

Exploring the Barriers of Entrepreneurship in Nursing as Perceived by Nurse Managers

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ABSTRACT

Introduction: The ever-evolving and intensely competitive nature of today's global landscape necessitates organizations to embark on entrepreneurial initiatives, ensuring their resilience and advancement. So we need to explore the barriers to entrepreneurship in nursing as perceived by nurse managers. **Methods:** This research method used a descriptive-exploratory approach. The sample for this research was a convenience sample of 82 out of 97 nurse managers. **Results:** The study results revealed that, the highest mean percent of the study sample' perception was (78.05%, 74.87%, &73.55%) related to attitudes towards entrepreneurship, resource consuming factors, and administration factors, respectively. There was a highly statistically significant correlation between total nurse managers' educational level and their perception regarding barriers to entrepreneurship in nursing ($f= 4.851, p=0.010^*$). **Conclusion:** The main barriers regarding entrepreneurship were attitudes towards entrepreneurship, resource consuming factors, and administration factors as perceived by nurse managers.

Keywords: Barriers; Entrepreneurship; Nurse Managers

INTRODUCTION

Today's constantly evolving and competitive circumstances, along with rapid global changes, urge organizations to dedicate themselves to entrepreneurial pursuits as a means of survival and growth. In the present day, entrepreneurship is widely recognized as a crucial instrument for organizational development since entrepreneurial-minded individuals can establish the foundations for success (Akgün *et al.*, 2019).

Henrekson & Sanandaji, (2020) defined entrepreneurship as the act of bringing something new and innovative, different from what is conventionally done, based on identifying unfulfilled needs or opportunities. It can manifest in various forms, including business entrepreneurship, intra-entrepreneurship, and social entrepreneurship.

Ali, Abd Allah & Al-hosany, (2020) asserted that nursing entrepreneurship offers a promising avenue for unlocking the full potential of nursing practice and enhancing the recognition of nursing services. To this end, Egypt has taken steps towards nurturing nursing entrepreneurship, with the government overseeing the provision of high-quality nursing services in homes. This marks the country's initial foray into nursing entrepreneurship. Moreover, the government has established the Technology Innovation and Entrepreneurship Centre (TIEC), an Egyptian Entrepreneurship Association that provides financial and training support to private-practice initiatives.

According to Ali, Abd Allah & Al-hosany, (2020), the perception of entrepreneurship in Egyptian society is notably positive and on the rise. The Global Entrepreneurship Monitor (GEM) Egypt National Report revealed that over 73% of Egyptians view entrepreneurship as a favorable career option. However, a significant proportion of Egyptians, at over 30%, are deterred from starting a new business due to factors such as fear of failure, inadequate support, and insufficient business skills.

In addition to managing patient care and providing leadership in their businesses, nurse entrepreneurs must also handle financial risks and legal challenges, as well as oversee sales, marketing, and potentially manage

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employees (Waite, 2019). The process of nurses applying entrepreneurial principles to their work within established organizations and institutions is referred to as intrapreneurship (Bagheri & Akbari, 2018).

Moreover, research has identified additional obstacles to nursing entrepreneurship, including unfair competition with untrained workers providing homecare services illegally at lower prices and with questionable quality due to a lack of supervision (Jahani, Elahi, & Fallahi 2016).

Furthermore, the existing literature indicates that nurses often lack education, knowledge and skills related to business as it is not an integral part of their professional identity (Arnaert *et al.*, 2018; Neergård, 2021) This lack of business education and knowledge poses a significant challenge for nurses as they venture into entrepreneurship.

Objective

Despite the global nursing workforce, the prevalence of entrepreneurial nurses is low. The proportion of nurses who are entrepreneurs is very low, estimated at only 0.5-1% of all working nurses worldwide, indicating a significant potential for entrepreneurship in the nursing profession. This potential is necessary to challenge the traditional view of nursing and to address future challenges, including an aging population, increased healthcare complexity and quality demands, limited financial resources, and workforce shortages (Neergård, 2021). Colichi *et al.*, (2020) argue that there are still gaps in undergraduate education that need to be addressed in order to better prepare future professionals for the labor market and future research in their field.

The increasing population faces a multitude of health challenges that require healthcare services that few providers can handle. This highlights the need for nurses to establish their own healthcare services, which is a form of nursing entrepreneurship. To do so successfully, it is essential to understand nurses' knowledge and attitudes towards entrepreneurship, as well as the barriers that prevent them from pursuing it.

The authors suggest that these findings highlight the need for entrepreneurial content to be included in nursing undergraduate courses. Overall, this study suggests that nursing education could benefit from incorporating more entrepreneurship content to ensure that nursing graduates are prepared to succeed in the evolving healthcare industry.

This study will represent the first comprehensive examination of the barriers to entrepreneurship specifically within the nursing profession in Egypt. No Prior studies have delved into this topic, leaving a critical gap in the existing body of knowledge. The investigation of this study fills this void and offers a pioneering contribution to the field of nursing entrepreneurship, broadening the understanding of the unique challenges faced by nurses in Egypt when pursuing entrepreneurial ventures. The findings from this study hold substantial significance for various stakeholders in the nursing profession, healthcare community, and academic institutions.

METHODOLOGY

This study aimed to explore the barriers to entrepreneurship in nursing as perceived by nurse managers. A descriptive-exploratory design was used to achieve the aim of the present study and to answer the research questions. What are the barriers to entrepreneurship in nursing as perceived by nurse managers? What is the relationship between nurse managers' personal characteristics and their perception of barriers to entrepreneurship?

This study was conducted at several hospitals affiliated with Cairo University, including the Medical Hospital, Obstetric Hospital, New Emergency Hospital, and Burn Hospital. A convenient sample of nurse managers was selected from specific departments (medical, surgical, and intensive care units), and the total sample size was (82) out of (97) nurse managers who had at least one year of experience in the working unit and agreed to participate in the research.

Data was collected using the following self-administered questionnaire. Barriers of Entrepreneurship Questionnaire: A structured questionnaire was developed by the investigators through a review of recent related literature (Arnaert *et al.*, 2018; Colichi & Lima, 2018; Thompson, 2019). It was divided into two sections as follows: Section I: personal characteristics it was concerned with the personal characteristics of nurse managers, including age, gender, educational level, positional level, specialty, and years of experience. Section II: Barriers of Entrepreneurship: The questionnaire used Likert scale questions, which were utilized to investigate the

perceptions of nurse managers regarding obstacles to nursing entrepreneurship.

Respondents were asked to indicate their level of agreement or disagreement with a statement, on a scale of 1 to 3 with higher scores indicating stronger agreement. The questionnaire contained 48 items, which were grouped into five dimensions. These dimensions included knowledge and skills related to entrepreneurship (11 questions), attitudes towards entrepreneurship (6 questions), self-efficacy (12 questions), administrative factors (6 questions), and resource utilization factors (13 questions). Scoring System: The three-point Likert scale was scored as follows; score 3 indicates agreement, score 2 indicates being undecided, and score 1 indicates disagreement.

Once the English questionnaire was translated into Arabic, three experts from the nursing administration department of the faculty of nursing at Cairo University reviewed and evaluated the content validity of the tool. Based on their recommendations, important adjustments were made to the questionnaire content. Internal consistency and reliability of the study tool was determined by using Cronbach's alpha coefficient for the independent variable. Internal consistency using Cronbach's alpha was (0.93) for the Barriers of Entrepreneurship Questionnaire, which indicated high reliability.

Regarding the data collection procedure; upon obtaining approval from both the medical and nursing directors of the hospitals being studied, the researchers began collecting data. They met with nurse managers from the study units during two shifts, morning and afternoon, to explain the study's purpose and invite them to participate on a voluntary basis. The nurse managers provided formal written consent to participate. The researchers distributed the questionnaire individually to the nurse managers, providing instructions on how to fill it out. It took approximately 10 to 15 minutes to complete. After the questionnaire was filled out, the researchers collected it and checked for completeness to ensure that there was no missing data. The data collection took place over a period of two months, specifically from January to February 2023.

Additionally, an official agreement was obtained from the medical and nursing directors of the study hospitals to conduct the research. Participation in the study was completely voluntary, and each participant had the right to decline or accept participation. Informed consent was obtained from the nurse managers who participated.

Anonymity and confidentiality were maintained by coding the data, and participants had the right to withdraw from the study at any time. Participants were also assured that their data would not be reused for another research project without their permission. The ethical considerations for this study included explaining the purpose and nature of the research and ensuring that participation was protected from any potential risks. The data collected was used only for the purposes of the study.

RESULTS

Table 1: Distribution of the Study Sample According to Personal Characteristics (N= 82).

Personal Characteristics	No.	%
Gender		
Male	39	47.6
Female	43	52.4
Age		
30 < 35 years	24	29.3
35 - < 40 years	30	36.6
40 and more	28	34.1
mean \pm SD. (37.5 \pm 4.4)		

Positional Level		
Charge nurse	20	24.4
Head nurse	45	54.9
Supervisor	17	20.7
Educational Level		
Technical school in nursing	25	30.5
Associate technical degree	30	36.6
Bachelor's degree in nursing	27	32.9

Table (1) shows that (52.4%) of the study sample was female. (36.6%) of them were in the age group 35 -< 40 years old. The mean age of the studied nurse managers was 37.5 ± 4.4 . About 54.9% of the study sample were head nurses. About 36.6% of the study sample had an associate technical degree in nursing.

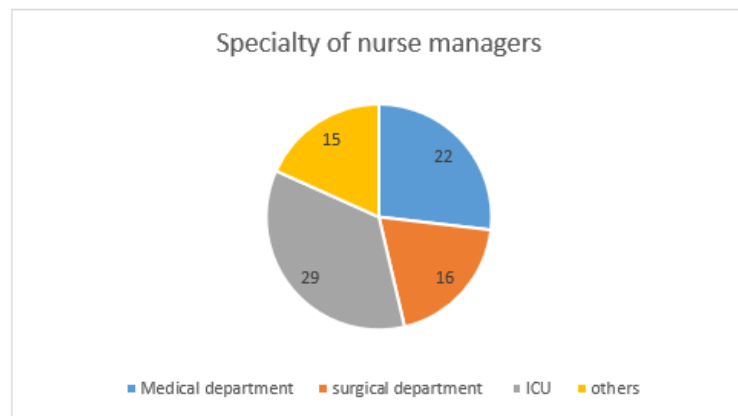


Figure 1: Distribution of the Study Sample According to their Specialty (N= 82)

Figure 2 illustrates that (55%) of the study sample had years of experience ranged from 5 to less than 10 years, while 7% of them had years of experience less than 5 years.

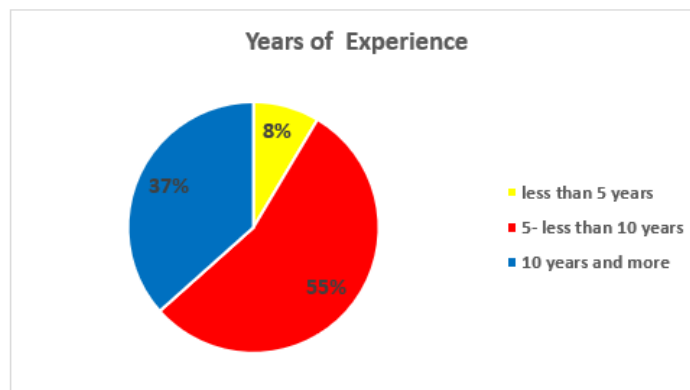


Figure 2: Distribution of the Study Sample According to their Years of Experience (N= 82)

Table 2: Mean Scores of the Study Sample Perception Regarding to Barriers of Entrepreneurship in Nursing (N= 82).

Dimensions	Minimum	Maximum	Mean±S.D	Mean%
Knowledge And Skills Toward Entrepreneurship	11	33	21.78±2.99	66
Attitudes Toward Entrepreneurship	6	18	14.05±1.42	78.05
Self-Efficacy	12	36	25.63±4.41	71.19
Administration Factors	6	18	13.24±2.08	73.55
Resource Consuming Factors	13	39	29.20±2.71	74.87
Total	48	144	103.90±8.28	72.15

Table 2 Indicates that the highest mean percent were (78.05%, 74.87% & 73.55%) of the study sample's perception related to attitudes toward entrepreneurship, the resource consuming factors and administration factors respectively.

Table 3: Correlation between Total Nurse Managers' Perception about Barriers of Entrepreneurship in Nursing and their Personal Characteristics (N= 82)

Personal Characteristics	Mean±SD	T	P
Gender			
Male	103.10±8.76	0.83	0.4
Female	104.63±7.86		
Position			
Charge Nurse	101.70±9.39	0.93	0.39
Head Nurse	104.67±8.46		
Supervisor	104.47±6.14		
Age			
30 years - less than 35	100.88±10.97	2.344	0.103
35 years - less than 40	105.13±7.34		
40 and more	105.18±5.82		
Educational Level			
Secondary Nursing School	105.44±5.56	4.851	0.010*
Technical Institute	106.10±8.43		
Baccalaureate	100.04±9.07		
Specialty			
Medical	104.73±11.97	0.44	0.72
Surgical Unit	103.31±7.49		
ICU	104.62±5.65		
Others	101.93±7.14		
Experience in Nursing			
Less than 5 Years	102.00±10.57	0.441	0.645
5- Less than 10 Years	103.53±9.39		
10 Years and More	104.90±5.69		

*Significant level at $p\text{-value} < 0.05$

Table 3 illustrates that, there was a highly statistically significant correlation between total nurse managers' perceptions about barriers of entrepreneurship in nursing and their educational level ($f= 4.851, p= 0.010^*$). However, there was no correlation between the study sample' gender, positional level, age, specialty, and experiences and their total perception of barriers of entrepreneurship in nursing.

Table 4: Correlation Matrix Between Barriers of Entrepreneurship in Nursing Dimensions (N=82)

Dimensions	Knowledge and skills		Attitudes		Self-efficacy		Administration factors		Resource consuming factors	
	r	p	r	p	r	p	r	p	r	p
Knowledge and skills toward entrepreneurship	1									
Attitudes toward entrepreneurship	0.48	0.0001*	1							
Self-efficacy	0.31	0.004*	0.27	0.01*	1					
Administration factors	0.23	0.03*	0.04	0.68	0.07	0.48	1			
Resource consuming factors	-0.002	0.98	-0.06	0.59	0.17	0.12	0.21	0.06	1	

*Significant level at $p\text{-value} < 0.05$

Table 4 declares that there was a highly significant correlation between Knowledge and skills of the nurse managers and their Attitudes toward entrepreneurship, Self-efficacy and the Administration factors ($r=0.48, p=0.0001$), ($r=0.31, p=0.004$), ($r=0.23, p=0.03$) respectively. Also this table indicates the highly positive correlation between nurse managers 'attitude and self-efficacy ($r=0.27, p=0.01$).

DISCUSSION

Nursing entrepreneurship offers many benefits, including improved patient care, increased job satisfaction, financial independence, professional development, and contributions to the healthcare industry. It is a promising avenue for nurses who want to make a positive impact on the healthcare industry while pursuing their entrepreneurial goals. Studies reveal that majority of nurses expressed job dissatisfaction, and there is no career development system for them. (This study aimed to explore the barriers of entrepreneurship in nursing as perceived by nurse managers.

The findings of this study showed that the highest mean percent of nurse managers' perception regarding the barriers to nursing entrepreneurship was related to their attitudes toward entrepreneurship. The researchers argued that this may be due to fear of social pressure to engage in entrepreneurship, as well as the ambiguity and risk-taking involved in entrepreneurial work, which can be challenging to navigate. A similar study conducted by Ashari *et al.*, (2021) found that personal attitude was the primary factor affecting entrepreneurial intention.

According to the results of the study, the perception of nurse managers regarding the barriers of nursing entrepreneurship was high in relation to resource consuming factors. The authors suggested that these factors are seen as a hindrance due to the shortage of nursing staff in Egypt, which affects the workload and availability of resources such as time, skilled staff, financial security, and role models. These factors may discourage nurses from taking the risk of starting their own businesses.

Based on the findings of the current study, nursing administration factors were identified as a significant barrier to nursing entrepreneurship, with a high mean percent of the study sample perceiving them as such. According to the authors' point of view; this may be due to the fact that administrative personnel may not view entrepreneurship as aligned with nursing values of care, leading them to discourage nurses from pursuing entrepreneurial ventures. Similarly, Richter *et al.*, (2019) found that nurses in strategic leadership positions faced challenges in being entrepreneurs due to their immediate leadership hindering their entrepreneurial efforts and discrediting their ability to manage, leading to feelings of being paralyzed in their efforts to develop entrepreneurial behaviors.

According to Marques *et al.*, (2019) who argued that for organizations to survive and thrive through constant innovation, entrepreneurship is essential. This requires organizations to have employees who exhibit entrepreneurial behaviours and to recognize their potential, attitudes, and contributions to entrepreneurship within the organization.

Consequently, it is crucial for managers to understand how employees decide to exhibit these behaviours and how organizations can support and encourage them.

The study results showed that knowledge and skills related to entrepreneurship were perceived as the least significant barriers. This finding was supported by a study conducted by AlQhaiwi & Abukaraki, (2021), which highlights the importance of knowledge management (KM) in facilitating entrepreneurship within organizations. KM involves acquiring, sharing, and implementing knowledge, and can enhance an organization's capabilities and competitiveness. By utilizing KM, organizations can achieve higher productivity, resource efficiency, and sustainable competitive advantages.

According to the authors; the reason for the low mean percent of knowledge and skills towards entrepreneurship as a barrier for nursing entrepreneurship is the lack of nursing entrepreneurship courses in nursing schools and faculties. Because entrepreneurship involves knowledge of the entrepreneurial process, risk management, decision-making, and social relationships, it is essential that these requirements are based on scientific knowledge. However, nursing entrepreneurship courses have recently been added to the nursing curriculum, which will enable new graduates and novices to explore entrepreneurship opportunities.

The current study revealed that there was a highly significant negative correlation between the educational level of the study participants and their overall perception of barriers to entrepreneurship in nursing. This could be due to education that emphasizes the development of qualities and skills, which enables individuals to recognize opportunities and manage existing hierarchies effectively. As education progresses, it fosters an interest in achieving success. This finding is consistent with the results of a study conducted by Colichi *et al.*, (2020), the study found that; the lack of education on entrepreneurship was a significant barrier to entrepreneurship, and suggested that undergraduate nursing programs should incorporate entrepreneurship education that is tailored to the cultural backgrounds of students, in order to prepare them for diverse professional opportunities.

The study findings indicated a highly significant correlation between the knowledge and skills possessed by nurse managers and their attitudes towards entrepreneurship. This finding was consistent with the results of a study conducted by Tshikovhi & Shambare (2015), which showed that both entrepreneurial knowledge and personal attitudes play a crucial role in shaping entrepreneurship intentions, with personal attitudes exerting a greater influence. The study also found that having a high level of knowledge about entrepreneurship had a positive impact on developing favorable attitudes towards entrepreneurship.

According to the research conducted by Mahendra, Djatnika, & Hermawan, (2017), it was found that providing effective entrepreneurship education to students can help to enhance their motivation and attitude towards entrepreneurship, which are critical skills needed to successfully undertake entrepreneurial tasks.

Karyaningsih, (2020) conducted a study that revealed that entrepreneurship education has an impact on three variables: entrepreneurial attitude, knowledge, and intention. The study found that entrepreneurial knowledge has a significant influence on students' intention to become entrepreneurs, but it does not have a significant impact on their entrepreneurial attitude.

The study results revealed a highly significant correlation between the knowledge and skills possessed by nurse managers and their self-efficacy towards entrepreneurship. These findings were consistent with those of Memon *et al.*, (2019), who found that entrepreneurial knowledge, experience, instrumental readiness, and risk propensity have a positive and significant impact on entrepreneurial self-efficacy. The positive relationship between entrepreneurial knowledge and self-efficacy is also in line with previous research, such as the study by Puni *et al.*, (2018), which suggested that entrepreneurship education's knowledge acquisition dimension is a crucial factor in enhancing entrepreneurial self-efficacy and, in turn, promoting entrepreneurial intention.

The study results declared a highly significant correlation between the knowledge and skills possessed by nurse managers and the administration's factors towards entrepreneurship. These results were consistent with a previous study by Richter *et al.*, (2019) which suggested that when nurses perceive entrepreneurial behaviours as beneficial for expanding and developing their nursing management practice, they can promote an entrepreneurial culture in their work environment. This can serve as a driving force for professional and institutional development, encourage innovative actions, and help nurses effectively deal with environmental challenges.

Based on the study results; there was a highly positive correlation between the attitude and self-efficacy of nurse managers towards entrepreneurship. This finding was consistent with Wardana *et al.*, (2020), who also found a positive

correlation between entrepreneurial self-efficacy and entrepreneurial attitude. The researchers suggested that nurses can improve their ability to identify opportunities and think creatively by participating in online workshops, meeting with role models, or engaging in e-learning, which has become more accessible and familiar in today's technology-driven world. By doing so, nurses can develop new ideas and modify nursing services to align with current market trends and capitalize on good market opportunities.

Limitations of the Study

The primary limitation of this research can be elucidated as the difficulty in incorporating a larger sample of nurse managers who withdraw due to their workload, including clinical rounds, mentoring responsibilities, or meetings, so it will be difficult to generalize this study results.

CONCLUSION

In light of the current study results, the primary barriers to entrepreneurship in nursing as perceived by nurse managers were attitudes towards entrepreneurship, the resource constraints and administrative factors. Additionally, the study found a significant negative correlation between the educational level of the study participants and their overall perception of the barriers to entrepreneurship in nursing. The research recommended the followings; Hospital administrators should support nurse leaders, empower them, and ensure the availability of needed resources to enhance their entrepreneurship abilities, in order to promote innovative and effective healthcare practices. Nursing programs and associations should develop entrepreneurial abilities among nurses, by incorporating entrepreneurship education and training in nursing curriculum, to equip them with the necessary skills and knowledge to contribute to healthcare improvement through novel initiatives. The study findings should be replicated on a larger sample size and in other healthcare settings, to ensure the generalization of the results and increase the validity and reliability of the findings.

Conflicts of Interest

The authors declare that they have no conflict of interests.

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