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# Perceived structural empowerment, resilience, and intent to stay among midwives and registered nurses in Saudi Arabia: a convergent parallel mixed methods study

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## Abstract

**Background** Retaining midwives and registered nurses in the Obstetrics and Gynecology department/unit (OB/GYN) is not just a matter of organizational effectiveness and financial wellness. It's a crucial aspect of ensuring quality healthcare delivery. This study aimed to discuss the degree to which midwives and nurses in OB/GYN departments are structurally empowered, resilient, and committed to remaining at the organizations and to examine whether nurses' and midwives' sense of structural empowerment and resilience is a good predictor of their decision to stay with the organization.

**Methods** This study employed a unique convergent parallel mixed methods approach. The research was conducted in two distinct phases. The first phase involved a cross-sectional quantitative survey with a convenience sample of 20 midwives and nurses in OB/GYN departments. The second phase was a qualitative study utilizing semi-structured, open-ended interviews. Eighteen nurses and midwives, specifically chosen as the target population, were invited to participate in individual interviews. The data collection took place at three major hospitals in Saudi Arabia, starting in January 2023 and concluding in February 2023.

**Results** The study results revealed that structural empowerment and resilience were statistically significant predictors of the intent to stay in the organization ( $F = 35.216, p < 0.001$ ), with 26.3% variation, the structural empowerment is higher predictor ( $\beta = 0.486, p < 0.000$ ) to intent to stay if compared to resilience ( $\beta = 0.215, p < 0.008$ ). Five major themes emerged from the narratives of the nurses and midwives: the nurturing of the physical and physiological, the development of the psychological, the managing finances, the restructuring of the organization, and the enrichment of the professional and occupational.

**Conclusion** The study's findings have significant implications for healthcare organizations. They highlight the importance of cultivating a culture of empowerment and resilience, which can serve as a powerful tool to encourage registered nurses and midwives to remain in their organizations. This insight empowers healthcare administrators,

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human resource managers, and obstetrics and gynecology professionals to take proactive steps toward improving retention rates.

**Keywords** Empowerment, Intent to stay, Midwife, Perception, Structural, Registered nurses, Resilience

## Background

Nurses and midwives are the backbones of the medical system and the most visible segment of the health sector. There are about 29 million nurses and midwives worldwide, according to the World Health Statistics Report [1–3]. The World Health Organization (WHO) predicts that by 2030, the world will need 9 million more nurses and midwives to meet increasing healthcare demands [4, 5]. Nurses are in low supply in the Kingdom of Saudi Arabia (KSA) [6]. Under the KSA's Saudi Vision 2030, midwifery is a healthcare service that will be vastly upgraded [7]. Providing high-quality midwifery, enhanced maternal health, and emotional and practical support to patients and their families are all within the purview of a midwife's professional responsibilities [8]. The healthcare organization is constantly evolving at a fast pace. According to Johnson [9] and Altaweli et al. [7], the total number of births reported by the KSA's Ministry of Health (MOH) hospitals in 2018 was 265,318. This represents an annual 2.43% increase in the Saudi Arabian population. Therefore, aspiring midwives require diverse characteristics and abilities to launch and sustain successful careers. This includes the traits of being able to bounce back from adversity, having confidence in one's abilities, and having the ability to handle difficult situations at work.

However, nursing and midwifery professions requiring specialized care are susceptible to staffing gaps. According to Altaweli et al. [7], the MOH needs more than 7,000 additional midwives to care for mothers and newborns. The health transformation strategy expects more than 100,000 nursing positions to be required by 2030 to realize Saudi Vision 2030 [10]. However, whether nurses and midwives will continue working in healthcare facilities in the KSA is still being determined. In fact, the KSA has a relatively high nursing turnover rate, as with midwifery, which is higher than in other countries. For example, the KSA has a 20% higher nursing turnover rate than the United Kingdom [11]. The lack of healthcare professionals is causing problems, but it also needs to be clarified how hard and committed the present crop of nurses and midwives is. There hasn't been a study done in KSA to investigate the factors of structure empowerment and resilience and determine whether they could help reduce nurses and midwives' turnover in the future and encourage them to remain in their organization.

Much research has looked into the factors leading to high turnover rates in the midwifery field and nursing workforce [12]. In both healthcare professions, a lack of appreciation, stress, strenuous working responsibilities,

lack of management support, poor compensation, and insufficient quality of life due to a lack of family and social life have all been recognized as contributing factors to this issue. Structural empowerment concerns social structures that facilitate the employee's work. Structural empowerment, a term broadly used in the nursing literature, refers to successfully resolving these negative influences. It entails substantial factors that must exist in the workplace if midwives are to be effectively empowered. One such paradigm is Kanter's structural empowerment, and its components include education, social networks, material resources, and professional development possibilities [13]. Sullivan et al. [14]. Corroborate this, finding many elements connected to a midwife's capacity for resiliency, empowerment, and a long career. Support from superiors, easy access to information, and a sense of agency and control in carrying out one's duties all affect longevity in one's career.

In their studies, Hezaveh et al. [15] and Pallant et al. [16] asserted that Nurses' and midwives' improved professional effectiveness is related to their increased resilience after experiencing empowerment. They can better adjust to stress on the job and boost their professional health as they receive more managerial backing, professional recognition, and the appropriate skills and resources. In turn, creating a pleasant workplace and conducive settings for professional work helps to keep nurses around for the long haul. In their study, Al-Hamdan et al. [17] found that nurses are more likely to commit to an organization if they feel supported by the leadership, have access to the tools they need, and have positive relationships with their coworkers. Nurses are more likely to feel loyal to their employers and stay with the organization if they are given responsibility, respect, and encouragement to do their best work in service of the organization's mission [18]. To the researchers' knowledge, no previous studies have analyzed the connection between structural empowerment, resilience, and intention to stay in the context of the Saudi Arabian midwifery and nursing workforce. Consequently, the current literature about this crucial area of research lacks depth. The present study stands out from the rest of the literature because it attempts to investigate three variables that have not been thoroughly explored in previous research.

## Study aim

Based on the literature gap, this study aimed to discuss the degree to which midwives and nurses in OB/GYN departments are structurally empowered, resilient, and

committed to remaining at the organizations and to examine whether nurses' and midwives' sense of structural empowerment and resilience is a good predictor of their decision to stay with the organization.

## Methods

A convergent parallel mixed methods design including quantitative cross-sectional research design and qualitative research design was adopted, which means the collection of quantitative and qualitative data is independent, the analysis of both types of data is separate, and the two datasets are merged finally to see whether the findings converged, diverged or enhanced each other [19]. The justification for utilizing convergent mixed-methods design in this study is that the researchers would like to gain a more holistic and comprehensive understanding of the nurse's and midwives' perceptions towards structural empowerment, resilience, and intent to stay, which is to strengthen the findings of one component with the findings of the other component and to answer different types of questions [20]. Thus, the main aim of this study fits the five purposes of mixed-method designs: triangulation, complementarity, development, initiation, and expansion [21]. The researchers in this study used a mixed-methods approach because they believed that neither the quantitative nor the qualitative approaches taken separately would provide adequate information to accomplish their goals and answer the concerns.

## Participants

### Quantitative sample

This study was conducted at the beginning of January 2023 and continued until the end of February 2023. The quantitative phase of the data collection involved gathering quantitative data from participants who met the inclusion criteria and were selected using a convenient non-probability sampling strategy. The sample size required for this study was derived based on a rigorous power analysis using *G\*Power* 3.1™, a trusted scientific tool. A power of 95%,  $\alpha=0.05$ , a medium-effect size ( $f^2=0.15$ ), and two predictors (structural empowerment and resilience) were used as the statistical basis for calculating a linear multiple regression analysis (fixed model,  $R^2$  deviation from zero). Based on the results, 107 participants from the total population ( $n=297$ ) were sufficient for this study.

Participants were included in the research study if they met the following selection criteria at the time of data collection—nurses and midwives who had three or more years of practical experience working in (delivery rooms, OB/GYN emergency rooms, and obstetrics departments), and were willing to participate in the research study. The participants were excluded from the research study if they were nurses and midwives newly recruited

in the orientation period at the time of data collection. The careful selection of participants was a key aspect of the study's design, ensuring the relevance and accuracy of the study's findings and providing a solid foundation for the research.

To select the required sample, the researchers coded all eligible registered nurses employed at the three hospitals based on lists provided by the senior hospital administrators and the hospital director. The researchers then sent the research questionnaire link for all of them to participate in the research.

### Qualitative sample

For qualitative study, the participants were eighteen registered nurses and midwives working in the OB/GYN departments of the three selected government hospitals located in the Eastern Province of Saudi Arabia (Al Khobar, Dammam, and Al Hasa), who had met the inclusion criteria by utilizing a purposive sampling: an OB/GYN nurse or midwife in the selected organizations, a minimum of three or more years of working experience to enhance credibility and trustworthiness of data, and willingness to cooperate with the researchers.

Each participating nurse and midwife were interviewed in a semi-structured individual interview. These interview sessions lasted 30 to 60 min and took place at the participants' place of work. When the researchers determined that no new issues continued to emerge and the same topics would be repeated, data saturation was considered to have been attained, and data collection was terminated.

### Setting of the study

The study was conducted in three maternity hospitals in the Eastern Province of Saudi Arabia. These hospitals were selected based on their capacity, which exceeds 500 beds in total, and their provision of 24/7 high-quality integrated health services in the field of Obstetrics and Gynecology. Additionally, their large staff of over 250 nurses and midwives in the Obstetrics departments, and their recognition as mother-friendly hospitals, where midwives provide high-standard and quality delivery care, were key factors in their selection.

## Data collection

### Measures

#### *Structural empowerment*

The Conditions of Work Effectiveness Questionnaire (CWEQ-II) is a self-reported questionnaire developed by Spence Laschinger et al. [22]. The researchers adapted it to measure the midwives' and nurses' perceptions of structural empowerment.

The CWEQ-II is used in international nursing research; a questionnaire consists of 19 items based on Kanter's

structural theory of organization empowerment; these items were grouped under six dimensions: Access to opportunity, access to support, access to resources, having formal power and having informal power. Responses were measured on a five points Likert scale ranging from (1) to (5) where 1 represents 'none' and 5 represents 'a lot'.

The components can vary from 6 to 30, with values between 6 and 13 meaning low level of structural empowerment, between 14 and 22 meaning moderate levels, and between 23 and 30 representing high value of structural empowerment. A high score indicated a high level of participants' perception of structural empowerment. Cronbach's previous studies reported alpha reliabilities for the instrument, which ranged from 0.81 to 0.87 [23].

### **Resilience**

The Connor–Davidson Resilience Scale 10-Item (CD-RISC-10) version questionnaire [24] was chosen to measure resilience in this study. This shortened version of the original 25-item questionnaire is a widely used, uni-dimensional self-report questionnaire. It contains ten statements, and the responses to each statement were measured on a five-point Likert scale, where 0 represents 'not true at all' and four means 'true nearly all the time.'

Nurses' and midwives' responses to all ten statements in this section can provide insight into their organizations' resilience perceptions. The final score on the questionnaire was the sum of the responses obtained on each item (range from 0 to 40), with values between 0 and 29 meaning the lowest level of resilience, between 30 and 32 meaning low levels, between 33 and 36 meaning moderate level, and between 37 and 40 representing the high value of resilience. The highest scores indicate the highest level of resilience. Cronbach's alpha ranged from 0.6 to 0.7 and has a moderate reliability rating [24].

### **Intent to stay**

Nurses' and midwives' intent to stay in the organizations was measured by McCain's Behavioral Commitment Scale (MBCS), which was developed by McCloskey and McCain [25]. The MBCS consists of 38 items; McCain extracted five items from this scale to measure nurses' intent to stay [26]. The 5-item Subscale from McCain's Behavioral Commitment Scale is used in the current study. This section contains five statements used to measure midwives' and nurses' perceptions of their intention to stay in their current organizations. The responses to each statement were measured on a five-point Likert scale, where one represents 'strongly disagree,' and five represents 'strongly agree.' The Cronbach's alpha of McCain's subscale of intent to stay was (0.90). The total score ranges from 5 to 25, and the scores are summed and divided by the number of statements to attain the

participant's perception mean. A higher score indicated a higher intent to stay.

### **Socio-demographic characteristics of the participants**

The researchers developed the socio-demographic questionnaire, which was used to collect information about the participants' socio-demographic characteristics. This information included the participants' ages, marital status, work settings, years of experience, and educational levels. These items for the questionnaire were developed based on the reviewed literature about structural empowerment, resilience, and the intention to stay in the organization.

### **Qualitative phase**

The research instruments were a series of semi-structured interviews, field notes, and audio recordings. These strategies were chosen to generate an in-depth exploration of the participants' working experiences with research phenomena. A semi-structured interview guide was developed by the researchers to elicit participant data. Creswell & Creswell [19] indicated that the interview-guided questionnaire consisted of a series of open-ended questions that elicited the participants' experiences. This type of data allowed the researchers to ask follow-up/probing questions from the participants so that they could clarify and expound their thoughts and have a deeper understanding of the facts presented [27].

The transcript files contained the raw data from the interviews, such as a detailed consecutive account of the participants, settings, and reflective notes on the research experience and methodological issues. The information likewise was obtaining the personal files, which enabled the reconstruction of conversations in context rather than simply relying on a contextual verbal recording. Information on the participants' reflections and insights was also included. Audio recording was used during the interview to facilitate data gathering and verification of the information supplied during the interview.

### **Ethical considerations**

#### **Ethical approval**

Permission to carry out the study and record the interviews was obtained from the ethics bodies of King Saud University's Institutional Review Board (Ref no: KSU-HE-22-785) and Governmental Hospitals (Ref No: EXT-MS-2022-001) -(Ref No: H-05-HS-065). To further protect participant anonymity, they were assigned color-coded numbers and pseudonyms. Before the interviews, participants signed a written consent form, demonstrating their voluntary participation and allowing the researchers to make audio recordings. We assured participants that their contributions, names, and

recordings would be treated with the utmost respect and confidentiality.

Participants were also informed they could withdraw from the research or stop the recording at any time. The researchers showed the utmost care for the participants by adhering to the rigorous ethical concept of protecting the participants' health and their right to privacy during the research, the participants' informed consent was sought in the form of a written document that was signed during face-to-face contact. As a direct consequence of this, each participant was given a sheet of information. On the form that was sent to participants, information regarding the purpose of the study, its methods, dangers, potential benefits, and participant rights was detailed. Before providing their signed consent, the researchers made sure that the participants read and comprehended the information sheet that was provided to them.

## Data analysis

### Quantitative data analysis

In preparing the data for analysis, the raw data were extracted from the Question Pro questionnaires and imported into the Statistical Package for Social Science (SPSS) Version 25. Question Pro program's ability to accept imported information helped minimize data entry errors. Subsequently, each participant's response was assigned a unique participant code number before coding the data. The researchers checked all the soft-copy questionnaires against the data entered in SPSS. Any data

entry errors were edited to clean the data before analyzing it.

Descriptive and Inferential statistics of the quantitative data were performed. Descriptive statistics were carried out and represented by means and standard deviations using the frequency distribution tables to determine the level of each of the study variables. Frequencies and percentages of specific (socio-demographic) variables were used to clarify the characteristics of the sample population and their general information. The results were categorized and tabulated using Microsoft Office to produce tables and figures that visualized the data. Values of  $p < 0.05$  and  $0.01$  were considered statistically significant, and a  $p\text{-value} < 0.001$  was considered highly statistically significant. Inferential statistical tests such as multiple regression analyses were used after all assumptions regarding linearity, multicollinearity, independence of error, homoscedasticity, and normality were achieved.

### Qualitative data analysis

The Colaizzi method was used to analyze and interpret data [28]. After completing Colaizzi's data analysis steps, the participants clarified their initial words and phrases, expanded on what they wanted to convey, changed misunderstood experiences, added more information, and rectified grammatical and typographical errors. The results were verified using the Consolidated Criteria for Reporting Qualitative Data [29].

## Results

### Quantitative findings

A total of 200 out of 297 nurses and midwives participated in the study (67.3) percent response rate). Most participants (42.5%) worked in wards (Antenatal, Postnatal). The majority of the participants (63.0%) were aged (31–40 years). Regarding their years of experience, the majority of participants (33.0%) had (11–15 years) of experience, then (31.5%) of participants had (6–10 years), followed by (19.5%) with (<6 years) of work experience, then (12.5%) with (16–20 years) of work experience and only (3.5%) with (>20 years) of work experience. Most of the participants (51.0%) held a bachelor's degree in nursing/midwifery, while (42.5%) had a diploma level, and only (6.5%) of the participants had Master's or postgraduate qualifications. Of the 200 participants who indicated their marital status, the majority (77.0%) were married, and (23.0%) were single [30]. ( Table 1)

Our findings revealed that the overall structural empowerment score level was 19.67, with a mean score and SD ( $3.28 \pm 0.671$ ). This means the overall perception of the participants about structural empowerment was moderate. About the - CWEQ-II subscales, the "Opportunity" dimension was the highly perceived dimension and ranked first with a mean score of ( $3.55 \pm 0.956$ ),

**Table 1** Participants' demographic characteristics ( $n = 200$ )

Item	Sub-item	Frequency	Percentage	Mean $\pm$ SD
Age Group	20–30 Years	36	18.0%	2.04 $\pm$ 0.668
	31–40 Years	126	63.0%	
	41–50 Years	33	16.5%	
	> 50 Years	5	2.5%	
Education Level	Diploma	85	42.5%	1.64 $\pm$ 0.602
	Bachelor	102	51.0%	
	Post-Graduate	13	6.5%	
Years of Experience	< 6 Years	39	19.5%	2.49 $\pm$ 1.051
	6 – 10 Years	63	31.5%	
	11–15 Years	66	33.0%	
	16–20 Years	25	12.5%	
	> 20 Years	7	3.5%	
Work Setting (Unit)	Labor & Delivery	64	32.0%	1.94 $\pm$ 0.757
	Ward (Antenatal, Postnatal)	85	42.5%	
	Out Patient Area (Clinics & ER)	51	25.5%	
Marital Status	Single	46	23.0%	1.77 $\pm$ 0.422
	Married	154	77.0%	
<b>Total</b>		<b>200</b>	<b>100%</b>	

followed by the “Information” dimension with a mean score (3.51±0.903), then the “Support” dimension with a mean score (3.32±0.844). The informal power dimension came fourth rank with a mean score (3.26±0.784), followed by the “Resources” dimension with a mean score of (3.20±0.847), while the minimally perceived dimension by the participants was “Formal Power” with a mean score of (2.83±0.952) and ranked as the sixth and the last dimension among the structural empowerment dimensions. (Table 2).

Regarding resilience, our findings revealed that the overall resilience score level was 26.80, with a mean score and SD (2.68±0.744). This means the overall perception of the participants about resilience was the lowest. Regarding the CD-RISC-10 subscales, the “Regulate Emotion” component was the most highly perceived. It ranked first with a mean score of (2.80±1.058), followed by the “Self-Efficacy” component with a mean score of (2.78±0.827), then the “Cognitive focus/maintaining attention under stress” component with a mean score of (2.68±0.996). The “Optimism” component came fourth rank with a mean score of (2.67±0.832), and lastly, the “Flexibility” component, with a mean score of (2.49±0.878) came fifth rank among the resilience components. (Table 3).

Regarding the Intent to Stay, our findings revealed that the overall intent to stay mean score and SD was (3.29±0.840). This means the overall perception of the study subjects about intent to stay was “Neutral” perception (between 2.61 and 3.40). The questions’ means ranged between (3.17–3.44) that’s ranged between (Neutral - Agree) perception; the highest mean belonged to statement five, which stated: “I plan to keep this job for at least two or three years,” with a mean score of (3.44±1.255), followed by statement three “Even if this job does not meet all my expectations, I will not quit,” with a mean score of (3.34±1.095), then statement one “I plan to work at my present job for as long as possible”

**Table 2** Means, standard deviation and rank perception of overall participants of structural empowerment (n = 200)

Structural empowerment dimensions	X ± SD	Rank
Opportunity	3.55 ± 0.956	1st
Information	3.51 ± 0.903	2nd
Support	3.32 ± 0.844	3rd
Resources	3.20 ± 0.847	5th
Formal Power	2.83 ± 0.952	6th
Informal Power	3.26 ± 0.784	4th
<b>Total Mean (SD)</b>	<b>3.28 (0.671)</b>	
<b>Total: Score</b>	<b>19.67</b>	<b>Moderate Perception</b>

**Table 3** Means, standard deviation and rank perception of overall participants of resilience (n = 200)

Resilience components	X ± SD	Rank
Flexibility	2.49 ± 0.878	5th
Self-Efficacy	2.78 ± 0.827	2nd
Regulate Emotion	2.80 ± 1.058	1st
Optimism	2.67 ± 0.832	4th
Cognitive focus/maintaining attention under stress	2.68 ± 0.996	3rd
<b>Total: Mean (SD)</b>	<b>2.68 (0.744)</b>	
<b>Total: Score</b>	<b>26.80</b>	<b>Lowest Perception</b>

with a mean score of (3.32±1.194). Statement four came as fourth rank: “Under no circumstances would I leave my present job,” with a mean score of (3.18±1.136). The second statement stated, “I will probably spend the rest of my career in this job or jobs that it leads to in this hospital,” with a mean score of (3.17±1.112) coming fifth rank. (Table 4).

A multiple regression was used to identify the most significant predictor from the main factors that were found to influence participant’s intent to stay in the current working organization.

Table 5 presents “variables in the equation” that is, those factors that were found to be predictive of

**Table 4** Means, standard deviation and rank perception of overall participants of intent to stay (n = 200)

Intent to stay items	X ± SD	Rank
I plan to work at my present job for as long as possible.	3.32 ± 1.194	3rd
I will probably spend the rest of my career in this job or jobs that it leads to in this hospital.	3.17 ± 1.112	5th
Even if this job does not meet all my expectations, I will not quit.	3.34 ± 1.095	2nd
Under no circumstances would I leave my present job.	3.18 ± 1.136	4th
I plan to keep this job for at least two or three years.	3.44 ± 1.255	1st
<b>Total Mean (SD)</b>	<b>3.29 (0.840)</b>	<b>Neutral</b>

**Table 5** Enter multiple regression analysis, variables in the equation

Variables	Unstandardized coefficient		Standardized coefficient		95% confidence interval for B		
	B	Std. error	B	T	P	Lower bound	Upper bound
Structural Empowerment	0.486	0.089	0.388	5.437	0.000	0.310	0.662
Resilience	0.215	0.081	0.191	2.670	0.008	0.056	0.374

Dependent Variable: Intent to Stay

**Table 6** Model summary of regression analysis of level of intent to stay

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. error
1	0.513 <sup>a</sup>	0.263	0.256	0.72470

Predictors: (Constant), Structural Empowerment, Resilience

Dependent Variable: Intent to Stay

respondents' Intent to Stay ( $p < 0.000$ ). This multiple regression analysis showed that Structural Empowerment and Resilience were predictive of intent to stay, based on the Pearson correlation, significantly correlated level.

Likewise, Table 6 presents model one (structural empowerment, resilience) recorded a positive  $R = 0.513^a$  correlation,  $R^2 = 0.263$ , which indicates that 26.3% of the variation in Intent to Stay (the dependent variable) can be explained by the independent variable (Structural empowerment, Resilience).

Moreover, the  $R^2$  for the variables in the equation was used to determine the joint predictive contribution to the dependent variable (Intent to Stay) of the independent variables (Structural Empowerment and Resilience).

Thus, based on the multiple regression analysis, the best predictor of Intent to Stay from among the two variables analyzed is structural empowerment if compared to resilience.

Table 7 indicates that for the Model of the regression, the sum of squares is 36.990 ( $p = < 0.000$ ). Thus, the results of the ANOVA confirm differences of variance between the independent variables in terms of their predictive strengths, thereby supporting the finding that the independent variables structural empowerment and resilience are dominant predictors of intent to stay. (Table 7)

## Qualitative findings

### Findings from the semi-structured interviews

The qualitative findings were related to five major themes in the form of individual (nurses and midwives) dimensions from the narratives of 18 participants, including (1) physical and physiological, (2) psychological, (3) financial, (4) organizational, and (5) professional and occupational. The first major theme, nurturing physical and physiological, displays the activities of daily living (ADLs) and instrumental activities of daily living (IADLs) of an individual trying hard to adapt to situations. IADLs are activities that everyone does regularly, from personal hygiene

tasks (shaving, brushing their teeth, and taking a bath) to professional and social obligations (going to work) to recreational pursuits (playing sports) to eating and drinking. The second major theme, the developing psychological, displays the affective-emotional or affective-motivational status of the individual. Psychological empowerment is a response to certain empowering conditions and an outcome of structural empowerment. It portrays the lived experiences of the nurse and midwives in pursuit of their cognitive (intellectual), affective (emotional), and psychomotor (skills) well-being. Thus, the third major theme, managing the financial, portrays the capacity to address practical requirements with financial resources and a sense of control and financial literacy. The fourth major theme, restructuring the organizational, covers the structure and general managerial mechanisms that serve as its backbone and fundamental building block. Lastly, the fifth major theme is called the enriching professional and occupational, exploring employee enrichment and satisfaction through work in their organization. Employment may fall under this category, but it might also refer to involvement in any activity, even if it is unpaid. This theme is actualized to the degree that derives satisfaction from engaging in these pursuits [31]. (Table 8)

## Synthesis and integration (mixing both result strands)

Separately and independently, each data type can be collected and evaluated using the methods that have been developed over time. This is a perfect opportunity for multidisciplinary teams to do research, with members having competence in both quantitative and qualitative methods. Furthermore, the design allows for a direct comparison between participant perspectives gleaned through open-ended questions (e.g., a semi-structured interview) and researchers' perspectives gleaned via close-ended questioning (e.g., a survey chosen by the researchers). With this method, the researchers can reveal statistical trends while simultaneously giving participants a voice.

In our study's quantitative findings, we observed that the perceptions of midwives/nurses working in OB/GYN departments were 19.67, which was at a moderate level of structural empowerment. During the interview, the theme clusters to the major theme of managing financial

**Table 7** Analysis of variance (ANOVA)

Model	Sum of squares	Df	Mean <sup>2</sup>	F	P
1					
Regression	36.990	2	18.495	35.216	0.000 <sup>b</sup>
Residual	103.461	197	0.525		
Total	140.451	199			

Significant at  $p < 0.001$

Dependent Variable: Intent to Stay

b. Predictors: (Constant), Resilience, and Structural Empowerment

**Table 8** Summary of the major themes and theme clusters

Theme	Dimension	Theme cluster
1	Nurturing Physical and Physiological Dimension	Physical Exhaustion Dietary and Lifestyle Insufficiencies Physiological Disturbances
2	Developing Psychological Dimension	Mental Capacity and Decision Making Emotional Intelligence and Behavior Adaptative Competence
3	Managing Financial Dimension	Financial Remuneration Provision of Work Benefits Budgetary Management Greener Pasture
4	Restructuring Organizational Dimension	Social Acceptance and Organization Support Work Recognition and Appreciation Workplace Environment
5	Enriching Professional and Occupational Dimension	Technological Competency Professional Development Mentoring and Coaching Programs Leadership and Management Skills Emergency and Disaster Management Research Development Specialization Training for OB/GYN Stress Management Character and Communication Skills Development Case Presentations Quality Management System

confirms that access to recourses is critical to enhancing midwives' and nurses' structural empowerment level in the organization. The participants discussed that they needed additional monetary compensation. As the participant stated:

"Our salary is not enough, according to what we are doing; we are dealing with mothers and babies." (P1).

Moreover, theme clusters to the major theme of restructuring organizational confirm that access to support is essential for enhancing the midwives' and nurses' structural empowerment level. During the qualitative phase, participants described experiencing the need for organizational support for growth and development. As the participant stated:

"Okay, I guess the nursing office they must see as our staff developed educationally and regarding nursing practice, they need to see what's their needs they need to ask us what you need to get developed in your career and what you need to increase our patient care quality. Yeah, this is my opinion. So, they started I told you this is my first year to take an education or something rather than work by my hand in every day". (P4)

Furthermore, the theme clusters to the major theme of enriching professional and occupational confirm that access to opportunities to learn and grow is also an essential of enhancing midwives' and nurses' structural empowerment levels. The participants discussed their need to have technological skills to comply with

modernization and advancements, continuous professional development to improve their skills in performing their duties and responsibilities, mentoring and coaching programs to teach and cultivate the best practices of the nurse leaders and managers in the unit, and participation in training and development.

On the other hand, some participants viewed the workplace as their bread and butter to support financial needs. Concerning restructuring organizational, midwives and nurses express their experience of having a strong support system, feeling motivated each time peers and patients recognize and appreciate their good performance, receiving constant feedback from different members in the organization, and they can freely exercise their power to speak up in their workplace. Thus, all of these dimensions discussed by the participants relate to the high structural empowerment level. Finally, participants mentioned that they have strong social support in their departments and freely exercise their power to speak up with their perspective on the unit as emerged in the major theme restructuring organizational dimension as being contradictory with the midwives and nurses are experiencing burnout as emergent in the major theme developing psychological dimension.

Regarding resilience, the quantitative result reveals that the perception level of midwives/nurses working in OB/GYN departments was 26.8, the lowest level of resilience. During the qualitative interview, participants discussed



feeling stressed, having insufficient time to rest because of the long hours of duty, and developing different physiological changes due to their workplace issues. During the interview, the theme clusters to the major theme of nurturing physical and physiological confirm that employees lack energy, motivation, concentration, and interest when physically weary. Consequently, during the interview, the theme clusters to the major theme of developing psychological confirms that employee behavior and attitudes to work are heavily influenced by structural empowerment and resilience. Participants discussed that they are experiencing burnout. As the participant stated:

"Of course, I burned out already" (P15).

"I am dealing with the same kind of patient. I am dealing with the same problems with the same challenge. I need a new chapter in my professional life." (P14)

However, with this theme finding, participants felt empowered knowing they could influence their patients, develop their self-confidence, and make their own decisions based on the organizational policies and regulations. Most participants recognized that not all midwives and nurses in their departments were pleased with resilience. Some staff needed to be more interested in challenges, responsibilities, and joint decision-making. Finally, according to the theme cluster adaptive competence, most participants discussed that they could seek ways and means to adapt, adjust, and cope with unfavorable situations; they imagine their selves as skillful and patient during tough times and are willing to share their competencies in the future generation.

Regarding intent to stay, the quantitative result reveals that the perception level of midwives/nurses working at OB/GYN departments was 3.29, which was a neutral intent to stay score in their organization. During the interview, the theme clusters to the major theme of managing financial confirms that access to resources is essential to why midwives and nurses stay in the organization. During the interview, the participants described how they experienced managing their finances accordingly. Moreover, the theme clusters to the major theme of restructuring organizational confirm that organizational benefits employees enhance the intention to stay. Participants discussed that they have strong support in their workplace, a strong support system, freely exercising their power, and a tenacious policy to follow. There were favorable perceptions and experiences about the hospital's top management and policy; some participants felt empowerment as an obligation. The opportunities and support the organization provides may affect the midwives' and nurses' intention to stay in the organization. In addition, participants discussed that the availability of job resources is related to their decision to stay in the organization. As the participant stated:

"I'm just work in Saudi Arabia to save money to support my family in India. But of course, I still want to settle down in my own country." (P6)

Quantitatively, linear multiple regression analysis of structural empowerment, resilience, and intent to stay showed that structural empowerment and resilience are significant predictors of intent to stay in the organization. Structural empowerment gives midwives and nurses greater resilience, enhancing their decision to stay in the organization. The participants perceived that structural empowerment and resilience could influence their decisions to stay in the organization. During the interview, the theme clusters to the major theme of developing psychological and theme clusters to the major theme of restructuring organizational dimension; both confirm that midwives and nurses feel structurally empowered and know they can influence their patients. Thus, their ability to recognize, control, and express their emotions reflects their resilience in the organization. Consequently, access to opportunity, recourses, and positive challenges is a motivated dimension of why midwives and nurses stay in the organization. Two of the participants shared their experiences:

"Ok what motivates me, the everyday challenges here in the labor room, we don't have a routine as I've said, every day and every situation is new for us. So, dealing with mother also the relationship with my colleagues, our teamwork, the respect here, the appreciation, if they say thank you, our mother trust, that motivates me." (P1).

"I am empowered because of my colleagues are helping. Sometimes doctor is also more helpful for us. Sometimes the patient delivered at the same time delivery room may be not accepted for sometimes they are busy. They said they cannot accept it for this patient at that time, doctor said no, it's already delivered this patient at that time our doctor stopped are helping for us." (P7).

However, with this theme finding, participants discussed that they are experiencing burnout and still need organizational support for growth and development.

"I don't have interest like before. Yes, yes, because every day we handle delivery, especially if it new, or we facing new challenge but it's still the same, the same routine." (P1)

We noticed that the level of structural empowerment of midwives and nurses in this study was moderate, which reflects partial access to components such as opportunities, resources, support, information, and formal and informal power in the organizations.

## Discussion

The triangulation and integration of quantitative and qualitative findings in this study provide a comprehensive and multifaceted analysis of the experience of nurses' and midwives' views on structural empowerment, resilience,

and intent to stay. Therefore, this convergent parallel mixed method study assures a thorough understanding of the strength of participants' perceptions of these factors.

The data analysis displayed key findings indicating that structural empowerment and resilience predicted intent to stay in the organization. Our study's midwives and nurses reported moderate structural empowerment, lowest resilience, and neutral intent to stay in their organization. Previous studies have also demonstrated moderate structural empowerment among nurses [13, 31–35, 36].

According to structural empowerment, there are six organizational structures of access: opportunity, information, support, resources, formal power, and informal power. The findings of this study reveal that the participants perceived the greatest access to the opportunity component, followed by information and support. The informal power component was fourth, followed by resources and formal power. The higher perceived level of access to opportunity is significantly related to all participants having more than three years of work experience. This experience allows them more access to learning, growth, and expertise in their midwifery and OB/GYN specialties. This result aligns with a study by Gholami et al. [37], which revealed the highest score in the access to opportunity subscale and the lowest score in their perceptions of access to formal power. Similar studies have shown access to opportunity as the primary driver of structural empowerment [38, 39]. In contrast, some structural empowerment studies have prioritized access to resources [18, 40]. Oliver et al. [41]. showed lower-than-expected scores on the resource subscale and acceptable scores on the subscales of support, formal power, and informal power.

Our study results showed that midwives' and nurses' perceptions of structural empowerment were moderate. The participants discussed that they needed additional monetary compensation and a competitive housing allowance. Arslan Yürümezoğlu and Kocaman [42] pointed out that structural empowerment through rewards and recognition for a well-done job could contribute to employee satisfaction. Our findings indicate that access to support is essential to enhancing midwives' and nurses' empowerment in the organization. This finding is in line with Hagerman et al. [43], who revealed that access to support must be through feedback, guidance, emotional support, helpful advice or hands-on assistance, and problem-solving advice, all of which can benefit nurses in their workplace.

Furthermore, our study results confirm that access to opportunities to learn and grow is also essential for enhancing midwives' and nurses' empowerment levels. The participants discussed their need to have technological skills to comply with modernization and

advancements and continuous professional development to improve their skills in performing their duties and responsibilities. According to Kanter [44], when employees do not have access to resources, support, and opportunities, they experience powerlessness.

Our study also revealed that the participants perceived their resilience levels as the lowest in the organization. Several studies have addressed healthcare providers' resilience, but few have examined midwives' resilience. No study was found that measured levels of resilience about structural empowerment or intent to stay in the organization. Our study participants perceived their resilience as a process facilitated by various coping strategies, including accessing peer support and developing self-awareness and self-protection. Moreover, the participants identified the importance of the workplace environment in enhancing resilience.

In this study, it was evident that the participants suffered from feeling stressed and having insufficient time to rest. It confirmed that employees lack energy, motivation, concentration, and interest when physically weary. McGowan et al. [45] revealed that resilience is related to improved physical and mental health. According to this, midwives and nurses need resilience more than any other profession [46]. However, the participants felt empowered knowing they could influence their patients, develop their self-confidence, and make their own decisions based on organizational policies and regulations. Gover and Duxbury [47] point out that employee engagement in decision-making is essential to organizational resilience.

Most previous studies have focused on turnover intention rather than intention to stay. In the current study, the participants' perceptions of their intent to stay were neutral. Various studies have found that nurses have moderate to low intentions to stay at their organizations [31, 32]. The present study's findings contrast with those of Al-Hamdan et al. [17]. and Alhadidi et al. [48], who found that the overall mean intention of nurses to stay in their organizations was high.

Furthermore, the results confirm that access to resources is essential to why midwives and nurses stay in the organization. Moreover, the participants confirm that organizational benefits employees enhance the intention to stay. Participants discussed that they have strong support in their workplace. There were favorable perceptions and experiences about the hospital's top management and policy; some participants felt empowerment as an obligation. The opportunities and support the organization provides may affect the midwives' and nurses' intention to stay in the organization. Kleine et al. [49] Pointed out that leaders such as empowerment and supportive leadership relate to turnover. In addition, participants discussed that the availability of job resources is related

to their decision to stay in the organization. Management and leadership are related to turnover [50].

In this research, the linear multiple regression analysis of structural empowerment, resilience, and intent to stay showed that structural empowerment and resilience are significant predictors of intent to stay in the organization. The participants perceived that structural empowerment and resilience could influence their decision to stay in the organization. The findings are similar to those of Liu et al. [51], who revealed that resilience had the strongest direct effect on the intention to stay in the organization. Likewise, Meng et al. [18] found that structural empowerment significantly positively affected nurses' intent to stay. Cowden and Cummings [52] revealed that empowerment strongly influences a nurse's intent to stay.

Resilience has high practical value and could significantly enhance nurses' intent to stay [53, 54]. Previous studies' results support the current study's findings [42, 55]. In contrast, Hall [56] indicated that structural empowerment did not predict nurses' intent to stay in their organizations. Kelly et al. [57] also found that structural empowerment was not significantly related to intent to leave.

Liu et al. [51]. Found that resilience had the strongest direct effect on the intention to stay in the organization. Interestingly, a component of structural empowerment, such as opportunity, resources, formal and informal power, and adaptive resilience competence, can be related to midwives' and nurses' intention to stay in the organization. Previous studies' results support the current study's findings [18, 33, 42, 52–54]. However, participants discussed experiencing burnout and needing organizational support for growth and development. Along the same lines, a study conducted by Hall [56] showed that structural empowerment does not predict the intent to stay of nurses in the organization.

In particular, Hezaveh et al. [15] and Pallant et al. [16] reiterate the key points, assuring us that the relationship between resilience, structural empowerment, and professional effectiveness is well-supported in their studies. This reaffirms our confidence in the findings and their implications for midwifery and nursing. Although extant literature has reported that support from superiors, easy access to information, and a sense of agency and control in carrying out one's duties all affect longevity and satisfaction in one's career and are connected to a midwife's capacity for resiliency, structural empowerment, and a long career [14].

Our mixed-method study contributes to the body of knowledge in various ways. Our results recommended that any healthcare organization enhance its staff's intent to stay through empowering work conditions, promoting empowering behaviors, and increasing resilience. They should ensure the five empowering

dimensions at the workplace to keep their staff resilient and to have a greater sense of loyalty to stay in their organization. Accordingly, it is essential to develop and implement a national staff empowerment standardizing policy to transform the healthcare and services system in Saudi Arabia. A policy of this type will save significant resources and provide insight into coping strategies to prevent adverse employee turnover outcomes and create retention strategies; as a result, policymakers can benefit from our results if they formulate a policy to increase midwives' growth, power, resilience, and competence.

Our study limitations include the study's cross-sectional design and reliance on self-reported survey questionnaire data, both of which prevent the researchers from drawing causal conclusions about study variables. Likewise, the sampled nurses and midwives were all located in the Eastern Province; therefore, the results cannot be generalized to the rest of the KSA. Finally, this error in the sampling process was attributable to using convenience sampling in quantitative research. It is challenging to detect variations in a population subgroup when using a convenience sample, which leads to underrepresentation of the sample; as a result, research study conclusions need to be more generalizable to the target population. Therefore, the sampling strategy used in the qualitative phase was deliberate, which raises the possibility of selection bias impacting the findings.

## Conclusions

The study's researchers are optimistic that drawing attention to the importance of cultivating a culture of empowerment and resilience would encourage nurses and midwives to remain in their current roles. It takes nurses and midwives succeeding in two fields simultaneously to have a global impact. The emergent themes underlined the physical, physiological, psychological, financial, organizational, professional, and vocational aspects of nurses and midwives, giving them agency, resilience, and determination to remain in the sector. All of these requirements must be met to avoid consequences for the rest. The outcome might be fatigue, burnout, workplace antagonism, and a general lack of enthusiasm among nurses and midwives.

Evidence from quantitative and qualitative studies suggests that healthcare organizations' leaders and managers can do more to help nurses and midwives feel empowered and resilient at work and reduce turnover.

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### Author contributions

Conceptualization, A.G.A-O and A.E.A methodology, A.G.A-O and A.E.A; software, A.G.A-O ; validation, A.G.A-O , A.E.A.; A.N.A and S.A.A formal analysis A.G.A-O , A.E.A.; A.N.A and S.A.A.; investigation, A.G.A-O., and F.A.A; writing—original draft preparation, , A.G.A-O and A.E.A.; writing—review and editing, A.G.A-O, A.N.A and S.A.A.; visualization, A.N.A supervision, A.E.A. All authors guarantee the integrity of the content and the study. All authors have read and agreed to the published version of the manuscript.

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### Data availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

### Declarations

#### Ethics approval and consent to participate

The researchers sought permission to carry out the study and record the interviews from the ethics bodies of King Saud University's Institutional Review Board (Ref no: KSU-HE22-785) and Governmental Hospitals (Ref No: EXT-MS2022-001) -(Ref No: H-05-HS-065). All participants provided their written informed consent to participate in this study.

#### Consent for publication

Not applicable.

#### Competing interests

The authors declare no competing interests.

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