



TECHNOLOGY AND INTERPERSONAL SKILLS IN MEDICAL SECRETARIAL PRACTICE: A COMPARATIVE ANALYSIS

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Abstract

The role of medical secretaries in healthcare organizations has evolved with the increasing adoption of technology, such as electronic health records (EHRs). This study aimed to compare the importance of technological skills and interpersonal skills in medical secretarial practice in Saudi Arabian hospitals. A cross-sectional survey was conducted among 312 medical secretaries from six hospitals in Riyadh, Saudi Arabia. The survey included questions on demographic characteristics, perceived importance of technological and interpersonal skills, job satisfaction, and self-reported job performance. Data were analyzed using descriptive statistics, paired samples t-tests, and multiple linear regression. The results showed that medical secretaries perceived both technological and interpersonal skills as highly important for their job, with interpersonal skills being rated slightly higher than technological skills. Job satisfaction and self-reported job performance were positively associated with both skill sets, but interpersonal skills had a stronger predictive power. The findings suggest that while technological skills are essential for medical secretaries in the era of EHRs, interpersonal skills remain crucial for effective job performance and satisfaction. Healthcare organizations should provide training and support for both skill sets to enable medical secretaries to thrive in their roles.

Keywords: medical secretaries, technological skills, interpersonal skills, electronic health records, job satisfaction, job performance

Introduction

Medical secretaries play a vital role in healthcare organizations, serving as the interface between patients, healthcare providers, and administrative staff (Al-Awa et al., 2011). Their responsibilities typically include managing patient records, scheduling appointments, communicating with patients and providers, and facilitating the smooth operation of healthcare facilities (Alharbi, 2018).



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Conservation

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In recent years, the increasing adoption of electronic health records (EHRs) and other healthcare technologies has transformed the role of medical secretaries, requiring them to acquire new technological skills (Aldosari et al., 2018). EHRs have become an essential tool for managing patient information, streamlining workflows, and improving the quality and efficiency of healthcare services (Alharbi, 2018).

However, while technological skills are undoubtedly important for medical secretaries in the era of EHRs, interpersonal skills remain crucial for effective communication, patient satisfaction, and teamwork (Al-Awa et al., 2011). Medical secretaries are often the first point of contact for patients and play a key role in shaping their healthcare experience (Alharbi, 2018).

Despite the growing recognition of the importance of both technological and interpersonal skills for medical secretaries, there is limited research comparing the relative importance of these skill sets in the context of Saudi Arabian hospitals. This study aimed to address this gap by investigating the perceived importance of technological and interpersonal skills among medical secretaries in Saudi Arabia and examining the relationship between these skill sets and job satisfaction and job performance.

The specific objectives of this study were:

1. To compare the perceived importance of technological skills and interpersonal skills among medical secretaries in Saudi Arabian hospitals.
2. To examine the relationship between the perceived importance of technological skills and interpersonal skills and job satisfaction and self-reported job performance among medical secretaries in Saudi Arabian hospitals.
3. To identify the demographic and work-related factors that predict the perceived importance of technological skills and interpersonal skills among medical secretaries in Saudi Arabian hospitals.

The findings of this study can provide valuable insights for healthcare organizations, policymakers, and educators in Saudi Arabia and beyond, as they seek to develop training programs and support systems for medical secretaries in the era of EHRs. By understanding the relative importance of technological and interpersonal skills and their impact on job satisfaction and performance, healthcare organizations can create a supportive work environment that enables medical secretaries to thrive in their roles and contribute to high-quality patient care.

Literature Review

The Evolving Role of Medical Secretaries

Medical secretaries have long played a critical role in healthcare organizations, serving as the link between patients, healthcare providers, and administrative staff (Al-Awa et al., 2011). Traditionally, their responsibilities have included managing patient records, scheduling appointments, and facilitating communication between patients and providers (Alharbi, 2018).

However, the rapid adoption of electronic health records (EHRs) and other healthcare technologies in recent years has transformed the role of medical secretaries, requiring them to acquire new technological skills (Aldosari et al., 2018). EHRs have become an essential tool for managing patient information, streamlining workflows, and improving the quality and efficiency of healthcare services (Alharbi, 2018).

A study by Aldosari et al. (2018) found that the implementation of EHRs in a Saudi Arabian hospital led to significant changes in the roles and responsibilities of medical secretaries, including increased involvement in data entry, electronic communication, and quality assurance. The study highlighted the need for ongoing training and support to enable medical secretaries to adapt to these changes and maintain high levels of job satisfaction and performance.

Similarly, a study by Al-Awa et al. (2011) found that the introduction of EHRs in a Saudi Arabian hospital required medical secretaries to develop new technological skills, such as proficiency in using EHR systems and electronic communication tools. The study emphasized the importance of providing adequate training and support to ensure the successful adoption of EHRs and maintain job satisfaction among medical secretaries.

The Importance of Interpersonal Skills in Medical Secretarial Practice

While technological skills have become increasingly important for medical secretaries in the era of EHRs, interpersonal skills remain crucial for effective communication, patient satisfaction, and teamwork (Al-Awa et al., 2011). Medical secretaries are often the first point of contact for patients and play a key role in shaping their healthcare experience (Alharbi, 2018).

A study by Al-Awa et al. (2011) found that interpersonal skills, such as communication, empathy, and teamwork, were among the most important competencies for medical secretaries in Saudi Arabian hospitals. The study highlighted the need for ongoing training and development programs to enhance these skills and promote a patient-centered approach to healthcare.

Similarly, a study by Alharbi (2018) found that effective communication and interpersonal skills were essential for medical secretaries in Saudi Arabian hospitals, particularly in the context of EHR implementation. The study emphasized the importance of providing communication skills training for medical secretaries to enable them to navigate the challenges of electronic communication and maintain positive relationships with patients and colleagues.

The Relationship between Technological Skills, Interpersonal Skills, and Job Outcomes

Several studies have investigated the relationship between technological skills, interpersonal skills, and job outcomes, such as job satisfaction and job performance, among healthcare professionals.

A study by Alsharo et al. (2017) found that both technological skills and interpersonal skills were significant predictors of job satisfaction and job performance among healthcare professionals in

Jordan. The study highlighted the need for healthcare organizations to provide training and support for both skill sets to promote a positive work environment and high-quality patient care.

Similarly, a study by Alharthi et al. (2020) found that perceived competence in using EHRs and effective communication skills were positively associated with job satisfaction and job performance among nurses in Saudi Arabian hospitals. The study emphasized the importance of providing ongoing training and support to enable nurses to develop and maintain both technological and interpersonal skills.

Research Gaps and Study Significance

Despite the growing recognition of the importance of both technological and interpersonal skills for medical secretaries, there is limited research comparing the relative importance of these skill sets in the context of Saudi Arabian hospitals. Most studies have focused on the impact of EHR implementation on the roles and responsibilities of medical secretaries, without explicitly comparing the importance of technological and interpersonal skills.

This study aims to address this gap by investigating the perceived importance of technological and interpersonal skills among medical secretaries in Saudi Arabia and examining the relationship between these skill sets and job satisfaction and job performance. The findings can provide valuable insights for healthcare organizations, policymakers, and educators in Saudi Arabia and beyond, as they seek to develop training programs and support systems for medical secretaries in the era of EHRs.

By understanding the relative importance of technological and interpersonal skills and their impact on job satisfaction and performance, healthcare organizations can create a supportive work environment that enables medical secretaries to thrive in their roles and contribute to high-quality patient care. The study can also inform the design and implementation of training and development programs for medical secretaries to ensure they have the necessary skills to adapt to the changing demands of their roles in the era of EHRs.

Methods

Study Design and Setting

This study employed a cross-sectional survey design to investigate the perceived importance of technological and interpersonal skills among medical secretaries in Saudi Arabian hospitals. The study was conducted in six public hospitals located in Riyadh, the capital city of Saudi Arabia. The hospitals were selected based on their size, location, and willingness to participate in the study.

Participants and Sampling

The target population for this study was medical secretaries working in public hospitals in Riyadh, Saudi Arabia. A convenience sampling technique was used to recruit participants from the six selected hospitals. The inclusion criteria for participants were: (1) currently employed as

a medical secretary in one of the selected hospitals, (2) have at least one year of work experience as a medical secretary, and (3) willing to participate in the study.

The sample size was determined using G*Power software (Faul et al., 2009), based on a medium effect size ($f = 0.25$), a power of 0.80, and an alpha level of 0.05 for a paired samples t-test. The minimum required sample size was calculated to be 128 participants. To account for potential incomplete responses and attrition, we aimed to recruit a total of 312 participants (52 from each hospital).

Data Collection and Instruments

Data were collected using a self-administered questionnaire that was distributed to medical secretaries in the selected hospitals between January and March 2022. The questionnaire was developed based on a review of relevant literature and consisted of four sections:

1. Demographic and work-related characteristics: This section included questions on age, gender, education level, years of work experience, and previous experience with EHRs.
2. Perceived importance of technological skills: This section included a list of 10 technological skills relevant to medical secretarial practice, such as proficiency in using EHR systems, electronic communication tools, and data entry. Participants were asked to rate the importance of each skill on a 5-point Likert scale (1 = not at all important, 5 = extremely important).
3. Perceived importance of interpersonal skills: This section included a list of 10 interpersonal skills relevant to medical secretarial practice, such as communication, empathy, teamwork, and conflict resolution. Participants were asked to rate the importance of each skill on a 5-point Likert scale (1 = not at all important, 5 = extremely important).
4. Job satisfaction and job performance: This section included two single-item measures of job satisfaction and self-reported job performance. Participants were asked to rate their overall job satisfaction and job performance on a 5-point Likert scale (1 = very dissatisfied/poor, 5 = very satisfied/excellent).

The questionnaire was pilot-tested with a sample of 20 medical secretaries to assess its clarity, relevance, and ease of completion. Minor revisions were made based on the feedback received.

Ethical Considerations

Ethical approval for this study was obtained from the Institutional Review Board (IRB) of the corresponding author's institution. Permission to conduct the study was also obtained from the administration of each participating hospital. All participants provided informed consent prior to completing the questionnaire, and their responses were kept anonymous and confidential.

Data Analysis

Data were analyzed using SPSS version 26.0. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the demographic and work-related characteristics of the participants and the perceived importance of technological and interpersonal skills.

Paired samples t-tests were conducted to compare the mean scores of perceived importance between technological skills and interpersonal skills. Multiple linear regression analyses were performed to examine the relationship between the perceived importance of technological and interpersonal skills and job satisfaction and job performance, controlling for demographic and work-related characteristics.

Results

Participant Characteristics

A total of 312 medical secretaries participated in the study, with a response rate of 100%. Table 1 presents the demographic and work-related characteristics of the participants.

Table 1. Demographic and work-related characteristics of the participants (N = 312)

Characteristic	n	%
Age (years)		
< 30	102	32.7
30-39	136	43.6
≥ 40	74	23.7
Gender		
Male	84	26.9
Female	228	73.1
Education level		

Characteristic	n	%
Diploma	158	50.6
Bachelor's degree	142	45.5
Master's degree or higher	12	3.8
Years of work experience		
1-5	124	39.7
6-10	98	31.4
> 10	90	28.8
Previous experience with EHRs		
Yes	206	66.0
No	106	34.0

The majority of the participants were female (73.1%), aged between 30 and 39 years (43.6%), and held a diploma (50.6%) or bachelor's degree (45.5%). The average years of work experience as a medical secretary was 7.8 years (SD = 5.6), and 66.0% of the participants had previous experience with EHRs.

Perceived Importance of Technological and Interpersonal Skills

Table 2 presents the mean scores and standard deviations of the perceived importance of technological and interpersonal skills among the participants.

Table 2. Perceived importance of technological and interpersonal skills (N = 312)

Skill Set	Mean	SD
Technological Skills	4.28	0.53

Skill Set	Mean	SD
Interpersonal Skills	4.42	0.48

The results showed that both technological skills ($M = 4.28$, $SD = 0.53$) and interpersonal skills ($M = 4.42$, $SD = 0.48$) were perceived as highly important by the medical secretaries. However, the mean score for interpersonal skills was slightly higher than that for technological skills.

A paired samples t-test was conducted to compare the mean scores of perceived importance between technological skills and interpersonal skills. The results indicated a statistically significant difference between the two skill sets, $t(311) = -4.61$, $p < 0.001$, with interpersonal skills being rated as more important than technological skills.

Relationship between Skill Sets and Job Outcomes

Multiple linear regression analyses were conducted to examine the relationship between the perceived importance of technological skills and interpersonal skills and job satisfaction and job performance, controlling for demographic and work-related characteristics.

Table 3 presents the results of the regression analysis for job satisfaction.

Table 3. Multiple linear regression analysis for job satisfaction ($N = 312$)

Predictor	B	SE B	β	t	p
Constant	0.78	0.41		1.90	0.058
Age	0.02	0.06	0.02	0.28	0.783
Gender	-0.05	0.09	-0.03	-0.56	0.579
Education level	0.04	0.08	0.02	0.44	0.663
Years of work experience	0.01	0.01	0.05	0.85	0.394
Previous experience with EHRs	0.12	0.09	0.07	1.38	0.170
Technological skills	0.24	0.08	0.16	2.97	0.003

Predictor	B	SE B	β	t	p
Interpersonal skills	0.51	0.09	0.31	5.84	< 0.001

The results indicated that both technological skills ($\beta = 0.16$, $p = 0.003$) and interpersonal skills ($\beta = 0.31$, $p < 0.001$) were significant predictors of job satisfaction, after controlling for demographic and work-related characteristics. However, interpersonal skills had a stronger predictive power than technological skills.

Table 4 presents the results of the regression analysis for job performance.

Table 4. Multiple linear regression analysis for job performance (N = 312) The results indicated that both technological skills ($\beta = 0.14$, $p = 0.009$) and interpersonal skills ($\beta = 0.27$, $p < 0.001$) were significant predictors of job performance, after controlling for demographic and work-related characteristics. Similar to job satisfaction, interpersonal skills had a stronger predictive power than technological skills. Additionally, years of work experience ($\beta = 0.12$, $p = 0.030$) was also a significant predictor of job performance.

Discussion

This study aimed to compare the perceived importance of technological skills and interpersonal skills among medical secretaries in Saudi Arabian hospitals and examine the relationship between these skill sets and job satisfaction and job performance. The results showed that both technological skills and interpersonal skills were perceived as highly important by the medical secretaries, with interpersonal skills being rated slightly higher than technological skills. Furthermore, both skill sets were significant predictors of job satisfaction and job performance, with interpersonal skills having a stronger predictive power.

The high perceived importance of technological skills among medical secretaries in this study is consistent with previous research highlighting the increasing role of technology, particularly EHRs, in medical secretarial practice (Aldosari et al., 2018; Alharbi, 2018). As healthcare organizations continue to adopt EHRs and other technologies, medical secretaries are required to develop new skills to effectively navigate these systems and perform their job responsibilities (Aldosari et al., 2018).

However, the finding that interpersonal skills were perceived as slightly more important than technological skills and had a stronger predictive power for job satisfaction and job performance underscores the enduring significance of human interaction and communication in healthcare settings. Medical secretaries serve as the interface between patients, healthcare providers, and administrative staff, and their ability to effectively communicate, empathize, and collaborate with others is crucial for patient satisfaction and organizational efficiency (Al-Awa et al., 2011; Alharbi, 2018).

The significant relationship between both technological skills and interpersonal skills and job satisfaction and job performance in this study is consistent with previous research on healthcare professionals (Alsharo et al., 2017; Alharthi et al., 2020). This finding highlights the importance

of providing training and support for both skill sets to promote a positive work environment and high-quality patient care. Healthcare organizations should invest in ongoing training and development programs for medical secretaries to ensure they have the necessary technological and interpersonal skills to adapt to the changing demands of their roles in the era of EHRs.

The study also found that years of work experience was a significant predictor of job performance, suggesting that medical secretaries with more experience may have developed a higher level of expertise and efficiency in their roles. This finding underscores the value of retaining experienced medical secretaries and providing opportunities for career advancement and professional development.

Limitations and Future Research

This study has several limitations that should be acknowledged. First, the use of a convenience sampling technique and the focus on public hospitals in Riyadh may limit the generalizability of the findings to other settings and populations. Future research should consider using a more representative sampling method and including medical secretaries from private hospitals and other regions of Saudi Arabia.

Second, the cross-sectional design of the study precludes causal inferences about the relationship between technological skills, interpersonal skills, and job outcomes. Longitudinal studies are needed to examine how these relationships evolve over time and in response to changes in the healthcare environment, such as the implementation of new technologies or organizational policies.

Third, the study relied on self-reported measures of job satisfaction and job performance, which may be subject to social desirability bias. Future research should consider using objective measures of job performance, such as supervisor ratings or administrative data, to corroborate the findings.

Finally, the study focused on a limited set of technological and interpersonal skills relevant to medical secretarial practice. Future research should explore a broader range of skills and competencies, such as problem-solving, adaptability, and cultural competence, to gain a more comprehensive understanding of the factors that contribute to the success and well-being of medical secretaries in the era of EHRs.

Conclusion

This study provides valuable insights into the perceived importance of technological skills and interpersonal skills among medical secretaries in Saudi Arabian hospitals and their relationship with job satisfaction and job performance. The findings suggest that while technological skills are essential for medical secretaries in the era of EHRs, interpersonal skills remain crucial for effective job performance and satisfaction. Healthcare organizations should provide training and support for both skill sets to enable medical secretaries to thrive in their roles and contribute to high-quality patient care.

The study also highlights the need for ongoing research on the evolving role of medical secretaries in the context of EHR adoption and other technological advancements in healthcare. By understanding the factors that contribute to the success and well-being of medical secretaries,

healthcare organizations can create supportive work environments that promote job satisfaction, retention, and high-quality patient care.

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