

# Emotional Intelligence and Caring Behaviour of Nursing Staff in Darbhanga Hospitals

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## Abstract

The association between the emotional intelligence of the nursing staff working in different hospitals in Darbhanga town and their caring behaviour has been explored in the present investigation. 320 nursing staff were selected through purposive-cum-incidental method as a sample of the study. The sample included nursing staff working in government and private hospitals. Assessment of the effect of gender and type of hospital on their caring behaviour were also objectives of the study. The study used the Personal Data Sheet, Caring Behaviour Scale and Emotional Intelligence Test to record the demographic variables and measure the participants' caring behaviour and emotional intelligence. The Caring behaviour was developed by Wu, Larrabee, and Putman (2006) and consists of 24 items., Schutte (1998) created the Emotional intelligence scale, which measures its four dimensions: emotion perception, utilising emotions, managing self-relevant emotions, and managing others' emotions. Both scales have satisfactory reliability and validity. A positive and significant relationship has been found between some dimensions of emotional intelligence and caring behaviour. Utilisation of emotion was found to be negatively associated with caring behaviour. The type of hospital impacts the connectedness dimensions of caring behaviour. Sex also determines the Assurance, Knowledge & skill dimensions of caring behaviour.

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**Keywords:** Emotional intelligence, Caring behaviour, Nursing staff, Darbhanga.

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## Introduction

Health organisations, both government and private hospitals, are the backbone of Indian society. Among the largest healthcare providers are paramedical staff interacting with patients more frequently than other healthcare providers. Nurses play a significant role in caring for patients (Khademian&Vizeshfar, 2008). Nursing staff spend more time with hospitalised patients than other healthcare providers, significantly affecting patients' perceptions of their hospital experience. Nurses are present 24/7, regardless of the physical setting in a hospital (Nussbaum, 2003). Therefore, their caring behaviour contributes to patients' satisfaction and well-being and, subsequently, to healthcare organisations' performance. Caring behaviors have been defined by Greenhalgh, Vanhanen, and Kyngas (1998) as "acts, conduct, and mannerisms enacted by professional nursing staff that convey concern, safety, and attention to the patient."

As per research by Akerjordet& Severinsson (2007) and Warelow& Edward (2007), emotional intelligence plays a vital role in making nursing staff more competent. This enables nurses to think and function in a constructive and rational manner, as stated by Akerjordet& Severinsson (2007) and Kaur et al. (2013). Effective management of one's own emotions as well as others' emotions is critical in providing excellent patient care, according to Sumner and Townsend-Rocchiccioli (2003). Emotional intelligence encompasses four dimensions that help nurses understand and manage emotions, and use them to benefit patients, as defined by King & DeCicco (2009). It is essential for nurses to have high levels of emotional intelligence to carry out the emotionally demanding labor required in their interactions with patients, as highlighted by Rego et al. (2010). Nurses with high emotional intelligence can provide better care to outdoor and indoor patients (Akerjordet& Severinsson, 2007). However, the Indian context has a significant research gap in the relationship between emotional intelligence and nurses' caring behaviours.

## Hypotheses

The present investigation has been conducted to test the following hypotheses:

Hypothesis 1: There will be positive relationships between dimensions of emotional intelligence and the caring behaviour of nursing personnel.

Hypothesis 2: There will be a significant effect of the type of hospital on the caring behaviour of the nursing staff.

Hypothesis 3: There will be a significant effect of sex on the caring behaviour of the nursing staff.

## Methodology

### Sample

This research was conducted in various Government and Private hospitals located in Darbhanga town. A total of 320 nursing staff members from both Govt. and private hospitals were personally contacted during their working hours. A questionnaire was handed over to them after obtaining necessary permission from the concerned authorities. This questionnaire contained nurses' demographic characteristics, three constructs (SI, EI, and caring behavior of nurses) and their dimensions.

The study made use of the following tests/scales:

1. Personal Data Sheet- This section was used to record demographic information.
2. Caring Behaviour Scale- This scale was created by Wu, Larrabee, and Putman (2006) and consists of 24 items. It covers four major dimensions, namely assurance, knowledge and skills, respect and connectedness. It has internal consistency ( $r = .96$ ) and convergent validity ( $r = .62$ ) and reproduces at least 97% of the variance.
3. Emotional Intelligence Test - This scale was developed by Schutte (1998) and commonly referred to as the Schutte Self-report Emotional Test (SSET). It is a method of measuring general Emotional Intelligence (EI) using four dimensions: emotion perception, utilizing emotions, managing self-relevant emotions, and managing others' emotions. The SSEIT

model is closely associated with the EQ-I model of Emotional Intelligence. The scale includes 33 self-report items, each rated on a 5-point scale ranging from 1 (strongly agree) to 5 (strongly disagree). Each sub-test score is graded and then added together to give the total score for the participant. This scale is highly reliable and valid, with Schutte and her colleagues reporting a reliability rating of 0.90.

### Statistical tools

Product moment correlation ( $r$ ) was used in the study to measure the correlation between emotional intelligence and the caring behaviour of the nursing staff. For measuring the significance of the mean difference on account of sex and the type of hospital, a t-ratio test was used.

### Result and discussion

According to hypothesis number 1, there is a link between emotional intelligence and caring behaviour. The hypothesis states that individuals with greater emotional intelligence will exhibit more caring behaviour. A Pearson correlation was performed between emotional intelligence and caring behaviour to test this theory. Table 1 contains the resulting data.

Table 1: Correlation between emotional intelligence and caring behaviour

		CB_ASSURANCE	CB_KS	CB_RESPECT	CB_CONNECTED	CB
EI_PoE	Pearson Correlation	.011	.100	.228**	.089	.159**
	Sig. (2-tailed)	.840	.074	.000	.111	.004
EI_MoE	Pearson Correlation	-.099	-.064	.050	.129*	.003
	Sig. (2-tailed)	.077	.252	.372	.021	.957
EI_MotE	Pearson Correlation	.028	-.055	.094	.023	.037
	Sig. (2-tailed)	.614	.324	.093	.679	.509
EI_UoE	Pearson Correlation	-.143*	-.197**	-.080	.071	-.132*
	Sig. (2-tailed)	.011	.000	.155	.202	.018
EI	Pearson Correlation	-.061	.057	.133*	.138*	.096

	Sig. (2-tailed)	.276	.313	.017	.013	.088
	N	320	320	320	320	320

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

#### Abbreviation

EI\_PoE : Perception of emotion (dimension of emotional intelligence)

EI\_MoE : Management of own emotion (dimension of emotional intelligence)

EI\_MotE: Management of others' emotions (dimension of emotional intelligence)

EI\_UoE: Utilisation of emotions (dimension of emotional intelligence)

EI : Emotional intelligence.

CB\_ASSURANCE – Assurance dimension of Caring behaviour

CB\_KS – Knowledge and skill dimension of Caring behaviour

CB\_RESPECT – Respectful dimension of Caring behaviour

CB\_CONNECTED – Connected dimension of Caring behaviour

CB – Caring Behaviour

The correlation between emotional intelligence dimensions and caring behaviour is displayed in Table 1. Each dimension's correlation coefficient is as follows: perception of emotion and respect, caring behaviour is 0.228, perception of emotion and caring behaviour is 0.159, management of own emotion and connected caring behaviour is 0.129, utilisation of emotion and Assurance dimension of caring behaviour is -0.143, utilisation of emotions and knowledge & skill dimension of caring behaviour is -0.197, utilisation of emotion and caring behaviour is -0.132, emotional intelligence and respectful, caring behaviour is 0.133, and emotional intelligence and connected caring behaviour is 0.138. All relationships are statistically significant at 0.05 or 0.01. The correlation indicates that emotional intelligence increases when caring behaviour increases and decreases when caring behaviour declines. However, a negative relationship has been observed between the utilisation of emotion and the dimension of caring behaviour. This means that if caring behaviour decreases, the utilisation of emotion increases, and vice versa. Therefore, the third hypothesis, 'there will be a positive relationship between the dimensions of emotional intelligence and the dimension of caring behaviour,' is partially accepted. Reg et al.'s findings in their investigation related to caring behaviour and emotional intelligence support this result.

The second hypothesis predicted that there would be a significant difference in the nursing staff's caring behaviour due to their hospitals (private or government). Means for both groups (participants from private or government hospitals) were calculated based on their caring behaviour scores. The t-ratio was measured to test the significance of the mean difference between them. Tables 2 and 3 show the result.

Table 2: Group Statistics

	Hospital	N	Mean	Std. Deviation	Std. Error Mean
CB_ASSURANCE	Private	123	31.67	1.571	.142
	Government	197	32.04	2.059	.147
CB_KS	Private	123	21.36	1.516	.137
	Government	197	21.48	1.596	.114
CB_RESPECT	Private	123	23.52	1.681	.152
	Government	197	23.21	1.748	.125
CB_CONNECTED	Private	123	20.73	1.699	.153
	Government	197	20.20	1.609	.115
CB	Private	123	97.28	4.416	.398
	Government	197	96.93	4.605	.328
	Government	197	114.99	9.444	.673

Abbreviations:

CB\_ASSURANCE – Assurance dimension of Caring behaviour

CB\_KS – Knowledge and skill dimension of Caring behaviour

CB\_RESPECT – Respectful dimension of Caring behaviour

CB\_CONNECTED – Connected dimension of Caring behaviour

CB – Caring Behaviour

Table 3: Showing the difference between private and government hospital nursing staff on account of their caring behaviour

	t-test for Equality of Means						
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
CB_ASSURANCE	-1.664	318	.097	-.361	.217	-.787	.066
CB_KS	-.692	318	.489	-.125	.180	-.478	.229
CB_RESPECT	1.551	318	.122	.307	.198	-.082	.697
CB_CONNECTED	2.825	318	.005	.534	.189	.162	.905
CB	.683	318	.495	.356	.521	-.669	1.381

Abbreviations:

CB\_ASSURANCE – Assurance dimension of Caring behaviour

CB\_KS – Knowledge and skill dimension of Caring behaviour

CB\_RESPECT – Respectful dimension of Caring behaviour

CB\_CONNECTED – Connected dimension of Caring behaviour  
 CB – Caring Behaviour

Tables 2 and 3 indicate that the caring behaviour of nursing staff is affected by the type of hospital they work in, specifically the Connected dimension. Private hospital nursing staff scored higher in the Connected dimension than government hospital nursing staff, with a mean difference of 0.534. Private hospital nursing staff had a mean score of 20.73, SD of 1.69, and SEM of 0.153, while government hospital nursing staff had a mean score of 20.20, SD of 1.6, and SEM of 0.115. The t-ratio value is 2.825, and df is 318, indicating that the mean difference in Connected dimension scores between the two groups is statistically significant. Therefore, the hypothesis, which states that the category of hospital plays a significant role in caring behaviour, is partially accepted.

The last hypothesis explores the effect of gender on caring behaviour. It is supposed that gender plays a significant role in caring behaviour. A t-test/t-ratio has been conducted to check if there is a significant mean difference between the caring behaviour scores of male and female participants, and the result is recorded in Tables 4 and 5.

Table 4: Group statistics

	Sex	N	Mean	Std. Deviation	Std. Error Mean
CB_ASSURANCE	Male	41	33.15	2.044	.319
	Female	279	31.71	1.800	.108
CB_KS	Male	41	22.12	1.382	.216
	Female	279	21.33	1.566	.094
CB_RESPECT	Male	41	23.71	1.991	.311
	Female	279	23.28	1.681	.101
CB_CONNECTED	Male	41	20.34	1.667	.260
	Female	279	20.41	1.664	.100
CB	Male	41	99.32	4.083	.638
	Female	279	96.73	4.504	.270

Abbreviations:

CB\_ASSURANCE – Assurance dimension of Caring behaviour

CB\_KS – Knowledge and skill dimension of Caring behaviour



CB\_RESPECT – Respectful dimension of Caring behaviour

CB\_CONNECTED – Connected dimension of Caring behaviour

CB – Caring Behaviour

Table 5: t-ratio showing the difference between males and females in the Positive aspect of the meaning of life

	t-test for Equality of Means						
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
CB_ASSURANCE	4.675	318	.000	1.433	.307	.830	2.036
CB_KS	3.053	318	.002	.789	.258	.280	1.297
CB_RESPECT	1.497	318	.135	.431	.288	-.136	.998
CB_CONNECTED	-.254	318	.800	-.071	.278	-.618	.477
CB	3.467	318	.001	2.582	.745	1.117	4.048

Abbreviations:

CB\_ASSURANCE – Assurance dimension of Caring behaviour

CB\_KS – Knowledge and skill dimension of Caring behaviour

CB\_RESPECT – Respectful dimension of Caring behaviour

CB\_CONNECTED – Connected dimension of Caring behaviour

CB – Caring Behaviour

The tables labelled Tables 4 and 5 display the difference in caring behaviour and its dimensions between male and female participants. Statistical analysis has revealed that gender plays a significant role in only two dimensions of caring behaviour: Assurance, Knowledge and Skill, and caring behaviour itself. The other dimensions, namely Respectful and Connected, are not influenced by the gender of the participants. The mean difference and t ratio of the assurance dimension are 1.433 and 4.675, respectively, while the mean difference and t ratio of the Knowledge and Skill dimension are 0.789 and 3.053, respectively. Regarding caring behaviour, the mean difference and t ratio are 2.582 and 3.467, respectively. In all these variables, the male group's mean values are higher than the female group's. Therefore, it can be concluded that male participants have exhibited more caring behaviour in these two dimensions, namely Assurance and Knowledge and Skill, than



their female counterparts. However, no statement can be made regarding the other two dimensions of caring behaviour as the mean difference between the male and female groups is not statistically significant. Consequently, the sixth hypothesis, which states that gender will significantly impact caring behaviour, is partially accepted, as Tables 4 and 5 indicate that gender plays a limited role in caring behaviour.

## Conclusion

The result of the study can be concluded in the following points:

1. Emotional intelligence increases when caring behaviour increases and decreases when caring behaviour declines. However, caring behaviour increases when the utilisation of emotion (dimension of emotional intelligence) decreases and vice-versa.
2. The category of hospital (Government or Private) significantly determines the only Connected dimension of the caring behaviour of nursing staff.
3. Only two dimensions of caring behaviour, i.e. Assurance, Knowledge and skill and caring behaviour itself, are influenced by the sex of the nursing staff.

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