The Relationship Between Factors Affecting Career Development and Nurses' Motivation

Aml Adel Sayed Khalil [1], Lamiaa Ismail Keshk [2]
Noha Hussein Yassein[3]

[1](Nursing Director, Beni-Suif specialized Hospital,)
[2](Professor of Nursing Administration, Faculty of Nursing/ Helwan University, Egypt)
[3](Assistant Professor of Nursing Administration, Faculty of Nursing/ Helwan University, Egypt)

Abstract:

Background*:* Nurses are the largest human resources in hospitals andhave an important role in maintaining and improving the quality of health services in hospitals. The behavior of nurses in professional development is important to study because nurses are an integral part in patient care and play an important role in improving the quality of hospitals, ***Aim:*** The aim of this study is to assess the relationship between factors affecting career development and nurses' motivation. ***Study design*** was descriptive correlational design. ***Sample:*** a convenience study sampling from available nursing staff. **Setting:** The critical care units located at Beni-Suef model hospital, ***Tool I:*** factors affecting career development questionnaire and ***Tool II***: actors affecting the nurses' work motivation questionnaire. ***Results:*** The present study indicated that majority of the studied group had satisfactory level regarding factors affecting both career development and work motivation with the percentage of (75.5% & 77.3%) respectively. ***The conclusion:*** There was highly statistically positive correlation between total factors affecting both career development and work motivation among the studied nursing staff.. ***The recommendation****:* Generalize development of policies and plans for enhancing career development and nurses' motivation. In addition, Development of a rewards system to enhance nurse's motivation for improvement and achievements.

Key Word*: Career development – Critical Care Unit – Motivation – Nursing Staff.*

INTRODUCTION

Nursing is an important part of modern medicine. The stability and development of nursing teams are related to the quality of clinical nursing work **(Nibbelink & Brewer, 2018)**. However, the professional development of nurses has long been a problem, and the shortage of nurses and the high turnover rate have always existed **(Wan et al., 2018; Zhang et al., 2019)**.

Career is a sequence of work activities separate, but related, which gives continuity, regularity, and meaning in one's life, where it is shaped by many factors including heredity, culture, parents, school, age level, family cycle, and the actual experiences within an organization or more ". This indicates that a person's career development journey much earlier influenced by social and cultural conditions that shape the character and personality of the person. "Although the primary responsibility for career planning lies in the individual, but organizational career planning should be completely in line with individual career planning if the company wants to retain the best employees" **(Long, et al., 2019)**.

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Career development has close links with the development of human resources. Where the career development leads to improvement afforded by individuals and organizations to choose a destination and a career path to achieve that goal. Career development is not only referring to regulation but also on the ability of individuals and organizations the ability to develop career employees **(Meyer, 2021)**.

Work motivation is a key to emerge and enhance the nurse's satisfaction and their work performance. Accordingly, the factors that affect the work motivation among nurses became essential instruments to modify and shape the work behaviors of the nurses and its consequences. **(Hee, et al., 2020)**.

Career motivation is the level of energy, commitment, and creativity that nurses bring to their jobs, in other words is the goal of nurse manger to benefit from psychological forces (like enthusiasm and drives) of nursing staff to improve desirable behaviors to accomplish activities related to work. Career motivation plays important role in improving career commitment through; mentoring facilities, self-directedness, career involvement, career success, and positive attitude **(Muogbo, 2020)**.

Nursing staff who are motivated tend to be more organized, good managed their time, and having more confidence and self-esteem. Career motivation energize nursing staff to acquire new experiences, knowledge, show their creative side, be empowered and having the ability to choose the best and compete **(Meng, et al., 2021)**.

Several factors that might influence nurses to participate in career development activities. These factors are represented in three factors; personal factors, job-related factors and organizational factors. The first one is the personal related factors such as personal behaviors, satisfaction, empowerment, and nurses' career development practice. Personal behaviors are important components in nurses' ability to perform a satisfactory job. Career development should be with an assessment of self as well as one's work environment, job analysis, education, training, job search and acquisition, and work experience to identify their opportunities and needs for improvement **(Toode, et al., 2020)**.

Significance of the study

Nurses play a key role in all healthcare systems in the world. To improve the professional conditions and increase the quality of care, nurses' career development should be fulfilled in a specific and targeted way **(Copanitsanou, et al., 2018)**.

Nurses all over the globe face many complexities that decrease their motivation and make them unable to move forward in their career such as (routine, rules and policies, money, work hours, loss of appreciation. etc.). So, the need for career motivation become in increase every day for enhancing the ability to adapt with career circumstances and overcoming all complexities that hind achieving career success, commitment, career efficacy etc. The decrease in career motivation will lead to career, exhaustion or burnout which will be reflected in quality of patient care or increase the shortage of professional nurses who let their job **(Ryan, 2021)**.

According to the WHO (2018), nurses are the largest workforce, comprising 50% of the healthcare system. A shortage of nurses can lead to consequences related to quality of patient care because 80% of direct patient care is provided by nurses. Therefore, nurses are valuable

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assets to health organizations and their services must be retained to ensure quality health care is provided to consumers **(WHO, 2018)**.

Studies have reported that the global nurse turnover rate is between 15% and 44%, which varies from country to country **(Pang et al., 2020).** The turnover of nurses is not conducive to the development of their nursing career and not beneficial to the stability and development of the whole nursing community **(Yasir et al., 2020).**

So, the purpose of the current study is to investigate factors affecting career development and its effect on nurses' motivation in critical care unit in Beni Suef model Hospital. The study outcomes might be useful f0or human resources officers and the Nursing Director regarding appropriate strategies and measures to take toward controlling and reducing the turnover of nurses.

Aim of the study

This study was aimed to assess the relationship between factors affecting career development and nurses' motivation.

Research question

What is the relationship between factors affecting career development and nurses' motivation

Subject and Methods
Technical Design:
The technical design includes research design, setting, subject and tools for data collection.
Study design

Descriptive correlational research design was utilized to achieve the aim of the study.
Study Setting:

The study was conducted at the critical care units in Beni Sueif Model Hospital.
Subjects:

Convenient sample (n=110) of nursing staff at the critical care units in Beni Suef Model Hospital were included in this study and it was composed of all available staff nurses with one or more years of experience in caring for patients in critical care units.

Tools for data collection:
Two tools were used for data collection, as the following:

1st Tool: "**factors affecting career development questionnaire sheet**" by **Ismaiel, et al. (2013)**, and it was modified by the investigator. **It consists of two parts:**

Part 1: It included the personal and work-related data of the staff nurses in the study. It includes the gender, age, years of experience.

Part 2: The questionnaire sheet was used to assess the factors affecting career development and it consisted of (87 items) which classified into three factors: the personal factors (44 items) that included personal behaviors (9 items), satisfaction (11 items), empowerment (12 items) and nurses' career development practice (11 items). The job factors (32 items) containing autonomy (13 items), supervisory support (12 items) and opportunities for development (7 items). The organizational factors (11 items) encompass management support (5 items) and the career developmental plans (7 items).

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Scoring system:

- Satisfactory ≥ 261 score (60%).
- Un-satisfactory level <261 score (60%).

2nd Tool: Factors that affect the nurses' work motivation questionnaire (Appendix II). by **El-Saied (2008)** based on motivator's and hygiene theory, and it was modified by the investigator, it was used in this study to factors that affect the nurses' work motivation. It consists of (41 items) which classified in to seven factors: job security (9 items), hospital policies (11items), work nature (4 items), interaction between colleagues (8 items), work responsibility (4items) and Achievements (5 items).

Scoring system:

- Satisfactory ≥ 141 score (60%).
- Un-satisfactory level <141 score (60%).

Validity of the tools

Tool Reliability

The two tools were tested for its reliability; the stability aspect of the tool (consistency of the results over time) was assessed in a test -retest (2weeks interval). The internal consistency of the items composing the tool was assessed using Cronbach's Alpha Coefficient version 32. The reliability of Questionnaire of factors affecting career development and Questionnaire of Factors that affect the nurses' work motivation were (0.998 and 0.997) respectively.

Ethical considerations:

Before the study was conducted, ethical approval was obtained from the scientific research and ethical committee of the faculty of nursing-Helwan University. Besides, the investigator obtained official permission from the director of Beni-Suef model hospital, where the study was conducted. Additionally, Ethics, values, believes and cultures of the study subjects were respected.

Pilot Study:

A pilot study has been carried out on 10% of the total sample size (11 nurses) to test applicability and clarity of the tools, identify obstacles and problems that might be encountered during data collection, and to estimate the time needed to fill out the tool by nurses, this pilot sample was included in the study sample as no modifications were done.

Field Work:

The purpose of the study and the data collection tool were explained to the participants, the questionnaire was given to them individually by the investigator. The time spent to fill out the questionnaire ranged between 30 to 45 minutes, it was returned on the same day. This has been done on regular basis: data was collected in the morning, afternoon, and night shifts daily until all the data had been collected. After the final data were collected from all participants, Data were collected through three months period from January 2022 to March 2022.

Administrative Design

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An approval to carry out this study has been obtained from the dean of the faculty of nursing-Helwan university, and an agreement from the director of selected units to get his approval to conduct the study, an oral consent has been obtained from the participants.

Statistical Design

The collected data were organized, tabulated, and statistically analyzed using SPSS software (Statistical Package for the Social Sciences, version 32. For all tests, a two-tailed p-value ≤ 0.05 was considered statistically significant. While p-value> 0.05 was considered not significant.

Result

Table (1) as regard to personal characteristics of the studied nursing staff. It illustrates that 40.9% of the age of the studied nursing staff was between 20-<30 years old with a mean age of 33.55 ± 8.10. Also, the majority (90.9%) of the studied nursing staff were female. While regarding educational level, more than two-fifths (43.6%) of the studied nursing staff had a technical institute of nursing degree. Additionally, considering years of experience, more than one-third of them (38.2%) have experience ≥ 15 with the mean of 12.54 ± 7.89. Moreover, more than two third (78.2% & 75.5%) of the studies nursing staff were married and attended training courses respectively.

Table (2) show that, there was a significant statistical relation between personal characteristics (age, educational level, years of experience & marital status, attending training courses) and total factors affecting career development plan among the studied nursing staff, at P ≤ 0.01.

Table (3) represents that the total mean score of total factors affecting nurses' work motivation among the studied nursing staff was ($\overline{x}$ + SD= 176.86 + 51.83) with a significant statistical difference at P = 0.000.

Figure (1) represents level of total factors affecting career development among the studied nursing staff. It clarifies that more two-thirds (75.5%) of the studied nursing staff had satisfactory level of total factors affecting career development. In addition to, presence of difference between observed and expected values with a significant statistical difference at P = 0.000. Moreover, satisfactory to un-satisfactory level of total factors ratio = 3.1:1.

Figure (2) represents level of total factors of affecting work motivation among the studied nursing staff. It clarifies that more two-thirds (77.3%) of the studied nursing staff had satisfactory level of total factors of affecting work motivation. In addition to, presence of difference between observed and expected values with a significant statistical difference at P = 0.000. Moreover, satisfactory to un-satisfactory level of total factors ratio = 3.4:1.

Figure (3) represents level of total factors affecting both career development and work motivation among the studied nursing staff. It clarifies that more two-thirds of the studied nursing staff had satisfactory level of total factors affecting both career development and work motivation with the percentage of 75.5% & 77.3% respectively.

Figure (4): illustrated correlation between cumulative score of total factors affecting both career development and work motivation among the studied nursing staff. It clarifies that, there was highly statistically positive correlation between cumulative score of total factors affecting

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both career development and work motivation among the studied nursing staff. at (r=0.973 &P= 0.000).

Table (1): Number and percentage distribution of Personal characteristics among the studied nursing staff (n=110)

Items		No.	%
Age (year)	▪ 20-<30	45	40.9
	▪ 30-<40	41	37.3
	▪ 40-<50	20	18.2
	▪ ≥ 50	4	3.6
	▪ **Mean ± SD**	33.55 ± 8.10	
Gender	▪ Male	10	9.1
	▪ Female	100	90.9
Educational Level	▪ Diploma nursing degree	39	35.5
	▪ Technical Institute of Nursing	48	43.6
	▪ Bachelor nursing degree	23	20.9
Years of experience	▪ <5 years	28	25.5
	▪ 5-<10 years	25	22.7
	▪ 10 -< 15 years	15	13.6
	▪ ≥ 15	42	38.2
	▪ **Mean ± SD**	12.54 ± 7.89	
Marital status	▪ Single	16	14.5
	▪ Married	86	78.2
	▪ Widowed	5	4.5
	▪ Divorced	3	2.7
Attending training courses	▪ Yes	83	75.5
	▪ No	27	24.5

Table (2): Relation between total factors affecting career development and Personal characteristics among the studied nursing staff (n= 110).

Personal characteristics		No	Career Development				X2	P-Value
			Satisfactory		Un-Satisfactory			
			83	75.5	27	24.5		
			No.	%	No.	%		
Age (year)	▪ 20-<30	45	27	24.5	18	16.4	11.95	0.000**
	▪ 30-<40	41	37	33.6	4	3.6		
	▪ 40-<50	20	15	13.6	5	4.5		
	▪ ≥ 50	4	4	3.6	0	0.0		
Gender	▪ Male	10	7	6.4	3	2.7	0.177	0.674

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	▪ Female	100	76	69.1	24	21.8	
Educational level	▪ Diploma	39	22	20.0	17	15.5	11.85	0.003**
	▪ Technical	48	41	37.3	7	6.4		
	▪ Bachelor's degree	23	20	18.2	3	2.7		
Years of experience	▪ <5 years	28	8	7.3	20	18.2	46.33	0.000**
	▪ 5-<10 years	25	25	22.7	0	0.0		
	▪ 10 -< 15	15	14	12.7	1	0.9		
	▪ ≥ 15	42	36	32.7	6	5.5		
Marital status	▪ Single	16	16	14.5	0	0.0	30.16	0.000**
	▪ Married	86	67	60.9	19	17.3		
	▪ Widowed	5	0	0.0	5	4.5		
	▪ Divorced	3	0	0.0	3	2.7		
Attending training courses	▪ Yes	83	73	66.4	10	9.1	28.5	0.000**
	▪ No	27	10	9.1	17	15.5		

*Significant $p \leq 0.05$ **Highly significant $p \leq 0.01$

Table (3): Total and Sub-total Mean Scores of Total Factors affecting nurses'Work Motivation among the Studied Nursing Staff (n= 110).

Job factors	Min	Mix	$\bar{x}$	SD	T-test	P-value
Job security	14	42	32.25	8.21	6.78	0.000**
Hospital policy	15	57	43.96	13.10	6.37	0.000**
Work nature	4	20	15.47	4.79	7.60	0.000**
Collogue interaction	5	25	19.77	5.66	8.84	0.000**
Supervision	8	40	30.84	9.5	7.54	0.000**
Work responsibility	4	20	15.40	4.88	7.31	0.000**
Achievements	5	25	19.17	6.14	7.12	0.000**
Total	55	229	176.86	51.83	7.26	0.000**

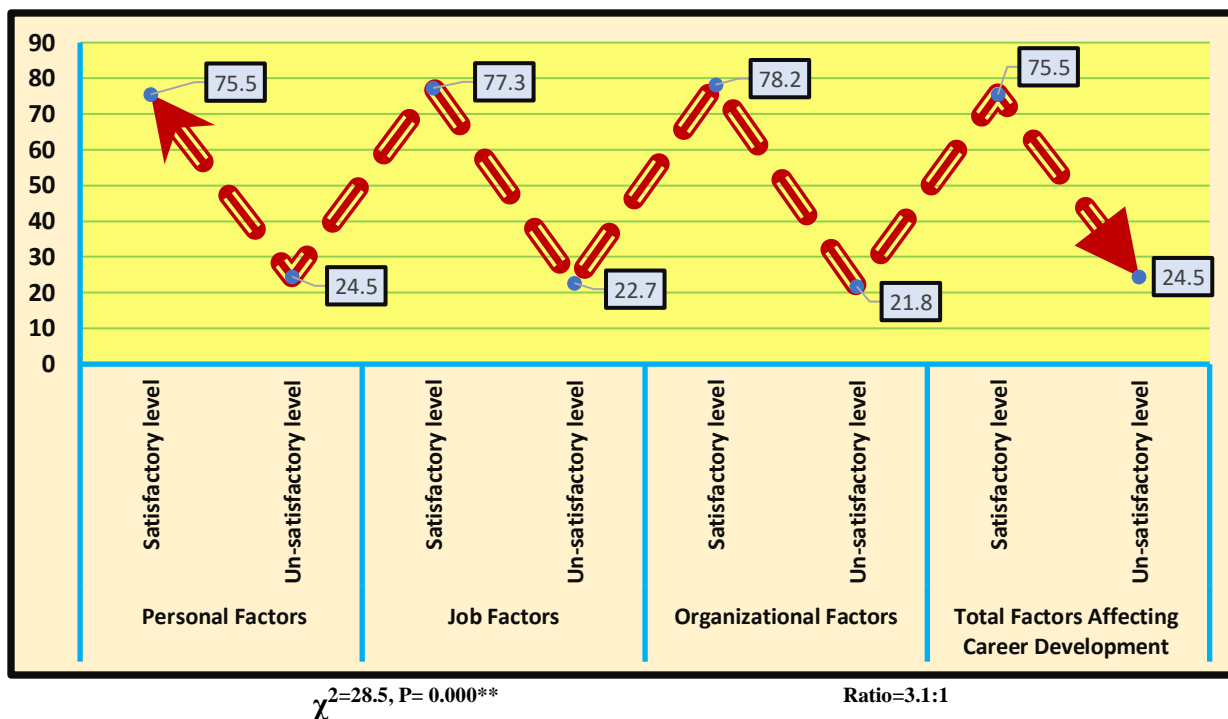NS: Not significant at $P > 0.05$ *Significant $p \leq 0.05$ **Highly significant $p \leq 0.01$

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$\chi^2=28.5$, P= 0.000**   Ratio=3.1:1

Figure (1) Percentage distribution of total factors affecting career development among the studied nursing staff (n= 110).

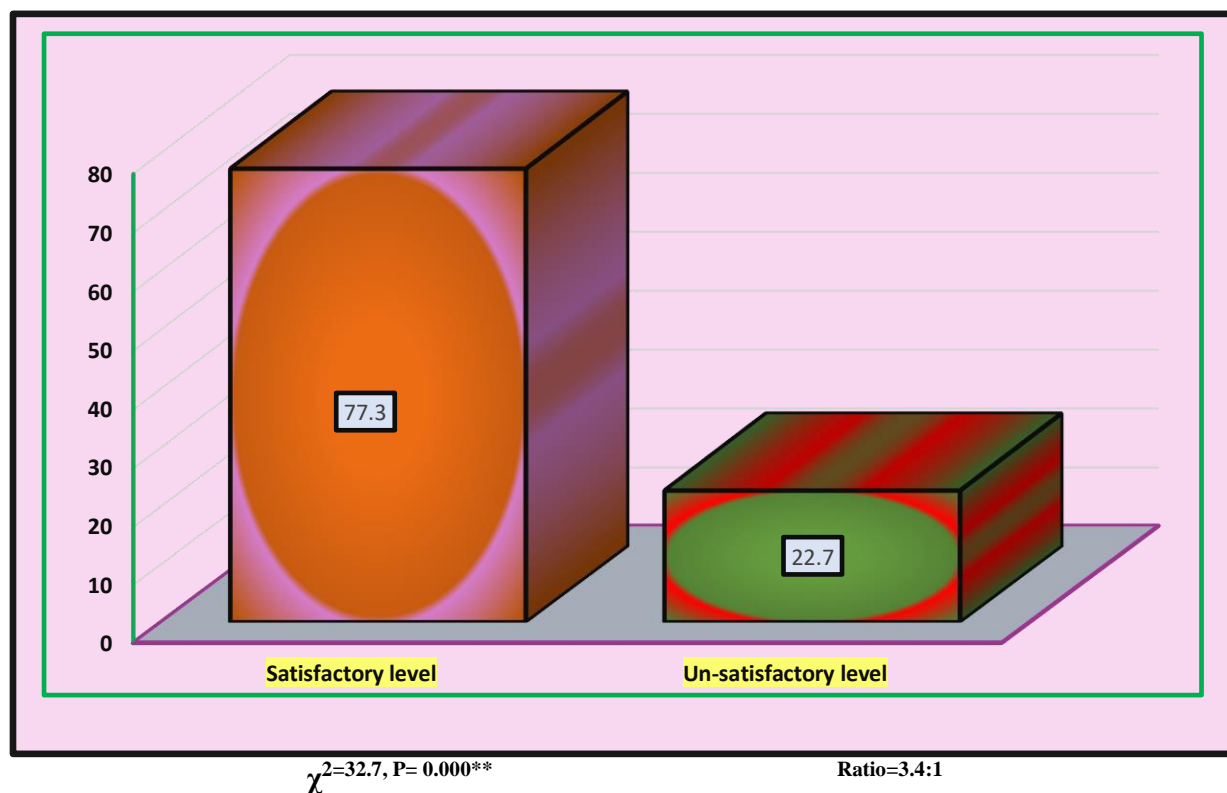$\chi^2=32.7$, P= 0.000**   Ratio=3.4:1

Figure (2): Percentage distribution of total factors of affecting work motivation among the studied nursing staff (n= 110).

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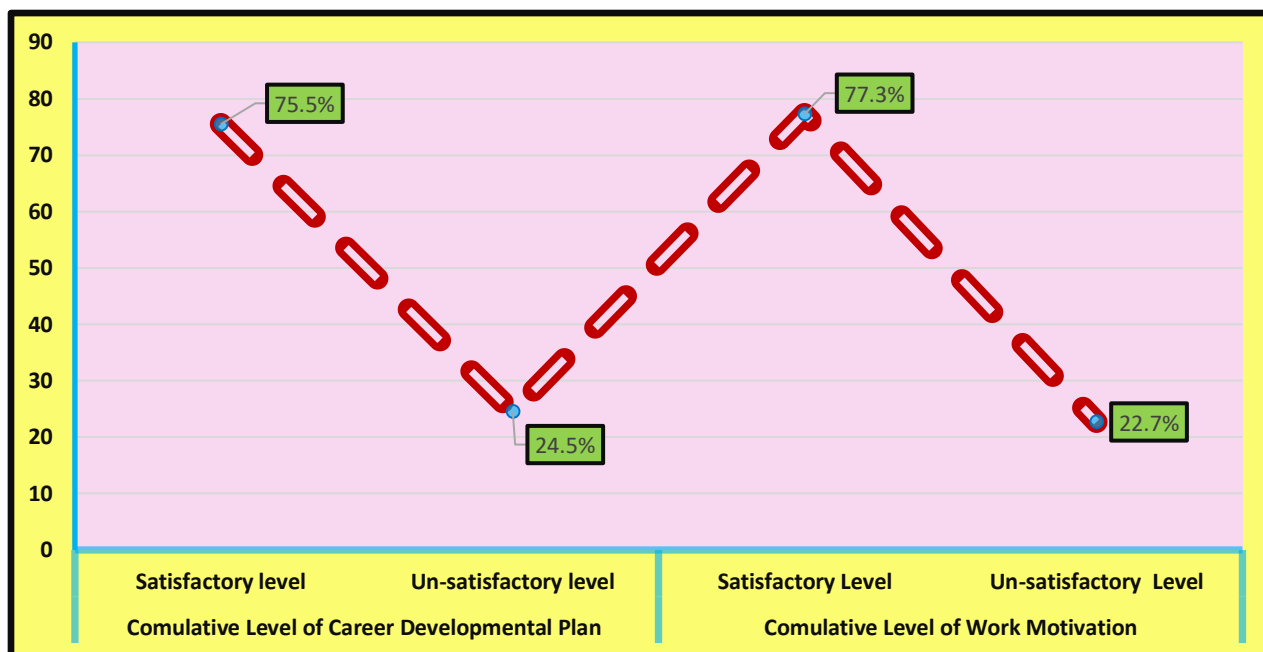**Figure (3): Percentage distribution of total factors affecting both career development and work motivation among the studied nursing staff (n= 110).**
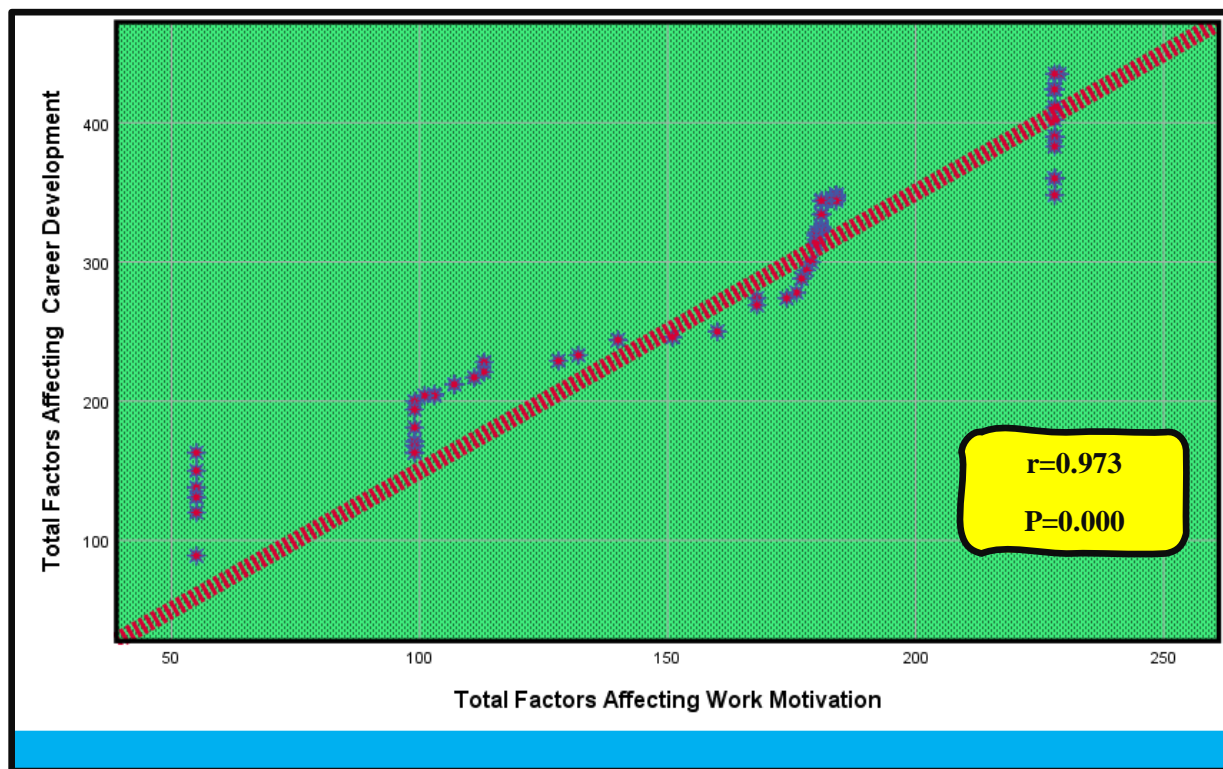

Figure (4): Scatter dot showing the Correlation between cumulative score of total factors affecting both career development and work motivation among the studied nursing staff (n= 110).

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Discussion

As Regarding personal characteristic of the studied nursing staff. More than two-fifths of the age of the studied nursing staff was between twenty to less than thirty years old. Also, the majority of the studied nursing staff were female. While regarding educational level, more than two-fifths of the studied nursing staff had a technical institute of nursing degree. Additionally, considering years of experience, more than one-third of them have experience more than fifteen years old. Moreover, more than two third of the studies nursing staff were married and attended training courses respectively.

This data was consistent with study results conducted at Port-Said Governmental Hospitals by **Mohammed et al. (2020)** which studied "factors influencing career development among nursing staff", revealed that more than two-fifths of the age of the studied nursing staff was between twenty to less than thirty years old. Also, the majority of the studied nursing staff were female, married, had a technical institute of nursing degree, had experience ranged from fifteen to less than twenty years old.

On the same line, the study findings were consistent with the study result conducted at a governmental hospital in Alexandria city-Egypt by **Hamouda (2020)** which studied "the effect of nurse managers' human resource maintenance awareness on staff nurses' career development and organizational resilience", concluded that, more than two fifths of staff nurses age were range between from thirty to forty years, the majority of the staff nurses were female, married, had a technical nursing degree.

Considering, total personal factors affecting career development among the studied nursing staff. It clarified that more two-thirds of the studied nursing staff had satisfactory level of total personal factors affecting career development with a significant statistical difference.

These finding was accordance with the study result conducted at Assiut and Minia University Hospitals by **Abo Elmagd & Ahmed (2019)**, which studied "factors affecting nurses' career development and its' relation to job burnout", confirmed that Assiut University Hospitals nurse's had high level and high mean score for all dimensions (personal behaviors, empowerment, satisfaction, and career development) for career development.

From the researcher point of view, these results might be attributed to the Beni Sueif nurses were involved in many activities and participated in different nursing committee which provide them more opportunities for developing their career, more satisfaction and confident about their job. Moreover, they are looking forward to receiving guidance and acceptance from their supervisors. Self-confident, have willingness for learning new practice and knowledge; and have the ability to evaluate their strengths and weaknesses. Moreover, nurses are more empowered and satisfied about what they do, they have mastered the necessary needed skills for their job, and they are seeking for the feedback about their performance.

In relation to total job factors affecting career development among the studied nursing staff. It clarified that more than two-thirds of the studied nursing staff had satisfactory level of total job factors affecting career development with a significant statistical difference.

The study finding was consistent with study result conducted at Benha University Hospital by **Ebrahim, et al. (2018)**, which studied "assertiveness and absenteeism and their relation to career development among nursing personnel", confirmed that the studied nursing

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personal (staff and head nurses) had a satisfactory level of job factors affecting career development regarding to participation at work, work climate, and work support. It concluded that career development is a great importance for organization' productivity involves responsibilities through a continuous acquisition of managerial, professional skills and experience to achieve organizational goals

This could be due to that the Beni Sueif nurses used to work and take decisions independently regarding the work and the patient care because the supervisor encouraging them to act as a team and providing them initial support during the work to accomplish their goal of care.

Regarding total level of organizational factors affecting career development among the studied nursing staff. It clarified that more than two-thirds of the studied nursing staff had satisfactory level of total organizational factors affecting career development with a significant statistical difference at P = 0.000. Moreover, satisfactory to un-satisfactory level.

On the same direction, the study finding was consistent with study results conducted at Port-Said Governmental Hospitals by **Mohammed et al. (2020)** which studied "factors influencing career development among nursing staff", confirmed that the studied nursing group had a satisfactory level of nursing career development in relation to personal factors (nurses' personal behaviors, satisfaction, empowerment, career development practice), Job related factors (autonomy, supervisor support)and organizational factors (management support, the career developmental plans).

In contrast, the findings were in consistent with a descriptive comparative study result carried out by **Khrais et al. (2018)** which evaluated "impact of organizational support on nursing job stressors: a comparative study". The results of this study indicated that that both Jordanian and Egyptian nurse perceived very high level of stress and a relatively poor organizational support. The study emphasized the importance of organizational support from the managers and other nurses. Thus, nurse managers and organizations need to generate a work atmosphere with values support.

This might be interpreted as the studied nursing staff perceived a satisfactory level regarding master the basic skills to work freely, opportunity to express your opinions, supervisor shows confidence and appreciates good work, availability of training and development needs, which is reflected by the fact that the majority of the nursing staff in the study had satisfactory levels of job factors affecting career development regarding organizational factors..

In relation to, total factors affecting work motivation among the studied nursing staff. It clarifies that more than two-thirds of the studied nursing staff had satisfactory level of total factors of affecting work motivation with a significant statistical difference.

On the same direction, the study finding was fit with result conducted at university hospital at Cairo by **Elewa, (2021)** which studied nurse manager's leadership practices and its relation to staff nurses' motivation and intention to leave, confirmed that the majority of staff nurses had a high level of motivation while the minority had low level of motivation. The result emphasized that nurses were more expected to have high levels of career motivation when their supervisor was helpful, motivated subordinates to establish career goals, started conversations connected to improvement and career-connected matters.

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Moreover, this was supported by a study conducted in Iran by **Esfahani and Afshin (2019)**, which reviewed "job motivation among iranian nurses; a systematic review and meta-analysis study", found that the mean of job motivation among nursing was between medium to high. Additionally, in the same context **Baljoon (2020)** which studied "nurses' work motivation and the magnet journey documented that nurses' work motivation level was high.

On opposite, the study findings were incongruent with a descriptive correlational the study that carrying out at Met Ghamer Hospital; which affiliated to Ministry of Health by **Abd-Elatef Mohamed, et al, (2019)** which assessed "relationship between motivating work factors and empowerment among staff nurses", concluded that the majority of the studied subjects had low perception regarding motivating work factors includes; job security, hospital policy, work facilities, availability of supervision, peer interaction, promotion policy and self-actualization. Also, the majority of the studied subjects had low perception regarding sources of empowerment includes information, work support, work opportunity and work resources

From the researcher's point of view, this can be interpreted as the studied nursing staff perceived a satisfactory level regarding job security (continued incentives and financial rewards & availability of Bonuses, promotions, and pensions), hospital policy (the hospital's location is secure & presence of Regulations and laws are applied), nature of the work (consistency of work with specialty & presence of professional level of the physicians and nursing staff in workplace), colleagues interaction (presence of relationship and mutual respect between nursing staff) , supervision (freedom of speech at work & encouraging creativity and good innovation), work responsibility (opportunities to take responsibility and make decisions & ability to continuously increase efficiency and achieve key objectives) and achievement (directing and continuous education to achieve the goals of the organization & evaluation of progress and giving new ideas and suggestions), which is reflected by the fact that the majority of the nursing staff in the study had satisfactory levels of total factors of affecting work motivation.

Regarding to correlation between total career development and work motivation among the studied nursing staff. It clarified that, there was highly statistically positive correlation between total factors affecting both career development and work motivation among the studied nursing staff.

The study finding was agreed with *the study result published in International Journal of Nursing & Clinical Practices and conducted by* **Baljoon et al, (2018)** *which studied "nurses' work motivation and the factors affecting it", confirmed that there was highly statistically positive correlation between personal behavior, job and organizational factor and nursing motivation.*

This result is in the same line with *descriptive correlational study carried out by the* **Saber et al. (2021)** *which entitled thesis named "motivate nurses and reduce the absenteeism rate in Intensive Care Units", summarized that there were significant positive correlations were found between task identity, autonomy, and feedback with motivation.*

Conclusion and Recommendations

Findings of the present study concluded that:

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More than two-thirds of the studied nursing staff had satisfactory level regarding factors affecting career development , More than two-thirds of the studied nursing staff had satisfactory level of total factors of affecting work motivation, There was highly statistically positive correlation between cumulative score of total factors affecting both career development and work motivation among the studied nursing staff

Based on the study results, the following recommendations can be given:

1. **At nursing personnel level:**
   - Development of policies and plans for enhancing career development and increase nurses performance.
   - Improve the working environment and provide comfort for their work.
   - Encourage nursing staff to attain workshops, health conferences to enhance their career motivation.

2. **At the organizational level:**
   - Follow up the performance of nursing staff to know the strengths and weaknesses and develop a plan for improvement and development.
   - Establish good rewarding system not focused only on financial rewards especially in critical care units to attract and encourage nurses to work.
   - Establish flexible policies schedules and routines to free nursing staff from work overload and give opportunities to growth and development in their career.
   - Make nurses close to decision making and help them to share, and vote for decisions that will affect their future in the work.

3. **At the educational level:**
   Designing nursing curricula which encourage nursing students' autonomy and critical thinking skills that are required for academic achievement motivation.

4. **At the research level:**
   - Further research with larger sample sizes and multiple settings to evaluate the relationship between factors affecting career development and nurses' motivation in critical care units
   - Further studies to investigate the effects of nurses' motivation on nurses' career development in other caring units is recommended.
   - Future studies are needed to investigate which factors can affect nursing motivation and perceived career development.

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