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**PERSONALITY, TOP MANAGEMENT SUPPORT,
CONTINUANCE INTENTION TO USE ELECTRONIC
HEALTH RECORD SYSTEM AMONG NURSES IN
JORDAN**

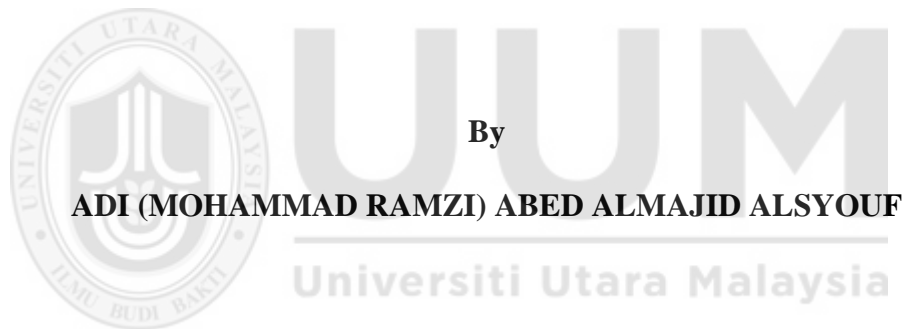
ADI (MOHAMMAD RAMZI) ABED AL MAJID ALSYOUF



UUM
Universiti Utara Malaysia

**DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
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**PERSONALITY, TOP MANAGEMENT SUPPORT, CONTINUANCE INTENTION TO
USE ELECTRONIC HEALTH RECORD SYSTEM AMONG NURSES IN JORDAN**



**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Fulfillment of the Requirement for the Degree of Doctor of Philosophy**



Kolej Perniagaan
(College of Business)
Universiti Utara Malaysia

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ABSTRACT

Electronic health record system (EHRs) is preferred as standard documentation to track patient information and office visits. It is acclaimed as technological breakthrough capable to improve the healthcare industry's service delivery and system quality. Accordingly, Jordanian government initiated EHRs implementation in all public hospitals. However, only eleven out of 35 public hospitals have fully implemented EHRs and their usage remains low. Moreover, empirical research associated to the particular concern of EHRs is insufficient and the effort to appraise it is low considering its extensive ongoing implementation. Besides, comprehending and explaining nurses' continuous intention (CI) to use EHRs are crucial to gauge EHRs usage in Jordan. Considering the problem, this study highlighted on continuous intention (CI) of nurses to use EHRs model by incorporating the following theories; the Unified Theory of Acceptance and Use of Technology (UTAUT), Expectation-Confirmation Theory (ECT) and Five Factor Model (FFM). The model is insinuated to investigate whether UTAUT factors namely effort expectancy, performance expectancy, social influence, facilitating conditions, FFM domains (conscientiousness, extraversion, neuroticism, openness to experience, and agreeableness) and Top Management Support (TMS) predict nurses' CI to use EHRs. Total responses are 497 nurses. Partial Least Squares technique used for analysis. Results revealed significant positive relationship between UTAUT factors and CI. However, there is no significant evidence of relationship between TMS and CI. The study also disclosed significant mediating influence of performance expectancy on two separate hypotheses concerning two predictors namely agreeableness and openness to experience on CI. Additionally, the study revealed significant moderation impact of conscientiousness on the relationship between both performance expectancy and social influence with CI. The study has illustrated important attention to substantive differences between acceptance and continuance to use behaviors.

Keywords: unified theory of acceptance and use of technology, five factor model, top management support, electronic health records, nurses.

ABSTRAK

Sistem rekod kesihatan elektronik (EHRs) dipilih sebagai dokumentasi standard untuk mengesan maklumat dan lawatan pesakit. Sistem ini diiktiraf sebagai kejayaan teknologi yang mampu meningkatkan penyampaian perkhidmatan dan kualiti sistem industri penjagaan kesihatan. Oleh itu, kerajaan Jordan melaksanakan EHRs di semua hospital awam. Namun, hanya sebelas daripada 35 buah hospital awam melaksanakan EHRs sepenuhnya dan penggunaan EHRs masih rendah. Malahan, hasil penyelidikan empirikal berkenaan EHRs didapati belum mencukupi dan usaha untuk menilai penggunaan sistem EHRs masih rendah walaupun implementasi berlangsung secara ekstensif. Selain itu, usaha untuk memahami dan menerangkan CI jururawat untuk menggunakan EHRs adalah penting dalam mengukur penggunaan EHRs di Jordan. Berdasarkan masalah tersebut, kajian mengetengahkan model niat berterusan (CI) jururawat untuk menggunakan EHRs dengan menggabungkan Teori Bersepadu Penerimaan dan Penggunaan Teknologi (UTAUT), Teori Jangkaan-Pengesahan (ECT) dan Model Lima Faktor (FFM). Sebuah model dicadangkan untuk melihat samada faktor UTAUT iaitu jangkaan usaha, jangkaan prestasi, pengaruh social dan keadaan yang memudahkan, lima domain personaliti (*conscientiousness, extraversion, neuroticism, openness to experience, and agreeableness*) dan sokongan pengurusan tertinggi dapat meramal CI jururawat untuk menggunakan EHRs. Sejumlah 497 maklum balas diterima daripada jururawat. Teknik kuasa dua terkecil (PLS-SEM) digunakan untuk menganalisis data. Hasil kajian menunjukkan hubungan positif yang signifikan di antara faktor UTAUT dengan CI. Namun, tiada bukti hubungan yang signifikan di antara sokongan pengurusan tertinggi dengan CI. Kajian juga mendedahkan peranan jangkaan prestasi sebagai pengantara yang signifikan ke atas hubungan diantara dua variabel bebas iaitu *agreeableness* dan *openness to experience* dengan CI. Selain itu, kajian menunjukkan kesan penyederhana *conscientiousness* yang signifikan ke atas dua hubungan iaitu antara jangkaan prestasi dengan CI, dan antara pengaruh sosial dengan CI. Kajian menjelaskan perhatian yang imperatif perlu diberi ke atas perbezaan substantif di antara tingkah laku penerimaan dan tingkah laku meneruskan penggunaan.

Kata kunci: teori bersepadu penerimaan dan penggunaan teknologi, model lima faktor, sokongan pengurusan tertinggi, rekod kesihatan elektronik, jururawat.

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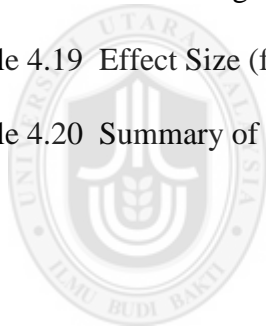
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LIST OF ABBREVIATIONS

A	Agreeableness
AVE	Average Variance Extracted
C	Conscientiousness
CIS	Clinical Information System
CMV	Common Method Variance
C-TAM-TPB	Combination of TAM and TPB Theory
E	Extraversion
ECT	Expectation-Confirmation Theory
EE	Effort expectancy
EMR	Electronic Medical Records
EHR	Electronic Health Record
EHS	Electronic Health Solution
FC	Facilitating Condition
HIS	Health Information System
ICT	Information and Communications Technology
IDT	Innovation Diffusion Theory
IS	Information System
IT	Information Technology
MM	Motivational Model
MPCU	Model of PC Utilization
N	Neuroticism
O	Openness to Experience
PE	Performance Expectancy

PhD	Doctor of Philosophy
PLS	Partial Least Squares
Q2	Construct Cross Validated Redundancy
R2	R-squared values
SCT	Social Cognitive Theory
SEM	Structural Equation Modelling
SI	Social Influence
SPSS	Statistical Package for the Social Sciences
TAM	Technology Acceptance Model
TMS	Top Management Support
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UTAUT	Unified Theory of Acceptance and Use of Technology
ρ_c	Composite Reliability



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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Globally, healthcare systems have witnessed soaring pressure on both their physical and monetary resources because of increases in patient needs and the attendant operational overheads. Consequently, investing in information systems with a view to increasing the efficiency of medical systems and in decreasing costs related to running healthcare facilities has become a paramount issue for both governments and their agencies (Ayanso, Herath, & O'Brien, 2015). Basically, using information systems in healthcare involves compiling patient records from diverse sources into a central digital repository (Ayanso et al., 2015).

In the healthcare literature and the related extant practice, patient health record systems are known as electronic health records (EHR), clinical information systems (CIS), clinical information technology (clinical IT), and Electronic Medical Records (EMR) (Ayanso et al., 2015). These systems are noted for their robustness in managing a wide-range of information related to specific aspects of patient care, such as medical records, appointments, theatre management and ward reporting (Marques, Oliveira, Dias, & Martins, 2011).

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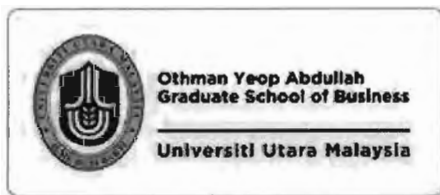
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UUM
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APPENDICES

Appendix A Research Instrument (English Version)



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Dear Nurse,

I am currently PhD student from University of North Malaysia (UUM) conducting a study designed to investigate the continuance intention of Jordanian Nurses to use EHRs in Public Hospitals in Jordan.

EHR Experts define it as an information system which sought as the standard of documentation for tracking patient information and patients visits. EHR system cannot be considered successful if its usage is not sustained by users, under-utilization and/or abandonment of the system. Thus, it is important to recognize factors affecting EHR continuance intention to us. Therefore, current study investigates your intention to continue use EHRs in your hospital.

Your cooperation and efforts are highly appreciated, your answers will be kept confidential. If you have any inquires please contact me at the address shown below

Thank you for your cooperation and your participation in this study.

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PART (1): UTAUT Variable Measure for PE, EE, SI, FC, and CI

The following questions ask you to indicate your opinion about EHRs in your hospital. This questionnaire designed to determine the factors contribute to make you continue use EHRs. For each item please rate your confidence about your first judgment, by ticking a number from (1 to 5), where (1) indicates Strongly disagree, (2) indicates Disagree, (3) indicates Neither agree nor disagree, (4) indicates Agree, and (5) indicates Strongly agree.

Continuance Intention.

		Strongly disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1	I intend to continue using EHRs in my work in the future.	1	2	3	4	5
2	I plan to continue using EHRs to accomplish my work duties.	1	2	3	4	5
3	I will encourage other nurses to continue using EHR.	1	2	3	4	5
4	I will encourage other health care providers (physicians, pharmacist, lab technicians) in my hospital to continue using EHR.	1	2	3	4	5
5	I will continue using EHR.	1	2	3	4	5
6	I would like to learn more about electronic health records.	1	2	3	4	5

Performance expectancy

		Strongly disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1	Using EHRs would be useful in my job.	1	2	3	4	5
2	Using EHRs would make me accomplish my tasks quickly.	1	2	3	4	5
3	Using the EHRs would enhance my productivity.	1	2	3	4	5
4	Using the EHRs would increase my chances of getting higher salary.	1	2	3	4	5
5	Using the EHRs would increase my chances of getting a promotion.	1	2	3	4	5

PART (3): Effort Expectancy

		Strongly disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1	It would be easy for me to become skillful at using EHRs at work.	1	2	3	4	5
2	I would find EHRs is easy to use at work.	1	2	3	4	5
3	Learning to use EHRs at work would be easy for me.	1	2	3	4	5
4	I understand how much effort I would have to expend to use the EHR.	1	2	3	4	5
5	I would be able to understand how to accomplish my tasks using the EHR application.	1	2	3	4	5

PART (4): Social influence

		Strongly disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1	People who influence my behavior think that I should use EHRs.	1	2	3	4	5
2	People who are important to me think that I should use EHRs.	1	2	3	4	5
3	Nurses who are in my department think that I should use EHRs.	1	2	3	4	5
4	The other Nurses in the hospital think that I should use EHRs.	1	2	3	4	5
5	Doctors in the hospital think that I should use EHRs.	1	2	3	4	5
6	The management in the hospital think that I should use EHRs.	1	2	3	4	5
7	The senior management of the hospital has been helpful in the use of EHRs.	1	2	3	4	5
8	In general, the hospital has supported the use of EHRs.	1	2	3	4	5

PART (5): Facilitating condition

		Strongly disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1	I would have received the necessary training to use the EHRs.	1	2	3	4	5
2	I would have received sufficient information regarding the EHRs.	1	2	3	4	5
3	The hospital has sufficient computer equipments to run the system.	1	2	3	4	5
4	I would have the resources necessary to use EHRs.	1	2	3	4	5
5	I would have the knowledge necessary to use EHRs.	1	2	3	4	5
6	The EHRs <i>was not</i> compatible with other system I use.	1	2	3	4	5

PART (2): Top management support

The following questions ask you to indicate your opinion about TMS to use EHRs. (This measure incorporated two wide-ranging types of support namely, application development support and general support.) For each item please rate your confidence about your first judgment, by circling a number from 1 to 5, where 1 indicates Strongly disagree, 2 indicates Disagree, 3 indicates Neither agree nor disagree, 4 indicates Agree, and 5 indicates Strongly agree.

Top management support

		Strongly disagree 1	Disagree 2	Neither agree nor disagree 3	Agree 4	Strongly agree 5
1	I am convinced that management is sure as to what benefits can be achieved with the use of EHRs.	1	2	3	4	5
2	There is always a person in the organization whom we can turn to for help in solving problems with the EHRs system.	1	2	3	4	5
3	A central support (e.g. information centre) is available to help with problems.	1	2	3	4	5
4	Training courses are readily available for Nurses to	1	2	3	4	5

	improve themselves in the use of EHRs.					
5	I am always supported and encouraged by my boss to use the EHRs in the performance of my job.	1	2	3	4	5
6	Management has provided most of the necessary help and resources to get nurses used to the EMR quickly.	1	2	3	4	5
7	Nurses are constantly updated on new software that can help them to use the EHRs more effectively.	1	2	3	4	5
8	Management is really keen to see that we are happy with using EHRs.	1	2	3	4	5

PART (3): Personality Factors (Neo-five-factor inventory-NEO-FFI)

Neo-five-factor inventory (NEO-FFI): Refers to five personality domains, which are (a) conscientiousness, (b) extraversion, (c) neuroticism, (d) openness to experience, and (e) agreeableness. This part consists of 60 items. For each item please rate your confidence about your first judgment, by circling a number from 1 to 5, where 1 indicates Strongly disagree, 2 indicates Disagree, 3 indicates Neither agree nor disagree, 4 indicates Agree, and 5 indicates Strongly agree.

According to the contract between the research and PAR company the researcher is not allowed to address the instrument in the study due to copy right.

PART (4): Demographic Data

This section relates to personal information, and the other about working in your hospital. The following are some of the questions on personal background and work. The following questions are intended solely for the purpose of analysis. Please choose or write your answers when needed.

1. Please indicate your gender:

- 1. Male*
- 2. female*

2. Please write how old are you? ----- year.

3. Please indicate your highest level of education:

- 1. Diploma*
- 2. Bachelor Degree*
- 3. Master 's Degree*
- 4. PhD*

4. How long have you been in nursing profession? ----- years

5. what is the name of the current hospital you work now? ----- hospital.

6. In which department does you work in your hospital? ----- department.

7. How long have you been working in the current hospital? -----Year.

Thank you for participating in this survey.

Appendix B Research Instrument (Arabic Version)



عزيزي الممرض،،،،،

يقوم طالب الدكتوراه عدي السيوف من كلية اداره الاعمال في جامعه شمال ماليزيا (UUM) بعمل دراسة تهدف الى استكشاف نية الممرضين الاردنيين بالاستمرار باستخدام السجلات الصحية الالكترونية في القطاع الصحي العام.

يعرف الخبراء السجلات الطبية الالكترونية على انها نظم معلوماتية ينظر لها كمعيار لتوثيق و تتبع معلومات المرضى و مواعيد زياراتهم.

تهدف الدراسة الحالية تقييم وجهة نظركم لإستخدام السجلات الطبية الإلكترونية في المستشفى الذي تعمل به. ان تعاونكم و جهودكم التي تبذلونها هي محط تقدير و عرفان. علما بان اجاباتكم ستحاط بالسرية التامة. إذا كان لديك أي استفسارات يرجى الإتصال بي على العنوان المبين أدناه.

شكرا لكم على تعاونكم ومشاركتم لي في هذه الدراسة.

د. اوانيس كو اسحاق كلية الادارة جامعة شمال ماليزيا ولاية كدح- ماليزيا awanis@uum.edu.my	عدي السيوف كلية الادارة جامعة شمال ماليزيا ولاية كدح- ماليزيا Adisyouf@gmail.com
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الاستبانة

الجزء الاول :

يهدف هذا الجزء من الاستبانة الى تحديد العوامل تساهم في جعلك تستمر في استخدام السجلات الصحية الالكترونية. الرجاء الاجابة على جميع العبارات بالدقة الممكنة. الرجاء وضع دائرة حول الرقم المناسب بجانب العبارة التي تمثل معتقداتك بالنسبة لسجلات الطبية الالكترونية. حيث (1) يشير الى لا اوافق بشدة , (2) يشير الى لا اوافق, (3) يشير الى اوافق جزئيا, (4) يشير الى اوافق, (5) يشير الى اوافق بشدة.

1. النية في الاستمرارية

يقيس هذا العامل نية الممرضين للاستمرار في استخدام السجلات الطبية الإلكترونية في عملهم.

موافق بشدة 5	موافق 4	غير متأكد 3	غير موافق 2	غير موافق بشدة 1	
5	4	3	2	1	1 أرغب في مواصلة استخدام السجلات الطبية الإلكترونية في المستقبل.
5	4	3	2	1	2 سوف استمر في أستخدم السجلات الطبية الإلكترونية في عملي دائماً.
5	4	3	2	1	3 سوف أشجع زملائي الممرضين على الاستمرار في استخدام السجلات الطبية الإلكترونية.
5	4	3	2	1	4 سوف أشجع مقدمي الرعاية الصحية الآخرين في المستشفى (الأطباء، الصيادلة، فنيي المختبرات) على الاستمرار في استخدام السجلات الطبية الإلكترونية.
5	4	3	2	1	5 سوف استمر في استخدام السجلات الطبية الالكترونية.
5	4	3	2	1	6 أرغب في تعلم المزيد حول السجلات الطبية الإلكترونية.

2. الأداء المتوقع

يقيس هذا العامل درجة اعتقاد الممرضين بان استخدام السجلات الصحية الإلكترونية سوف يحسن ادائهم في تأدية عملهم.

	غير موافق بشدة 1	غير موافق 2	غير متأكد 3	موافق 4	موافق بشدة 5
1	1	2	3	4	5
2	1	2	3	4	5
3	1	2	3	4	5
4	1	2	3	4	5
5	1	2	3	4	5

3. الجهد المتوقع

يقيس هذا العامل درجة السهولة المرتبطة باستخدام الممرضين لتطبيق السجلات الطبية الإلكترونية

	غير موافق بشدة 1	غير موافق 2	غير متأكد 3	موافق 4	موافق بشدة 5
1	1	2	3	4	5
2	1	2	3	4	5
3	1	2	3	4	5
4	1	2	3	4	5

5	4	3	2	1	سوف أكون قادراً على فهم كيفية تنفيذ مهماتي باستخدام تطبيق السجلات الطبية الإلكترونية.
---	---	---	---	---	---

4. التأثير الاجتماعي

يقيس هذا العامل مدى أهمية اعتقاد و آراء الآخرين في التأثير على الممرضين في استخدام السجلات الطبية الإلكترونية.

	غير موافق بشدة 1	غير موافق 2	غير متأكد 3	موافق 4	موافق بشدة 5	
1	1	2	3	4	5	يعتقد الأشخاص المؤثرون على سلوكي أنه يتوجب عليّ الاستمرار في استخدام تطبيق السجلات الطبية الإلكترونية.
2	1	2	3	4	5	يعتقد الأفراد المهمون بالنسبة لي أنه يتوجب عليّ الاستمرار في استخدام تطبيق السجلات الطبية الإلكترونية.
3	1	2	3	4	5	يعتقد الممرضون في القسم الذي أعمل فيه أنه يتوجب عليّ الاستمرار في استخدام تطبيق السجلات الطبية الإلكترونية.
4	1	2	3	4	5	يعتقد الممرضون في الأقسام الأخرى في المستشفى أنه يتوجب عليّ الاستمرار في استخدام تطبيق السجلات الطبية الإلكترونية.
5	1	2	3	4	5	يعتقد الأطباء في المستشفى أنه يتوجب عليّ الاستمرار في استخدام تطبيق السجلات الطبية الإلكترونية.
6	1	2	3	4	5	تعتقد إدارة المستشفى أنه يتوجب عليّ الاستمرار في استخدام تطبيق السجلات الطبية الإلكترونية.
7	1	2	3	4	5	قدمت الإدارة العليا للمستشفى المساعدة اللازمة للاستمرار في استخدام السجلات الطبية الإلكترونية.
8	1	2	3	4	5	المستشفى الذي أعمل به شجع عليّ للاستمرار في استخدام تطبيق السجلات الطبية الإلكترونية بشكل عام.

5. الظروف المساعدة

يقيس هذا العامل إدراك الممرضين للموارد والدعم المتوفر لاستخدام السجلات الطبية الإلكترونية.

موافق بشدة 5	موافق 4	غير متأكد 3	غير موافق 2	غير موافق بشدة 1		
5	4	3	2	1	1	حصلت على التدريب اللازم للاستمرار في استخدام تطبيق السجلات الطبية الإلكترونية.
5	4	3	2	1	2	تلقيت معلومات كافية حول تطبيق السجلات الطبية الإلكترونية.
5	4	3	2	1	3	لدى المستشفى معدات حاسوبية كافية لتشغيل التطبيق.
5	4	3	2	1	4	لدى الموارد اللازمة لاستخدام تطبيق السجلات الطبية الإلكترونية.
5	4	3	2	1	5	لدى المعرفة اللازمة لاستخدام تطبيق السجلات الطبية الإلكترونية.
5	4	3	2	1	6	تطبيق السجلات الطبية الإلكترونية غير متوافق مع نظام آخر استخدمه.

6. دعم الإدارة العليا

يقيس هذا العامل مستوى الدعم المقدم من الإدارة العليا لاستخدام السجلات الطبية الإلكترونية.

موافق بشدة 5	موافق 4	غير متأكد 3	غير موافق 2	غير موافق بشدة 1		
5	4	3	2	1	1	أنا مقتنع بأن الإدارة واثقة من الفوائد الممكن تحقيقها من استخدام تطبيق السجلات الطبية الإلكترونية.
5	4	3	2	1	2	يوجد دائماً في المؤسسة شخص معين نستطيع أن نلجأ إليه للمساعدة في حل المشكلات في نظام السجلات الطبية الإلكترونية.
5	4	3	2	1	3	يوجد دعم مركزي (مركز معلومات مثلاً) للمساعدة في حل المشكلات.
5	4	3	2	1	4	الدورات التدريبية أصبحت متوفرة للممرضين كي يطوروا أنفسهم في استخدام السجلات الطبية الإلكترونية.

5	4	3	2	1	يدعمني مديري ويشجعني دائماً على استخدام السجلات الطبية الإلكترونية في أداء عملي.
5	4	3	2	1	قدمت الإدارة كل ما يلزم من مساعدة لتعويد الممرضين على استخدام السجلات الطبية الإلكترونية بسرعة.
5	4	3	2	1	الممرضون على اطلاع دائم بالتحديثات على البرمجيات الجديدة التي تساعدهم على استخدام السجلات الطبية الإلكترونية بفعالية أكبر.
5	4	3	2	1	الإدارة حريصة على رؤية الممرضين راضين عند استخدام السجلات الطبية الإلكترونية.

77. قائمة العوامل الخمسة الكبرى في الشخصية

تشير إلى خمسة مجالات شخصية تتمثل في (أ) الاجتهاد، (ب) الانبساط، (ج) العصابية، (د) الانفتاح على التجارب، (هـ) الوداع.

وفقاً للعقد المبرم بين الباحث و شركة المالكة لحقوق الملكية لا يسمح للباحث ادراج الاستبانة لضمان حقوق الملكية.

الجزء الثاني : البيانات الديموغرافية

هذا القسم يتعلق بالمعلومات الشخصية، والآخر حول العمل في المستشفى الخاص بك. وفيما يلي بعض الأسئلة على الخلفية الشخصية. الأسئلة التالية مخصصة فقط لغرض التحليل. يرجى اختيار أو كتابة إجاباتك عند الحاجة

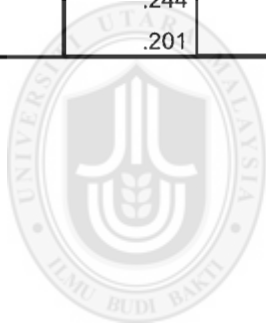
يتعلق هذا القسم بمعلومات شخصية و اخرى حول العمل في مؤسستك وفيما يلي بعض الأسئلة على خلفيتك الشخصية والعمل. وتهدف الأسئلة التالية فقط لغرض التحليل. يرجى وضع علامة (X) أو الكتابة إجاباتك عند الحاجة.	
1 الجنس : <input type="checkbox"/> ذكر <input type="checkbox"/> أنثى	
2 العمر : _____ سنة	
3 مستوى التعليم: <input type="checkbox"/> دبلوم <input type="checkbox"/> بكالوريوس <input type="checkbox"/> ماجستير <input type="checkbox"/> دكتوراه	
4 كم عدد سنوات الخبرة لديك في مهنة التمريض؟ _____ سنة	
5 ما اسم المستشفى الذي تعمل به؟ _____	
6 في اي قسم تعمل في داخل المستشفى ؟ _____	
7 كم عدد السنوات التي خدمتها في المستشفى الذي تعمل به حالياً؟ _____	

شكراً جزيلاً

Appendix C CMV (Harman Single Test)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.301	48.190	48.190	5.301	48.190	48.190
2	1.841	16.740	64.930			
3	.851	7.735	72.665			
4	.769	6.995	79.660			
5	.472	4.290	83.950			
6	.424	3.851	87.801			
7	.323	2.933	90.734			
8	.295	2.679	93.413			
9	.280	2.544	95.957			
10	.244	2.219	98.176			
11	.201	1.824	100.000			



UUM
Universiti Utara Malaysia

Appendix D University Letter for Data Collection



OTHMAN YEOP ABDULLAH
GRADUATE SCHOOL OF BUSINESS
Universiti Utara Malaysia
06010 UUM SINTOK
KEDAH DARUL AMAN
MALAYSIA



Tel: 604-928 7101/7113/7130
Faks (fax): 604-928 7160
Laman Web (Web): www.oyagsb.uum.edu.my

KEDAH AMAN MAKMUR • BERSAMA MEMACU TRANSFORMASI

UUM/OYAGSB/K-14
14 June 2015

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER FOR DATA COLLECTION AND RESEARCH WORK

This is to certify that **Adi (M. Ramzi) Abed Al Majid Al-Syouf (Matric No: 94595)** is a bonafied student of Doctor of Philosophy (PhD), Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia. He is conducting a research entitled "**Intention to use Electronic Medical Records among Nurses in Public Sector**" under the supervision of Assoc. Prof. Dr. Norazuwa Bt Mat.

In this regard, I hope that you could kindly provide assistance and cooperation for him to successfully complete the research. All the information gathered will be strictly used for academic purposes only.

Your cooperation and assistance is very much appreciated.

Thank you.

"SCHOLARSHIP, VIRTUE, SERVICE"

Yours faithfully


ROZITA BINI RAMLI
Assistant Registrar
for Dean
Othman Yeop Abdullah Graduate School of Business

c.c - Supervisor
- Student's File (94595)



Appendix E Permissions To Conduct the Study

د. ف. المرفق
بلاييز لاروسا و رطاب
بشيس شه ملك لاروسا

الرقم: ٦٢١٧ / خطه / ٢٠١٩
التاريخ: ١٥ / ٧ / ٢٠١٩
الموافق:

مدير مستشفى البشير
تحية طيبة وبعد ،،،

أرفق طياً صورة عن كتاب مدير مستشفى البشير / رئيس لجنة أخلاقيات البحث العلمي رقم م ب ١ / لجنة أخلاقيات / ١٠٩٠٨ / تاريخ ٢٠١٥ / ٧ / ٢٢ بخصوص السماح لطالب الدكتوراة عدي محمد رمزي السيوفا اجراء بحث بعنوان :-

(Intention to Use Electronic Medical Records among Nurses in Puplic Sector)

عن طريق توزيع الاستبيان المرفق صورة عنه على المعرضين في المستشفيات الحكومية التابعة لوزارة الصحة .

أرجو التكرم بالإيعاز لمن يلزم تسييل مهمة اجراء البحث اعلاه .

وتفضلوا بقبول فائق الاحترام ،،،

مدير تطوير الموارد البشرية
الدكتورة فذوى الشوابكة

مستشفى البشير
وزارة الصحة
التاريخ: ١٥ / ٧ / ٢٠١٩

www.moh.gov.jo



الرقم ٦٢٦٧ / تطوير / خطه

التاريخ

الموافق ٢٠١٥ / ٧ / ٢٦

مدير مستشفى الملكة تانيا الجبل الملك.....

تحية طبية وبعد ،،،

أرفق طياً صورة عن كتاب مدير مستشفى البشير / رئيس لجنة أخلاقيات البحث العلمي رقم م ب أ / لجنة أخلاقيات / ١٠٩٠٨ / تاريخ ٢٠١٥/٧/٢٢ بخصوص السماح لطالب الدكتوراة عدي محمد رمزي السيوف اجراء بحث بعنوان :-

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أرجو التكرم بالإيعاز لمن يلزم تسهيل مهمة اجراء البحث اعلاه .

وتفضلوا بقبول فائق الاحترام ،،،

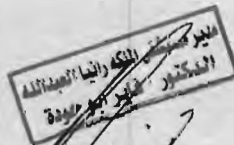
٦٠ / ١ / ١

٢٠١٥ / ٧ / ٢٩

مدير تطوير الموارد البشرية

الدكتورة فدوى الشوابكة

مساعدة مدير
تطوير الموارد البشرية
الدكتور أمين العايطه



Handwritten signature and date: ٢٠١٥ / ٧ / ٢٩



الرقم: ٢٢١٧ / تطوير / خط / ٢٠٢٢
التاريخ:
الموافق: ١٤٤٤ / ١٠ / ١٥

مدير مستشفى: مستشفى الحسينية / عمان (٨٤٣)

تحية طيبة وبعد ،،،

أرفق طياً صورة عن كتاب مدير مستشفى البشير / رئيس لجنة أخلاقيات البحث العلمي رقم م ب أ / لجنة أخلاقيات / ١٠٩٠٨ / تاريخ ٢٠١٥/٧/٢٢ بخصوص السماح لطالب الدكتوراة عدي محمد رمزي السيوف اجراء بحث بعنوان :-

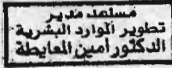
(Intention to Use Electronic Medical Records among Nurses in Puplic Sector)

عن طريق توزيع الاستبيان المرفق صورة عنه على الممرضين في المستشفيات الحكومية التابعة لوزارة الصحة .

أرجو التكرم بالإيعاز لمن يلزم تسهيل مهمة اجراء البحث اعلاه .

وتفضلوا بقبول فائق الاحترام ،،،

مدير تطوير الموارد البشرية
الدكتورة فنوى الشوابكة



- الدكتور
- الدكتور
- رشيده لطفان
- رشيده دة المحمود

سؤالي .. و شكرا لك ايها المدير
الحمت ، و اجراء للبرامج
مديرة



الرقم ٦٤١٨ / ٢٠١٥ / ٢٢
التاريخ ١٠ / ١٠ / ٢٠١٥
الموافق

مدير مستشفى الزورقاء العام.....

تحية طبية وبعد ،،،

أرفق طياً صورة عن كتاب مدير مستشفى البشير / رئيس لجنة أخلاقيات البحث العلمي رقم م ب أ / لجنة أخلاقيات / ١٠٩٠٨ / تاريخ ٢٠١٥/٧/٢٢ بخصوص السماح لطالبة الدكتورة عدي محمد رمزي السبيوة، اجراء بحث بعنوان :

(Intention to Use Electronic Medical Records among Nurses in Puplic Sector)

عن طريق توزيع الاستبيان المرفق صورة عنه على الممرضين في المستشفيات الحكومية التابعة لوزارة الصحة .

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وتفضلوا بقبول فائق الاحترام ،،،

مدير تطوير الموارد البشرية

الدكتورة فدى الشوابكة

مسلمة مدير
تطوير الموارد البشرية
الدكتور أمين المعايطة

المستشفى الزورقاء الحكومي
(٩ آب ٢٠١٥)
المدير فدى الشوابكة

وصىء الإجازة
لسيدتنا الدكتورة فدى الشوابكة

الملكية الأردنية الماعية
هاتف: ٢٢٠٠٠٠٠٠ - ١١٢٦٦٠٠٠ فاكس: ١١٢٦٠٠٠٠٠٠٠٠٠
www.moh.gov.jo الأردن المرتع الإلكتروني



الرقم ٦٤٦٧ / تطوير / خطية

التاريخ
الموافق ١٤٦٧ / ٧ / ٢٠١٥

مدير مستشفى. مصاندة الجبوري... الختم...

تحية طيبة وبعد ،،،

أرفق طياً صورة عن كتاب مدير مستشفى البشير / رئيس لجنة أخلاقيات البحث العلمي رقم م ب أ / لجنة أخلاقيات / ١٠٩٠٨ / تاريخ ٢٠١٥/٧/٢٢ بخصوص السماح لطالب الدكتوراة عدي محمد رمزي السيوفا اجراء بحث بعنوان :-

(Intention to Use Electronic Medical Records among Nurses in Puplic Sector)

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أرجو التكرم بالإيعاز لمن يلزم تسهيل مهمة اجراء البحث اعلاه .

وتفضلوا بقبول فائق الاحترام ،،،

/ مدير تطوير الموارد البشرية

الدكتورة فدوى الشوابكة

مساعدة مدير
تطوير الموارد البشرية
الدكتور أمين المعايطة

الملكة الاردنية الهاشمية
وزارة الصحة
مستشفى معان الحكومي
شؤون الموظفين

مستشفى معان الحكومي
رئيسة قسم التمريض



الرقم: ٦٤٦٨ / ٢٤٦ / ٢٠١٥
 التاريخ: ١٠ / ١٢ / ٢٠١٥
 الموافق: ١٠ / ١٢ / ٢٠١٥

مدير مستشفى الرضا الحكومي المتخصص

تحية طيبة وبعد ،،،

أرفق طياً صورة عن كتاب مدير مستشفى البشير / رئيس لجنة أخلاقيات البحث العلمي رقم م ب ا / لجنة أخلاقيات / ١٠٩٠٨ تاريخ ٢٠١٥/٧/٢٢ بخصوص السماح لطالب الدكتوراة عدي محمد رمزي السيوف اجراء بحث بعنوان :-

(Intention to Use Electronic Medical Records among Nurses in Puplic Sector)

عن طريق توزيع الاستبيان المرفق صورة عنه على الممرضين في المستشفيات الحكومية التابعة لوزارة الصحة .

أرجو التكرم بالإيعاز لمن يلزم تسهيل مهمة اجراء البحث اعلاه .

وتفضلوا بقبول فائق الاحترام ،،،

مدير تطوير الموارد البشرية
 الدكتورة فدى الشوابكة

مساعدا مدير
 تطوير الموارد البشرية
 الدكتور أمين المعايطة

وزارة الصحة
 مستشفى البشير
 عمان
 بتاريخ ١٠ / ١٢ / ٢٠١٥

مدير الموارد البشرية
 فدى الشوابكة

المسكنة الاردنية الثانية
 هاتف: ٢٢٠٠٣٣٠٠٣٣ - ٩١٢٦٦٥١٢٢٦ - ٩١٢٦٦٥١٢٢٦
 ص ب ٨٦ عن ١١١١٨ الأردن الموقع الإلكتروني www.moh.gov.jo



الرقم ٦٤٦٦ / تطوير / خط / ٢٠٢٢
التاريخ
الموافق ١٤٤٣ / ١٠ / ١٥

مدير مستشفى...
٢٠٢٢ - ٢٠٢٣

تحية طبية وبعد ،،،

أرفق طياً صورة عن كتاب مدير مستشفى البشير / رئيس لجنة أخلاقيات البحث العلمي رقم م ب ا / لجنة أخلاقيات / ١٠٩٠٨ تاريخ ٢٠١٥/٧/٢٢ بخصوص السماح لطالب الدكتوراة عدي محمد رمزي السيوف اجراء بحث بعنوان :-

(Intention to Use Electronic Medical Records among Nurses in Puplic Sector)

عن طريق توزيع الاستبيان المرفق صورة عنه على الممرضين في المستشفيات الحكومية التابعة لوزارة الصحة .

أرجو التكرم بالإيعاز لمن يلزم تسهيل مهمة اجراء البحث اعلاه .

وتفضلوا بقبول فائق الاحترام ،،،

مدير تطوير الموارد البشرية
الدكتورة فندوى الشوابكة

مساعدة مدير
تطوير الموارد البشرية
الدكتور أمين العايطة

- الدكتور
- الدكتور
- رشيده لطف
- رشيده لطف

سوف تلتزم...
البحث...
مجهز



الرقم / تطوير / خط / ٢٠١٥
التاريخ
الموافق ١٤ / ٧ / ٢٠١٥

مدير مستشفى

تحية طيبة وبعد ،،،

أرفق طياً صورة عن كتاب مدير مستشفى البشير / رئيس لجنة أخلاقيات البحث العلمي رقم م ب ا / لجنة أخلاقيات / ١٠٩٠٨ / تاريخ ٢٠١٥/٧/٢٢ بخصوص السماح لطالب الدكتوراة عدي محمد رمزي السيوف اجراء بحث بعنوان :-

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مدير تطوير الموارد البشرية

الدكتورة فدوى الشوابكة

مستعدة مدير
تطوير الموارد البشرية
الدكتور امين المعايطة

هــــ



CODE : MOH REC 150084

الرقم

لتاريخ

الموافق

قرار لجنة اخلاقيات البحث العلمي

اجتمعت لجنة اخلاقيات البحث العلمي بتاريخ 6 / 7 / 2015 لمناقشة ودراسة
البحث العلمي المقدم من قبل الطالب/عدي محمد رمزي السيوف.
بعنوان :-

Intention to Use Electronic Medical Records among Nurses in Public Sector

وقد قررت اللجنة بالاجماع الموافقة على اجراء البحث المشار اليه اعلاه .

وعليه تم التوقيع من قبل اعضاء اللجنة حسب الاصول .

عضو اللجنة
رئيس قطيعة الاشعة العلاجية
الدكتور/ رسمي مبيضين

عضو اللجنة
رئيس قسم الجراحة
الدكتور/ فايز العجود

عضو اللجنة
المساعد لشؤون التمريض
هاني القضاة

عضو اللجنة
رئيس قسم العناية التمريضية والتوليد
الدكتور/ عبد المتع السليمات

عضو اللجنة
رئيس قسم الباطني
الدكتور/ وسيم حموده

عضو اللجنة
رئيس قسم الاطفال
الدكتور/ هادي القضاة

رئيس اللجنة /
مدير مستشفى البشير
الدكتور/ احمد قطيحات

الدكتور/ هادي القضاة
المساعد الفني



م ب ا / لجنة اخلاقيات / ١,٩٠٨

الرقم

٢٠١٥ / ٧ / ٢٢

التاريخ

الموافق

ومدير تطوير الموارد البشرية

تحية طيبة وبعد ،،،

اشارة لكتابكم رقم تطوير /خطط /42671 تاريخ 2015/6/25 بخصوص البحث المقدم
من قبل الطالب/عدي محمد رمزي السيوف.

أرفق بظيه قرار لجنة اخلاقيات البحث العلمي والمتضمن الموافقة على إجراء البحث
العائد للمذكور أعلاه .

للتكرم بالاطلاع و اجراءاتكم لطفًا

واقبلوا الاحترام

مدير مستشفى البشير

الدكتور احمد قطيطات

الدكتور عبد العزيز شمعة
المساعد الطبي

ص ب

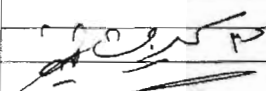
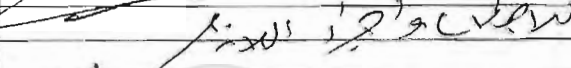
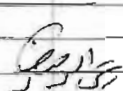
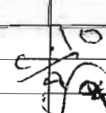
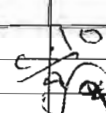

مديرية تطوير الموارد البشرية

٢٢ - ٢٠١٥

الرقم ١٩٠٨ / ٧ / ٢٢

١١/٣١

رقم الملف ورقم العاملة	رقم الكتاب وتاريخه		
<p>من... مدير تعليم المصادر البشرية بخصوص السماح لأطالمة الدكتوراه عددي محمد بن محمد السويدي ابراء به عن طريق كذا في الاستقبال</p>			
المشروعات والتوقيع	إلى	التاريخ	الرقم
<p>للإطلاع والمعلم وشهد مهنة الطلاب اعلاء</p>	<p>الساحه الاداريه رشيد التميمي</p>		
<p><i>[Handwritten signature]</i></p>	<p><i>[Handwritten signature]</i></p>	<p>10/10</p>	<p><i>[Handwritten number]</i></p>
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رقم الملف ورقم العاملة	رقم الكتاب وتاريخه		
بخصوص السماح لأطباء الكوراه	من مدير تطعيم الجمارد المبرورة		
عبد محمد رمضان السيد	اعداد		
المشروعات والتوقيع	الى	التاريخ	الرقم
للإفطار والعلوم وتشجيع مهنة الطلاب العلماء	المساحة الادارية	رئيس التسيير	
 			
			



الرقم / تطوير / خط / ٢٠٢٢
التاريخ
الموافق ٢٠٢٢ / ١٠ / ١٥

مدير مستشفى (المرفق الجدي) الم.م.م.م

تحية طيبة وبعد ،،،

أرفق طياً صورة عن كتاب مدير مستشفى البشير / رئيس لجنة أخلاقيات البحث العلمي رقم م ب أ / لجنة أخلاقيات / ١٠٩٠٨ / تاريخ ٢٠١٥/٧/٢٢ بخصوص السماح لطالب الدكتوراة عدي محمد رمزي السيوف اجراء بحث بعنوان :-

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وتفضلوا بقبول فائق الاحترام ،،،

/ مدير تطوير الموارد البشرية

الدكتورة فدوى الشوابكة

مسئلة مدير
تطوير الورد البشرية
الدكتورامين المعايلة

المملكة الاردنية الهاشمية
وزارة الصحة
مستشفى البشير التخصصي
الدقة
التاريخ
١٥ / ١٠ / ٢٠٢٢