THEORY-BASED STUDIES

Factors affecting holistic motivation among registered nurses and its impact on nursing care quality in Jamaica: an integration of the Expectancy Theory of Motivation

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Abstract
Holistic motivation in nursing is an approach that considers the entire person - physical, emotional, social, and spiritual well-being - to promote a more comprehensive and effective healing experience. Motivation is a important factor for nurses to improve the quality of nursing care and maintain professional competencies in clinical practice. However, many nurses focus primarily on physical factors that promote motivation, neglecting spiritual, psychological, and social aspects. This study aimed to assess the factors that influence holistic motivation among registered nurses in Jamaica, in order to deliver high-quality nursing care. A cross-sectional design was employed to achieve the study objective, guided by the Expectancy Theory of Motivation. A total of 56 clinical nurses from health facilities in Kingston and St. Andrew, Jamaica, participated in the study. A self-administered questionnaire on work motivation was used to collect data, which was analyzed using descriptive statistics, Chi-Square, and binary regression. The significance level was set at 0.05 for hypothesis testing. The findings indicated that 66% of nurses were motivated to continue practicing nursing. However, 42.9% of respondents reported that their mental health and motivation were impacted by their work status, high workload, challenging work environment, patients' attitudes, lack of essential resources, staff shortage, and limited welfare activities. Additionally, 31.5% of nurses expressed that their work status and motivation affected their spiritual activities. Although the majority of participants reported feeling motivated, factors determining holistic motivation varied among individuals. Future studies should address this holistic motivation to enhance patient care and outcomes in nursing practice.

Keywords: Expectancy theory of motivation, holistic care, nursing practice, patient-centered care, quality of care

Introduction

Holistic motivation encompasses the entire being of a nurse, considering physical, social, psychological, and spiritual factors that collectively promote motivation (Kohnen et al., 2023). Motivation is influenced by various aspects, including physical factors such as remuneration, nutrition, rewards, promotions, exercise, health, and career inspiration (Karaferis et al., 2022). Social factors, including family support, interpersonal relationships, and acceptance, also play a significant role in motivating nurses (Ahlstedt et al., 2020). Furthermore, psychological factors like emotional stability, optimism, and gratitude contribute to nurses' motivation (Yıldırım et al., 2021). Spiritual motivation is also vital, encompassing faith, hope, trust, forgiveness, courage, and endurance (Nandika & Nagalakshmi, 2022). The study assert that spiritual motivation predicts better psychological, social, and physical health (Bożek et al., 2020). This highlights the importance of considering all aspects of a nurse's being to improve holistic motivation. In Jamaica, the nursing workforce is facing significant challenges that poses a substantial threat to the provision of quality healthcare services (Ministry of Health and Wellness, 2022). Systemic issues exacerbate the problem, such as international recruitment and limited professional development opportunities. Additionally, poor remuneration, workload, working conditions, lack of appreciation, and patients' ingratitude further demotivate nurses. Research has shown that the migration of healthcare workers from Jamaica **(Figure 1)** is a long-standing issue that driven by differences in living and working conditions between Jamaica and destination countries (Murphy et al., 2016). Despite efforts to address this issue, the existing literature highlights an

Figure 1. Illustration of nurses in Jamaica (Courtesy of Rudranath Fraser at www.jis.gov.jm).

important gap in understanding the motivational factors that influence Jamaican nurses' decisions to remain in or leave the profession, particularly in relation to their perceived autonomy, job satisfaction, and opportunities for professional growth. Furthermore, there is a critical need to investigate how the emigration of experienced nurses affects the motivation and engagement of remaining nurses, potentially leading to a decline in morale, productivity, and quality of care.

Jamaica faces a significant issue in nursing sector, with approximately 8% of registered nurses and 20% of specialist nurses migrating to high-income countries, such as the US and the UK in each year (Murphy et al., 2016). This trend has resulted in substantial vacancy rates, with estimates suggesting that two-thirds of Jamaica's nurses have migrated. In 2001, vacancy rates were alarmingly high, with 37% for registered nurses, 28% for public health nurses, 17% for nurse practitioners, and 61% for assistant nurses. The global nursing vacancy rate then increased to 58% by 2003 (Murphy et al., 2016). Many nursing students now enroll in schools with the goal of relocating since the situation has become increasingly challenging (Murphy et al., 2016). The mass exodus of nurses has severely impacted healthcare system, especially in mental health, where staffing shortages limit patient care and rehabilitation (Squires et al., 2016). Furthermore, Jamaica's significant investment in training healthcare workers, subsidized by the government, is effectively providing foreign aid to wealthier nations (Murphy et al., 2016). Nursing is often regarded as a calling, driven by a sense of purpose and passion (Kallio et al., 2022; Zhou et al., 2021). Some nurses are motivated by a desire to care for others, while others are drawn to the profession for personal or professional reasons. However, factors such as poor health, lack of interest, negative attitudes, poor remuneration, patient ingratitude, and abuse from colleagues can weaken a nurse's motivation and dedication to patient care (Senek et al., 2020). Research shows that what motivates someone to become a nurse and experiences on the job can greatly affect motivation and the quality of care they provide (Kamirullah et al., 2024). A nurse's sense of purpose can motivate them from within that leading to better nursing practices (Zeng et al., 2022).

Motivation is an essential element in nursing practice, as it empowers healthcare professionals to stay up-to-date with skills, remain committed to careers, and make valuable contributions to organizations (Chang et al., 2021; Holtan et al., 2024; Kurtovic et al., 2024). A nurse who is holistically motivated, with a balance of physical, mental, social, and spiritual well-being, is more resilient and better equipped to fulfill roles and responsibilities, even in challenging work environments and despite inadequate compensation (Agusta & Made, 2023). In contrast, partial motivation (e.g. only nurse's well-being) can lead to work lethargy, poor nursing care, carelessness, and a lack of interest in patient care (Veenstra et al., 2022). Moreover, a motivated nurse can become demotivated when expectations and conditions are not met (Niskala et al., 2020). Given that motivation is pivotal for providing high-quality nursing care, it is essential to understand the factors that influence holistic motivation. A demotivated or partially motivated nurse can compromise patient care that emphasizing the need for this study (Zabin et al., 2023).

Despite the critical role of registered nurses in delivering quality healthcare services, there is a substantial gap in understanding the factors that influence holistic motivation among nurses in Jamaica, and how these factors impact the quality of nursing care. Existing studies have primarily focused on individual aspects of motivation without considering the complex interplay of other factors contribute to holistic motivation. Furthermore, there is a lack of research that integrates theoretical frameworks, such as the Expectancy Theory of Motivation, to explain how nurses' motivations and expectations influence behavior and performance. The theory was used since it postulates that motivation is a determining factor in human behavior (Oliver, 1974). The expectancy theory of motivation has three major elements: expectancy, instrumentality and valency (Oliver, 1974). According to this theory, the behavior of an individual is determined by what they believe will lead to the most beneficial outcome. Therefore, nurses will conduct nursing and best practices when they are motivated by factors such as but not limited to good remuneration, good nutrition, reward, promotion, exercise, good health, career inspiration, good family support, good interpersonal relationships, acceptance, emotional stability, optimism, sense of gratitude, faith, hope, trust, forgiveness, courage, endurance. This study aims to

address these gaps by exploring the factors that affect holistic motivation among registered nurses in Jamaica, and examining how these factors impact the quality of nursing care. It is hoped that integrating the Expectancy Theory of Motivation will provide a nuanced understanding of how nurses enhance nursing care quality in Jamaica.

Method

This study employed an observational design with cross-sectional approach to investigate the factors influencing holistic motivation in nurses in Jamaican health facilities. These facilities, including community health centers in Kingston and St. Andrew, provide a range of healthcare services, such as treatment, screening, prevention, health promotion, and education **(Figure 2)**. The study started March 2023 and was completed 7 November 2024. The target population consisted of 62 registered nurses working in health facilities in Kingston and St. Andrew, who met specific inclusion criteria. To be included, nurses had to be at least 18 years old, registered nurses working at a health center in Kingston or St. Andrew, on duty at the time of data collection, and provide informed consent. Conversely, nurses who were not on duty, on leave, or did not provide consent were excluded. The total staff complement of registered nurses in the Kingston and St. Andrew region is sixty-two. All sixty-two registered nurses were invited to participate in this study. Of the sixty-two nurses, 56 completed the online questionnaire, resulting in a response rate of 90%.

Before commencing the study, all participants signed an informed consent form to protect their rights and those of the researcher. Participants were assured of anonymity and confidentiality, and their rights to withdraw from the study at any time without penalty were explained. The study was approved by the ethics committee of South East Regional Health Authority of Jamaica on 13 October 2023. It was agreed by the Senior Medical Officer of health for Kingston and St. Andrew Health Department Jamaica to collect data for the study. Consent forms were sent before the questionnaires were issued. The study participants were informed of their rights and any possible risks that may be involved in the study. They were given an assurance of confidentiality. Participants were informed that participation is voluntary, and they have the right to withdraw from the study at any time, without penalty. All participants were asked to sign informed consent to protect the rights of the researcher and the participants. The study participants were told not to include their names, address or contact identification for anonymity. Participants were also informed that they are free to seek independent advice about their rights as a research participant.

Figure 2. Illustration of research setting (Documented by authors).

This study utilized a 108-item structured questionnaire, wherein 80 items were adapted from a study (Malik et al., 2018). The questionnaire encompassed five sections: demographics and basic information, the prevalence of motivation, factors influencing motivation, the effect of the workplace on nurses' motivation, and a scale measuring intrinsic, organizational and socio-cultural motivation. The sections consisted of 13, 2, 17, 3, 22, 36, and 15 items respectively. The validity and reliability were adapted from that study (Malik et al., 2018), where the pre-tested instrument yielded an overall Cronbach's Alpha value of 0.88. The Cronbach's Alpha for the different motivation scales were as follows: Intrinsic motivation was

0.75, Organizational motivation was 0.87 and Socio-cultural motivation was 0.65. Notably, the study is an open article, allowing unrestricted use, distribution and reproduction of the information embodied in the article (Malik et al., 2018). Three nurse educators and one research expert reviewed the instrument for clarity, content and relevance to the research objectives. Data were collected through questionnaires administered to participants, which were then securely stored to maintain confidentiality. Nurses working with the Kingston and St. Andrew health department and were on duty were approached and informed about the study. The phone numbers or WhatsApp numbers of those who agreed to participate were utilized. Verbal consent was obtained, questionnaires (using google forms) were sent via WhatsApp numbers. On completion, participants were asked to submit completed questionnaires, same were accessed by researchers through an online platform. Information was accessed by the research team, confidentiality was maintained; names were not utilized, data collected was anonymous. To ensure data protection and confidentiality, all questionnaires were securely stored, and electronic data were password-protected. Data will be preserved for approximately four years, after which electronic data will be permanently deleted, and questionnaires will be shredded.

Descriptive statistics were used to calculate the mean, standard deviation (SD), frequency (n), and percentage (%) of the participants (Cooksey, 2020). The relationship between variables were assessed using Chi-square tests and binary regression analysis (Schober & Vetter, 2019; Harris, 2021). Kolmogorov Smirnov and Shapiro Wilk test was also employed to test the distribution of the data (Habibzadeh, 2024). The significance level was considered at 0.05 for hypothesis testing.

Results

The study comprised 56 nurses from public health centers. The majority (98%) of the respondents were female, with a mean age of 44 years (±9.3). The age range was 25 to 62 years, with the largest proportion (40.4%) falling within the 40-54 age group. In terms of marital status, almost two-thirds (62.5%) of the respondents were married. Most respondents (82.1%) lived with their family members. With regard to their professional qualifications, 57% of the respondents were registered nurses, midwives, or specialist nurses. The monthly income of the respondents varied, with almost half (42.9%) earning between $250.000 and $350.000. The respondents had considerable professional experience, with over three-quarters (78.6%) having at least 10 years of experience. The length of time working in the current organization varied, with 33.9% having worked for five years or less, and 28.6% having worked for 16 years or longer. In terms of workload, over half of the nurses worked an average of 40 hours per week **(Table 1).** Two out of three nurses (66%) felt motivated to continue practicing nursing, while a significant portion (98.2%) reported that their motivation at work varied from daily to sometimes. A considerable proportion of nurses (42.9%) reported that their mental health was impacted by their work status, high workload, challenging work environment, patients' attitudes, lack of essential resources, staff shortage and limited welfare. Among the unmotivated nurses, 42.9% reported that their physical health influenced their work motivation. The primary factors affecting work motivation, as identified by the nurses, were excessive workload/fatigue (33.9%), lack of time, resources, or facilities (26.8%), and challenges in relationships with coworkers (16.1%). Most nurses (67.9%) believed that changes in their attitude and behavior were linked to their motivation level. A significant proportion of nurses expressed concerns that low motivation could negatively impact their behavior and attitude **(Table 2)**.

A Chi-Square test was performed to examine the relationship between motivation and the influence of work status on the nurses' mental health. The test showed no significant relationship between the variables ($p > 0.05$). Of the nurses who are not motivated to continue practicing, nearly a quarter (24%) reported that their work status affected their mental health, while 30% reported the opposite effect. Among motivated nurses, 76% reported that their work status affected their mental health, while 70% indicated that their mental health was unaffected **(Table 3)**. Further, a small number of nurses (n=17, 31.5%) expressed that their work status affected their spiritual activities. They noted that their work schedule and workload made it difficult to attend church and engage in devotional activities. They also mentioned that animosity and conflicts within the work environment compromised their spiritual beliefs. However, the test of Independence showed no statistical difference between motivated nurses and those who indicated that their work status affected their spiritual activities ($p > 0.05$). The study found no significant association between the nurses' physical health and their level of motivation ($p > 0.05$) **(Table 3)**. Intrinsic factors have a profound impact on nurses' motivation. The study documented that a majority of nurses (66% and 73%, respectively) agreed with the statements "I feel motivated being able to work ethically in general" and "I feel motivated to be dependable and reliable." These intrinsic statements received the highest mean scores. In contrast, over one-third of the nurses disagreed with the statements "I feel motivated with the availability of drinking water during work" and "I feel motivated with importance given to me by management," which had the lowest mean scores (see Table 5). The overall mean score for intrinsic factors was 3.41 (± 0.94) indicating that most nurses acknowledge and agree that these factors influence their motivation **(Table 4)**.

Table 1. Demographic and work-related characteristics of study respondents.

Variables	Category	Frequency (%)
Sex	Male	1 (1.8%)
	Female	55 (98.2%)
Age	25 – 39	15 (27.3%)
	40 – 54	33 (60.0%)
	≥ 55	7 (12.7%)
Ethnicity	African	46 (82.1%)
	Hispanic/ Latino	1 (1.8%)
	Other	9 (16.1%)
Marital status	Married	35 (62.5%)
	Single	16 (28.6%)
	Common-law	3 (5.4%)
	Separated	1 (1.8%)
	Widowed	1 (1.8%)
Living situation	Living alone	8 (14.3%)
	Living with friends	2 (3.6%)
	Living with family	46 (82.1%)
Position	Registered Nursing	9 (16.1%)
	Registered Nursing & Midwife	14 (25%)
	Specialist Nurse	18 (32.1%)
	Nurse Manager	6 (10.7%)
	Public Health Nurse	9 (16.1%)
Monthly income	< $250.000	13 (23.2%)
	$250.000 – $350.000	24 (42.9%)
	> $350.000	19 (33.9%)
Years of experience	1 – 3 years	7 (12.5%)
	4 – 6 years	3 (5.4%)
	7 – 9 years	2 (3.6%)
	≥ 10 years	44 (78.6%)
Time at current organization (in years)	0 – 5 years	19 (33.9%)
	6 – 10 years	10 (17.9%)
	11 – 15 years	11 (19.6%)
	≥ 16 years	16 (28.6%)
Average working hours	< 40 hours weekly	1 (1.8%)
	40 hours weekly	30 (53.6%)
	> 40 hours weekly	25 (44.6%)

Organizational factors impact nurses' motivation as in the study's findings that highlighted the most nurses either disagreed or strongly disagreed with nearly all statements related to their place of employment. However, two statements stood out with the highest mean scores, indicating nurses' agreement: "My hospital provides me measures for safety during work from diseases like HIV/AIDS, TB, COVID-19, and Hepatitis, etc." and "I am satisfied with my job security." A significant proportion of nurses expressed satisfaction with their job security (44.6%) and the hospital's provision of equipment and safety measures for managing and preventing outbreaks (46%). Despite this, the overall mean score for organizational factors was 2.47 (±0.79) that indicating a high level of dissatisfaction and disagreement with the organizational structure and resources **(Table 5)**. Socio-cultural factors also play a significant role in influencing nurses' motivation. The study found that most nurses agreed with nearly all the statements, with the highest mean scores indicating strong agreement. Specifically, 68% and 71% of nurses agreed with the statements "I feel motivated if co-workers respect each other" and "I feel motivated with good relationships between doctors and nurses," respectively. However, a notable proportion of nurses expressed dissatisfaction with certain socio-cultural aspects. More than two-fifths (43%) disagreed with the statement "I am satisfied with the teamwork around me during work." Furthermore, 57% of nurses either disagreed or strongly disagreed with the statement "I feel motivated by the way the hospital supports and

respects my personal life issues." The overall mean score for socio-cultural factors was 3.34 (±1.03), indicating a moderate level of agreement regarding the influence of these factors on their motivation **(Table 6)**.

Table 2. Holistic motivation in nurses.

Variables	Category	Frequency (%)
Motivation to continue nursing	Yes	37 (66.1%)
	No	14 (25%)
	Sometimes	5 (8.9%)
Frequency	Daily	10 (17.9%)
	Sometimes	45 (80.4%)
	Rarely	1 (1.8%)
Perceived impact of work status on mental health	Yes	24 (42.9%)
	No	10 (17.9%)
	Sometimes	22 (39.3%)
Perceived impact of work status on spiritual activities	Yes	17 (31.5%)
	No	37 (68.5%)
Perceived impact of physical health on work motivation	Yes	7 (12.5%)
	No	49 (87.5%)
Perceived factors that can affect work motivation	Lack of time, resources, or facilities	15 (26.8%)
	Excess workload/fatigue	19 (33.9%)
	Patient's behavior/attitudes	4 (7.1%)
	Remuneration	3 (5.4%)
	Relationship with coworkers	9 (16.1%)
	All the above	6 (10.7%)
Change in behavior due to motivation status	Yes	38 (67.9%)
	No	16 (28.6%)
	Sometimes	2 (3.6%)

Table 3. Cross-tabulation of motivation and mental health, spiritual and physical factors.

Are you motivated?	Mental Health		Spiritual		Physical	
	No	Yes	No	Yes	No	Yes
No	3 (30%)	11 (24%)	10 (27%)	4 (24%)	11 (23%)	3 (43%)
Yes	7 (70%)	35 (76%)	27 (73%)	13 (76%)	38 (77%)	4 (57%)
p	0.68		0.78		0.24	

A binary logistic regression analysis was conducted to examine the effects of sociodemographic characteristics and factors influencing motivation on nurses' likelihood of continuing to practice nursing. The logistic regression model was statistically significant ($p < 0.05$) that indicating that the predictors collectively contributed to the outcome. The Hosmer and Lemeshow test confirmed that the model fit the data well. The Nagelkerke R-squared value exposed that the model explained 66.4% of the variance in motivation and correctly classified 85.7% of cases. The analysis identified several statistically significant predictors of motivation. Nurses who lived alone ($p < 0.05$) and received a monthly salary of less than \$250.000 were more likely to be motivated. Additionally, an increase in the rating of organizational factors was associated with a higher likelihood of motivation. Conversely, an increase in sociocultural factors may decrease the likelihood of motivation. The following variables contributed to the statistical significance of the model: living situation, monthly income, and organizational and sociocultural factors **(Table 7)**.

Discussion
The present study showed that most nurses were motivated, with a 90% response rate and a prevalence rate of 66%. This finding is consistent with previous research, which reported a prevalence rate of 60.8% of motivated and satisfied nurses (Ayalew et al., 2019; Gunawan et al., 2019). Noteworthy is the fact that nurses provide high-quality nursing care and emphasize the importance of nurturing factors that boosting motivation (Asadi et al., 2019). The findings also disclosed that nurses' motivation was influenced by various intrinsic, organizational, and socio-cultural factors. Specifically,

research has shown that nurses' work motivation is shaped by work environment, remuneration, managerial support, career advancement, individual psychological well-being, and aspirations (Afolabi et al., 2018). Furthermore, study have highlighted the significance of encouragement, recognition, and financial incentives in promoting workplace motivation amid clinical nurse (Deressa & Zeru, 2019). A systematic review also identified factors such as autonomy, educational level, administrative positions, nurses' empowerment, work engagement, pay, and financial benefits as influencing nurses' work motivation (Baljoon et al., 2018). However, excessive workload has been found to exacerbate the factors affecting motivation.

Table 4. Intrinsic factors affecting motivation.

Statements	Mean	Standard Deviation
I feel interested in my current job	3.61	1.26
I like to work hard during my work	3.66	1.24
I feel motivated with the availability of drinking water during work	2.89	1.32
I feel motivated with the challenging work given to me	3.20	1.05
I feel motivated with my status	3.50	1.18
I feel motivated being able to work ethically in general	3.77	1.21
I feel motivated to be dependable and reliable	3.77	1.22
I feel motivated with the availability of adequate food during work	3.05	1.30
I feel motivated with my work efficiency	3.66	1.16
I feel motivated with my sense of accomplishment during work	3.64	1.18
I feel motivated with the pride that I get being a part of this facility	3.30	1.22
I get self-respect from my work	3.55	1.22
I feel motivated with the recognition given to me for good work	3.07	1.32
Work is meaningful to me	3.75	1.28
I feel motivated with the availability of proper rest room for long duties	3.07	1.45
I like my work	3.84	1.35
I feel motivated with the amount of functional independence given to me during work	3.50	1.31
I feel motivated with importance given to me by management	2.88	1.13
I feel motivated with the amount of variety in my work	3.20	1.12
I take my work as a source of social respect	3.34	1.18
I feel motivated with creativity opportunities during work	3.27	1.24
I feel motivated with my work in general	3.57	1.19
Total mean score for Intrinsic factors	3.41	0.94

Research has emphasized the importance of autonomy, relatedness, competence, and supportive leadership in building motivation within nurses (Breed et al., 2020). Additionally, remuneration, conducive working conditions, responsibilities, managerial support, career advancement, and appreciation from patients are fundamental in promoting motivation (Afolabi et al., 2018). Motivation can be achieved holistically by integrating physical, social, psychological, and spiritual factors during practice (Kohnen et al., 2023). Physical factors contributed to increase nurses' motivation, including good remuneration, good nutrition, rewards, recognition, promotion opportunities, regular exercise, good physical health, and career inspiration (Karaferis et al., 2022). In addition to physical factors, social factors also contribute to nurses' motivation such as strong family support, positive interpersonal relationships, and acceptance (Ahlstedt et al., 2020). These social factors can provide nurses with a sense of security and support that enabling them to perform their duties more effectively. Psychological factors are also important in promoting nurses' motivation. Emotional stability, optimism, and a sense of gratitude are key psychological factors that can enhance motivation (Yıldırım et al., 2021). Cultivating these psychological factors can develop a more positive mindset and approach the work with renewed enthusiasm. Spiritual motivation is rooted in factors such as faith, hope, trust, forgiveness, courage, and endurance (Nandika & Nagalakshmi, 2022). Spiritual motivation has been shown to predict better psychological, social, and physical health outcomes. Thus, incorporating spiritual practices into their daily lives can experience improved overall well-being and increased motivation.

Table 5. Organizational factors affecting motivation.

Statements	Mean	Standard Deviation
I am satisfied with the availability of proper toilets and hand washing facilities in the workplace	2.70	1.35
I am satisfied with the availability of proper dressing rooms in workplace	2.30	1.29
I am satisfied with the availability of proper hygienic and serviceable conditions	2.48	1.29
I am satisfied with the availability of proper lighting during work	2.63	1.33
I am satisfied with the clean and maintained workplace	2.55	1.26
I am satisfied with the availability of adequate designated work area	2.54	1.29
I am satisfied with the availability of proper ventilation in workplace	2.59	1.26
I am satisfied with my workload	2.57	1.06
I am satisfied with the general working environment to accomplish quality job	2.50	1.24
I am satisfied with the amount of safety during work from diseases like HIV/AIDS, TB, COVID 19 and Hepatitis etc.	2.77	1.29
My hospital provides me measures for safety during work from diseases like HIV/AIDS, TB, COVID 19 and Hepatitis etc.	3.07	1.25
I am satisfied in general with the occupational health	2.80	1.24
I am satisfied with the insurance paid for me	2.34	1.03
I am satisfied with my job description	2.95	1.18
I am satisfied with the referral procedures	2.79	0.99
I work according to my job description	2.89	1.22
I am satisfied with the clarity of my roles and responsibilities	2.63	1.20
I am satisfied with the clarity of roles and responsibilities of different Health Care Providers	2.39	1.17
I am satisfied with the pension planned for me	2.09	0.92
I am satisfied with the allowances I get	1.80	0.96
I am satisfied with the opportunities for career advancement and growth given to me	2.73	1.27
I am satisfied with the opportunities for promotion available to me	2.45	1.17
I am satisfied with the opportunities for higher qualification available to me	2.71	1.26
I am satisfied with my job security	3.07	1.25
I am satisfied with overall supplies available during work	2.21	1.17
I am satisfied with the drugs available during work	2.30	1.11
I am satisfied with the equipment available during work	2.20	1.09
I am satisfied with the number of staff available during work	2.11	1.09
I get feedback from my supervisor	2.70	1.16
I am satisfied with the quality of supervision I get	2.63	1.20
Supervisors provide fair feedback for all	2.46	1.14
I feel I have a good competitive salary for the profession I have	2.00	1.03
I am satisfied with the subsidies I get	2.00	0.97
I feel my income is in accordance to my education, skills and knowledge	1.89	1.02
I am satisfied with increments in my salary	1.98	1.05
I get enough pay to fulfil basic needs like food, accommodation, and transport for me and my family	2.11	1.06
Total mean score for Organizational factors	2.47	0.79

Psychological factors, such as emotional stability, optimism, and a sense of gratitude or appreciation, play a crucial role in enhancing nurses' motivation (Yıldırım et al., 2021). Verbal appreciation, recognition, and rewards for hard work can motivate nurses that energizing them to contribute more to their profession and workplace (Alahiane et al., 2023). Nurses with higher emotional satisfaction tend to have more motivation at work (Xu & Fan, 2023). However, social factors, such as poor interpersonal relationships, can hinder motivation. Friction with patients, colleagues, supervisors,

or coworkers can develop during interactions, affecting nurses' motivation. Hence, the ability to manage conflicts and foster positive working relationships is essential in maintaining motivation (Gunawan et al., 2019). Research highlights a strong correlation between work performance and nurses' motivation (Alharbi et al., 2024). Work absenteeism is a significant consequence of work demotivation in nurses (Mbombi et al., 2018). The findings revealed a moderate mean score for intrinsic factors that indicating feeling of valued and motivated by the inherent enjoyment and satisfaction derived from helping patients. In contrast, the overall mean score for organizational factors was low, emphasizing several shortcomings, including insufficient resources, limited career development opportunities, and an unfavorable working environment. This is evident in the considerable number of nurses who reported disagreement that suggesting improvements to enhance work experience and motivation. Although the mean score for sociocultural factors was moderate, it indicates variability in experiences and mixed levels of satisfaction. This presents substantial opportunities for growth and improvement in these areas.

Table 6. Socio-cultural factors affecting motivation.

Statements	Mean	Standard Deviation
I feel motivated if co-workers help each other	3.68	1.44
I feel motivated with the personal support I get from co-workers when required	3.07	1.33
I am satisfied with my personal life issues	3.36	1.29
I am satisfied with the teamwork around me during work	2.89	1.26
I feel motivated if co-workers respect each other	3.73	1.45
I feel motivated with good relationship between doctors and nurses	3.75	1.42
My work affects my other priorities like responsibilities at home, visiting friends, pursuing a hobby etc.	3.05	1.39
I feel motivated with the feedback I get from the patients	3.71	1.25
I feel motivated by the way hospital supports and respects my personal life issues	2.36	1.24
I feel motivated with the respect I get from patients	3.25	1.32
I prefer to work in a team	3.36	1.35
I feel motivated with the respect I get from the community	3.54	1.24
I feel motivated with the feedback I get from the community	3.46	1.26
I feel motivated if co-workers willingly share expertise and skills with other colleagues	3.71	1.36
I am satisfied with my general interpersonal relations during work	3.14	1.37
Total mean score for Socio-cultural factors	3.34	1.03

Strong leadership is essential for improving investment in nursing, enhancing the quality of nursing education, and addressing working conditions (Alilyyani, 2022). Effective leadership can align nursing positions with updated competencies, ensuring that nurses possess the necessary skills to provide high-quality care (Mabona et al., 2022). Moreover, leaders made a critical contribution in ensuring fair and safe working conditions, which is vital for nurses' job satisfaction and motivation. By prioritizing nurses' well-being and providing a supportive work environment, leaders can help reduce burnout, improve job retention, and enhance the overall quality of care. Research has identified several independent predictors of nurses' job motivation, including the type of health institution, educational qualification, perceived respect for the nursing profession, and work experience (Negussie & Oliksa, 2020). These findings suggest that nurses' motivation is influenced by a range of factors, including their work environment, professional development opportunities, and interpersonal relationships. To improve nurses' job motivation, healthcare organizations can implement performance appraisal systems, foster collaborative working environments, and promote teamwork among healthcare providers. Additionally, providing opportunities for professional growth, recognition, and rewards can help enhance nurses' motivation and job satisfaction (Shiri et al., 2023). The study's findings also highlight the importance of addressing organizational and sociocultural factors to advance a healthy and motivated healthcare workforce (Almutairi et al., 2022). Prioritizing nurses' well-being, providing opportunities for professional growth, and building positive working conditions, healthcare organizations can enhance nurses' job motivation, improve patient outcomes, and contribute to a more sustainable healthcare system. Furthermore, addressing sociocultural factors, such as fostering a culture of respect and appreciation for nurses, can also have a significant impact in motivation and job satisfaction. Moreover, the findings of this study have significant implications for healthcare policy and practice. Healthcare organizations and

Figure 3. Illustration of discussion on professional growth opportunities (Documented by authors).

policymakers must prioritize nurses' opportunities for professional growth, and promote positive working conditions to enhance motivation and patient outcomes **(Figure 3)**. Addressing these factors comprehensively can help keep nurses motivated, satisfied, and provide quality patient care.

The Expectancy Theory of Motivation provides a useful framework for understanding the factors that influence holistic motivation among registered nurses in Jamaica. Firstly, expectancy refers to the nurse's belief that their effort will lead to a desired outcome (Oliver, 1974). In the context of Jamaican healthcare, nurses who perceive that their efforts will lead to improved patient outcomes are more likely to be motivated. Secondly, instrumentality refers to the nurse's belief that achieving a specific outcome will lead to a desired reward or consequence (Oliver, 1974). For instance, nurses who believe that providing high-quality care will lead to recognition or career advancement are more likely to be motivated. Finally, valency refers to the value or appeal of the reward or consequence (Oliver, 1974). In Jamaica, nurses who place a high value on patient satisfaction, professional development, or work-life balance are more likely to be motivated.

Table 7. Binary regression analysis.

Variables	B	Standard error	*p*	Odds ratio
Age group			0.254	
25 to 39 years	0.252	1.498	0.867	1.286
40 to 54 years	1.874	1.292	0.147	6.517
Nationality				
Jamaican	25.734	13637.34	0.998	1.5007E+11
Marital status			0.948	
Married	-17.113	40192.98	1	0
Single	-18.484	40192.98	1	0
Common-law	-1.123	56841.45	1	0.325
Separated	-6.215	56841.45	1	0.002
Living situation			0.093	
Living alone	6.628	3.038	0.029	755.961
Living with friends	-21.038	49701.02	1	0
Monthly income			0.053	
< $250.000	-7.429	3.131	0.018	0.001
$250.000 to $350.000	1.839	1.615	0.255	6.289
Number of years working at present employment			0.318	
0 to 5 years	4.724	2.685	0.078	112.668
6 to 10 years	3.107	2.651	0.241	22.351
11 to 15 years	2.624	2.088	0.209	13.785
Total score for intrinsic factors	0.13	0.069	0.059	1.139
Total score for organizational factors	0.173	0.077	0.025	1.189
Total score for sociocultural factors	-0.244	0.117	0.037	0.784
Constant	3.802	40192.98	1	44.785

However, implementing the Expectancy Theory of Motivation in Jamaica is not without its limitations. One major challenge is the limited availability of resources, including financial incentives, professional development opportunities, and adequate staffing. Additionally, the theory assumes that nurses have a high degree of autonomy and control over their

work environment, which may not be the case in Jamaican healthcare settings. Understanding and applying the theory offers a powerful framework for Jamaican healthcare leaders and policymakers to enhance the quality of nursing care. To achieve this, targeted strategies should focus on strengthening the three core components of the theory: expectancy, instrumentality, and valence. To enhance expectancy, healthcare institutions should invest in continuous professional development opportunities, provide access to adequate resources and equipment, and offer mentorship programs to build nurses' confidence. Clear performance expectations and constructive feedback mechanisms are also essential (Gnepp et al., 2020). To boost instrumentality, transparent and equitable reward systems must be implemented that linking performance directly to tangible benefits, such as promotions, salary increases, and recognition programs. Furthermore, creating opportunities for career advancement and demonstrating a clear pathway for professional growth can reinforce the connection between effort and reward (Hosen et al., 2023). Finally, to maximize valence, healthcare leaders should actively seek to understand the individual needs and values of their nursing staff. This involves offering a diverse range of incentives that align with nurses' personal and professional goals, including opportunities for further education, flexible work schedules, and a supportive work environment. For Jamaican nurses specifically, advocating for participation in decision-making processes, seeking mentorship, and engaging in continuous learning can empower them to take ownership of their professional development and strengthen healthcare system.

Conclusion

This study indicated that the majority of nurses are motivated to continue their nursing practice. Although most participants reported feeling motivated, the factors that influence holistic motivation varied among individuals. These factors encompassed workload, work environment, availability of essential resources, staff shortages, limited welfare activities, income, patient attitudes, positive relationships with colleagues, participation in religious and devotional activities, managerial support, career advancement opportunities, and individual psychological well-being and aspirations. Therefore, upcoming studies should focus on developing effective strategies to enhance holistic motivation. These strategies may include improving the quality of the work environment and implementing wellness programs that support a balance between work and personal life. Additionally, the studies should investigate the impact of managerial support, career advancement opportunities, and spiritual and psychological well-being on holistic motivation. Understanding the factors that influence holistic motivation among nurses can help develop effective strategies to improve the quality of care and nurses' well-being.

Author's declaration

The authors contributed collectively to the conception, data analysis, interpretation, and manuscript preparation, and share equal responsibility for the final manuscript.

AI statement

The author declares that this manuscript was written without the use of any generative text artificial intelligence tools.

Availability of data and materials

All data are available from the authors.

Competing interests

The authors declare no competing interest.

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Authors' insight

Key points
- This study examines the multifaceted nature of motivation among registered nurses which impact professional growth, recognition, autonomy, and the intrinsic value of care.
- The Expectancy Theory of Motivation analyzed how nurses' beliefs influence their motivation and subsequent quality of care.
- The study focuses on the specific context of Jamaica and investigate how the identified motivational factors directly affect the quality of nursing care.

Emerging nursing avenues
- How do specific cultural and socioeconomic factors in Jamaica influence holistic motivation when delivering nursing care?
- What are the most significant intrinsic and extrinsic motivational factors that contribute to holistic motivation among registered nurses in Jamaica?
- What practical interventions can be implemented within the Jamaican healthcare system to enhance registered nurses' holistic motivation?