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Exploring Secondary School Graduates' Knowledge and Interest in Nursing Profession: A Study in Arar, Kingdom of Saudi Arabia

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Abstract

Background: The research aims to assess the knowledge and perceptions of secondary school graduates about the nursing profession in Arar, KSA. Using a structured questionnaire, the study evaluated sources of information, familiarity with nursing duties, career interest, and attitudes towards nursing. *Objectives:* To evaluate the knowledge, perceptions, and career interest of secondary school graduates concerning the nursing profession. *Materials and Methods:* A total of 120 students were selected from various secondary schools within the Arar Government. To ensure a representative sample across gender and grade levels, a stratified random sampling method was employed. This target group was chosen as they are in the final years of secondary education and actively considering their career options. The study found that familial influence (48%) and the internet (38%) were the primary sources of information about nursing, while educational settings played a minor role. Despite a high interest in nursing careers (81%), there were gaps in students' understanding of nursing responsibilities and participation in medical decision-making. The study also examined the factors influencing nursing licensure exam preparation, highlighting a significant correlation between knowledge and examination readiness. *Conclusions:* In regions like Arar, where limited exposure to the nursing profession exists, these factors play a significant role in shaping students' career choices. There are several factors that influence the knowledge and interest in nursing among secondary school graduates, including cultural perceptions, educational exposure, societal influences, and family support. Addressing misconceptions, providing better education and career guidance, and showcasing the diverse opportunities within nursing can encourage more students to pursue this essential profession. Future research in this area is critical to developing targeted strategies that promote nursing as a desirable and respected career choice, particularly in smaller cities in Saudi Arabia. The findings underscore the need for targeted educational initiatives to enhance nursing awareness and address career barriers, particularly financial constraints.

Keywords: Assessment, Nursing Profession, Secondary Graduates, Knowledge.

Introduction

This chapter of the paper presents the problem and its setting. It includes the Introduction, the Background of the Study, the Statement of the Problem, the Hypothesis, the Study's Significance, and the Study's Scope and Limitations

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Nursing is a cornerstone of the global healthcare system, with an increasing demand for qualified nurses worldwide. This study explores secondary school graduates' perceptions of the nursing profession, aiming to provide insights into knowledge gaps, career interests, and attitudes toward nursing. Understanding these factors is essential for improving workforce planning and addressing healthcare challenges. The study is significant as it provides valuable data for policymakers, educators, and healthcare providers on how to better promote the nursing profession and increase student participation in nursing careers.

The nursing profession plays a crucial role in the healthcare system, ensuring the delivery of quality care and improving patient outcomes. However, despite its importance, nursing has often faced challenges related to its perception and attractiveness as a career choice, particularly in regions where alternative professions are more commonly pursued. In Saudi Arabia, nursing remains an essential component of the healthcare workforce, but there is limited research regarding the level of awareness and interest among secondary school graduates, particularly in smaller cities such as Arar, Kingdom of Saudi Arabia.

Locally, the need for healthcare professionals, particularly nurses, is critical to meet the growing population's needs in the Kingdom of Saudi Arabia (KSA). This study aims to assess the knowledge and interest in the nursing profession among secondary school graduates in Arar, Saudi Arabia, a city located in the Northern Region of the Kingdom. By understanding the level of awareness, the factors influencing career choices, and the overall perception of nursing as a profession, this research seeks to provide valuable insights into how educational institutions, policymakers, and healthcare leaders can enhance the appeal of nursing as a viable career path. Moreover, the study will help identify potential gaps in knowledge and attitudes towards nursing, offering direction for future interventions and programs designed to promote nursing as a desirable profession.

Given the rapid development and transformation of the healthcare system in Saudi Arabia, there is a critical need to attract and retain young talent in the nursing field. Understanding the perceptions of secondary school graduates is essential in shaping strategies that could encourage more students to pursue nursing and address the growing demand for skilled nursing professionals in the country. This research contributes to the broader conversation about how to strengthen the healthcare workforce in Saudi Arabia by fostering interest in nursing careers among the younger population. Understanding the unique cultural and social factors influencing students' perceptions in these areas is essential for developing targeted strategies to attract more graduates to the nursing profession.

In Al-Rass city, Al-humaidan, A., & Mersal, F. (2017) found that although students were aware of the functional aspects of nursing, only 29% considered it as a future career. The primary deterrent was the belief that a science background was necessary, as indicated by 55.1% of participants.

This study reveals a generally positive perception of nursing among secondary school students, with 85% understanding nurses' primary duties and 93% acknowledging the physical demands of the profession, aligning with findings by Younas *et al.* (2022) and Black and Lockhart (2021). However, 33% did not believe nurses are involved in medical decision-making, highlighting a persistent misconception. Clarifying the critical role nurses play in clinical decision-making is essential to improving public understanding and promoting nursing as a respected and intellectually rewarding career (Delaney *et al.*, 2021).

Background of Study

The nursing profession is a vital component of healthcare delivery worldwide. In Saudi Arabia, where healthcare needs are expanding rapidly due to demographic shifts, urbanization, and the government's commitment to improving health services, the demand for qualified nursing professionals is increasingly critical. Despite its importance, there remains a gap in the number of nurses entering the profession, with many secondary school graduates in Saudi Arabia still perceiving nursing as less attractive compared to other career options. So, this study aims to review and explore the existing body of research on knowledge and interest in the nursing profession among secondary school graduates, with a specific focus on the factors influencing their perceptions and decisions regarding nursing as a career, particularly in smaller cities such as Arar.

Research has consistently shown that a lack of awareness and misconceptions about nursing contributes significantly to students' reluctance to enter the field. In a study by Alharthy *et al.* (2019), it was noted that many students in Saudi Arabia were unaware of the diverse roles that nurses play in the healthcare system, such as advanced practice roles in areas like nurse practitioners and nurse anesthetists. This lack of awareness often leads to the perception of nursing as a lower-status or less desirable profession, especially among high school graduates considering career paths in medicine, engineering, or business.

Alshammari *et al.* (2021) conducted a study in Riyadh and found that a significant number of high school students had limited knowledge about the responsibilities of nurses, viewing the profession mainly in terms of bedside care and basic nursing tasks. Their findings highlight the need for better education and career guidance in schools to help students better understand the broad scope of nursing practice.

Several factors influence students' career choices, and these factors can vary widely depending on cultural, social, and educational contexts. For instance, societal perceptions of gender roles have a profound effect on students' interest in nursing. Traditionally, nursing has been seen as a female-dominated profession, which may deter male students from pursuing it. However, a growing awareness of the need for male nurses in Saudi healthcare systems is gradually shifting these perceptions. According to a study by Al-Dosary *et al.* (2017), male nursing students in Saudi Arabia reported that they felt a sense of pride in entering a profession that is highly valued and offers job stability, despite societal norms. Conversely, female students often face societal pressure to choose careers in education or medicine, which are viewed as more prestigious (Alhusban & Othman, 2020).

In smaller cities such as Arar, the local community's influence is stronger, and the decision-making process for students is more tightly connected to regional cultural values. Studies suggest that students from smaller cities may have limited exposure to the nursing profession beyond traditional images of caregiving (Alzaid *et al.*, 2020). However, national campaigns and local educational programs that promote nursing could potentially enhance interest in the profession.

In Arar and other similar regions, these efforts could be particularly beneficial, as they would help bridge the knowledge gap and address the misconceptions surrounding the profession. Introducing programs that highlight the importance of nursing and showcasing successful nursing role models can help create a more positive image of the profession and motivate students to pursue

Theoretical Framework

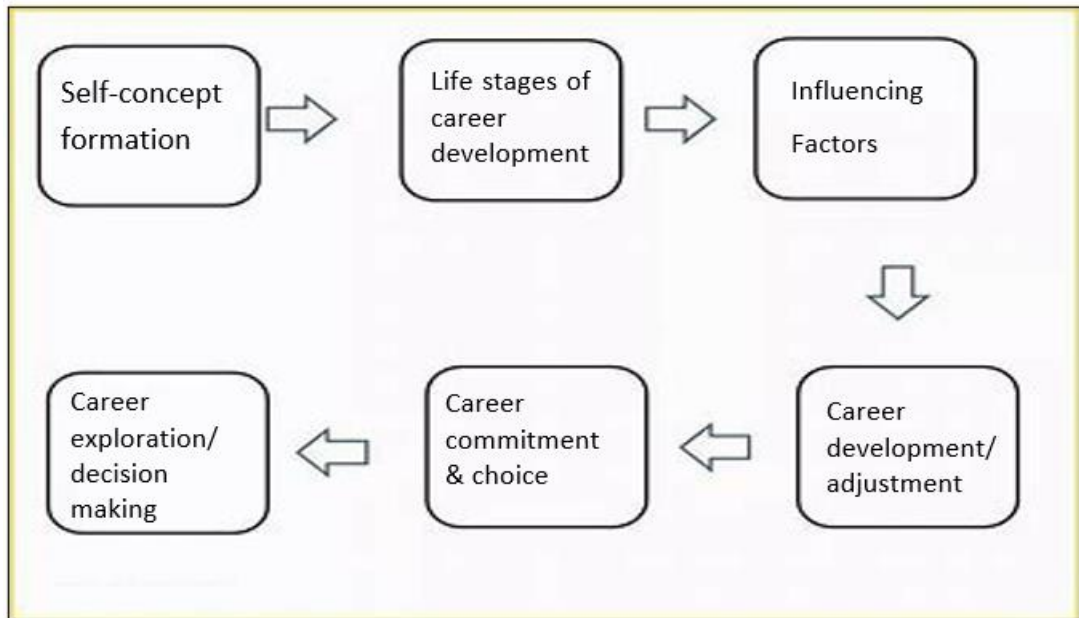


Figure 1: Career Choice Theory (Super, 1957) Helps to Understand How the Students' Self-Concept and Aspirations Align with The Choice of Nursing.

Our findings align with Super's (1957) emphasis on self-concept and societal roles in career choices. Students' reliance on familial and online sources reflects the theory's assertion that external influences shape career exploration during adolescence. Targeted interventions could align nursing's professional identity with students' evolving self-concepts.

Donald Super's Career Development Theory emphasizes that career choices are influenced by self-concept, life roles, and the stages of life. It suggests that individuals seek a career that reflects their personal identity and aspirations. The theory can be used to understand how students' self-concept (who they believe they are and who they want to be) aligns with the nursing profession because it focuses on how individuals progress through various stages of career development over their lifetime, influenced by their self-concept. Super viewed career development as a lifelong process of adapting to and making decisions based on one's changing self-image and life experiences. His theory emphasizes the importance of a person's values, interests, skills, and personality traits in shaping their career choices and development.

This framework could explain how the students' perception of their roles in society and their self-concept shapes their interest in nursing. This outlines how an individual's self-concept, life experiences, and societal influences shape their career choices over time. It emphasizes the progression from career exploration to commitment and professional development. Also, it helps in recognizing that career selection is not a one-time decision, but a continuous process influenced by self-discovery, experiences, and changing life circumstances.

In relation to this theory, the present study aimed to assess the knowledge and interest in the nursing profession among secondary school graduates in Arar, Saudi Arabia.

Statement of the Problem

This study aimed to assess the level of knowledge and interest in the nursing profession among secondary school graduates, with a particular emphasis on respondents from Arar, Saudi Arabia.

Specifically, it sought to answer the following questions.

1. What are the demographic profiles of the respondents in terms of:
 - a. Age
 - b. Gender
 - c. Grade Level
2. What are the perceptions of the respondents about the knowledge and interest in nursing profession.
3. Is there a significant relationship between the respondent's demographic profile and the perception of nursing profession?
4. What recommendations can be developed to fill the knowledge gap and misconceptions about nursing profession?

Research Hypothesis

The following hypotheses were tested at a (.05) level of significance

Ho: There is a significant gap in understanding the nursing profession among secondary school students in Arar, Saudi Arabia.

Contribution to Research

While previous studies have primarily examined university students' attitudes and public perceptions of nursing (Alharbi *et al.*, 2023), limited research focuses on secondary school students in Arar. Since this demographic plays a key role in shaping the future nursing workforce, understanding their knowledge and interest in the profession is essential for targeted recruitment and awareness efforts.

Implications for Workforce Development

Provides valuable insights for educational institutions and healthcare organizations to enhance nursing career awareness and interest. Supports the Ministry of Health in addressing the ongoing nursing shortage by informing targeted awareness campaigns and career guidance initiatives. Helps identify and mitigate barriers preventing students in Arar from pursuing nursing, ultimately contributing to a stronger and more sustainable healthcare workforce in the region.

Scope and Limitation of the Study

This study assessed the knowledge and interest in the nursing profession among secondary school graduates in Arar, Saudi Arabia. It provided comprehensive insights into the knowledge and interest and their readiness to enter for nursing professional practice. The researchers agreed to focus only on assessing knowledge and interest in the nursing profession among secondary school graduates using the adapted and modified questionnaire, which provided a structured

framework for measurement. A structured questionnaire was used to collect data, covering demographics (age, gender, and grade level), knowledge of nursing duties (multiple-choice and true/false questions), attitudes toward nursing (Likert-scale items), and career interest (questions on the likelihood of pursuing nursing and influencing factors). Open-ended questions were included to gather deeper insights into students' perspectives and personal experiences

Moreover, while the study aimed to comprehensively assess the knowledge and interest of secondary graduate students in the nursing profession, it only extended to investigating the potential long-term impacts beyond the immediate scope of the research. This research would not cover any other topics aside from its objective. Despite these limitations, the targeted strategy aimed to produce comprehensive, valuable insights and perceptions into the nursing profession by the secondary graduate students of Arar, Saudi Arabia.

This study has several limitations that should be considered. The sample size of 120 participants restricts the generalizability of the findings to a broader population. Additionally, the focus was primarily on secondary students, excluding other educational stages that may have different experiences and perspectives. Another limitation is the reliance on self-reported data, which could introduce bias due to subjective interpretations or social desirability effects. To address these limitations, future research should adopt a mixed-methods approach, incorporating qualitative interviews to gain deeper insight into students' perceptions and the barriers they face.

Excluding students with prior nursing exposure may limit insights into how familial influence interacts with direct experience. Future studies should include this subgroup to explore nuanced decision-making factors.

Review of Related Literature and Studies

Florence Nightingale not only developed the first school of nursing, but she was also committed to training nurses for the nursing profession. That's why her model of "training" spread quickly throughout the world and successfully improved the quality of nursing services. Currently, nursing education in Saudi Arabia has been given utmost consideration to cope with the recent requirements of nursing education in developed countries.

This utmost consideration has come from the realization that education for professional nursing is the backbone of the health services and plays a vital role in the promotion of health and quality of life. Consequently, nursing input in health care delivery is important to achieve health for all, and in the Saudi society, nursing influences and is influenced by the values and socio-cultural forces. (Alluhaidan M, *et al*, 2020)

The study reveals that the lack of awareness about the nursing profession is compounded by socio-cultural factors that hinder the development of a positive nursing identity among potential recruits. This disconnect between the profession and the community not only affects the number of students entering nursing programs but also impacts the retention of those already in the field. The insights from Elmorshedy *et al.*, (2020) underscore the necessity for targeted interventions aimed at enhancing public perception and awareness of nursing, which are essential for fostering interest among secondary school graduates.

Interest in Nursing Among Secondary School Graduates

Interest in the nursing profession among secondary school students is influenced by both personal and external factors. Personal interests in healthcare and science, exposure to healthcare settings, and family support all play significant roles in students' decisions to pursue nursing. A

study by Alquwez *et al.* (2019) found that students who had family members or relatives working in healthcare settings were more likely to consider nursing as a career. Moreover, school-based initiatives, such as internships, shadowing programs, and career fairs, can provide students with firsthand exposure to the profession, enhancing their interest.

Al-Haqwi (2017) emphasizes that the image of nursing as a profession has improved in recent years, particularly in urban areas where nursing roles have evolved into advanced practice and leadership positions. However, in smaller cities, there remains a substantial gap in students' awareness of these advancements. Alzahrani *et al.* (2018) argue that to encourage more students to enter the nursing profession, it is essential to provide clear career paths, promote nursing's professional development, and create opportunities for students to interact with nurses in diverse settings.

Barriers to Nursing as a Career Choice

Despite the increasing recognition of nursing as an essential healthcare role, students still face various barriers to choosing nursing as a career. These barriers include limited knowledge of the profession, negative perceptions about job demands, lack of encouragement from families, and a lack of role models within the community (Al-Harbi *et al.*, 2018). Additionally, a lack of sufficient resources for practical nursing education and training, especially in rural areas, may deter students from pursuing the profession. A study by Alsharif *et al.* (2017) found that students in rural regions of Saudi Arabia reported a lack of exposure to nursing role models and educational resources, making it more difficult for them to consider nursing as a viable career option.

Strategies for Improving Interest in Nursing

Efforts to improve the image of nursing and increase interest among students have been seen in various regions of Saudi Arabia. The Ministry of Health and educational institutions have launched initiatives to enhance awareness about nursing, such as awareness campaigns, school visits by nurses, and career counseling sessions. Additionally, nursing colleges and universities are working to create specialized programs that attract high-achieving students. For example, Alghamdi *et al.* (2021) found that providing nursing students with more flexible training opportunities and promoting nursing as a respected career were key strategies to increase enrollment.

According to Alharbi, M. F. (2022) Alharbi's findings can offer valuable insights into the systemic challenges within the nursing profession. Understanding these challenges can help in developing strategies to attract and retain future nursing professionals by addressing educational and organizational barriers early on. This mainly refers to some of misconceptions of the secondary graduate students entering nursing profession. The research can build upon existing knowledge and contribute to a more comprehensive understanding of the factors influencing nursing career choices among secondary school graduates in Arar, Saudi Arabia.

Misconceptions About Nursing Roles

The study by Rayani *et al.* (2024), which found that many students associate nursing with basic caregiving while overlooking critical thinking and specialized skills, highlights a significant issue in nursing education and career perceptions. Many students view nursing primarily as providing bedside care, such as assisting with daily activities (feeding, bathing, etc.), rather than recognizing its advanced components. This limited perception may discourage high-achieving

students from considering nursing as a profession. This study helps to address how better education can reshape students' perceptions and improve nursing recruitment.

Moreover, a lack of proper career guidance may lead students to underestimate the complexity of nursing and its career growth opportunities. Schools and career counselors should introduce programs that educate students about modern nursing roles and the skills required. Thereby, encouraging more interest in nursing profession. Changing perceptions requires media representation, role models, and targeted awareness campaigns in schools. If students recognize that nursing involves problem-solving, leadership, and specialized expertise, more may consider it a desirable career. This study can explore whether better exposure to nursing education increases students' interest in the profession.

Methodology

Research Design

This study employs a cross-sectional survey design to assess secondary school students' knowledge, perceptions, and attitudes toward nursing. This approach allows for efficient data collection from a large sample within a short timeframe, providing a comprehensive snapshot of students' perspectives. By capturing data at a single point in time, the study can identify prevailing attitudes and misconceptions, offering valuable insights that may inform future educational and recruitment strategies in the field of nursing.

Study Setting

The study was conducted in secondary schools within the Arar Government in Saudi Arabia, focusing on students aged 16–18. This target group was chosen as they are in the final years of secondary education and actively considering their career options. By engaging students at this critical decision-making stage, the study aims to gain valuable insights into their knowledge, perceptions, and attitudes toward nursing as a potential career path.

Population and Sample

The target population for this study comprised secondary school students in grades 9 to 12, aged 16 to 18. A total of 120 students were selected from various schools within the Arar Government. To ensure a representative sample across gender and grade levels, a stratified random sampling method was employed.

Inclusion Criteria

Students in grades 9 to 12, aged 16 to 18, enrolled in secondary schools in Arar were included in the study. Informed consent was obtained from all students, with parental consent secured where applicable.

Exclusion Criteria:

Students with extensive prior exposure to nursing, such as children of nurses or those with significant healthcare experience, were excluded from the study. Participants outside the age range of 15 to 24 years and those who declined consent were excluded from the study.

Data Collection Process

A structured questionnaire was utilized to evaluate students' knowledge, attitudes, and career interests regarding nursing.

Procedure

Prior to participation, informed consent was obtained from all students. The questionnaires were then administered either in person or online, depending on accessibility and convenience. Throughout the process, researchers were available to provide clarification and assistance as needed to ensure accurate and complete responses.

Instruments and Data Management

Researchers collected data using a structured questionnaire from participants. It included demographic questions covering age, gender, and grade level. A knowledge assessment section featured multiple-choice and true/false questions to evaluate students' understanding of nursing duties. Attitudes toward nursing were measured using Likert-scale items, capturing students' perceptions of the profession. Additionally, career interest was assessed through questions about the likelihood of pursuing nursing and the factors influencing their career choices. To complement the quantitative data, open-ended questions were included to gain deeper insights into students' views and personal experiences.

Data Management and Analysis

All collected data was securely stored in both physical and digital formats, with confidentiality maintained through data anonymization. Before analysis, responses were carefully reviewed for completeness and consistency to ensure data quality.

Data Analysis

Descriptive statistics, such as frequency distributions, percentages, means, and standard deviations, were employed to summarize and interpret the students' knowledge, attitudes, and career interests regarding nursing. Additionally, chi-square tests were used to examine the associations between categorical variables, such as gender and career interest, providing insights into factors that may influence students' perceptions and career choices.

Validity and Reliability and Ethical Considerations

The study ensured the validity and reliability of the questionnaire through various measures. Content validity was achieved by consulting experts in nursing and education during the design phase, while construct validity was established by grounding the questions in existing literature. To ensure reliability, Cronbach's alpha was used to assess the internal consistency of the Likert-scale items, and test-retest reliability was evaluated by administering the survey to a small group of participants after a few weeks to check for response stability. Ethical considerations were prioritized throughout the study. Informed consent was obtained from both students and their parents, ensuring they were fully aware of the study's purpose and their rights. Participants' confidentiality was maintained by anonymizing all collected data, and participation was entirely voluntary, with students free to withdraw from the study at any time without any consequences.

Ethical considerations were carefully upheld throughout the study. Informed consent was obtained from both students and their parents, ensuring they were fully aware of the study's purpose and their rights before participation. To protect participants' privacy, all collected data was anonymized, maintaining confidentiality. Participation in the study was entirely voluntary, and students were informed that they could withdraw at any time without facing any negative consequences.

Results

The study revealed key insights into students' knowledge and perceptions of nursing. Approximately 48% of students reported learning about nursing primarily from their family members, highlighting the role of personal connections in shaping their understanding. The internet emerged as a significant source of information, with 38% of students using it as their main resource for learning about nursing. When it comes to understanding the duties of nurses, 69% of students demonstrated a moderate to good level of knowledge. A strong interest in nursing as a career was expressed by 81% of students, indicating a positive perception of the profession. Additionally, 93% of students recognized the physical demands associated with nursing, acknowledging the challenging aspects of the profession.

Test of Validity of the Questionnaire

Analysis: The validity of the questionnaire was assessed through correlation analysis. High correlation values between the questionnaire items and the intended constructs indicate that the tool effectively measures the concepts it was designed to assess. This suggests that the questionnaire accurately captures the students' knowledge, attitudes, and career interests regarding nursing, confirming its reliability and relevance for the study's objectives.

Analysis and Interpretation of Data

Test of Validity of the Questionnaire:

The questionnaire validity means that the questionnaire questions measure what has been set for its measurement. Validity refers to the degree to which a measure adequately represents the fundamental construction that it measures and examines well the measurement scale is measuring the theoretical constructions that it measures. The researcher has verified the validity of the questionnaire as the following:

Statements	Pearson	Sig.
Do you have any family members working in the healthcare field?	.421**	0.000
Do you consider working in the healthcare field in the future?	.588**	0.000
Do you have any prior knowledge of the nursing profession?	.638**	0.000
The primary duties include providing healthcare to patients by administering medications in the correct doses and at the times specified by the treating physician. Additionally, nurses monitor and record the patient's vital signs.	.507**	0.000
A nurse must possess physical and health capabilities, as this profession is demanding and often requires working long hours and during late shifts.	.303**	0.001
Do you believe that nurses participate in making medical decisions?	.692**	0.000

Table 1: Coefficient of Correlation Between the Degrees of Each Statement of Knowledge and Attitudes Towards The Healthcare and Nursing Professions

The table (1) shows that the correlation coefficients between each statement of the first dimension (Knowledge and Attitudes Towards the Healthcare and Nursing Professions), where the value of the correlation coefficient are between (0.789 – 0.912) which is a positive

correlation. The Sig value of each statement is less than 0.05 and thus considered to be honest and intended to measure.

Statements	Pearson	Sig .
Nursing is one of the most important professions in the world.	.856**	0.000
I believe that nursing is a profession that requires high skills.	.910**	0.000
I think that nursing provides opportunities for professional development.	.870**	0.000
I see nursing as a profession that requires empathy and compassion.	.818**	0.000
I believe that nurses receive adequate recognition in society.	.789**	0.000
I believe that nursing is a profession suitable for both men and women.	.906**	0.000
I believe that the nursing profession offers job stability.	.889**	0.000
I believe that nursing is a profession that requires higher education.	.912**	0.000

Table 2: Coefficient of Correlation Between the Degrees of Each Statement of the Factors Influencing Nursing Licensure Exam Preparation

The table (2) shows that the correlation coefficients between each statement of the first dimension (Factors Influencing Nursing Licensure Exam Preparation), where the value of the correlation coefficient are between (0.789 – 0.912) which is a positive correlation. The Sig value of each statement is less than 0.05 and thus considered to be honest and intended to measure.

Reliability Analysis

In this study, the reliability of each scale has been tested through Cronbach's alpha to identify the internal consistency of the scale.

The dimension	Cronbach's Alpha	No. of Statements
Knowledge and Attitudes Towards the Healthcare and Nursing Professions	0.931	6
Factors Influencing Nursing Licensure Exam Preparation	0.952	8
ALL	0.893	14

Table 3: Cronbach's Alpha Coefficient for the Main Dimensions

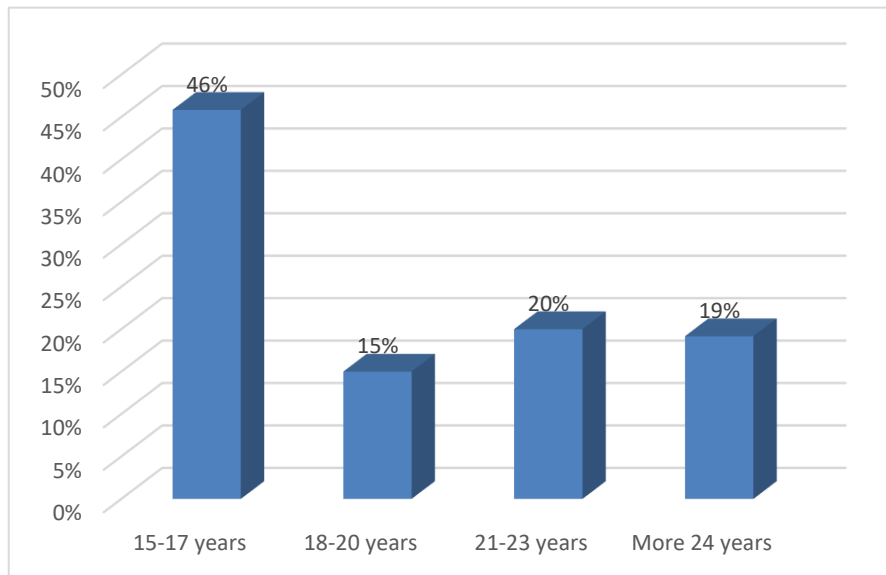
Table (3) summarizes the reliability test results for the questionnaire dimensions. All of the dimensions show an alpha coefficient equals 0.893, this result indicates that the research dimensions will give the same results if re-applied to the same sample and test stability using Cronbach alpha coefficient.

The Sample Description

	Frequency	Percent
15-17 years	55	46%
18-20 years	18	15%
21-23 years	24	20%
More than 24 years	23	19%
Total	120	100%

Table 4: Age Distribution

The table shows us that 46% of the samples are from 15-17 years, 15% of the sample are from 18-20 years, 20% of the sample are from 21-23 years, 19% of the sample are from More 24 years, the following graph shows the same results:

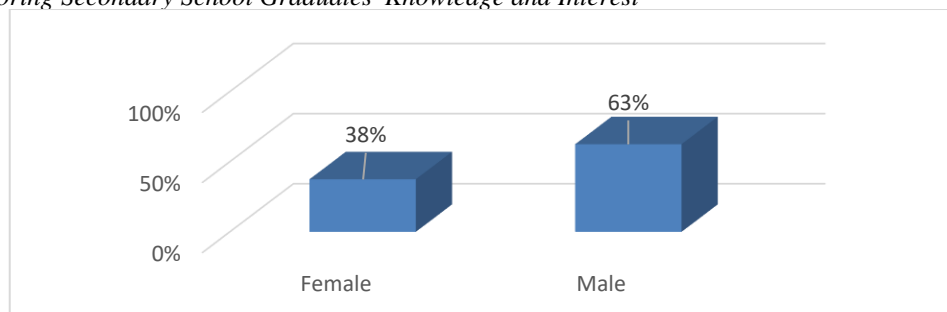


Graph 1: Age Distribution

	Frequency	Percent
Female	45	38%
Male	75	63%
Total	120	100%

Table 5: Gender Distribution

The table shows us that 63% of the sample are male, 38% of the sample are female, and the following graph shows the same results:

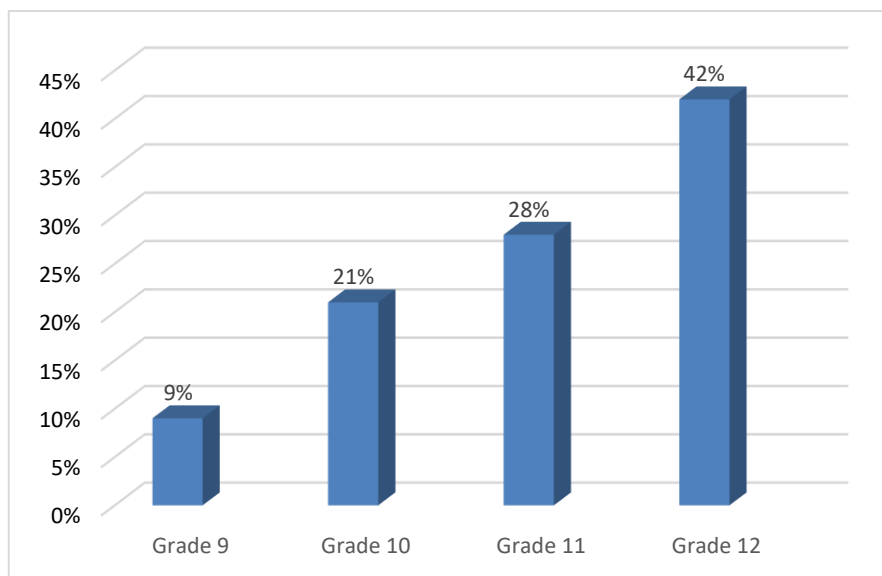


Graph 2: Gender Distribution

Grade Level	Frequency	Percent
Grade 9	11	9%
Grade 10	25	21%
Grade 11	34	28%
Grade 12	50	42%
Total	120	100%

Table 6: Grade Level

The table shows that 9% of the samples are in Grade 9, 25% are in Grade 10, 28% are in Grade 11, and the highest percentage, 42%, are in Grade 12. The following graph presents the same results.



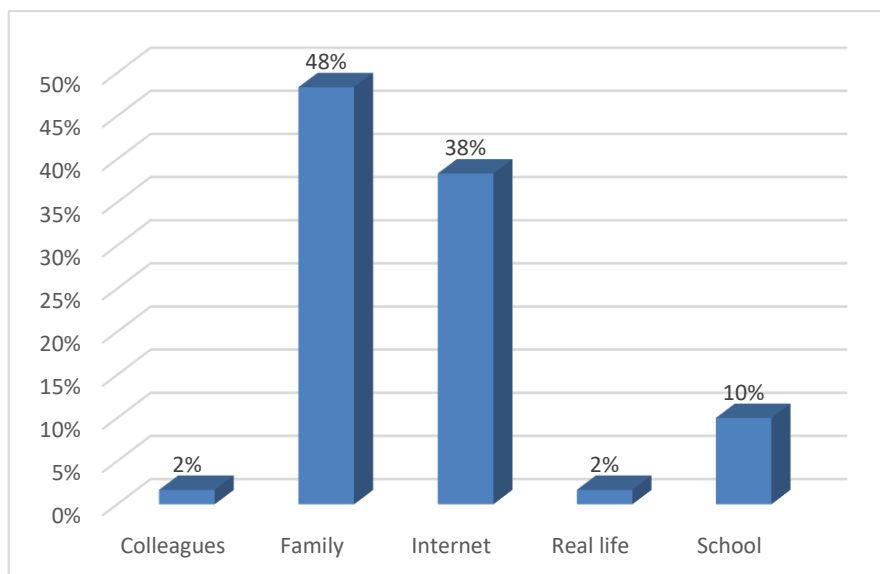
Graph 3: Grade Level

The factors Influencing Nursing Licensure Exam Preparation Among Student Candidates in Arar Government in KSA description

	Frequency	Percent
Colleagues	2	2%
Family	58	48%
Internet	46	38%
Real life	2	2%
School	12	10%
Total	120	100%

Table 7: Sources of Your Knowledge About the Nursing Profession

Family (48%) is the most significant source of knowledge, with 58 participants reporting that their understanding of the nursing profession comes primarily from family members, then Internet (38%) is the second most common source, with 46 participants using online resources to learn about nursing, School (10%) follows as a less common source of knowledge, with 12 participants gaining information from their educational experiences, Colleagues (2%) and Real life (2%) were each reported by only 2 participants, indicating that these sources have minimal influence on the participants' understanding of nursing.

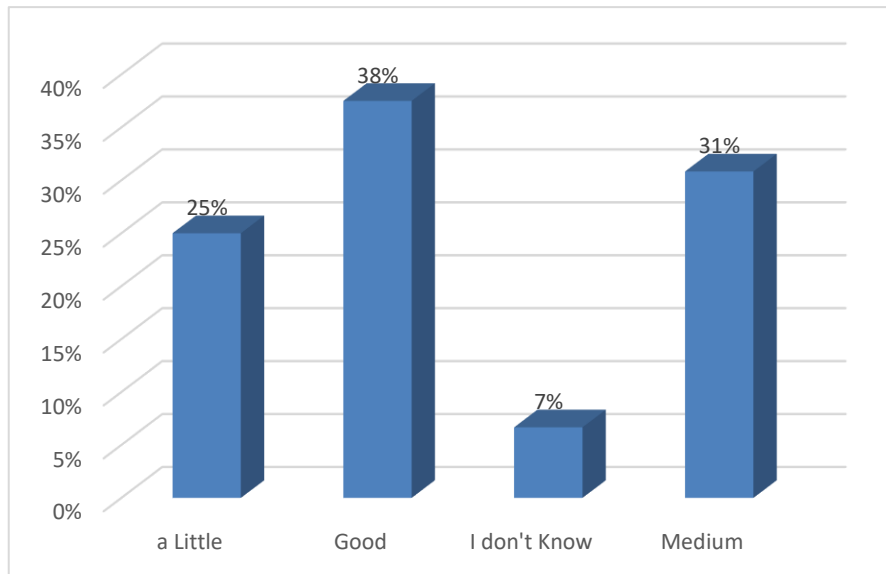


Graph 4: Sources of Your Knowledge About the Nursing Profession.

	Frequency	Percent
A little	30	25%
Good	45	38%
I don't Know	8	7%
Medium	37	31%
Total	120	100%

Table 8: Familiarity With the Primary Duties of the Nursing Profession.

This distribution suggests that while most participants (69%) have at least a moderate to good understanding of the primary duties of nurses, there is still a notable portion (25%) with limited or no knowledge.



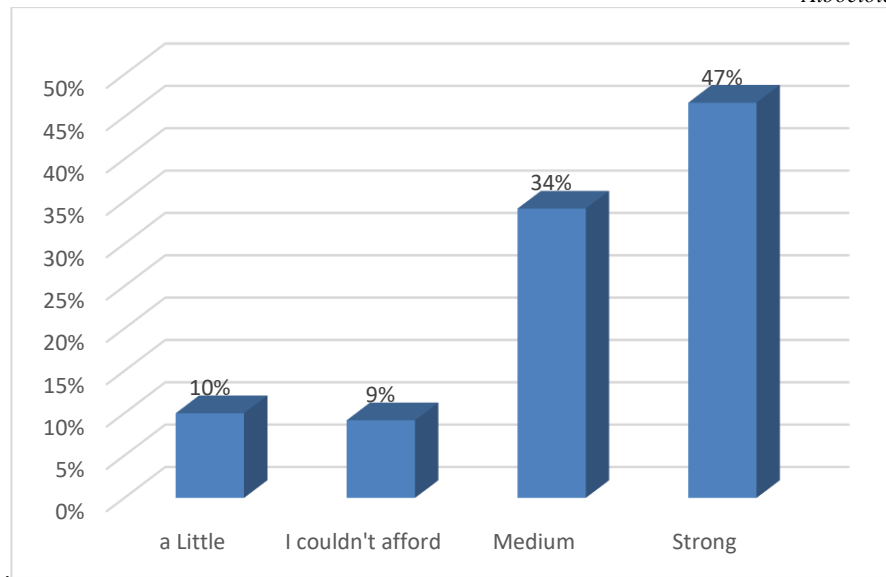
Graph 5: Familiar Are You with the Primary Duties of the Nursing Profession.

	Frequency	Percent
A little	12	10%
I couldn't afford	11	9%
Medium	41	34%
Strong	56	47%
Total	120	100%

Table 9: The Likelihood of Considering Nursing as A Potential Career in the Future Is Being Evaluated.

This distribution indicates that a majority (81%) of participants are somewhat or very likely to consider nursing as a career, while a smaller portion (19%) expresses little or no interest, with some citing financial limitations as a constraint.

Graph (6) The likelihood of considering nursing as a potential career in the future being evaluated



Graph 6:

Analysis of the Dimensions: -

For analysis of the questionnaire statements, we depend on the mean and standard deviation for each statement.

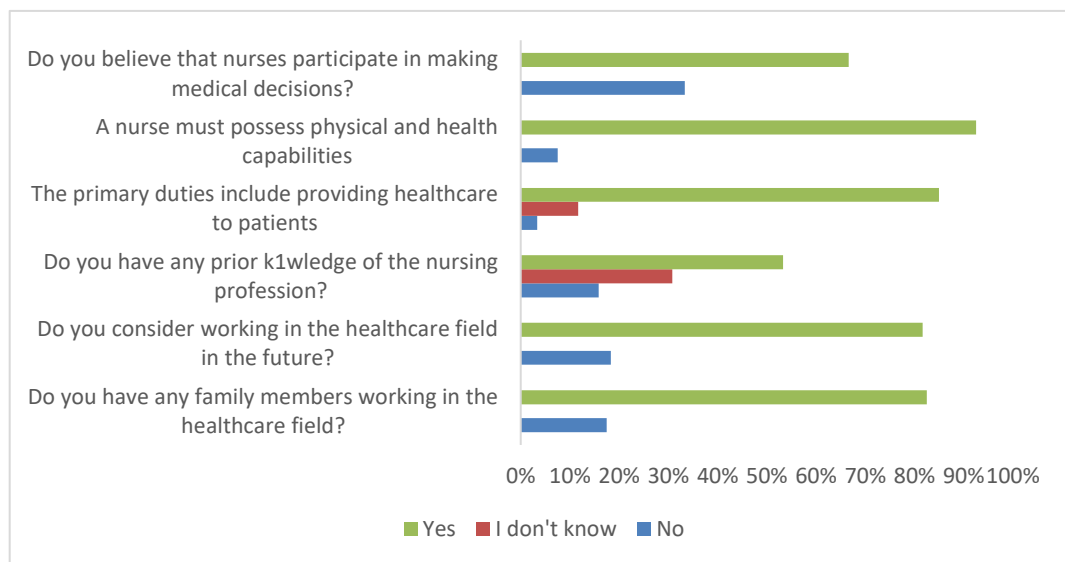
Statements	No	I don't know	Yes
Do you have any family members working in the healthcare field?	21 18%	0 0%	99 83%
Do you consider working in the healthcare field in the future?	22 18%	0 0%	98 82%
Do you have any prior knowledge of the nursing profession?	19 16%	37 31%	64 53%
The primary duties include providing healthcare to patients by administering medications in the correct doses and at the times specified by the treating physician. Additionally, nurses monitor and record the patient's vital signs.	4 3%	14 12%	102 85%
A nurse must possess physical and health capabilities, as this profession is demanding and often requires working long hours and during late shifts.	9 8%	0 0%	111 93%
Do you believe that nurses participate in making medical decisions?	40 33%	0 0%	80 67%

Table 10: Mean, Std. Deviation Ranking (Knowledge and Attitudes Towards the Healthcare And Nursing Professions)

The data in Table (10) provides insight into the participants' knowledge and attitudes towards the healthcare and nursing professions, focusing on the responses to a set of questions. Below is

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- Do you have any family members working in the healthcare field?
 - Yes (83%): A majority (99 participants) reported having family members working in healthcare, indicating a strong familial influence in the field, No (18%):
- Do you consider working in the healthcare field in the future?
 - Yes (82%): Most participants (98 individuals) expressed interest in working in the healthcare field, suggesting a positive attitude toward pursuing careers in healthcare, No (18%):
- Do you have any prior knowledge of the nursing profession?
 - Yes (53%): A little over half (64 participants) reported having prior knowledge of nursing, showing that there is a moderate awareness of the profession, No (16%), I don't know (31%)
- The primary duties of nurses include providing healthcare to patients by administering medications and monitoring vital signs.
 - Yes (85%): The majority (102 participants) demonstrated awareness of the primary duties of nurses, No (3%), I don't know (12%).
- A nurse must possess physical and health capabilities due to the demanding nature of the profession.
 - Yes (93%): A very high percentage (111 participants) agreed that nursing requires physical stamina and health, No (8%):
- Do you believe that nurses participate in making medical decisions?
 - Yes (67%): Most participants (80 individuals) believed that nurses do participate in medical decision-making, No (33%)



Graph 7: Knowledge and Attitudes Towards the Healthcare and Nursing Professions

Statements	Mean	Std. Deviation	Degree
Nursing is one of the most important professions in the world.	4.192	1.266	Agree
I believe that nursing is a profession that requires high skills.	4.300	1.213	High Agree
I think that nursing provides opportunities for professional development.	4.133	1.334	Agree
I see nursing as a profession that requires empathy and compassion.	4.367	1.243	High Agree
I believe that nurses receive adequate recognition in society.	3.742	1.405	Agree
I believe that nursing is a profession suitable for both men and women.	4.375	1.257	High Agree
I believe that the nursing profession offers job stability.	4.225	1.299	High Agree
I believe that nursing is a profession that requires higher education.	4.217	1.265	High Agree
Factors Influencing Nursing Licensure Exam Preparation	4.205	1.115	High Agree

Table 11: Mean, Std. Deviation Ranking (Factors Influencing Nursing Licensure Exam Preparation)

According to the previous table, it can be concluded that:

The responses of the sample of the study sample showed a general trend towards approving for the Factors Influencing Nursing Licensure Exam Preparation, where mean is 4.205 while its standard deviation is 1.115 and that means that sample of the study has a high agreement towards the Factors Influencing Nursing Licensure Exam Preparation.

Testing the Correlation

There is a significant correlation between Knowledge and Attitudes Towards Healthcare and Nursing Professions and Nursing Licensure Exam Preparation

This presents the correlation matrix of the main dimensions as follows:

		Knowledge and Attitudes Towards the Healthcare and Nursing Professions	Nursing Licensure Exam Preparation
Knowledge and Attitudes Towards the Healthcare and Nursing Professions	Pearson Correlation	1	0.422*
	Sig. (2-tailed)		0.018
	N	120	120

Table 12: The Correlation Matrix of the Main and Sub-Dimensions

From the correlation matrix we can find how the relationships between the main dimensions are as follows:

There is a moderate and positive significant relationship between Knowledge and Attitudes Towards the Healthcare and Nursing Professions and Nursing Licensure Exam Preparation, as Pearson Correlation = 0.422, and the sig value = 0.018.

Discussion

This study offers valuable insights into secondary students' perceptions of the nursing profession, with a particular focus on their knowledge sources, familiarity with nursing duties, and factors influencing their consideration of nursing as a future career. The findings underscore the significant role played by informal and familial influences in shaping students' understanding of the field. Nearly half of the participants (48%) identified family as their primary source of information about nursing, followed by the internet (38%). This is consistent with previous research that highlights the impact of familial attitudes and online exposure in career decision-making among adolescents (Kenny *et al.*, 2015; Price *et al.*, 2019).

While these sources can offer emotional support and accessible information, they may not always provide accurate or comprehensive depictions of the nursing profession. Conversely, educational institutions (10%) and real-life experiences (2%) were reported as minor sources of nursing-related knowledge, suggesting a missed opportunity within formal educational settings to engage students more effectively. The limited influence of school-based education is concerning, particularly considering the importance of informed career guidance during adolescence.

As Reeve *et al.* (2020) argue, early exposure to healthcare careers through structured curricula, guest speakers, and clinical simulations can positively influence students' interest and readiness for health professions. This suggests that integrating nursing-focused modules or interactive sessions into school programs could address existing knowledge gaps and challenge outdated stereotypes about the nursing profession.

Moreover, although most students (69%) report a moderate understanding of nursing duties, a notable proportion (25%) indicate limited or no knowledge of the core responsibilities. This knowledge gap may contribute to uncertainty or hesitation when considering nursing as a viable career path. Ten Hoeve *et al.* (2017) note that misconceptions about nursing roles often stem from media portrayals or a lack of real-world exposure, which can lead to undervaluing the intellectual, technical, and leadership aspects of nursing practice.

To address this, targeted educational interventions are essential. Programs that incorporate role-modeling, mentorship from practicing nurses, and practical exposure through school-community partnerships could provide students with a more realistic and inspiring view of the profession (Ferguson & Ziegler, 2021). Such initiatives not only build awareness but may also play a critical role in addressing future workforce shortages in nursing by fostering early interest and commitment.

This study highlights a generally positive perception of nursing among students, marked by strong recognition of its societal value and high standards for licensure. However, significant knowledge gaps and persistent misconceptions particularly regarding professional autonomy and physical demand remain. These issues, often shaped by limited exposure and cultural influences, may discourage students, especially young women, from pursuing nursing careers

(Labrague *et al.*, 2020; Aljohani *et al.*, 2021; Alshammari *et al.*, 2023).

Early educational interventions, such as school-based nursing modules, mentorship, and clinical simulations, have been shown to improve awareness and student engagement (Reeve *et al.*, 2020; Ferguson & Ziegler, 2021). A significant correlation between students' knowledge and their preparedness for licensure suggests that accurate, real-world understanding of nursing strengthens academic commitment and career interest (Kim *et al.*, 2020; Ten Hoeve *et al.*, 2017).

Encouragingly, the belief in nursing's importance to society, particularly post-COVID-19, reflects shifting perceptions and increased respect for the profession (Turale *et al.*, 2021). To build on this momentum, targeted efforts in education, media, and policy are essential for transforming public understanding and attracting a committed future nursing workforce.

Conclusions and Recommendations

Findings

The survey findings highlight a significant interest in the nursing profession, with 81% of participants expressing a desire to pursue a nursing career. This enthusiasm is tempered by a lack of awareness, as 25% of respondents report limited or have no knowledge about the day-to-day responsibilities and duties of nurses. Among the sources of information, family members (48%) and the internet (38%) are the most frequently cited, while educational institutions (10%) and real-world experiences (2%) have a much smaller impact on shaping perceptions of nursing. Despite 69% of participants having a moderate to good understanding of the profession, there remains a notable gap in knowledge. Furthermore, while there is widespread interest in nursing, 19% of participants mention financial constraints or a lack of interest as reasons for not pursuing this career. These insights suggest that educational initiatives should prioritize raising awareness about the diverse roles of nurses and focus on alleviating financial obstacles, such as providing scholarships or financial aid, to make the profession more accessible to aspiring candidates.

Conclusions

This study reveals a generally positive outlook on nursing among secondary students, with a high level of interest (81%) in pursuing it as a career. However, there are significant gaps in knowledge, particularly about nursing duties and the profession's roles in healthcare. Family and the internet are the primary sources of information, while schools play a minor role. To address these gaps, it is crucial to enhance educational outreach, involve families in the learning process, and create financial support programs to overcome barriers to entry. By improving awareness and providing stronger career guidance, we can cultivate a more informed and enthusiastic generation of future nurses, ultimately strengthening the healthcare workforce. In summary, the findings suggest an urgent need to strengthen school-based efforts in promoting accurate and engaging portrayals of nursing. By leveraging both formal and informal channels and improving the quality of information students receive, educators and policymakers can help ensure that secondary students make informed decisions about nursing as a future career.

Recommendations

Based on the findings regarding secondary school graduates' knowledge and interest in the nursing profession, the following recommendations are proposed:

1. **Enhancing Family Awareness Programs:** Since 48% of students learn about nursing from family, initiatives should be developed to educate parents and guardians about the

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profession's significance, career opportunities, and societal impact.

2. **Strengthening Online Educational Resources:** With 38% relying on the internet as their primary source, authoritative and accessible online platforms should be developed to provide accurate and engaging nursing-related content.
3. **Curriculum Integration of Nursing Awareness:** Schools should incorporate nursing career education into the curriculum to improve students' understanding of nursing duties, addressing the 69% who have moderate to good knowledge.
4. **Career Guidance and Exposure Programs:** Since 81% of students show interest in nursing, structured career counseling, mentorship programs, and hospital visits should be implemented to sustain and enhance this enthusiasm.
5. **Addressing Perceptions of Physical Demands:** With 93% acknowledging physical demands, awareness campaigns should highlight strategies for managing workload, stress, and the availability of support systems to prevent deterring potential candidates.
6. **Distribute informational brochures and digital materials** to parents through schools and community centers and conduct family engagement workshops and awareness campaigns to highlight the importance of nursing.
7. **Partner with educational institutions** to create free e-learning modules about nursing and healthcare professions.
8. **Organize practical workshops** where students can engage in basic healthcare simulations, such as first aid training. Conduct guest lectures by nurses and healthcare educators to provide firsthand insights into the profession.

These recommendations aim to improve awareness, accessibility, and support for students interested in nursing. By strengthening education, mentorship, and online resources, more graduates can make informed decisions about pursuing a career in nursing. These recommendations aim to improve awareness, accessibility, and support for students interested in nursing. By strengthening education, mentorship, and online resources, more graduates can make informed decisions about pursuing a career in nursing.

Author's Contribution

All authors contributed significantly to this research. They collectively participated in conceptualizing the study, reviewing literature, designing the methodology, analyzing data, and discussing the findings. They also ensured ethical compliance, facilitated translations, and explored publication opportunities. Additionally, all authors assisted in data collection and questionnaire distribution, playing a vital role in the study's success.

Ethics Approval and Consent to Participate

The ethics and research committee of our institution approved the conduct of the study, number 146, code SNUD0Ec1010102. Written informed consent was obtained from the students. This was part of the basis upon which ethical approval was given.

Human and Animal Rights

No animals were used in this research. All human research procedures were followed in accordance with the ethical standards of the committee responsible for human experimentation

(institutional and national), and with the Helsinki Declaration of 1975, with the most recent revision occurring in 2013.

Consent for Publication

All study participants gave informed consent to participate in the research which included the agreement that results would be published.

Conflict of Interest

The authors of this study, EXPLORING SECONDARY SCHOOL GRADUATES' KNOWLEDGE AND INTEREST IN NURSING PROFESSION: A STUDY IN ARAR, KINGDOM OF SAUDI ARABIA, declared that there are no conflicts of interest related to this research. No financial support or external funding was received for the completion of this study. Furthermore, there are no personal, professional, or financial relationships that could be perceived as influencing the outcomes or interpretation of the study findings. All aspects of the research were conducted impartially, adhering to ethical guidelines set by the research ethics committee, faculty of nursing.

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