

**ATTITUDE AND PERCEPTION OF NURSING / MIDWIFERY MANAGERS TOWARD
THE TRANSFORMATION IN MIDWIFERY PROFESSION IN SAUDIARABIA****Mrs. Thuraya Ibrahim Fallatah**

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Abstract

Background: Nurses and midwives are central to Primary Health Care and are often the first and sometimes the only health professional that people see and the quality of their initial assessment, care and treatment is vital. **The aim is:** to conduct a survey study among nursing/midwifery managers in Saudi Arabia to measure their attitude and perceptions toward the transformation in midwifery profession in Saudi Arabia. **Desing:** A cross-sectional study design had been employed in this research. **Setting:** The study will be conducted in all hospitals of the Ministry of Health and its primary care centers in 13 administrative regions in KSA. **Results:** indicated that the main important factor affect attitude and perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia are supporting stakeholders, including patients, healthcare organizations, and government agencies, creating attractive environment to encourage service providers and increase efficiency and effectiveness, increasing investment in Midwives' capabilities and opportunities for training and skills development, improving efficiency and creativity among employees, and enhancing job satisfaction according. **Conclusions:** Results concluded that the level of attitude and awareness of nursing/ midwifery managers toward the transformation in Midwifery profession in Saudi Arabia was moderate as most of respondents understand the goals and objectives of transformation, have the ability to provide guidance and support to midwives through the shift and transformation, willing to change current practices to

accommodate changes in Midwifery. **Recommendations:** to conduct more future researches related to the national transformation programs for the health sector in KSA for achieving the goals of the kingdom vision 2030.

Attitude and Perception of Nursing/ Midwifery Managers toward the transformation in Midwifery profession in Saudi Arabia

Background

Nurses and midwives are central to Primary Health Care and are often the first and sometimes the only health professional that people see and the quality of their initial assessment, care and treatment is vital. They are also part of their local community – sharing its culture, strengths and vulnerabilities – and can shape and deliver effective interventions to meet the needs of patients, families and communities (WHO, 2020). According to the World Health organization (WHO, 2022), approximately 27 million men and women make up the global nursing and midwifery workforce which accounts for nearly 50% of the global health workforce. WHO estimates that the world will need an additional 9 million nurses and midwives by the year 2030. Globally, 70% of the health and social workforce are women compared to 41% in all employment sectors. Nursing and midwifery occupations represent a significant share of the female workforce (WHO, 2022). According to the statistics of the Saudi Ministry of Health The rate of human resources (nursing/midwifery) per ten thousand people in 2018 was 55.2. It is estimated that every 10000 people need 58 nurses and midwives (The-World-Bank-Data, 2019).

WHO's work relating to nursing and midwifery is currently directed by World Health Assembly resolution (WHO, 2021b) which calls on WHO Member States and WHO to strengthen nursing and midwifery through the Global Strategic Directions for Nursing and Midwifery (SDNM) 2021–2025 (WHO, 2021a). The SDNM is an interrelated set of policy priorities that can help countries to ensure that midwives and nurses optimally contribute to achieving universal health coverage (UHC) and other population health goals. The SDNM comprises four policy focus areas: education, jobs, leadership, and service delivery (WHO, 2021a). Regarding the education area, the strategic direction is defined as “Midwife and nurse graduates match or surpass health system demand and have the requisite knowledge, competencies and attitudes to meet national health priorities”. In leadership area, the strategic direction is defined as “Increase the proportion and authority of midwives and nurses in senior health and academic positions and continually develop and empower the next generation of nursing and midwifery leaders”. In jobs area, the strategic direction is “Increase the availability of health workers by sustainably creating nursing and midwifery jobs, effectively recruiting and retaining midwives

and nurses, and ethically managing

international mobility and migration”. In service delivery area, the strategic direction is “Midwives and nurses work to the full extent of their education and training in safe and supportive service delivery environments”.

This global interest in the subject of nursing and midwifery was matched by a national interest from the Kingdom, as this interest was manifested through national transformation programs in the health sector within the Kingdom's Vision 2030 (MOH, 2018). There are six systems of the modern health care model: preventive care, urgent care, elective care, women and children care, chronic disease care, palliative care. The midwifery profession is a cornerstone for achieving the system of caring for mothers and children. Prince Mohammed bin Salman's initiative to support the nursing profession in all its specializations came as a requirement to achieve the attractiveness of the profession as a means of achieving the health vision. The Midwifery Department at the Ministry of Health has adopted many initiatives and programs in pursuit of this aspect of transformation (MOH, 2018). One of the most important initiatives is to support the profession of midwives, and to create policies and standards to support the profession and its employees to achieve the system of the care of mothers and children. The midwifery department also set standards for home births, standards for midwifery clinics, and standards for midwifery homes. In addition, it established a Bachelor's degree in Midwifery at Umm Al-Qura University and Noura University, and it adopted a Master's degree in Midwifery at King Saud bin Abdulaziz University and Umm Al-Qura University to increase the number of graduates of this specialty. Thus, the transformation in the midwifery profession is considered important, as the current midwife sits in the delivery rooms for obstetrics only, but the transformation restores her rights and enables her to achieve the health of the mother and the child, and by which the system of care for mothers and children is achieved within the health transformation program in the Kingdom. Under this relentless pursuit, clinics independent of the doctor are opened for the midwife, where she is enabled to have a planned home birth and enable her to perform her proper role in society.

To meet KSA vision 2030 and the related national health transformation programs, it is essential to transform nursing services by developing effective nursing/midwifery leaders. For example, the nursing profession leaders have a significant part in highlighting their roles and improving nursing misconception as the leaders have regular attendance at official meetings and conferences, which are accompanied by television or press interviews (Al-Khunizi, Al-Otaibi, Al-Anazi, Bashatah, & Wajid, 2021).

Literature Review

Health care in Saudi Arabia is currently experiencing transformation because of population and economic growth. These transformations have been influenced by the Saudi Arabian 2030 Vision. Through a survey of literature between 2000 and 2017, Al-Dossary (2018) found that the nursing profession in Saudi Arabia faces challenges from nursing shortages, underdeveloped nursing

education and unclear scope of practice, and he concluded that the new 2030 Vision offers many opportunities for social and economic transformation.

The ministry of health care system in KSA is acting to improve the former health care system with government supports for the new strategies. The future of health care system can be seen through the 2030 Saudi vision and the national transformation program 2020. The vision builds upon the encouragement of sectors that have been predominately funded and serviced by the government in the past (Alotaibi & Al Anizi, 2019).

The Saudi Vision 2030 calls for unifying the efforts of nursing leaders, educators, and practitioners toward nursing transformation. Nursing transformation requires improving the quality of delivered care, a stronger education foundation, establishing an autonomous regulatory council, formulating a clear scope of nursing practice based on nurses' knowledge and skills, and reducing professional constraints and centralization of the management (Alsufyani et al., 2020).

El Dahshan et al. (2017) explored nurse managers' leadership styles and its effect on nurses' organizational commitment at Taif governmental hospitals in Kingdom of Saudi Arabia, the study revealed that "Transformational leadership style was rated higher than transactional leadership style in both hospitals, and there were statistically significant positive correlations between the perceived leadership styles and organizational commitment".

Harb et al. (2022) examined nurses and midwives' perceptions about the managers' leadership and to determine whether the style used may play a role in determining the quality of patient care in the eastern healthcare cluster in Saudi Arabia, they found a positive correlation between leadership outcome factors (effectiveness, extra effort and satisfaction) and transformational and transactional leadership styles and a negative correlation with passive avoidant leadership style. According to this study, transformational leadership appears to be best suited for nursing as it has positive nursing outcomes (reflected in care effectiveness, extra efforts and satisfaction) that will ultimately and expectedly lead to positive patient outcome meeting KSA vision 2030.

Albejaidi and Nair (2019) provided an overview of health workforce in Saudi Arabia and identified various critical issues and challenges that need to be addressed in

achieving health system goals envisaged in the Vision 2030, where they concluded that "Health system needs to adopt a rigorous approach by investing heavily on medical, nursing, and other specialized fields of education. Planning for the health workforce needs to adopt appropriate strategies that reflect all aspects including the number, skills, and gender distribution for meeting the future health needs of population to facilitate achievement of Vision".

Almarwany et al. (2021) investigated the relationship between job security among nurses and leadership styles at Makkah health cluster in Saudi Arabia, they concluded that there has been a significant relationship between job security and leadership style.

Advanced practitioner roles are increasingly implemented internationally, Van Hecke et al. (2019) explored the practice profile and competencies of advanced practice nurses (APNs) and midwives (AMPs), and factors associated with task non-execution among APNs/AMPs in Flanders (Belgium), where tasks and competencies were explored in seven domains: clinical/professional leadership, change management/innovation, research, clinical expertise/guidance/coaching, consultation/consultancy, multidisciplinary cooperation/care coordination and ethical decision-making, this study revealed that "Participants (n = 63) executed tasks in all domains. Task non-execution related to research and clinical expertise was associated with work setting; task non-execution regarding care coordination and ethical decision-making was associated with competency perception. Several tasks were performed by few APNs/AMPs despite many feeling competent. Five of ten tasks performed by fewest participants belonged to the leadership domain".

Banaser et al. (2021) explored nurses, advanced practice nurses, and nurse leader perceptions of the Advanced Practice Nurses role in Saudi Arabia. Advanced nurse practitioners are one of the leading professionals who contribute to health promotion, disease prevention, health counseling and patient education. They found that "Advanced practitioners' educational preparedness, organizational, and contextual factors are important factors that need to be addressed to promote their role and to improve nurse's perception about the APN role in clinical practice".

Positive safety cultures are imperative for positive patient and staff outcomes. Staff member's attitudes contribute to an organizations safety culture, but can differ between health professional groups and across different subcultures. Edgar et al. (2021) investigated if safety culture data collected over two consecutive years, with formal feedback of results and an expectation of developing and enacting an action plan by nurse/midwife leaders, influences improvement in safety attitudes of staff in Australia, they concluded that "Measures over time are important to establish differences in perceptions and feedback on impact of actions. Facilitated feedback of results shows meaning when nursing/midwifery leadership staff has data explained and an opportunity to discuss and plan".

The ineffectiveness of leadership across maternity services in England has been a recurrent theme over a number of years, with reports continuing to identify the same issues. Bannon et al. (2017) explored the history of midwifery leadership, and examined the reasons why midwives in particular have been perceived as failing to have developed the necessary skills to lead and manage maternity services in England, the authors found that “Midwifery managers in particular have been singled out as lacking the necessary skills for effective leadership, despite midwives striving for many years to improve outcomes for women. In addition, changes to the organization and regulation of maternity care have resulted in greater focus on GPs, and the exclusion of midwives from hospital records systems and managerial environments”.

Since its inception in the 1980s, empirical studies have identified benefits of implementing the Magnet® Model involving improved patient care and nursing workforce outcomes. Moon et al. (2019) conducted a survey to measure leadership styles of nurse managers at a large health organization comprising hospitals with a wide range of service profiles in regional Australia, they found that “Specific transformational leadership components (Individualized Consideration and Intellectual Stimulation) could be improved by leveraging the maturity of current and/or prospect nurse managers and advancing their academic education, respectively”.

It is evident from the above preliminary literature survey that there are no studies in Saudi Arabia that dealt with the extent of knowledge, support and orientation of the nursing and midwifery departments in the Ministry of Health facilities in all regions with regard to national transformation programs for the health sector in general and with regard to nursing/ midwifery in particular. So the current research will fill this gap. However, Harb et al. (2022) investigated nurses' and midwives' perceptions of managers' leadership to determine whether the style used might play a role in determining the quality of patient care in the Eastern Healthcare cluster in Saudi Arabia, Almarwany et al. (2021) also dealt with the issue of the relationship between job security among nurses and leadership styles in the Makkah Health Complex in the Kingdom of Saudi Arabia. In addition, Banaser et al. (2021) explored nurses, advanced practice nurses, and nursing Leader perceptions of the role of advanced practice nurses in Saudi Arabia, and El Dahshan et al. (2017) explored nurse managers' leadership styles and its effect on nurses' organizational commitment at Taif governmental hospitals in Kingdom of Saudi Arabia. Few foreign studies have addressed the issue of the relationship between nursing/midwifery leadership and the health system outcome in Belgium, Australia and England (Bannon et al., 2017;

Edgar et al., 2021; Moon et al., 2019; Van Hecke et al., 2019).

Research questions

1. What is the level of attitude and awareness of nursing/ midwifery managers toward the transformation in Midwifery profession in Saudi Arabia?
2. What is the perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia?
3. What are the factors affecting both the attitude and perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia?
4. What are the factors that may hinder the transformation Midwifery profession in Saudi Arabia?
5. What are the future implications issued from the transformation Midwifery profession in Saudi Arabia?

Aims and objectives

The Health Sector Transformation Program works on harmonizing and coordinating between all health sector entities, vision realization programs and relevant government entities, in addition to aligning and linking with strategic national goals during the transformation journey. In this context, investigating the attitude and perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia is very vital to achieve the health sector transformation programs. Therefore, my aim is to conduct a survey study among nursing/ midwifery managers in Saudi Arabia to measure their attitude and perceptions toward the transformation in midwifery profession in Saudi Arabia. The specific objectives of this research are:

1. Assessing the level of attitude and awareness of nursing/ midwifery managers toward the transformation in Midwifery profession in Saudi Arabia.
2. Assessing the perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia.
3. Identifying the factors affecting both the attitude and perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia.

Methodology

Study Design

A cross-sectional study design will be employed in this research.

Study Area (Settings)

The study will be conducted in all hospitals of the Ministry of Health and its primary care centers in 13 administrative regions in the Kingdom of Saudi Arabia.

Study Population

The study will target all Saudi nursing/midwifery managers. According to the statistics of the Saudi Ministry of Health for the year 2021 (MOH-KSA, 2021), the number of hospitals affiliated with the Ministry and other governmental sectors reached 338, in which 151,067 nurses and midwives working in the ministry of health and other governmental sectors in 2021. Assuming that 5% of these nursing staff is managers, the expected population is 7553 nursing/midwifery managers.

Sample size

The necessary sample size (n) can be calculated using Yamane formula as following (Yamane, 1973):
$$n = \frac{N}{1 + N(e^2)} \quad (1)$$

Where N = "Population size" and e = "Margin of error".

As the expected population is N (7553) nursing/midwifery managers, by applying the equation (1) for 5% error margin, one obtains $n = 380$ managers.

Data Collection

A questionnaire will be used to collect data. The questionnaire is composed of three parts; the first part is for socio-demographic information of participants (managers), including the hospital name (health center), age, sex, marital status, nursing/midwifery work experience, work position and education. The second part will collect data on nursing/midwifery managers' attitude towards the transformation in midwifery profession in Saudi Arabia, the questions are scored from 1 to 5 using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The third part will collect data on nursing/midwifery managers' perception towards the transformation in midwifery profession in Saudi Arabia, the answers are scored from 1 to 5 using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree).

Validity and Reliability

In order to check validity of the research tool, two methods were adopted, the content validity and content validity.

Content Validity: In order to confirm the content validity of the research tool it was evaluated and checked by (2) professors in Um AlQura University (Appendix A). All suggestion to edit the questionnaire made by those experts were updated.

Construct Validity: In order to check the construct validity of the research tool, it was distributed among pilot sample consisted of (25) respondents from the targeted population and excluded from the main sample of the research. After that Pearson correlation test was applied to get the correlation coefficients between each sentence and its dimension, and between each dimension and the total scale. Tables (1) below show the results of Pearson correlation test between statements and its related dimension and the total scale.

	Statement	Correlation with Dimension	Correlation with Total Scale
Attitude and Awareness Nursing/ Midwifery Managers Toward the Transformation in Midwifery Profession			
1	I understand the goals and objectives of transformation in midwifery Profession	0.314**	0.278**
2	I have the ability to provide guidance and support to midwives through the shift and transformation	0.544**	0.504**
3	I believe in being open to collaboration with other healthcare professionals	0.831**	0.814**
4	I am prepared to dedicate additional resources to support the midwifery transition	0.719**	0.607**
5	I am willing to change current practices to accommodate changes in Midwifery	0.894**	0.871**
6	I have the ability to recognize the potential improvement in patient safety as a result of the midwifery shift	0.790**	0.831**
7	I believe in the ability of midwives to maintain autonomy in making decisions about women and their families care	0.520**	0.402**
8	I am aware of the potential impact on the reputation of the midwifery profession	0.540**	0.621**

9	I am ready to take a leadership role in promoting transformation in midwifery	0.812**	0.846**
10	I realized that significant modifications were needed in current practices to keep pace with the shift in midwifery	0.543**	0.603**
11	I understand the importance of knowing about changes in the Midwifery profession	0.642**	0.691**
12	I have the ability to adapt to new developments in the field of Midwifery constantly	0.877**	0.857**
13	The transformation in Midwifery reduces waiting times and increases focus on public health and prevention initiatives	0.549**	0.440**
14	The transformation in Midwifery helps Women & and their Families reach the most appropriate settings for maternity care	0.622**	0.473**
15	The transformation in Midwifery leads to several healthcare delivery options	0.875**	0.507**
16	The transformation in Midwifery raises the level of Midwives' autonomy in decision-making.	0.587**	0.477**
17	The transformation in Midwifery increases operational flexibility in facilities	0.408**	0.405**
18	The transformation in Midwifery facilitates the process of making strategic decisions, to improve the exploitation of available resources	0.603**	0.422**

19	The transformation in the Midwifery profession contributes to the implementation and follow-up of decisions in the institution	0.454**	0.345**
Perception Nursing/ Midwifery Managers Toward the Transformation in Midwifery Profession			
1	I envision the impact of the changes on the attractiveness of the profession for future student	0.716**	0.589**
2	I have a perception of the impact of the changes on the provision of midwifery service	0.895**	0.860**
3	I understand the potential for improving efficiency and effectiveness in the healthcare system	0.915**	0.851**
4	I have a visualization of the impact of changes on Women's and their families' satisfaction	0.723**	0.655**
Factors Affecting Attitude and Perception Nursing/ Midwifery Managers Toward the Transformation in Midwifery Profession			
1	I understand the importance of supporting stakeholders, including patients, healthcare organizations, and government agencies	0.595**	0.480**
2	The transformation in Midwifery creates an attractive environment to encourage service providers and increase efficiency and effectiveness	0.440**	0.406**
3	Increasing investment in Midwives' capabilities and opportunities for training and skills development nowadays	0.846**	0.839**

4	The transformation in the Midwifery contributes to ensuring a work environment that stimulates efficiency andcreativity among employees	0.667**	0.636**
5	The transformation in the Midwiferyensures fair development and empowerment opportunities for all employees	0.579**	0.408**
6	I understand the impact of changes onmidwives' job satisfaction	0.677**	0.636**
7	I fully understand the importance ofcommunication and transparency regarding a Midwifery transition	0.587**	0.529**
8	I understand the importance of investing in techlllogy and equipment in Midwifery	0.740**	0.639**
Factors that hinder Transformation of Midwifery Profession			
1	The transformation in Midwiferyimproves infrastructure, facility management and safety standards	0.711**	0.682**
2	I understand the impact of the changes onthe Director of Nursing's workload and responsibilities	0.352**	0.364**
3	I understand the impact of the changes onthe midwives' workload	0.807**	0.815**
4	understand the need for additional training & education in midwifery Led care for	0.711**	0.773**
	Leaders and employee in Maternity-carefield		

For the correlation between dimensions and total score, results are presented in table (2)

Table (2):		
Num ber	Dimension	Correlation with Total Scale
1	Attitude and Awareness Nursing/ Midwifery Managers Toward the Transformation in Midwifery Profession	0.918**
2	Perception Nursing/ Midwifery Managers Toward the Transformation in Midwifery Profession	0.904**
3	Factors Affecting Attitude and Perception Nursing/Midwifery Managers Toward the Transformation in Midwifery Profession	0.945**
4	Factors that hinder Transformation of Midwifery Profession	0.852**

Reliability: it is defined as the extent to which the research tool is stable and consistent in measuring what it is supposed to measure (Robert & Priest, 2006). In order to check research tool reliability Cronbach's alpha test was applied. According to Taber (2018) the recommended value for Cronbach's alpha test is (0.70) or more. Results of Cronbach's alpha test are presented in table(3).

Table (3):			
Num ber	Dimension	Number of Statements	Cronbac h's Alpha
1	Attitude and Awareness Nursing/ Midwifery Managers Toward the Transformation in Midwifery Profession	19	0.908
2	Perception Nursing/ Midwifery Managers Toward the Transformation in Midwifery Profession	4	0.832
3	Factors Affecting Attitude and Perception Nursing/ Midwifery Managers Toward the	8	0.760

	Transformation in Midwifery Profession		
4	Factors that hinder Transformation of Midwifery Profession	4	0.753
	Total	35	0.918

After confirming the validity and reliability of research tool, it was distributed among the research sample by using google forms from (date) to (date). After that responses were collected and filtered in order to check data and prepare it for analysis. Around (450) copy of the research tool was distributed, (427) questionnaire were received. Around (33) were excluded from them as they are not valid for analysis and included missing values. (394) questionnaire was remaining and valid for analysis. The response rate was calculated to be (87.55%). The collected data was coded and prepared for analysis by using SPSS version 25.0.

Data Analysis

Data will be analyzed using the Statistical Program (SPSS) version 25.0. This software will be used as it is widely used in quantitative study to manage and document data features. Descriptive statistics and frequencies will be analyzed for all socio-demographic variables, attitude and perception scores. Differences in attitude and perception towards the transformation in midwifery profession by the socio-demographic variables will be compared using One-way ANOVA test, and statistical significance can be defined as $P \leq 0.05$.

Results

In this section, the result of statistical analysis is presented in addition to clarification and discussion of results. As well as comparing the results of the current research with the results of previous researches in the same field.

Socio Demographic Variables

In order to analyze the socio demographic characteristics of respondents, descriptive statistic will be used in term of frequencies and percentages as presented in table (4).

Table (4): Socio Demographic Variables

	Variables	Categories	Frequency	Percentage
	Age	20-30 years	80	20.3%
		31-40 years	227	57.6%
		41-50 years	81	20.6%

		51-60 years	6	1.5%
	Education	Technical Certificate	91	23.1%
		Bachelor Degree	150	38.1%
		Masters Degree	128	32.5%
		PhD	25	6.3%
	Years of Experience	Less than 5 years	66	16.8%
		6 – 10 years	107	27.2%
		11 – 20 years	185	47.0%
		More than 20 years	36	9.1%
	Region	Asir region	10	2.5%
		Baha region	6	1.5%
		Bisha region	1	.3%
		Eastern region	17	4.3%
		Hafer Albatin region	1	.3%
		Hail region	10	2.5%
		Jazan region	12	3.0%
		Jouf region	14	3.6%
		Makkah region	134	34.0%
		Medinah region	98	24.9%
		Qassim region	7	1.8%
		Riyadh region	50	12.7%
		Tabuk Region	20	5.1%
		Najran Region	9	2.3%
		Northern Region	5	1.3%
	Total		394	100%

Results in table (3) represent the percentages and frequencies of socio demographic characteristics of respondents due to their age, education, experience and region.

Related to the age, respondents were classified among four main groups. The highest percentage are in the age category (31-40 years) with (57.6%) of

respondents. Followed by (20.6%) in the age category (41-50 years), then (20.3%) in the age category (20-30 years). The age category (51-60 years) included the lowest percentage of respondents with (1.5%) only.

According to the educational background, results in table (3) indicate that most of respondents are holding bachelor degree with (38.1%) of respondents. And (32.5%) of them are holding master's degree. While (23.1%) of respondents hold technical certificate, and only (6.3%) hold PhD.

For years of experience, it is clear from table (3) that (47%) of respondents have (11- 20) years of experience as nurse manager, followed by (27.2%) of them have (6-10) years of experience, and (16.8%) have less than 5 years of experience. While only (9.1%) of respondents have more than 20 years of experience in the field.

Related to the region, results in table (3) indicate that most of respondents are working in Makkah region with (34%) of respondents. Followed by (24.9%) from Medinah region, (12.7%) from Riyadh region, (5.1%) from Tabuk Region, (3.6%) from Jouf region, (0% from Jazan region, (2.5%) from Asir and Hail region respectively. The remaining region included less than (2.5%) of respondents for each region.

Answering Research Questions:

In order to answer research questions, mean and standard deviation will be adopted as well as percentages. In this term it is important to adopt and clarify how the mean value will be evaluated. The mean value will be evaluated by using three categories weak, moderate and high. In order to calculate the length of interval the lower limit will be subtracted from the upper limit of Likert scale points then divided by the categories numbers as the following:

$$\text{Interval Length} = (\text{upper Limit} - \text{Lower Limit}) / \text{Number of Categories}$$

$$\text{Interval Length} = (5 - 1) / 3$$

$$\text{Interval Length} = (4) / 3 \quad \text{Interval Length} = 1.33$$

By calculating interval length, the categories of mean can be classified as the following:

1.0 to 2.33 is Low

2.34 to 3.67 is Moderate

3.68 to 5.00 is High

1. What is the level of attitude and awareness of nursing/ midwifery managers toward the transformation in Midwifery profession in Saudi Arabia?

In order to answer this question, descriptive statistics will be used in term of percentages, mean and standard deviation. Results of attitude and awareness of nursing/ midwifery managers toward the transformation in Midwifery

profession in Saudi Arabia are presented in table (5).

Table (5): Level of Attitude and Awareness

	Statement	Mean	Standard Deviation	Percentage				
				Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	I understand the goals and objectives of transformation in midwifery Profession	3.55	1.008	5.8%	6.3%	29.2%	44.2%	14.5%
2	I have the ability to provide guidance and support to midwives through the shift and transformation	3.28	1.262	8.4%	24.1%	18.5%	28.9%	20.1%
3	I believe in being open to collaboration with other healthcare professionals	2.21	0.963	37.8%	3.0%	59.1%	0%	0%

4	I am prepared to dedicate additional resources to support the midwifery transition	2.22	1.231	45.7 %	8.1%	24.9%	21.3%	0%
5	I am willing to change current practices to accommodate changes in Midwifery	3.02	1.671	37.6 %	2.3%	4.3%	32.5%	23.4 %
6	I have the ability to recognize the potential improvement in patient safety as a result of the midwifery shift	3.58	1.068	5.8 %	5.1 %	36.8 %	30.2%	22.1 %
7	I believe in the ability of midwives to maintain autonomy in making decisions about	2.11	1.380	58.4 %	4.1 %	5.8%	31.7%	0%

	women and their families care							
8	I am aware of the potential impact on the reputation of the midwifery profession	3.95	0.871	4.8%	1.3%	7.9%	66.5%	19.5%
9	I am ready to take a leadership role in promoting transformation in midwifery	3.63	1.009	4.6%	3.8%	37.6%	32.5%	21.6%
10	I realized that significant	3.96	0.913	4.6%	2.8%	7.6%	61.7%	23.4%
	modifications were needed in current practices to keep							

	pace with the shift in midwifery							
11	I understand the importance of knowing about changes in the Midwifery profession	3.73	1.044	4.1 %	5.1 %	32.0 %	31.7 %	27.2 %
12	I have the ability to adapt to new developments in the field of Midwifery constantly	3.29	1.224	3.6 %	35.5 %	7.6%	35.0 %	18.3 %
13	The transformation in Midwifery reduces waiting times and increases focus on public health and prevention initiatives	2.25	1.390	53.3 %	2.3 %	10.7 %	33.8 %	0%

14	The transformation in Midwifery helps Women & and their Families reach the most appropriate settings for maternity care	2.41	1.422	48.0 %	2.8 %	11.4 %	36.3 %	1.5 %
15	The transformation in Midwifery leads to several healthcare delivery options	3.31	0.888	2.3 %	21.8 %	18.8 %	57.1 %	0%
16	The transformation in Midwifery raises the level of Midwives' autonomy in decision-making.	3.31	0.888	2.3 %	21.8 %	18.8 %	57.1 %	0%
17	The transformation in Midwifery	2.25	1.390	53.3 %	2.3 %	10.7 %	33.8 %	0%

	increases							
	operationa l f lexibility in facilities							
18	The transformation in Midwifery facilitates the process of making strategic decisions, to improve the exploitation of available resources	2.33	1.182	28.2	41.4%	0%	30.5%	0%
19	The transformation in the M idwifery profession contribute s to the implement ation and	3.40	0.755	2.8%	8.1%	35.8%	53.3%	0%

	follow-up of decisions in the institution							
	Total	3.014	1.216	-	-	-	-	-

Results in table (5) indicate that the mean value of attitude and awareness of nursing/ midwifery managers toward the transformation in Midwifery profession in Saudi Arabia ranges from (2.11 - low) to (3.96 - high), while the mean value for the total dimension was (3.014) which is moderate. This means that in general the level of attitude and awareness of nursing/ midwifery managers toward the transformation in Midwifery profession in Saudi Arabia is moderate.

Related to statement, the highest mean value was for statement number ten, which stated that “I realized that significant modifications were needed in current practices to keep pace with the shift in midwifery” with mean value (3.96) and standard deviation (0.913). while the lowest mean value was for the statement number seven, which stated that “I believe in the ability of midwives to maintain autonomy in making decisions about women and their families care” with mean value (2.11) and standard deviation (1.380).

Moreover, results in table (5) indicate that (58.7%) of respondents understand the goals and objectives of transformation in midwifery Profession. And (49%) of respondents have the ability to provide guidance and support to midwives through the shift and transformation. (55.9%) are willing to change current practices to accommodate changes in Midwifery. Even though (59.1%) of respondents are undecided if they are being open to collaboration with other healthcare professionals. And (21.3%) feel that they are prepared to dedicate additional resources to support the midwifery transition.

In term of improvement recognition, (52.3%) of respondents have the ability to recognize the potential improvement in patient safety as a result of the midwifery shift. Moreover, (86%) of respondents aware of the potential impact on the reputation of the midwifery profession. And (54.1%) of them are ready to take a leadership role in promoting transformation in midwifery. Besides that, (85.1%) of respondents realized that significant modifications were needed in current practices to keep pace with the shift in midwifery. Even though only (31.7%) of

respondents believe in the ability of midwives to maintain autonomy in making decisions about women and their families care

Most of respondents understand the importance of knowing about changes in the Midwifery profession as (58.9%) of respondents understand that. And (53.3%) of them have the ability to adapt to new developments in the field of Midwifery constantly. (57.1%) believe that transformation in Midwifery leads to several healthcare delivery options and raises the level of Midwives' autonomy in decision-making, and contributes to the implementation and follow-up of decisions in the institution according to (53.3%) of respondents. Even though only (33.8%) of respondents believe that transformation in Midwifery reduces waiting times and increases focus on public health and prevention initiatives, helps Women & and their Families reach the most appropriate settings for maternity care according to (37.8%), increases operational flexibility in facilities according to (33.8%), facilitates the process of making strategic decisions, to improve the exploitation of available resources as reported by (30.5%)

2. What is the perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia?

In order to answer this question, descriptive statistics will be used in term of percentages, mean and standard deviation. Results of perception of nursing/ midwifery managers toward the transformation in Midwifery profession in Saudi Arabia are presented in table (6).

Table (6): Level of Perception

	Statement	Mean	Standard Deviation	Percentage				
				Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	I envision the impact of the changes on the attractiveness of	3.91	0.995	5.6%	5.1%	5.6%	60.4%	23.4%

	the professi on for future student							
	I have a perce ption ofthe impac t of the chang es on the	3. 39	1.172	5.1%	21.1 %	23.6%	29 .9 %	20.3 %

	provision of midwifery service							
3	I understand the potential for improving efficiency and effectivene ss in the healthcare system	3.4 5	1.1 18	5.8 %	13.2 %	30.2 %	31.5 %	19.3 %
4	I have a visualizat ionof the impact of changes on	3.7 0	0.8 00	0%	3.8 %	40.4 %	38.3 %	17.5 %

	Women's and their families' satisfaction							
	Total	3.568	1.329					

Results in table (6) indicate that the mean value of perception of nursing/ midwifery managers toward the transformation in Midwifery profession in Saudi Arabia ranges from (3.39 - moderate) to (3.91 - high), while the mean value for the total dimension was (3.568) which is moderate. This means that in general the level of perception of nursing/ midwifery managers toward the transformation in Midwifery profession in Saudi Arabia is moderate.

Related to statement, the highest mean value was for statement number one, which stated that “I envision the impact of the changes on the attractiveness of the profession for future student” with mean value (3.91) and standard deviation (0.995). while the lowest mean value was for the statement number two, which stated that “I have a perception of the impact of the changes on the provision of midwifery service” with mean value (3.39) and standard deviation (1.172).

Moreover, results in table (6) indicated that (83.8%) of respondents envision the impact of the changes on the attractiveness of the profession for future student. (55.8%) of them have a visualization of the impact of changes on Women's and their families' satisfaction. And (50.8%) potential for improving efficiency and effectiveness in the healthcare system. And (50.2%) have a perception of the impact of the changes on the provision of midwifery service.

3. What are the factors affecting both the attitude and perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia?

In order to answer this question, descriptive statistics will be used in term of percentages, mean and standard deviation. Results of factors affecting both the attitude and perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia are presented in table(7).

Table (7): Factors Affecting Attitude and Perception

	Statement	Mean	Standard Deviation	Percentage				
				Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	I understand the importance of supporting stakeholders, including patients, healthcare organizations, and government agencies	3.90	1.059	8.4%	2.3%	4.3%	60.9%	24.1%
	The transformation in Midwifery creates an attractive environment to encourage	3.81	0.554	0%	7.6%	3.8%	88.6%	0%

	service provider s and increase efficien cy and effectiv eness							
	Increasing investme nt in Midwife s' capabiliti es and opportun ities for training and skills develop ment nowaday s	3. 13	1.625	31.7 %	6.3%	4.1%	33 .2 %	24.6 %
	The transfor mation in the Midwife ry contribut es to ensuring a work environ ment that stimulat es efficienc	4. 07	0.624	0%	4.6%	2.3%	74 .4 %	18.8 %

	y and creativit y among employe es							
	The transfor mation in the Midwif ery ensures fair develop ment and empower ment	1. 98	1.367	65.2 %	1.0%	4.6%	29 .2 %	0%

	opportun ities for all employe es							
6	I understand the impactof changes on midwives' job satisfaction	4.0 7	0.6 24	0%	4.6 %	2.3 %	74.4 %	18.8 %
7	I fully understand the importance of	2.5 5	0.5 47	2.5 %	40.1 %	57.4 %	0%	0%

	communication and transparency regarding a Midwifery transition							
8	I understand the importance of investing in technology and equipment in Midwifery	2.18	0.953	38.1%	6.3%	55.6%	0%	0%
	Total	3.183	1.225	-	-	-	-	-

Results in table (7) indicate that the results of factors affecting both the attitude and perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia in term of mean, standard deviation and percentages. The mean value of factors ranges from (1.98 - low) to (4.07 - high), while the mean value for the total dimension was (3.183) which is moderate. Related to statement, the highest mean value was for statement number four and statement number six, which stated that “The transformation in the Midwifery contributes to ensuring a work environment that stimulates efficiency and creativity among employees” and “I understand the impact of changes on midwives' job satisfaction” respectively with mean value (4.07) and standard deviation (0.624). while the lowest mean value was for the statement number five, which stated that “The transformation in the Midwifery ensures fair development and empowerment opportunities for all employees” with mean value (1.98) and standard deviation (1.367). This indicate that the most important factors that affect attitude and perception of nursing/ midwifery managers toward the transformation are efficiency, creativity and job satisfaction.

Moreover, results in table (7) indicated that the main important factor affect attitude and perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia are supporting stakeholders, including patients, healthcare organizations, and government agencies according to (85.0%) of respondents, creating attractive environment to encourage service providers and increase efficiency and effectiveness as reported by (88.6%), increasing investment in

Midwives' capabilities and opportunities for training and skills development as reported by (57.8%), improving efficiency and creativity among employees according to (93.2%) of respondents, enhancing job satisfaction according to (93.2%),

While it was noticed that (57.4%) of respondents are not sure about the importance of communication and transparency regarding a Midwifery transition, (55.6%) have a doubt about the importance of investing in technology and equipment in Midwifery> moreover, (65.2%) of respondents reported that transformation in the Midwifery doesn't ensures fair development and empowerment opportunities for all employees.

4. What are the factors that may hinder the transformation Midwifery profession in Saudi Arabia?

Table (8): Factors Hinder the Transformation in Midwifery Profession

	Statement	Mean	Standard Deviation	Percentage				
				Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	The transformation in Midwifery improves infrastructure, facility management and safety standards	4.02	0.845	0%	6.3%	15.5%	47.7%	30.5%

	I understand the impact of the changes on the Director of Nursing's workload and responsibilities	3.81	0.972	5.8%	5.3%	7.1%	65.0%	16.8%
	I understand the impact of the changes on the midwives' workload	3.17	1.377	14.5%	25.1%	8.6%	32.7%	19.0%
	understand the need for additional training & education in midwifery Led care for Leaders and	4.02	0.845	0%	6.3%	15.5%	47.7%	30.5%

	employee in Maternity-care field							
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	Total	3.76	1.272					
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Results in table (8) represent the main factors that may hinder the transformation Midwifery profession in Saudi Arabia. The mean value of these factor ranges from (3.17 – moderate) to (4.02 – high). While the mean value for the total dimension was (3.76 – high).

Related to statement, the highest mean value was for statement number four and statement number one, which stated that “understand the need for additional training & education in midwifery Led care for Leaders and employee in Maternity-care field” and “The transformation in Midwifery improves infrastructure, facility management and safety standards” respectively with mean value (4.02) and standard deviation (0.845). while the lowest mean value was for the statement number three, which stated that “I understand the impact of the changes on the midwives' workload” with mean value (3.17) and standard deviation (1.377). This indicate that the most important factors that may hinder the transformation Midwifery profession in Saudi Arabia are the need for additional training & education in midwifery. As well as the infrastructure, facility management and safety standards.

According to (78.2%) of respondents the need for additional training & education in midwifery, and the lack of infrastructure, facility management and safety standards are the main factors that may hinder the transformation Midwifery profession in Saudi Arabia. On the other hand (81.8%) of respondents reported that the changes on the workload and responsibilities for director of Nursing's can be important factor that hinder the transformation. In addition to (51.7%) of respondents who reported that the changes on the midwives' workload is an important factor for hindering the transformation.

5. Is there any difference of attitude and awareness level and perception level of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia related to the socio demographic variables (age, education, experience and region)?

In order to answer this question one-way ANOVA test will be applied. But before applying ANOVA Test it is required to check the availability of test conditions. one-way ANOVA is a statistical technique that assesses potential differences in a scale-level dependent variable by a nominal-level variable having more than two categories. The test requires some conditions or assumptions as the following:

1. The normality distribution of sample.
2. Independence of cases: the sample cases should be independent of each other
3. Homogeneity of variance: Homogeneity means that the variance among the groups should be approximately equal.

After checking the availability of these assumptions one -way ANOVA test will be applied to answer question five.

1. Normality Test: There are different tests that can be used to check the normality of data set. Kolmogorov-Smirnov Test is the most suitable test as it is used to test the normality for sample size greater than (100). The null hypothesis of Kolmogorov-Smirnov Test assumes that the data follows the normal distribution, while the alternative hypothesis assumes not. If the value of the significance (sig.) is greater than (0.05) we accept the null hypothesis and conclude that data follows the normal distribution, otherwise the null hypotheses will be rejected and conclude that data doesn't follow the normal distribution (Berger & Zhou, 2014). Table (9) represent the results of Kolmogorov-Smirnov Test for the research variables

Table (9): Kolmogorov-Smirnov Test

Number	Dimension	Statistic	df	Sign.
1	Attitude and Awareness	0.039	394	0.160
2	Perception	0.028	394	0.200

Based on results in table (9), it can be noticed that the level of significance is greater than (0.05) for both dimensions. For this reason, we can conclude that the research data follows the normal distribution.

2. Independence of cases: This assumption can be determined from the design of the study or research. In the current research, data was collected from each case in separated way than the other cases. For this reason, cases don't depend oneach other. Do that this assumption is achieved in the current research.
3. Homogeneity of Variance: this assumption can be tested using different tests such as Levene's test or the Brown-Forsythe Test. In the current research Levene's test will be adopted to check the homogeneity of variance. The null hypothesis of the test assumes that variances are equal across groups. While the alternative hypothesis assumes that the variance is not equal among groups. The level of significant can be used to accept or reject the hypothesis. If the value of significance is greater than (0.05), the null hypothesis is accepted and conclude that the variance is equal among groups. In this case the assumption of homogeneity of variance is proved. Table (10) show the results of Levene's test.

Table (10): Levene's Test

	Variable	Levene's Statistic	df1	df2	Sig.
	Attitude and Awareness	1.596	3	390	.190
	Perception	1.468	3	390	.223

Results in table (10) indicate that the sig. value is greater than (0.05) for both variables. For this reason, the null hypothesis of Levene's test is accepted and we conclude that the assumption of homogeneity of variance is proved.

After checking the availability of one-way ANOVA test are satisfied. It is possible to apply the test in order to answer question five. Results of one-way ANOVA test related to attitude and awareness, and perception according to socio demographic variables are presented in the following tables.

1. Age:

(11): Mean and Standard Deviation of Attitude and Awareness, and Perception According to Age of Respondents

Variable	Categories	N	Mean	Standard Deviation
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					on
Attitude and Awareness	Age	20-30 years	80	2.9868	1.64325
		31-40 years	227	3.0199	1.49633
		41-50 years	81	3.0448	1.57342
		51-60 years	6	2.3832	.94515
		Total	394	3.0086	1.53366
Perception	Age	20-30 years	80	3.7003	1.56811
		31-40 years	227	3.5433	1.75186
		41-50 years	81	3.5700	1.49449
		51-60 years	6	4.0668	1.21417
		Total	394	3.5886	1.65526

Results in table (11) indicate that there are differences in mean values of both perception and awareness and attitude according to respondent age. In order to check the significance of these differences one-way ANOVA test will be applied. Results are presented in table (12).

Table (12): One-Way ANOVA for the Impact of Age on Perception, Attitude and Awareness

Variable	Source	Sum of Squares	df	Mean Square	F	Sig
Attitude and Awareness	Between Groups	2.520	3	0.840	0.355	0.785

Perception	With in Groups	921.857	390	2.364	0.347	0.791
	Total	924.377	393	-		
	Between Groups	2.865	3	0.955		
	With in Groups	1073.909	390	2.754		
	Total	1076.774	393	-		

Results in table (12) indicated that the differences in the level of attitude and awareness regarding respondent age is not significant as the sig. results are greater than (0.05). Moreover, results indicate that the mean differences in perception level according to respondent age is not significant for the same reason. From these results it can be concluded that the nurse's attitude and perception doesn't affected by respondent age.

2. Education

Table (13): Mean and Standard Deviation of Attitude and Awareness, and Perception According to Education of Respondents

Variable	Categories		N	Mean	Standard Deviation
Attitude and Awareness	Education	technical	91	2.9678	1.53288
		bachelor	150	2.8372	1.49501
		master	128	3.2600	1.54496

ness		PhD	25	2.8975	1.63029
		Total	394	3.0086	1.53366
Percepti on	Educati on	technical	91	3.4094	1.60034
		bachelor	150	3.5519	1.54306
		master	128	3.7398	1.77306
		PhD	25	3.6876	1.89243
		Total	394	3.5886	1.65526

Results in table (13) indicate that there are differences in mean values of both perception, and awareness and attitude according to respondent education. In order to check the significance of these differences one-way ANOVA test will be applied. Results are presented in table (14).

Table (14): One-Way ANOVA for the Impact of Education on Perception, Attitude and Awareness

Variable	Source	Sum of Squares	df	Mean Square	F	Si g
Attitude and Awareness	Between Groups	12.957	3	4.319	1.848	.138
	Within Groups	911.420	390	2.337		
	Total	924.377	393	-		
Perception	Between Groups	6.297	3	2.099	.765	.514
	Within Groups	1070.477	390	2.745		

	Total	1076.774	393	-		
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Results in table (14) indicated that the differences in the level of attitude and awareness regarding respondent education is not significant as the sig. result is greater than (0.05). Moreover, results indicate that the mean differences in perception level according to respondent education is not significant for the same reason. From these results it can be concluded that the nurse's attitude and perception doesn't affected by respondent education

3. Experience

Table (15): Mean and Standard Deviation of Attitude and Awareness, and Perception According to Experience of Respondents

Variable	Categories		N	Mean	Standard Deviation
Attitude and Awareness	Experience	Less than 5 years	66	2.3879	1.71540
		6-10 years	107	2.7732	1.37893
		11-20 years	185	3.2849	1.48933
		More than 20 years	36	3.4257	1.43112
		Total	394	3.0086	1.53366
Perception	Experience	Less than 5 years	66	3.4072	1.49491
		6-10 years	107	3.5737	1.63270
		11-20 years	185	3.6520	1.74155
		More than 20 years	36	3.6400	1.58425
		Total	394	3.5886	1.65526

Results in table (15) indicate that there are differences in mean values of both

perception, and awareness and attitude according to respondent experience. In order to check the significance of these differences one-way ANOVA test will be applied. Results are presented in table (16).

Table (16): One-Way ANOVA for the Impact of Experience on Perception, Attitude and Awareness

Variable	Source	Sum of Squares	df	Mean Square	F	Sig.
Attitude and Awareness	Between Groups	51.742	3	17.247	7.708	.000
	Within Groups	872.635	390	2.238		
	Total	924.377	393	-		
Perception	Between Groups	3.035	3	1.012	.367	.777
	Within Groups	1073.739	390	2.753		
	Total	1076.774	393	-		

Results in table (16) indicated that the differences in the level of attitude and awareness regarding respondent experience is significant as the sig. result is greater than (0.05). on the other hand, results indicate that the mean differences in perception level according to respondent experience is not significant as the sig. value is greater than (0.05). From these results it can be concluded that the nurse's attitude is affected by respondent experience, while perception is not.

In order to specify which category of years of experience has higher level of awareness and attitude toward the transformation in midwifery profession in Saudi Arabia post hoc test is applied. Results are presented in table (17).

Table (17): Post Hock Test for Attitude and Awareness Level Regarding Respondent Experience

Variable	Experience(I)	Experience (J)	Mean Difference (I)- (J)	Std . Error	Si g.
Attitude and Awareness	Less than 5 years	6-10 years	-.38534	.23412	.354
		11-20 years	-.89702**	.21447	.000
		More than 20 years	1.03777**	.30993	.005

Results in table (17) indicate that the mean difference is significant between the category (less than 5 years) and two other categories which are (11-20 years) and (more than 20 years). It can be noticed that the mean difference between the category (Less than 4 years) and (more than 20) years is (1.03777) and this difference is significant. The negative sign here indicates that respondents who have more than 20 years of experience have higher level of attitude and awareness toward the transformation in midwifery profession in Saudi Arabia compared with respondents who have (less than 5 years) of experience.

Related to the difference between the category (less than 5 years) and the category (11-20 years) the mean difference is (0.89702) this difference is significant as the value of significance is (0.000) which is less than (0.05). The negative sign here indicates that respondents who have (11-20 years) of experience have higher level of attitude and awareness toward the transformation in midwifery profession in Saudi Arabia compared with respondents who have (less than 5 years) of experience.

From this result it can be concluded that respondents with higher level of experience have better attitude and awareness toward the transformation in midwifery profession in Saudi Arabia.

4. Region:

Table (18): Mean and Standard Deviation of Attitude and Awareness, and Perception According to Region of Respondents

Variable	Categories		N	Mean	Standard Deviation
Attitude and Awareness	Region	Asir region	10	3.2660	1.05297
		Baha region	6	3.9738	1.23360
		Bisha region	1	1.0765	-
		Eastern region	17	3.2261	1.69090
		Hafer Albatin region	1	5.5456	-
		Hail region	10	3.4885	.99075
		Jazan region	12	3.0753	1.63468
		Jouf region	14	2.9411	1.66146
		Makkah region	134	3.1391	1.48249
		Medinah region	98	2.6753	1.63018
		Qassim region	7	2.5105	1.49145
		Riyadh region	50	3.0690	1.61029
		Tabuk Region	20	2.4097	.87408
		Najran Region	9	3.9142	1.58416
		Northern Region	5	3.4359	1.70631
		Total	394	3.0086	1.53366
Perception	Region	Asir region	10	4.3975	2.64538
		Baha region	6	3.6388	1.88981
		Bisha region	1	2.9842	-
		Eastern region	17	3.0901	1.73724

		Hafer Albatin region	1	5.6093	-
		Hail region	10	3.6151	1.55026
		Jazan region	12	4.0982	1.60344
		Jouf region	14	3.7748	1.42527
		Makkah region	134	3.4199	1.62317
		Medinah region	98	3.5305	1.69631
		Qassim region	7	4.2696	2.02753
		Riyadh region	50	3.6750	1.55629
		Tabuk Region	20	3.5705	1.47374
		Najran Region	9	3.6918	.83033
		Northern Region	5	5.2579	1.66100
		Total	394	3.5886	1.65526

Results in table (18) indicate that there are differences in mean values of both perception, and awareness and attitude according to respondent region. In order to check the significance of these differences one-way ANOVA test will be applied. Results are presented in table (19).

Table (19): One-Way ANOVA for the Impact of Region on Perception, Attitude and Awareness

Variable	Source	Sum of Squares	df	Mean Square	F	Significance
Attitude and Awareness	Between Group	50.206	14	3.586	1.555	.090

ESS	S					
	With in Groups	874.171	379	2.307		
	Total	924.377	393			
Perception	Between Groups	40.640	14	2.903	1.062	.391
	With in Groups	1036.13 4	379	2.734		
	Total	1076.77 4	393			

Results in table (19) indicated that the differences in the level of attitude and awareness regarding respondent region is not significant as the sig. result is less than (0.05). Moreover, results indicate that the mean differences in perception level according to respondent region is not significant as the sig. value is greater than (0.05). From these results it can be concluded that the nurse's attitude and perception is not affected by respondent region.

Discussion

The main objective of the current research is to measure the attitude and perceptions of nurse's managers toward the transformation in midwifery profession in Saudi Arabia. As well to investigate the differences in the level of attitude and awareness related to some socio demographic variables (age, education, experience and region).

In order to achieve research objectives, cross-sectional study design was adopted in all hospitals of the Ministry of Health and its primary care centers in 13 administrative regions in the Kingdom of Saudi Arabia. The research sample was collected by using random sampling from the research population and by using well developed questionnaire. The pilot sample consisted of (25) respondents used to confirm the validity and reliability of research tool. After that the tool was distributed among the research sample which was consisted of (394) respondents.

Results indicated that the level of attitude and awareness of nursing/ midwifery managers toward the transformation in Midwifery profession in Saudi Arabia was moderate as most of respondents understand the goals and objectives of transformation, have the ability to provide guidance and support to midwives through the shift and transformation, willing to change current practices to accommodate changes in Midwifery.

Related to the perception level, results indicated that the level of perception of nursing/ midwifery managers toward the transformation in Midwifery profession in Saudi Arabia was moderate. It was noticed that most of respondents have envisioned the impact of the changes on the attractiveness of the profession for future student, have a visualization of the impact of changes on Women's and their families' satisfaction. Understand the potential for improving efficiency and effectiveness in the healthcare system. And have a perception of the impact of the changes on the provision of midwifery service. This result is coincidence with the result of Harb et al. (2022) who found that transformational leadership appears has positive nursing outcomes (reflected in care effectiveness, extra efforts and satisfaction) that will ultimately and expectedly lead to positive patient outcome meeting KSA vision 2030.

Moreover, results indicated that the main important factor affect attitude and perception of nursing/ midwifery managers toward the transformation in midwifery profession in Saudi Arabia are supporting stakeholders, including patients, healthcare organizations, and government agencies, creating attractive environment to encourage service providers and increase efficiency and effectiveness, increasing investment in Midwives' capabilities and opportunities for training and skills development, improving efficiency and creativity among employees, and enhancing job satisfaction according. This result is coincidence with the result of Banaser et al. (2021) who found that advanced practitioners' educational preparedness, organizational, and contextual factors are important factors that need to be addressed to promote their role and to improve nurse's perception.

On the other hand, the need for additional training and education in midwifery, the lack of infrastructure, facility management and safety standards, changes on the workload and responsibilities for director of Nursing's and nurses can be important factor that hinder the transformation of Midwifery profession in Saudi Arabia. This result is coincidence with the result of Albejaidi and Nair (2019) who found the need of investing heavily on medical, nursing, and other specialized fields of education to improve skills in order to meeting the future health needs of population to facilitate achievement of Vision 2030. And the study of Bannon et al. (2017) who found that lacking the necessary skills lead to failing to develop and manage maternity services in England

Also, it was found that years of experience has significant impact on improving nurses' attitude and awareness toward transformation of Midwifery profession in Saudi Arabia for nurses with higher years of experience. More specifically nurses with more than 1 years of experience. While it was found that the level of perception is not affected by years of experience. Moreover, it was found that there are no significant differences in the level of attitude and perception related to nurses' education, age and region.

Based on the research results the following recommendation are provided:

- More efforts are needed to increase the lever of nurse's awareness and attitude toward transformation of Midwifery profession in Saudi Arabia.
- More efforts are needed to enhance nurse's perception toward transformation of Midwifery profession in Saudi Arabia.
- Enhancing employees' skills, end experiences through training is essential in the process of transformation.
- Improving health care infrastructure, facility management and safety standards are important for the transformation Midwifery profession in Saudi Arabia.
- It is recommended to conduct more future researches related to the national transformation programs for the health sector in KSA for achieving the goals of the kingdom vision 2030.

TimeframeTable 1. Research Timeframe

Task	Feb. 2023	March. 2023	April. 2023	May. 2023	June. 2023	July. 2023	Aug. 2023	Sept. 2023
Literature review								
Introduction								

Data Colle ction								
Dat a Ana lysi s								
Repor t the Resul ts								
Writin g Up Thesis and submi ssion								

Budgeting

Table 2. Projected Budget

Nu mbe r	Items	Unit	Price	Amount (SAR)
	Other Direct Costs			
1	SPSS Program	1		
2	Local transports	1		
3	Technical calls	1		
4	Internet	1		
5	Authorized translator	1		
Total Amount (SAR)				

References

- Al-Dossary, R. (2018). The Saudi Arabian 2030 vision and the nursing profession: The wayforward. *International nursing review*, 65(4), 484-490.
- Al-Khunizi, A., Al-Otaibi, A., Al-Anazi, A., Bashatah, A. S., & Wajid, S. (2021). The Nursing Image in Saudi Arabia: A Narrative Review on what it was and what is our Vision. *Health Sciences*, 10(10), 108-115.
- Albejaidi, F., & Nair, K. S. (2019). Building the health workforce: Saudi Arabia's challenges in achieving Vision 2030. *The International journal of health planning and management*, 34(4), e1405-e1416.
- Almarwany, K. H., Alzhrani, F. M., Althubiani, H. H. H., Alharthi, R. D. S., Alzahrani, A. M., Alhilali, I. S., . . . Shatarah, T. B. (2021). A study of Relationship between Leadership Styles and Job Security among Nurses Working in Makkah health cluster in Saudi Arabia. *European Journal of Molecular & Clinical Medicine*, 8(04), 2021.
- Alotaibi, T., & Al Anizi, A. (2019). Literature review on comparisons of advanced clinical nurse practitioner role in Saudi Arabia and United Kingdom. *Journal of Radiology Nursing*, 38(4), 264-271.
- Alsufyani, A. M., Alforihidi, M. A., Almalki, K. E., Aljuaid, S. M., Alamri, A. A., & Alghamdi, M. S. (2020). Linking the Saudi Arabian 2030 vision with nursing transformation in Saudi Arabia: Roadmap for nursing policies and strategies. *International Journal of Africa Nursing Sciences*, 13, 100256.
- Banaser, M., Al-Soqair, N., & Al-Feher, S. (2021). Nurses perception of advance nurse practitioners roles in public hospitals: a qualitative study. *Open Journal of Nursing*, 11(6), 513-527.
- Bannon, E. M., Alderdice, F., & McNeills, J. (2017). A review of midwifery leadership. *British Journal of Midwifery*, 25(10), 655-661.
- Edgar, D., Middleton, R., Kalchbauer, S., Wilson, V., & Hinder, C. (2021). Safety attitudes builds safety culture: Nurse/midwife leaders improving health care using quantitative data. *Journal of Nursing Management*, 29(8), 2433-2443.
- El Dahshan, M. E. A., Youssef, H. A., Aljouaid, M., Babkeir, R. A., & Hassan, W. B. (2017). Effect of nurse managers leadership styles on organizational commitment of nurses working at Taif governmental hospitals in Kingdom of Saudi Arabia. *Global Journal of Management and Business Research*.
- Harb, A., Althunian, Z., Silva, J., Alayed, A., Aljarudi, S., & Barshaid, A. (2022). Nurses Perceptions of Nursing Leadership Styles in the Eastern Healthcare

Cluster in Saudi Arabia. *American Journal of Nursing*, 10(1), 13-22.

MOH-KSA. (2021). Statistical Yearbook. KSA.

MOH. (2018). National health transformation program. Retrieved 18 Jan., 2023, from <https://www.moh.gov.sa/Ministry/MediaCenter/Publications/Documents/2018-11-01-010.pdf>

Moon, S. E., Van Dam, P. J., & Kitsos, A. (2019). Measuring transformational leadership in establishing nursing care excellence. *Healthcare*, 7(4), 132.

The-World-Bank-Data. (2019). Nurses and midwives (per 1,000 people) - Saudi Arabia. Retrieved 18 Jan., 2023, from <https://data.worldbank.org/indicator/SH.MED.NUMW.P3?locations=SA>

Van Hecke, A., Goemaes, R., Verhaeghe, S., Beyers, W., Decoene, E., & Beeckman, D. (2019).

Leadership in nursing and midwifery: Activities and associated competencies of advanced practice nurses and midwives. *Journal of Nursing Management*, 27(6), 1261-1274.

WHO. (2020). State of the world's nursing 2020: investing in education, jobs and leadership.

Retrieved 18 Jan., 2023, from <https://www.who.int/publications-detail-redirect/9789240003279>

WHO. (2021a). Global strategic directions for NURSING AND MIDWIFERY (2021-2025).

Geneva.

WHO. (2021b). Strengthening nursing and midwifery: investments in education, jobs, leadership and service delivery. Geneva.

WHO. (2022). Nursing and midwifery. Retrieved 18 Jan., 2023, from <https://www.who.int/news-room/fact-sheets/detail/nursing-and-midwifery>

Yamane, T. (1973). *Statistics: An Introductory Analysis*. London: John Weather Hill, Inc Roberts, P., & Priest, H. (2006). Reliability and validity in research. *Nursing standard*, 20(44), 41-46.

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, 48,

1273-1296.

Berger, V. W., & Zhou, Y. (2014). Kolmogorov–smirnov test: Overview.
Wiley statsref: Statistics reference online.

Appendix A

List of Arbitrators' Names

Name	Job Rank	University
Dr. Salwa M. Maghrabi	Assistant Professor	Umm Al-Qura University (Faculty of Nursing)
Dr. Grace M. Lindsay	Professor	Umm AlQura University(Medical Surgical Nursing)