	Yes	88.7% (361)
	No	11.3% (46)
	Total	100% (407)
<b>Policy regulate internet and social media use</b>	Yes	47.7% (195)
	No	52.3% (214)
	Total	100% (409)
<b>Does organization emphasize staff awareness about policy of internet and social media use</b>	Yes	41.8% (170)
	No	58.2% (237)
	Total	100% (407)
<b>Effect of internet and social media on work performance</b>	Positive effect	61.5% (251)
	Not at all	22.8% (93)
	Negative	15.7% (64)
	Total	100% (408)

### **5.3. Section two: The results of Work related Social Media Questionnaire (WSMQ) and William Anderson Work Performance scale**

#### **5.3.1 The participants' answers to the questions related to Work related Social Media questionnaire.**

The table (5.4) showed the detailed frequencies and percentages of each question of WSMQ. The questionnaire was divided into two subscales, the first one was the beneficial WSMQ included (8) questions, and the second subscale was the harmful WSMQ included (9) questions. For the first

eight questions of the questionnaire, if the participants answered agree or strongly agree, it indicated that the internet and social media applications had positive effects, while the answers for the last 9 questions of the scale agreed and strongly agreed, answers indicated negative effects. The mean of overall WSMQ was (3.57) which indicated that the internet and social media applications in the workplace had high positive general effects among participants according to table (8.4) in chapter 4. When comparing the means of beneficial and harmful WSMQ among participants, it showed higher mean (3.17) for the beneficial than for harmful WSMQ(2.08).

According to table (A) in chapter 4, the mean value for beneficial WSMQ was (3.17) which indicated a moderate beneficial effects of internet and social media applications among the participants, and only 3 questions showed that the internet and social media applications affected most of the participants positively, when 50% or more of the participants answered agree and strongly agree. For example, the highest means and percentages (>50% of strongly agree and agree) were for questions “I use social media to contact my coworkers when I am unable to reach them by other mean” (71.5%, M=3.80) “I have used social media to learn how to perform better at my job” ( 57%, M=3.37), followed by “If I find something on social media that will harm the reputation of my coworkers or our organization, I let people know” (53.8%, M=3.49).

Further, the lowest means and percentages (<50% of strongly agree and agree of the participants responses) were for 5 questions “I have taken advantage of the technical features of social media to accomplish work tasks” (49.6%, M= 3.34), followed by “I requested help from people on social media when I am having trouble solving problem at work” (45.7%, M=3.13), “I use my organizations official social media presence to network” (37.4%, M=2.96), “I communicate with existink2g customers or clients via social media” (34.5%, M=2.68) and “I reach out to potential new customers and clients using social media” (26.4%,M=2.58).

For harmful WSMQ, the mean was (2.08) which indicated low harmful effects of internet and social media applications in the workplace according to table (A) in chapter 4. The participants responses for all the 9 questions indicated that the internet and social media applications didn't affect them negatively in the workplace. Also, all the questions in this subscale had low means and more than (>50%) of the participants answered disagree and strongly disagree. For example,

most of them disagreed and strongly disagreed that “ Clients have posted information about me on social media that harmed my reputation at work” (82.4%, M=1.81) followed by “I’ve stolen information or other content from social media and used it as if it was my own work” (81.5%, M=1.79), “I have invited personal relationship with a client or coworkers that I shouldn’t have” (78.7%, M=1.88), “I’ve created an uncomfortable situation by refusing connections with coworkers, supervisors, or customers via social media” (76.8%, M=1.92), “I’ve used SM when I should been working” (63.9%, M=2.31), “Other people at work have offended by something I posted on social media” (61.9%, M=2.27), “ I have discussed negative feelings towards clients on SM” (61.8%, M=2.35) and I access social media while I am doing other work” (59.9%, M=2.42).

**Table (5.4): Distribution (%), mean and standard deviation of questions related to Work related Social Media questionnaire**

#	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree	Mean	S.D
1	I have used social media to learn how to perform better at my job	9.8	47.2	20.8	15.2	7	3.37	1.07
2	I communicate with existing customers or clients via social media	3	31.5	17.1	28.4	20	2.68	1.19
3	I reach out to potential new customers and clients using social media	1.2	25.2	24.2	28.9	20.3	2.58	1.11

**Table (5.4) cont.: Distribution (%), mean and standard deviation of questions related to Work related Social Media questionnaire**

#	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree	Mean	S.D
4	I request help from people on social media when I am having trouble solving a problem at work	4.9	40.8	25.2	21	8.1	3.13	1.05
5	I use social media to contact my coworkers	20.5	51	19.3	6.8	2.4	3.80	0.92

	when I am unable to reach them by other mean							
6	I use my organizations official social media presence to network	4.4	33	30.3	19.1	13	2.96	1.10
7	If I find something on social media that will harm the reputation of my coworkers or our organization, I let people know	13.7	40.1	30.6	11.2	4.4	3.49	1.07
8	I have taken advantage of the technical features of social media to accomplish work tasks	10	39.6	30.1	14.7	5.4	3.34	1.02
9	Other people at work have offended by something I posted on social media	2.4	12	23.7	34	27.9	2.27	1.06
10	I've used social media when I should been working	2.4	11.7	22	35.5	28.4	2.31	1.85
11	I have discussed negative feelings towards clients on social media	1	15.9	21.3	41.8	20	2.35	1.01
12	I access social media while I am doing other work	1.2	16.4	22.5	43.5	16.4	2.42	0.98
13	I have done poor quality work using my organizations social media accounts	0.7	6.6	15.9	44.3	32.5	1.98	0.90
14	Clients have posted information about me on social media that harmed my reputation at work	0.2	5.1	12.2	40.3	42.1	1.81	0.85
15	I have invited personal relationship with a client or coworkers that I shouldn't have	1.2	6.4	13.7	37.2	41.5	1.88	0.95

**Table (5.4) cont.: Distribution (%), mean and standard deviation of questions related to Work related Social Media questionnaire**

#	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree	Mean	S.D
16	I've stolen information or other content from social media and used it as if it was my own work	0.5	6.8	11.2	34.5	47	1.79	0.92
17	I've created an uncomfortable situation by refusing connections with coworkers, supervisors, or customers via social media	1.2	6.8	14.9	37	40.1	1.92	0.96
Overall Work related Social Media Questionnaire							3.57	0.42
Beneficial Work related Social Media Questionnaire							3.17	0.62
Harmful Work related Social Media Questionnaire							2.08	0.69

### 5.3.2. The participants' answers to the questions related to the William Anderson Work Performance Scale.

Also, the table (5.5) showed the detailed frequencies, percentages and means of each question of William Anderson Work Performance Scale. The questionnaire was a likert scale included 21 questions, each question had five answers ranged from strongly disagree to strongly agree. Also, the results showed that the mean of William Anderson Work Performance Scale was (3.35) which indicated that the work performance among participants was moderate. Among the three subscale the highest mean was for the organizational citizenship behaviors-individuals (OCBI) (3.68) followed by in-role behaviors (IRB) with a mean (3.24) and the lowest mean (3.15) was for the organizational citizenship behaviors-organizations (OCBO). There was a high performance for OCBI and moderate for IRB and OCBO among the participants.

Also, the results showed that most of the participants reported that their work performance was moderate and good as more than (>50 % of the participants answered strongly agree and agree for 14 questions out of 21 questions. For example, 81.4% (n=333) answered "I help others who have been absent", followed by "I help others who have heavy workloads" (80.9%, n= 331), "I fulfill

the responsibilities specified in my job description” (78.2%, n=320), “I perform the tasks expected of me” (78.0%, n=319), “I conserve and protect organizational property” (77.0%, n= 315), “I give advance notice when unable to come to work” (76.7%, n=314), “I adequately complete my assigned duties” (75.6%, n=309), “I adhere to informal rules devised to maintain order” (68.9%, n=282), “I meet the formal performance requirements of the job” (65.9%, n=269), “I go out of my way to help new employees” (64.1%, n=262), “I take a personal interest in other employees” (63.6%, n= 260), “I pass along information to co-workers” (60.4%, n=247) “I assist my supervisor with his/her work” (61.2%, n=250) and “I take time to listen to co-workers' problems and worries” (54.5%, n=223)

The lowest percentages (<50% for strongly agree and agree answers) were for seven questions. For example, 49.6%(n=203) answered “My attendance at work is above the norm” followed by “I engage in activities that will directly affect my performance”( 47.5%, n=194), “I take undeserved work breaks” (17.4%, n=71), “I complain about insignificant things at work” (12.0%), “A great deal of my time is spent on personal phone/email –communications” (11.8% ), “I fail to perform essential duties”(8.1%, n=33) and “I neglect aspects of my job that I am obligated to perform” (7.3%).

**Table (5.5): Distribution (%), mean and standard deviation of questions related to William Anderson Work Performance Scale.**

#	Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean	S.D
1	I help others who have been absent	17.8	63.6	11.7	4.2	2.7	3.89	0.83
2	I help others who have heavy workloads	20.8	60.1	13.4	4.3	1.2	3.95	0.78
3	I assist my supervisor with his/her work	10.8	50.4	27.9	7.8	2.9	3.58	0.89
4	I take time to listen to co-workers' problems and worries	7.6	46.9	32.3	9.8	2.9	3.46	0.88
5	I go out of my way to help new employees	14.0	50.1	29.3	4.2	2.4	3.68	0.85
6	I take a personal interest in other employees	12.5	51.1	26.8	7.6	2.0	3.64	0.86

7	I pass along information to co-workers	12.2	48.2	25.9	8.6	5.1	3.53	0.98
8	My attendance at work is above the norm	9.3	40.3	37.0	10.5	2.2	3.44	0.88

**Table (5.5): Distribution (%), mean and standard deviation of questions related to William Anderson Work Performance Scale.**

#	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	S.D
9	I give advance notice when unable to come to work	24.4	52.3	16.2	5.1	1.5	3.93	0.86
10	I conserve and protect organizational property	28.1	48.9	18.1	3.4	1.5	3.98	0.85
11	I adhere to informal rules devised to maintain order	17.4	51.5	24.0	4.4	2.2	3.77	0.86
12	I adequately complete my assigned duties	22.5	53.1	20.0	3.4	1.0	3.92	0.80
13	I fulfill the responsibilities specified in my job description	22.7	55.5	15.9	4.2	1.5	3.94	0.82
14	I perform the tasks expected of me	21.3	56.7	16.6	4.7	0.7	3.93	0.79
15	I meet the formal performance requirements of the job	17.1	48.8	25.4	7.3	1.2	3.73	0.87
16	I engage in activities that will directly affect my performance	10.8	36.7	32.3	15.6	4.4	3.33	1.01
17	I take undeserved work breaks*	3.7	13.7	26.6	36.2	19.6	2.45	1.06
18	A great deal of my time is spent on personal phone/email – communications	3.2	8.6	21.0	42.1	24.9	2.22	1.02
19	I complain about insignificant things at work	2.7	9.3	21.8	44.4	21.8	2.26	0.99

20	I neglect aspects of my job that I am obligated to perform	2.2	5.1	11.0	44.7	37	1.90	0.93
21	I fail to perform essential duties	1.5	6.6	12.7	39.6	39.6	1.91	0.95
William Anderson Work Performance scale							3.35	0.41
Organizational citizenship behaviors- Individual (OCBI)							3.68	0.60
Organizational citizenship behaviors-Organization (OCBO)							3.15	0.50
In- role behaviors (IRB)							3.24	0.48

#### **5.4. Section three: The relationship between the dependent and independent variables**

This section described the relationships between the independent variables included socio-demographic variables such as (age, gender, place of residency, marital status, educational level and monthly income), the work related variables included (specialization, professional title, workplace, years of experience, work department, work shift pattern, number of working hours and employment status), the internet related variables such as (the frequency of internet and social media applications use, hours spent on internet and social media applications, devices used to access internet and social media applications, network used to access internet and social media applications, add patients as friends or followers, had obstacles prevented from using internet and social media applications) and independent variables William Anderson Work Performance Scale and the Work related Social Media Questionnaire. Statistical analysis was done using T-test, one way ANOVA to determine the significant relationship of the variables. The statistical significance was defined as a P-value of (0.05).

#### **5.5. The relationship between Work related Social Media Questionnaire and William Anderson Work performance scale and the socio-demographic variables.**

The findings in table (5.6) showed that there was a statistically significant relationship between the Work related Social Media Questionnaire and monthly income. For example, the participants who had income more than 5000 NIS used internet and social media applications more than the participants who had 5000 NIS and less. However, there were no statistically significant relationships between the WSMQ and the other socio-demographic variables such as age, gender, place of residency, marital status, educational level.

Also, in relation to work performance, there were statistically significant relationships between work performance and gender, marital status and monthly income. For example, the male participants had high work performance compared with female participants. The married and previously married participants had higher work performance than the singles, and the participants who had an income more than 5000 NIS had higher work performance than the participants who had 5000 NIS and less. However, there were no statistically significant relationships between participants work performance and other socio-demographic variables such as age, place of residency and educational level.

**Table (5.6): The relationship between the Work related Social Media Questionnaire and Work Performance scale and the socio-demographic variables.**

Independent variables		WSMQ scale			Work Performance scale		
		Mean	T/F	P-value	Mean	Test	P-value
<b>Gender</b>	Male	3.55	-1.22	.222	3.39	2.11	<b>.035</b>
	Female	3.60			3.30		
<b>Age group</b>	20-30years	3.55	0.81	.485	3.32	1.76	.154
	>30-40years	3.60			3.41		
	>40-50years	3.62			3.40		
	>50years	3.43			3.36		
<b>Place of residency</b>	City	3.58	0.79	.454	3.36	0.29	.748
	Village	3.55			3.37		
	Camp	3.47			3.30		
<b>Marital status</b>	Single	3.55	-0.53	.596	3.30	-2.11	<b>.035</b>
	Married and previously married	3.58			3.39		
<b>Educational level</b>	Diploma	3.57	2.30	.101	3.32	1.42	.243
	Bachelor	3.55			3.35		
	Postgraduate	3.68			3.44		

<b>Monthly income</b>	5000and less	3.53	-2.68	<b>.008</b>	3.33	-2.24	<b>.025</b>
	> 5000 NIS	3.66			3.42		

### 5.6. The relationship between the Work related Social Media Questionnaire and William Anderson Work Performance scale and the work related variables.

The findings in table (5.7) showed that there were a statistically significant relationships between the Work related Social Media Questionnaire and specialization and professional title. For example, the physicians used the internet and social media applications more than nurses while the specialist doctors used them more than the resident doctors, head nurses or nurses. However, there were no statistically significant relationships between the WSMQ and the other work related variables such as workplace, years of experience, work department, work shift patterns, number of working hours and the employment status.

Moreover, the findings showed that there was statistically significant relationship between work performance and employment status. For example, the participants who worked full time had higher performance than the part time workers. However, there were no statistically significant relationships between work performance and the other work related variables such as specialization, professional title, workplace, participants years of experience, work department, work shift pattern and number of working hours.

**Table (5.7): The relationship between the Work related Social Media Questionnaire and William Anderson Work Performance Scale and the work related variables.**

Independent variables		WSMQ scale			Work Performance scale		
		Mean	T/F	P-value	Mean	T/F	P-value
<b>Specialization</b>	Medicine	3.68	4.49	<b>.000</b>	3.35	-0.13	.891
	Nursing	3.49			3.36		
<b>Professional title</b>	Specialist doctor	3.72	6.45	<b>.000</b>	3.39	0.16	.918
	Resident doctor	3.66			3.34		
	Head nurse	3.48			3.40		
	Nurse	3.50			3.35		
<b>Workplace</b>	Hebron Governmental Hospital	3.54	0.29	.832	3.37	1.08	.357
	Al-Ahli Hospital	3.57			3.38		
	Beit-Jala Hospital	3.58			3.29		

	Arab Society for Rehabilitation	3.60			3.36		
<b>Years of experience</b>	3years and less	3.55	0.83	.435	3.31	1.98	.139
	>3-10 year	3.61			3.37		
	> 10 years	3.57			3.41		
<b>Work department</b>	Internal Medicine	3.53	2.17	.115	3.31	2.14	.118
	Surgery	3.58			3.39		
	Gynecology and pediatrics	3.63			3.40		
<b>Shift pattern</b>	One shift	3.54	-0.72	.468	3.34	-0.13	.610
	Mixed shift	3.58			3.36		
<b>Number of working hours</b>	<8 hours	3.53	2.56	.078	3.31	0.77	.462
	8-16 hours	3.56			3.36		
	>16 hours	3.66			3.38		
<b>Employment status</b>	Part time	3.60	0.50	.615	3.21	-2.79	<b>.005</b>
	Full time	3.57			3.38		

### 5.7. The relationship between the Work related Social Media Questionnaire and William Anderson Work Performance Scale and the internet related variables

The results in table (5.8) showed that there was statistically significant relationship between the Work related Social Media Questionnaire and devices used to access internet and social media applications and networks used to access internet and social media applications. For example, the participants who used phone mobile used the internet and social media applications more than the participants who used other devices and the participants who used the mixed of SIM card and the hospital network used the internet and social media applications more than other participants who used SIM cards or hospital network alone.

However, there were no statistically significant relationship between the WSMQ and the other internet related variables such as the frequency of internet and social media applications use, hours spent on internet and social media applications (per day and outside the workplace), added patient as friends or followers, and had obstacles prevented from using internet and social media applications.

Further, in relation to work performance, there was a statistically significant relationship between work performance and had obstacles that prevented from using internet and social media

applications. For example, the participants who had obstacles prevented them from using the internet and social media applications in the workplace had a higher work performance than the participants who didn't have. However, there were no statistically significant relationships between work performance and the other internet related variables such as internet and social media applications used frequency, hours spent on internet and social media applications (per day and outside the workplace), devices used to access internet and social media applications, network used to access internet and social media applications, add patient as friends or followers.

**Table (5.8): The relationship between the Work related Social Media Questionnaire and William Anderson Work Performance Scale and the internet related variables.**

Independent variables		WSMQ scale			Work Performance scale		
		Mean	T/F	P-value	Mean	T/F	P-value
<b>Frequency of internet and social media applications use</b>	Once per day	3.55	-1.51	.130	3.36	0.53	.594
	Once per week	3.62			3.34		
<b>Hours spent internet and social media applications per day</b>	< 1 hour	3.63	2.92	.055	3.34	0.41	.664
	1-3 hours	3.57			3.35		
	> 3 hours	3.49			3.39		
	1-3 hours	3.49			3.37		
	> 3 hours	3.41			3.25		
<b>Hours spent on internet and social media applications outside workplace</b>	< 1 hour	3.59	2.28	.103	3.34	0.28	.749
	1-3 hours	3.60			3.37		
	> 3 hours	3.49			3.35		

**Table (5.8): The relationship between the Work related Social Media Questionnaire and William Anderson Work Performance Scale and the internet related variables.**

Independent variables		WSMQ scale			Work Performance scale		
		Mean	T/F	P-value	Mean	T/F	P-value
<b>Devices used to access internet and social media applications</b>	Phone mobile	3.58	2.01	<b>.045</b>	3.36	0.26	.794
	Other devices	3.38			3.33		
<b>Networks used to access internet and social media applications</b>	Own SIM card	3.58	3.70	<b>.012</b>	3.36	0.31	.812
	Hospital Network	3.52			3.32		
	Mix	3.68			3.39		
	other	3.31			3.33		
<b>Add patient as friends</b>	Yes	3.53	-1.26	.208	3.38	0.95	.341
	No	3.59			3.34		
<b>Have obstacles prevented from using</b>	Yes	3.55	-1.00	.309	3.40	2.27	<b>.023</b>
	No	3.59			3.31		

<b>internet and social media applications</b>							
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### 5.8 Regression model

Multiple linear regression analysis was used to modeling and examining further the significant relationship between the dependent and the independent variables as seen in table (5.9).

For WSMQ, the findings showed that there was only statistically a significant relationship between WSMQ and specialization (P-value= 0.038). For the William Anderson Work Performance Scale, the findings showed that there were significant relationships between the work performance and gender (P-value=0.005), employment status (P-value=0.009) and had obstacles prevented from using internet and social media applications (P-value=0.003).

**Table (5.9): Multiple linear analysis of the determinants of Work related Social Media Questionnaire and William Anderson Work Performance Scale.**

	WSMQ		WP	
	Beta	Sig.	Beta	Sig.
Specialization of the participants.	-0.208	.038	--	--
Professional title	-0.001	.989		
Devices used to access internet and social media applications	-0.54	0.267		
Network to access internet and social media applications	-0.054	.267		
Family income	0.066	.213	0.068	.156
Gender of the participants	--	--	0.040	.005
Marital status	--	--	0.053	.285
Employment status	--	--	0.130	.009

Obstacles prevented from using internet and social media applications	--	--	-0.143	.003
Social media use (WSMQ)	--	--	0.206	0.000
	Model p-value=0.000 Adjusted R <sup>2</sup> =0.068		Model p-value=0.000 Adjusted R <sup>2</sup> =0.037	

Moreover, linear regression analysis showed a significant relationship between social media use and work performance at P-value (0.000) (see table 5.10).

**Table (5.10): Generalized linear model of the relation between Work related Social Media Questionnaire and William Anderson Work Performance Scale**

Model	Unstandardized coefficient		Standardized coefficient	t	Sig	Collinearity	
	B	Std. error	Beta			Tolerance	VIF
Work performance	0.204	0.050	0.198	4.081	0.000	1.000	1.000

### 5.9. Correlation (r) between Work related Social Media Questionnaire and William Anderson Work Performance Scale

Pearson correlation (r) test was used to test the correlations Work related Social Media Questionnaire and Work Performance Scale as seen in table (5.11). The Pearson correlation test showed a weak positive statistically significant relationship between the Work related Social Media Questionnaire and William Anderson Work Performance Scale ( $r=0.198$ ;  $p=.000$ ). When testing this correlation among the three subscales of William Anderson Work Performance Scale, a statistically significant positive relationship was found in OCBI subscale ( $r=0.381$ ;  $p=0.000$ ). but, there was no correlation between the other subscales OCBO ( $r=-0.003$ ;  $p=0.956$ ) and IRB ( $r=0.032$ ;  $p=0.513$ ).

**Table (5.11): Pearson correlation (r) between the Work related Social Media Questionnaire and William Anderson Work Performance Scale**

WSMQ	William Anderson Work Performance Scale											
	Overall			OCBI			OCBO			IRB		
	R	Sig	N	R	Sig	N	R	Sig	N	R	Sig	N
	0.198	<b>.000</b>	409	0.381	<b>.000</b>	409	-0.003	.956	409	0.032	.513	409

## **5.10 Summary**

- This chapter represented the results of the quantitative analysis of the study.
- It went over the socio-demographic characteristics of physicians and nurses as well as the work related and internet related characteristics.

- Participants' perceptions for the Work related Social Media Questionnaire, and William Anderson Work Performance Scale were discussed as well.
- Finally, relationships and correlations between dependent and independent variables of the study were explored and detailed in tables and texts.
- Next to this, the researcher will discuss the findings in view of available scientific literature in the following chapter.

The next chapter discussed the discussion of the study

# **Chapter six**

## **Discussion and recommendations**

### **Chapter six**

#### **6.1 Introduction**

This chapter discusses the major findings of the current study and the interpretation of its findings in relation to previously conducted studies found in literature review. The participants' characteristics and their responses to the questionnaire items are discussed. Also, the relationship

between dependent and independent variables are highlighted by using many statistical analysis tests such as ANOVA test, T-test and regression analysis. The results of these statistical tests are discussed in each of the following sections:

- The characteristics of the participants and other related variables.
- Work related Social Media Questionnaire and William Anderson Work Performance Scale results.
- The relationship between dependent and independent variables.
- Limitations and recommendations.

## **6.2. The characteristics of the participants and other related variables.**

In the current study, 59.1% of the participants were males and (40.9%) were females. These findings were similar to the study of Irfan et al (2018) who found that (69.7%) of the participants were males and (30.3%) were females. However, these findings were inconsistent with Marin-Gomez (2018) study who found that two third of participants were females. Similarly, the study of Surani et al (2017) showed that (29.5%) of the participants were males and (70.2%) were females. With regards to age groups in the current study, the age of the participants ranged from 20 to 50 years and the findings showed that the most participants were young as 58.4% of the participants aged from 20-30 years old followed by 29.1% were more than 30-40 years old, 11.2% were more than 40-50 years and 1.2%. According to Rouis (2010), the younger people were the most users and engaged in the internet and social media applications. Similarly, Irfan et al (2018) showed that 48.4% of participants aged from 20-30 years.

For place of residence, one half of the study participants (52.8%) lived in village, 41.5% lived in a city and only 5.7% lived in camp. These findings were similar to a study conducted by Bosslet et al (2011) who found that more than half of the participants (52%) lived in rural areas. In addition, the results showed that the majority of the participants (64.1%) were married and previously married, while 35.9% were single. This result is expected because the average age for marriage in Palestine is 25.1 for males and 20.5 for females (PCBS, 2018). These findings were consistent with Wang et al (2019) study which found that 77.2% of the participants were married, 21.1% were single and only (1.7%) were widowed or divorced.

Regarding to the educational status, the majority of the participants had a bachelor degree(70.0%), 17.8% had diploma degree while 13.2% of them had postgraduates degree. The study findings were similar to the study of Wang et al (2019) who found that the majority of the participants (75.4%) had a bachelor degree, (20.5%) had diploma degree and (4.1%) of them had postgraduates degree. Also, a study of Qtait and Sayej (2016) found that one half of the study participants (50.3%) had bachelor degree. In Palestine, illiteracy rate was the lowest in the world and the rate was 3.3% and it was a higher among females (5.1%) than males (1.5%) (PCBS, 2018). Furthermore, the study findings showed that the majority of participants(71.1%) had a monthly income of 5000 NIS and less, while 28.9% of them had more than 5000 NIS. In Palestine, the salary of nurses is from 690 to 2,070 USD per month and the salary range of physicians is from 1,470 to 6,770USD(Salary explorer, 2020), which is considered good in comparison with other workers 'salary. Further, this finding may indicate that health professionals may have the same payment of monthly income in the governmental and nongovernmental hospitals.

For specialization, the majority of the participants were nurses(58.7%) while 41.3% were physicians. This result was consistent with a study conducted by Petosic et al (2019) who found that (83.0%) of the study participants were nurses and (17.0%) were physicians. It was revealed that the high rate of health professionals in Palestine were nurses with rate of 8.1 per 10,000 population followed by 5.2 physicians per 10,000 population and the lowest rate 5 per 10,000 population were pharmacists and other health professionals (Palestinian Ministry of Health, 2018). For years of experience, the majority of the participants (45.7%) had an experience of 3 years and less and 29.3% had an experience of more than 3-10 year. This might be explained by the high burnout rate among healthcare professionals in Palestine. For example, Hamdan and Abu Hamra study (2017) showed high levels of burnout among nurses and physicians workers at emergency department in the Palestinian hospitals as 64% of participants suffered from high emotional exhaustion, 38.1% suffered from high depersonalization and 34.6% suffered from low personal accomplishment. In addition, there were a high levels of emotional exhaustion among physicians (72.3%) compared to nurses (69.8%) and high levels of depersonalization was among nurses (48.8%) compared to physicians (32.1%). So doctors and nurses may leave their work to find a job in other field such as education, day care clinic or marriage particularly females who left their

job to take care of their families. These results were inconsistent with Al-Anzi and Al-Yami, (2019) who found that the majority of the participants (43.4%) had an experience of more than 10 years and (32.7%) had an experience of 3 years and less.

Moreover, for the work shift, results showed that (74.3%) of the participants had mixed shifts while 25.7% of them had one shift. Regarding the number of working hours, more than half of the participants (59.1%) worked from 8-16 hours, 21.1% of them worked for less than 8 hours, while 19.8% worked for more than 16 hours. This means that the majority of the current study participants work for long hours to improve their income or because the physicians should work for long duty hours (more than 24 hours) in the hospitals. Caruso (2014) found that the longer working hours for more than 8 hours among nurses lead to short sleep duration and sleep disturbances that might be reduced the job performance and caused fatigue related errors that harm patients.

Moreover, the majority of the participants (87.8%) had full time job, while 12.2% of them had part time. A study conducted by Burke et al (2013) found that the full time job among nurses reported higher levels of autonomy, job involvement, affective commitment and work engagement. In addition, it is expected that nurses who work full time will perform their jobs better than part time because continuity of jobs and career commitment performed than the part time job. These findings were consistent with the study of Piscotty et al (2016) who found that the majority of nurses (80.8%) worked fulltime and Kung and Oh (2014) found that (83.3%) of the participants worked full time while (12.3%) worked part time.

For the use of internet and social media applications, the findings showed that the majority of the participants (64.3%) used more than two internet and social media applications, 18.7% of them used two applications, and 17% used one application. In regard to the most internet and social media applications, Facebook was the most used platform (72.0%) followed by Whatsapp (13.1%) and the lowest platform were Twitter (7.0%), YouTube (3.7%), Instagram (2.5%), and Google (1.7%). Facebook application is favorable by healthcare professionals due to its simplicity, availability of great range of features and easier way to connect with friends and families (Shcherbakova and Shepherd, 2014). Similarly, Loeb et al (2014) showed that most physicians and nurses in hospitals were Facebook users (93.0%) followed by Twitter (36.0%). Also, the study of Adilman et al (2016) found that Facebook was the most used platform among

physicians(86.0%). Therefore, the Palestinian health care professionals should be encouraged to use social media for other purposes than Facebook communication such as improve health outcomes, develop a professional network, increase awareness of new discoveries, and provide health information to the community.

Also, the current study showed that 95.4% of the participants used their own mobile phone to access internet and social media applications and only 4.6% of them used other devices such as computers, laptops, IPad and tablets. These findings were supported by the study of Ozdalga et al (2012) which found that phone mobiles are mostly used among physicians because it is flexible for communication, short texts message, sharing e-mail, web searching, high quality cameras, and sound recorders. Also, these results were supported by the Palestinian Digital Activism Report (2017) which showed that (61.6%) of Palestinian internet users used their own mobile phones to access internet and social media applications compared to (43.4%) used computers and other devices. Inconsistently, Fuoco and Leveridge (2015) study found that lap top was the main device (55.2%) for accesses internet and social media applications among Canadian urologist participants.

Furthermore, the majority of the participants (70.6%) used their own internet SIM card to link internet and social media applications, 16.6% used their hospitals network, while 8.3% used both hospital network and their own internet SIM card. These results were supported by the Palestinian Digital Activism Report (2017) which revealed that the total number of SIM cards in Palestine was 4,400,000 which were used to access internet and social media applications. Moreover, it was found that hospitals didn't provide their workers free internet connections and only 16.6% of participants used their hospital network. Therefore, the healthcare professionals will use their own SIM cards to access internet in workplace. Further, the study findings revealed that the majority of the participants (71.9%) reported that they used the internet and social media applications daily and most of the day, while 28.1% they used it once per day. These results were supported by Erer and Cabner (2016) study which showed that (65.8%) of the participants used internet and social media applications every day.

For the use of internet and social media applications in the workplace, the majority of the participants (76.7%) reported spending less than one hour followed by 16.9% reported 1-3 hours

and only 6.4% of them spent more than 3 hours. Consistently, Surani et al (2017) study found that the majority of health care providers (67.4%) spent less than one hour on internet and social media applications in the workplace. Similarly, the study of Piscotty et al (2016) showed that the majority (60.9%) of nurses spent less than one hour on the internet and social media applications in the workplace. This may be because the physicians in hospitals have a heavy workload, they do not have enough time for using internet and social media application, and many physicians who contribute to social media are mainly doing it at the expense of their other commitments, such as patients care. Also, finding a time to contribute on social media was perceived too difficult for busy physicians and nurses particularly in the biggest referral hospitals (Evariant, 2019 ;Panahi ,2016).

Moreover, for the reasons of using internet and social media applications in workplace, 62.0% of participants reported that they communicated with their colleagues followed by 18.6% for skills development and research, and 10.3% to communicate with their patients. The findings of the current study were supported by Long et al (2017) study which found that (66.7%) of Chinese urologists used social media for collaboration with peers and 52.7% for surgical and medical education. Similarly, one study indicated that (93.4%) of Spanish physicians and nurses used internet and social media applications for pharmacological consultants and professional communications with colleagues (Marine-Gomez et al., 2018). In addition, the Palestinian Digital Activism Report (2017) found that the most common reason (75%) for using internet and social media applications among Palestinian people was to communicate with friends and colleagues. Further, Von-Muhlen and Ohno-Machado (2012) found that social media could be used as a powerful communication system for healthcare workers through which they can find patient health information and past medical history. Another reason for using social media applications among health care professionals in the Palestinian hospitals for communication may be is its cheap cost because of the expensive cost of mobile and telephone calls.

Also, the majority of the participants (54.6%) reported they had obstacles that limited the using of internet and social media applications in the workplace, while 45.4% they did not have such obstacles. The main obstacles was lack of time (25.9%) followed by fear of privacy and confidentiality (15.2%) and institutional policies and hospital blocking (7.4%). These findings

were supported by Al-Anzi and Al-Yami (2019) who found that (61.4%) of the Saudi Arabian physicians had obstacles which were lack of time and fear of privacy. Similarly, Panahi et al (2016) found that the main obstacles were fear of privacy, lack of sufficient time, lack of trust and mistakes information.

Moreover, the majority of participants (65.5%) reported that they didn't add their patients as friends or followers on internet and social media applications, while 34.5% of them answered "yes". Physicians or nurses should not add patients as friend on social media because the relationship must be terminated after they discharge from hospitals. Langefnfield et al (2014) found that when patient becomes friend with nurses on social media, they will exposed themselves to a highly jeopardizing situations and affected their professional image. Similarly, Duymus et al (2016) found that 94.2% of Turkish physicians didn't accept friend requests from patients because it is unethical and affect the patient physician's relationship. These results were congruent with the study of Wang et al (2017) who found that the majority of nurses (63.5%) didn't add their patients as friends or followers while (38.3%) of them accepted patients friend requests. So, awareness should be done among Palestinian nurses and doctors about the dangers of adding their patients as friend or followers on internet and social media applications.

Furthermore, more than half of the participants (52.3%) reported that their institution didn't had a policy for internet regulation, while 47.7% of them reported that their institutions had such a policy. Similarly, Backman et al (2011) found that (54.0%) of physicians reported that their institutions had internet and social media regulation policy. However, Surani et al (2017) found that (40.8%) of health care providers had internet and social media instructional policy. Cain (2011) reported that health care organizations need a formal and clear policy to regulate social media applications to prevent complications and professional problems. Therefore, the Palestinian hospitals should have a clear policy for internet and social media applications use in the workplace to prevent professional problems.

In relation to informed institutional policy, 58.2% of the participants said they weren't informed while (41.8%) said they were informed. This finding is supported by Wang et al (2019) who indicated that (52.7%) nurses reported that their institutions informed such a policy for internet

and social media applications use but they were lacking a formal or unified guidelines. Moreover, it is crucial to understand the institutional policy in order to protect confidential medical information and patient privacy. Furthermore, the majority of the participants (88.7%) indicated that they are aware of the disadvantages of internet and social media applications use in the workplace, while (11.3%) of them answered “ no”. The results of the current study were similar to Erer and Cabner (2016) study who found that the majority of nurses were aware about the disadvantage of using internet and social media applications. Similarly, Tuckett and Turner (2016) found that 72% of nurses were aware of the disadvantages of social media utilization in their practices. Therefore, policy makers should raise nurse’s and doctor’s awareness about the disadvantages of using social media applications in workplace.

Finally, for the effect of using internet and social media applications on their job performance from the participants point view, the findings showed that the majority of the participants (61.5%) reported that they positively affected their performance, 22.8% didn’t affect them at all, while 15.7% of them reported a negative effect on their work performance. These findings were congruent with the study of Long et al (2017) which found that (75.9%) of Chinese urologists reported that internet and social media applications affected their performance positively because social media improved their effectiveness of medical education, increased the exposure of their practices, and source of positive feedback from patients. Similarly, Wang et al (2019) found that (84%) of nurses believed that social media applications affected positively work performance.

### **6.3. Work related Social Media Questionnaire and William Anderson Work Performance Scale results.**

The results showed a discrepancy between the results of self reported questionnaires and the findings of the statistical analysis as the main findings of the study revealed high general positive effects of internet and social media applications in the workplace as reported by the participants. The mean of WSMQ was (3.57) which indicated that the internet and social media applications in the workplace had high positive effects, and the means of beneficial (3.17) which was higher than the harmful WSMQ(2.08). Also, the total mean of William Anderson Work Performance Scale was (3.35) which indicated that the work performance among participants was moderate. However, the Pearson correlation test showed a weak positive statistically significant relationship between the

Work related Social Media Questionnaire and William Anderson Work Performance Scale( $r=0.198$ ;  $p=.000$ ). One possible explanation of this discrepancy is the use of self-reported questionnaire. Demetriou et al (2015) indicated that one of the main disadvantage of using self reported questionnaire among healthcare workers is the possibility of participants responses to provide invalid answers or not answered the questions truthfully and carefully due to unconscious way which not represent them. These results were supported by Gaudin (2009) who found that 77% of employees who use social media during working hours resulted in 1.5% decrease in employee productivity, this drop in the productivity of employee because of the excessive browsing and uploading photos which were not related to the workplace. Moreover, it was found that the intensive use of social media in the workplace has the great impact on the employees performance through enhancing their job satisfaction which leads to organizational commitment. But the moderate use of social media results in making balance between the personal and the professional issues of an employees because the use of social media increases the overall performance of an employees. It helps the employees to improve their skills, knowledge, productivity and enhance communication (Maturi, 2018). Therefore, regulation for the use of internet and social medical applications in the Palestinian hospitals should done by the administrative staff and policy makers

Also, for the beneficial WSMQ, the highest percentages (>50% of strongly agree and agree) were for intra-office communication (71.5%,  $n=292$ ) followed by information gathering (57.0%,  $n=233$ ) and organizational reputational management (53.8%,  $n=220$ ). The findings of the current study were consistent with a study conducted by Alshakhs and Alanzi (2018) which found that social media in the workplace was beneficial tool that improve the healthcare services and enhance medical information. Similarly, Hazzam and Larech (2018) revealed that the main benefit of social media among health care professionals were for updating medical information and interpersonal communications. However, the findings of the current study were inconsistent with the study of Erer and Cobaner (2016) who found that the majority of nurses (80%) believed that social media applications had negative effects for example, inaccurate information, unprofessional behaviors and violation of patient privacy. The high percentages in the current study may be because the participants may exaggerate their answers as discussed previously or these social applications may

improve the psychological status of the health professionals who work under pressure by communicating with others .

Also, the findings of the current study revealed that the total mean of William Anderson Work Performance Scale was (3.35) which indicated that the work performance among participants was moderate. When the means of the three classes of employee behaviors were measured of William Anderson Work Performance Scale, it showed that the highest mean (3.68) was for the organizational citizenship behaviors-individuals (OCBI) followed by in-role behaviors (IRB) (3.24) and the lowest mean (3.15) was for the organizational citizenship behaviors-organizations (OCBO). Therefore, a high performance for OCBI and moderate for IRB and OCBO among participants, which mean that (OCBI) such as, helping other workers had a higher effect on work performance than (OCBO) such as the instructions and orders of the organization. These results were supported by Yuxiu et al (2011) study which found that the job performance level among nurses was moderate. Similarly, when employees feel that they are treated fairly by a company, have a good relationship with their manager, have a manager who is supportive and rewards high performance. Therefore, when they are treated well, they treat the company well by performing their job more effectively (Colquitt et al., 2001). However, the results of the current study were lower than others studies. For example, Qtait and Sayej (2016) found that job performance level among nurses in the five Hebron hospitals was high (71%). Also, Mokhtar and Mohamed (2017) found that the overall job performance mean among professional nurses in pediatric and intensive care units was high.

#### **6.5. The relationship between dependent and independent variables.**

There were several significant relationships between socio-demographic, work related variables and internet related variables in relation to WSMQ and William Anderson Work Performance Scale.

For WSMQ, monthly income, specialization, professional title, devices used to access internet and social media applications, and network used to access internet and social media applications were the common significantly factors related to the WSMQ. The higher means of internet and social media applications were seen in monthly income group (>5000 NIS) (M=3.66), physicians

(M=3.68), specialist doctors (M=3.72), phone mobile used to access internet and social media applications (M=3.58) and using mix network of SIM card and hospital network(M=3.68).

For example, for monthly income, the results of the current study found that higher income people were more likely to be internet and social media applications users. It was found that people with higher incomes are more likely to use social media than people with lower incomes (Anderson et al., 2019). However, another study found that the level of income didn't affect the social media usage and 8% of American population said that the cost was a barrier for some adults who were offline (Pew Research Center Survey, 2013). However, multiple linear regression analysis in the current study didn't show significant relationship between monthly income and WSMQ.

Moreover, for specialization, the findings showed that the higher users of internet and social media applications were physicians particularly specialist doctors than nurses. Similarly, Ventola (2014) found that physicians were higher users of social media than other healthcare professionals because they listen to experts, research for medical developments, consult colleagues regarding patient issues and discuss practice management challenges. Another reasons might be because nurses are busy most of the time in nursing care and they have direct contact with the patients so they do not have enough time to use internet and social media applications. Also, multiple linear regression analysis in the current study showed a significant relationship between specialization and WSMQ.

For devices used to access internet and social media applications, the findings of the current study were congruent with Piscotty et al (2016) who found that the majority of nurses (61.9%) used their phone mobiles to access social media applications than other devices. This might be because of the increasing of the popularization of mobile technology in the past decade due to availability, affordability and portability of mobile devices to access internet (Clement, 2019). According to the Palestinian Digital Activism Report (2017), 61.6% of Palestinian internet users used their mobile phones to access the internet and social media applications and the main purpose (75%) was to communicate with friends and colleagues. However, multiple linear regression analysis in the current study didn't show a significant relationship between devices used to access internet and social media applications and WSMQ.

Finally, the findings of the current study revealed that mix network (SIM card and hospitals network together) were the most used network to access internet in the workplace and had a significant relationship with WSMQ. These finding might be because hospitals didn't provide internet to their health workers to access internet and social media applications in the Palestinian hospitals, so most of the participants used their own SIM card. This result may indicate that internet is available for most of health professionals in their workplace by their own SIM card which may make it difficult to regulate its use in workplace. So, clear policy about the use of internet and social medical application in the Palestinian hospitals is crucial. However, multiple linear regression analysis didn't show a significant relationship between network used to access internet and social media applications and WSMQ.

For William Anderson Work Performance Scale, gender, monthly income, marital status, employment status and had obstacles prevented from using internet and social media applications were the common significantly factors related to Work Performance. Higher work performance was seen in males (M=3.39), married participants (M=3.39), monthly income group (>5000 NIS) (M=3.42), full time workers (M=3.38) and participants who had obstacles that prevented them from using internet and social media applications (M=3.40).

Regarding monthly income, the results of the current study were supported by Dieleman et al (2003) who found that when the employees were satisfied with their pay, they were more productive and motivated to perform their work better. Similarly, monthly salary was the most influential factor for nursing performance (Restilla, 2015). However, Qtait and Sayej (2016) found that there were no significant correlation between monthly income and work performance among nurses in Hebron hospitals. On the other hand, multiple linear regression analysis didn't show a significant relationship between monthly income and William Anderson Work Performance Scale in the current study. For gender, the findings revealed that males performed their work better than female participants. This result was supported by Murray (2002) who found that males had a higher work performance than female participants. This might be due to work home conflict such as, females had a lot of demands between their families and home responsibility and the work. Similarly, Al-Ahmadi (2009) found that male nurses had higher work performance than females.

However, in the current study multiple linear regression analysis showed a significant relationship between gender and William Anderson Work Performance Scale.

For marital status, the findings showed that married and previously married employees had higher work performance than single, which was supported by Crawly and Grant (2005) who found that married employees are less absent due to economic pressures and family requirements. Also, Al-Ahmadi (2009) who found that job performance is positively related to marital status. In addition, multiple linear regression analysis in the current study didn't show a significant relationship between marital status and William Anderson Work Performance Scale. However, Qtait and Sayej (2016) found that there was no significant correlation between gender, monthly income, marital status and work performance among nurses in Hebron hospitals. For employment status, the findings of the current study were supported by Mrayyan and Al-Faouri (2008) who found that participants who work on a full time will perform their jobs better than part time because the continuity and the commitment of full time features. Also, multiple linear regression analysis showed a significant relationship between employment status and William Anderson Work Performance Scale in the current study. Finally, in the current study, the participants who had obstacles of using internet and social media application had higher work performance. Moreover, lack of time was the main obstacles in the results of the current study. However, multiple linear regression analysis showed a significant relationship between the participants who had obstacles that prevented them from using internet and social media applications and William Anderson Work Performance Scale.

## **6.7 limitations and recommendations.**

### **6.7.1 Limitations**

There are some limitations in this study as the following:

- The study utilized cross sectional design, this type of design may have limitations in the generalization of the results to a wider population since it measures both the prevalence of the outcomes and the determinants in a population at a point in time or over a short period of time. This makes it difficult to assess accurately the magnitude of effect exerted by each factor or to

differentiate precisely whether the interaction between these factors would be advised or antagonistic.

- The data collection for this study was done by using a self- administered questionnaires. So, the reliability of the results may be affected, since the participants may hesitate to express their points of view or they may describe their own thoughts, feelings or behaviors in the spurious way to please the researcher (Mcclafferty et al, 2000).
- The sample included physicians and nurses who work in Hebron Governmental Hospital, Al-Ahli Hospital, Beit-Jala Governmental Hospital and Arab Society which may limit the generalization of the findings to other healthcare professionals or other hospitals.

## **6.7.2 Recommendations**

### **6.7.2.1 Recommendation for policy makers**

- Increase the knowledge and awareness of nurses, physicians and other medical workers about the harmful of internet and social media applications in the workplace.
- To integrate a standard policy and uniform guidelines models of internet and social media application to enhance organizational work performance in the Palestinian hospitals.
- Managers and leaderships of departments in the hospitals must encourage employees to perform their works through internet and social media application which include multidiscipline team, experts consultant and research.
- Policy makers should be decreased the number of working hours for physicians and nurses to eight hours per day.
- Policy makers should prevent the use of Facebook in the workplace because Facebook doesn't provide health knowledge and information and determine what are the best applications to obtain the accurate health information.

- Policy makers should limit the use of internet and social media applications just during the break time not during the work time.

#### **6.7.2.2 Recommendations for healthcare professionals.**

- There is a need to evaluate the impact of the internet and social media applications on work performance in other Palestinian hospitals.
- There is a need emphasize the moderate use of internet and social media applications in the workplace.
- Health care professional should focus on the beneficial issues through internet and social media applications especially new employees to maintain privacy and confidentiality.
- Health care professionals should take the internet and social media applications as a constructive medium for knowledge and skills development.

#### **6.7.3 Further research**

- There is a need for further quantitative and/ or qualitative studies to assess the internet and social media applications and work performance in a wider scale and larger samples to cover all geographic areas in Palestine.
- There is a need to conduct a qualitative study to understand in depth the reasons and obstacles of internet and social media applications among health workers in the workplace.
- There is a need to conduct a qualitative study to understand the impact of organizational instructions and rules on work performance in hospitals.

### **6.8 Conclusion**

This study aimed to assess the beneficial and harmful effects of internet and social media applications use in workplace and its effects on work performance among physicians and nurses in major referral hospitals in Hebron and Bethlehem cities. The study utilized a cross sectional design using Work related Social media Questionnaire and William Anderson Work Performance Scale, in addition to the socio-demographic sheets. The main finding of the study revealed that there was a weak positive statistically significant relationship between the Work related Social Media Questionnaire and William Anderson Work Performance Scale ( $r=0.198$ ;  $p=.000$ ) even though, the mean of WSMQ was high (3.57) and the mean of William Anderson Work Performance Scale was moderate (3.35). Among the subscales, the highest mean (3.68) was for the organizational citizenship behaviors-individuals (OCBI) followed by in-role behaviors (IRB) (3.24) and the lowest mean (3.15) was for the organizational citizenship behaviors-organizations (OCBO).

For the WSMQ, the highest positive effects of using internet and social media applications in workplace were for monthly income group (>5000 NIS) ( $M=3.66$ ), physicians ( $M=3.68$ ), specialist doctors ( $M=3.72$ ), using own phone mobile ( $M=3.58$ ) and using mixed of internet SIM card and hospital network to access internet and social media applications ( $M=3.68$ ).

For William Anderson Work Performance Scale, the highest work performance was seen in being a males ( $M=3.39$ ), married group ( $M=3.39$ ), monthly income group (>5000 NIS) ( $M=3.42$ ), full-time workers ( $M=3.38$ ), and the participants who had obstacles prevented them from using internet and social media applications ( $M=3.40$ ).

Multiple linear regression analysis in the current study revealed that only specialization had a statistically significant relationship with WSMQ and gender employment status and had obstacle prevented from using internet and social medias applications had statistically significant relationship with work performance. Moreover, linear regression revealed that there was a significant linear relationship between social media and work performance ( $P\text{-value}=0.000$ ).

Therefore, the Palestinian health care professionals should be encouraged to use internet and social media applications to improve health outcomes, develop a professional network, increase awareness of new discoveries, and provide health information to the community other than communication. Also, the administrative staff and policy makers in the Palestinian hospitals should regulate the use of internet and social media applications in hospitals by developing a clear policy for their use in the hospitals

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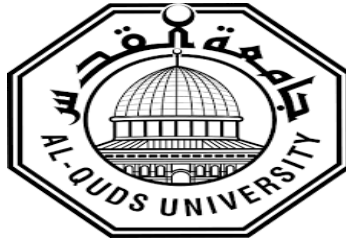
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جامعة القدس

كلية الصحة العامة

برنامج السياسات والإدارة الصحية

" تقييم الآثار الايجابية والسلبية لاستخدام تطبيقات الإنترنت ووسائل التواصل الاجتماعي في مكان العمل وتأثيرها على الأداء الوظيفي للأطباء والمرضى في المستشفيات الرئيسية في مدينتي الخليل وبيت لحم "

تحية طيبة وبعد...

تقوم الباحثة نداء حمامة من برنامج ماجستير السياسات والإدارة الصحية بإجراء دراسة بعنوان " تقييم الآثار الايجابية والسلبية لاستخدام تطبيقات الإنترنت ووسائل التواصل الاجتماعي مثل فيسبوك، تويتر، واتس أب، فايبر، انستغرام.....وتأثيرها على الأداء الوظيفي للأطباء والمرضى في المستشفيات الرئيسية في مدينتي

الخليل وبيت لحم"، وذلك من اجل استكمال متطلبات الحصول على رسالة الماجستير في السياسات والإدارة الصحية.

لذا نرجو من حضرتكم الإجابة على أسئلة الاستبانة. علما بأن هذه الدراسة من أجل البحث العلمي والأكاديمي فقط. وسيتم المحافظة على سرية الإجابة، لذلك لا داعي لكتابة الاسم أو ما يشير إليكم، شاكرة لكم حسن تعاونكم في إنجاح هذه الدراسة.

أطيب التحيات...

الطالبة : نداء حمامة

إشراف : د. منى حميد

2019

القسم الأول : المعلومات الشخصية والمهنية:

يتناول هذا القسم بيانات شخصية الرجاء وضع دائرة في مكان الإجابة الملائمة :

(1) الجنس:

(أ) ذكر (ب) أنثى

(2) العمر:

(أ) من ٠٢ - ٣٠ سنة (ب) أكثر من ٣٠ - ٤٠ سنة  
(ج) أكثر من ٤٠ - ٥٠ سنة (د) أكثر من ٥٠ سنة

(3) الديانة:

(أ) الإسلام

(ب) المسيحية (ج) غير ذلك (أذكره).....

(4) مكان السكن: (أ) مدينة

(ب) قرية (ج) مخيم

(5) الحالة الاجتماعية:

(أ) أعزب (ب) متزوج او متزوج سابقا

(6) المستوى التعليمي :

(أ) دبلوم (ب) بكالوريوس (ج) دراسات عليا

(7) الدخل الشهري بالشيكل :

(أ) 5000 فأقل (ب) أكثر من 5000

(8) التخصص: (أ) طب (ب) تمريض

(9) المسمى الوظيفي :

(أ) طبيب أخصائي. (ب) طبيب مقيم.

(ج) ممرض - رئيس قسم. (د) ممرض.

(10) ما هي المستشفى التي تعمل بها (مكان العمل) :

(أ) مستشفى الخليل الحكومي.

(ب) مستشفى الأهلي.

(ج) مستشفى بيت جالا الحكومي.

(د) مستشفى الجمعية العربية للتأهيل

(11) كم عدد سنوات الخبرة لديك:

(أ) ٣ سنوات فأقل (ب) من ٣ سنوات- ١٠ سنوات (ج) أكثر من ١٠ سنوات.

(12) ما هو القسم الذي تعمل به:

(أ) الباطني (ب) الجراحة (ج) الولادة والأطفال

(13) نظام المناوبة الذي تعمل به: (أ) صباحي فقط (ب) متنوع (صباحي ومسائي وليلي)

(14) ما هي عدد ساعات عملك اليومي:

(أ) أقل من ٨ ساعات (ب) ٨ ساعات - ١٦ ساعة (ج) أكثر من ١٦ ساعة

(15) الحالة الوظيفية في مكان العمل :

(أ) دوام جزئي

(ب) دوام كامل

**القسم الثاني : معلومات استخدام الانترنت ووسائل التواصل الاجتماعي:**

16) كم عدد تطبيقات الإنترنت ووسائل التواصل الاجتماعي التي تستخدمها في مكان العمل.

(أ) تطبيق واحد فقط

(ب) تطبيقان .

(ج) أكثر من تطبيقين.

17) أي من تطبيقات الإنترنت ووسائل التواصل الاجتماعي الآتية الأكثر استخداما لديك:

(أ) فيسبوك (ب) تويتر (ج) يوتيوب (د) واتس أب

(هـ) انستغرام (و) جوجل (ز) غير ذلك (اذكرها).....

18) ما عدد مرات استخدامك للانترنت ووسائل التواصل الاجتماعي خلال اليوم :

(أ) يوميا معظم الوقت (ب) مرة واحدة في اليوم

19) ما عدد الساعات التي تقضيها في استخدام الانترنت ووسائل التواصل الاجتماعي يوميا بشكل عام:

(أ) أقل من ساعة (ب) من ساعة – ٣ ساعات (ج) أكثر من ٣ ساعات

20) ما عدد الساعات التي تقضيها في استخدام الانترنت ووسائل التواصل الاجتماعي يوميا في مكان العمل:

(أ) أقل من ساعة (ب) من ساعة – ٣ ساعات (ج) أكثر من ٣ ساعات

21) ما عدد الساعات التي تقضيها في استخدام الانترنت ووسائل التواصل الاجتماعي يوميا خارج مكان العمل:

(أ) أقل من ساعة (ب) من ساعة – ٣ ساعات (ج) أكثر من ٣ ساعات

22) ما هي الأجهزة الأكثر استخداما لديك للوصول إلى الانترنت ووسائل التواصل الاجتماعي:

(أ) الهاتف المحمول (ب) غير ذلك اذكرها.....

23) تستطيع الوصول إلى الانترنت ووسائل التواصل الاجتماعي في مكان العمل من خلال:

- (أ) شريحة الانترنت الخاصة بك  
(ب) شبكة المستشفى للانترنت.  
(ج) شريحة الانترنت الخاصة وشبكة المستشفى معا  
(د) غير ذلك (اذكره).....

24) اذكر أسباب استخدامك للانترنت ووسائل التواصل الاجتماعي (يمكنك اختيار أكثر من إجابة)

- (أ) التواصل مع الزملاء و المهنيين.  
(ب) التواصل مع المرضى.  
(ج) تطوير المهارات.  
(د) التأكيد على سلامة المرضى في الرعاية الصحية.  
(هـ) البحوث وتحديث المعلومات الطبية  
(و) البحث عن عمل.  
(ز) قراءة آخر الأخبار.  
(ح) الترفيه والتسلية.  
(ط) الدردشة.  
(ي) جميع ما ذكر  
(ك) غير ذلك (اذكرها).....

25) على وسائل التواصل الاجتماعي الخاصة بك; هل تضيف مرضاك كأصدقاء أو متابعين:

- (أ) نعم  
(ب) لا

26) هل لديك أسباب تمنعك من استخدام الانترنت ووسائل التواصل الاجتماعي في مكان العمل:

- (أ) نعم  
(ب) لا

إذا كانت الإجابة نعم; ما هي الأسباب- يمكنك اختيار أكثر من إجابة:

- (أ) الخوف من اختراق الخصوصية.  
(ب) عدم الاهتمام في استخدام الانترنت ووسائل التواصل الاجتماعي.  
(ج) عدم الثقة في الانترنت ووسائل التواصل الاجتماعي.  
(د) عدم توفر الوقت لاستخدام الانترنت ووسائل التواصل الاجتماعي.  
(هـ) عدم توفر الخبرة في استخدام الانترنت ووسائل التواصل الاجتماعي.  
(و) استخدام الانترنت ووسائل التواصل الاجتماعي هي مضيعة للوقت.  
(ز) الانترنت ووسائل التواصل الاجتماعي غير مفيدة.  
(ح) يوجد حجب للانترنت ومواقع التواصل الاجتماعي داخل المستشفى.  
(ط) سياسات المؤسسة تمنع استخدام الانترنت ووسائل التواصل الاجتماعي.

(ي) لا يوجد شبكة انترنت داخل المستشفى للموظفين.

27) هل أنت مدرك لسلبيات استخدامك للانترنت ووسائل التواصل الاجتماعي في مكان العمل- كانتهاك خصوصية المريض والتبعات المهنية والقانونية الأخرى:

(أ) نعم (ب) لا

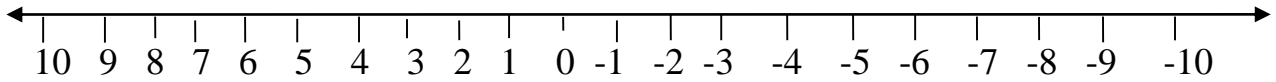
28) هل يوجد سياسة أو قوانين تنظم استخدام الانترنت ووسائل التواصل الاجتماعي في مكان عملك:

(أ) نعم (ب) لا

29) هل تعمل مؤسستك على توعية الموظفين فيما يتعلق بسياسة وقوانين استخدام الانترنت ووسائل التواصل الاجتماعي في مكان العمل:

(أ) نعم (ب) لا

30) برأيك; ما مدى تأثير الانترنت ووسائل التواصل الاجتماعي على أدائك الوظيفي حسب المقياس التالي حيث أن صفر لا يوجد أي تأثير ورقم (١٠) يعني تأثير ايجابي كبير جدا, ورقم (١٠-) تأثير سلبي كبير جدا:



القسم الثالث: يحتوي هذا القسم على 17 سؤالا حول فعالية استخدام الانترنت ووسائل التواصل الاجتماعي في العمل, تتراوح الإجابة بين "لا أوافق بشدة و أوافق بشدة", يرجى تحديد الإجابة المناسبة لك.

الرقم	الأسئلة	لا أوافق بشدة	لا أوافق	محايد	موافق	موافق بشدة
1	لقد استخدمت مواقع التواصل الاجتماعي لأتعلم كيف أنجز عملي بشكل أفضل.	1	2	3	4	5
2	أتواصل مع المرضى أو العملاء الحاليين عبر مواقع التواصل الاجتماعي.	1	2	3	4	5

3	أتواصل مع المرضى والعملاء المحتملين الجدد باستخدام مواقع التواصل الاجتماعي.	1	2	3	4	5
4	أطلب المساعدة من الناس عبر مواقع التواصل الاجتماعي عندما أواجه صعوبة في حل مشكلة ما أثناء العمل.	1	2	3	4	5
5	أستخدم مواقع التواصل الاجتماعي للتواصل بزملاء العمل عندما لا أستطيع الوصول إليهم بوسائل أخرى.	1	2	3	4	5
6	أستخدم المواقع الرسمية للتواصل الاجتماعي لمؤسستي من أجل التشبيك مع الآخرين.	1	2	3	4	5
7	إذا وجدت شيئاً على مواقع التواصل الاجتماعي من شأنه أن يضر بسمعة زملائي في العمل أو بسمعة مؤسستنا؛ فإنني أخبر الأشخاص بذلك.	1	2	3	4	5

الرقم	الأسئلة	لا أوافق بشدة	لا أوافق	محايد	موافق	موافق بشدة
8	لقد استفدت من الميزات التقنية لمواقع التواصل الاجتماعي مثل: مشاركة الملفات وجدول العمل لإنجاز مهام العمل.	1	2	3	4	5
9	شعر بعض الأشخاص في مكان العمل بالإهانة من أشياء نشرتها على مواقع التواصل الاجتماعي.	1	2	3	4	5
10	لقد استخدمت مواقع التواصل الاجتماعي في أوقات كان يجب علي أن أعمل فيها.	1	2	3	4	5
11	لقد ناقشت مشاعر سلبية تجاه العملاء أو المرضى أو زملاء العمل على مواقع التواصل الاجتماعي.	1	2	3	4	5
12	أكون متصلاً مع مواقع التواصل الاجتماعي أثناء قيامي بأعمال أخرى.	1	2	3	4	5
13	لقد قمت بعمل رديء الجودة باستخدام حساب التواصل الاجتماعي في مؤسستي.	1	2	3	4	5

5	4	3	2	1	لقد نشر المرضى أو العملاء معلومات عني على مواقع التواصل الاجتماعي أضرت بسمعتي في العمل.	14
5	4	3	2	1	لقد دعوت مرضى و زملاء إلى علاقة شخصية وكان يجب أن لا أفعل ذلك.	15
5	4	3	2	1	لقد قمت بسرقة معلومات أو محتويات أخرى من مواقع التواصل الاجتماعي ونسبتها لنفسي.	16
5	4	3	2	1	لقد تسببت في وضع غير مريح مع زملاء العمل أو المشرفين أو العملاء من خلال رفضي التواصل معهم عبر مواقع التواصل الاجتماعي.	17

**القسم الرابع: أرجو الإجابة على مقياس الأداء الوظيفي للعاملين ويحتوي على (21) سؤالاً، تتراوح الإجابة بين "لا أوافق بشدة و أوافق بشدة".**

الرقم	الأسئلة	لا أوافق بشدة	لا أوافق	محايد	موافق	أوافق بشدة
1	أنا أساعد زملائي الآخرين الذين غابوا عن العمل.	1	2	3	4	5
2	أنا أساعد زملائي الآخرين الذين لديهم أعباء عمل ثقيلة.	1	2	3	4	5
3	أنا أساعد مشرفي في عمله / عملها (عندما لا يطلب).	1	2	3	4	5
4	أنا أستغرق وقتاً للاستماع إلى مشاكل وقلق زملاء العمل.	1	2	3	4	5
5	أنا أقوم بمجهود عالي من أجل مساعدة الموظفين الجدد.	1	2	3	4	5
6	أنا أهتم بالموظفين الآخرين.	1	2	3	4	5
7	أنا أنقل المعلومات إلى زملائي بالعمل.	1	2	3	4	5
8	حضورى إلى العمل أعلى من المعتاد.	1	2	3	4	5
9	أنا أعطي إشعار مسبق عندما لا أستطيع المجيء إلى العمل.	1	2	3	4	5
10	أنا أحفظ وأحمي ممتلكات المستشفى التي أعمل بها.	1	2	3	4	5
11	أنا ألتزم بالقوانين غير الرسمية التي ينصح بها للحفاظ على النظام.	1	2	3	4	5

5	4	3	2	1	أنا بكفاءة أنني واجباتي.	12
5	4	3	2	1	أنا أقوم بمسؤولياتي حسب وصف وظيفتي.	13
5	4	3	2	1	أنا أنجز المهام المتوقعة مني.	14
5	4	3	2	1	يوجد لدي متطلبات العمل الرسمية لوظيفتي.	15
5	4	3	2	1	أشارك في أنشطة ستؤثر بشكل مباشر على أدائي.	16
5	4	3	2	1	أنا أخذ استراحات غير مستحقة بالعمل.	17
5	4	3	2	1	أقضي الكثير من وقتي على هاتفي/ البريد الإلكتروني للاتصال والتواصل.	18
5	4	3	2	1	أنا أشكو من أشياء غير مهمة في العمل.	19
5	4	3	2	1	أنا أهمل جوانب وظيفتي المطلوب مني إنجازها.	20
5	4	3	2	1	أنا أخفق في أداء مهام ضرورية في عملي.	21

شكرا جزيلا لتعاونكم...



Ref: .....  
Date: .....

الرقم: ١٩٤/١٩٧٥/١٣٤  
التاريخ: ٢٠١٩/١١/١٠

الأخ مدير عام الإدارة العامة للمستشفيات المحترم،،،

تحية واحترام،،،

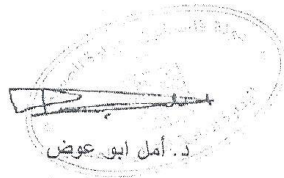
الموضوع: تسهيل مهمة

يرجى تسهيل مهمة الطالبة: نداء حمامة - تخصص ماجستير السياسات والإدارة الصحية -  
جامعة القدس، في عمل بحث بعنوان: "تأثير استخدام وسائل التواصل الاجتماعي في مكان العمل  
بين الأطباء والمرضى في مستشفيات الخليل وبيت لحم"، لذا يرجى تسهيل مهمتها لتوزيع استبانة  
لتعيينها من قبل الأطباء والمرضى (بعد أخذ موافقتهم)، وذلك في:

- مستشفى عاليه/ الخليل الحكومي

- مستشفى بيت جالا الحكومي

مع العلم ان مشرفة الدراسة هي د. منى حميد، كما أنه سيتم الالتزام بمعايير البحث العلمي والحفاظ  
على سرية المعلومات.

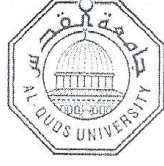


د. أمل أبو عوض  
مدير عام التعليم الصحي

مع الاحترام،،،

نسخة: عميدة كلية الصحة العامة المحترمة / جامعة القدس

Al-Quds University  
Jerusalem  
School of Public Health



جامعة القدس  
القدس  
كلية الصحة العامة

التاريخ: 2019/11/27

حضرة الدكتور يوسف التكروري المحترم  
مدير مستشفى الاهلي/ الخليل

الموضوع: تسهيل مهمة الطالبة نداء حمامة

تحية طبية وبعد،،

تقوم الطالبة نداء فايز اسماعيل حمامة/ برنامج ماجستير السياسات والإدارة الصحية/ كلية الصحة العامة/ جامعة القدس  
بإجراء بحث الرسالة بعنوان:

"تأثير استخدام وسائل التواصل الاجتماعي في مكان العمل بين الاطباء والممرضين في مستشفيات الخليل وبيت لحم".

تهدف الدراسة الى فحص تأثير استخدام الانترنت ووسائل التواصل الاجتماعي مثل فيسبوك وتويتر واتس اب فاير على الأطباء  
والممرضين في مكان العمل. وستقوم الطالب بتوزيع استبانة الدراسة على الاطباء والممرضين العاملين في مستشفى الخليل  
الحكومي/ الخليل ومستشفى بيت جالا/ بيت لحم، نرجو من حضرتكم السماح للطالبة بتوزيع الاستبانة على عينة الدراسة  
المطلوبة. علماً بان الدراسة ستكون لأغراض البحث العلمي فقط.

وتفضلوا بقبول فائق الاحترام،،

د. اسمى الإمام  
عميدة كلية الصحة العامة

نسخة: الملف

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البريد الإلكتروني: sphealth@admin.alquds.edu



التاريخ: 2019/11/27

حضرة الدكتور ادمون شحادة المحترم  
مدير مستشفى الجمعية العربية/ بيت لحم

الموضوع: تسهيل مهمة الطالبة نداء حمامة

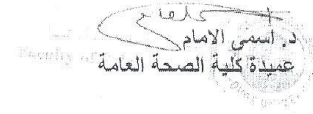
تحية طيبة وبعد،،

تقوم الطالبة نداء فايز إسماعيل حمامة/ برنامج ماجستير السياسات والإدارة الصحية/ كلية الصحة العامة/ جامعة القدس  
بإجراء بحث الرسالة بعنوان:

"تأثير استخدام وسائل التواصل الاجتماعي في مكان العمل بين الاطباء والمرضى في مستشفيات الخليل وبيت لحم".

تهدف الدراسة الى فحص تأثير استخدام الانترنت ووسائل التواصل الاجتماعي مثل فيسبوك وتويتر واتس اب فايزر على الأطباء والمرضى في مكان العمل، وستقوم الطالب بتوزيع استبانته الدراسة على الاطباء والمرضى العاملين في مستشفى الخليل الحكومي/ الخليل ومستشفى بيت جالا/ بيت لحم، نرجو من حضرتكم السماح للطالبة بتوزيع الاستبانة على عينة الدراسة المطلوبة. علماً بان الدراسة ستكون لأغراض البحث العلمي فقط.

وتفضلوا بقبول فائق الاحترام،،



نسخة: الملف