



## COMPARATIVE ANALYSIS OF PSYCHOLOGICAL WELLBEING AMONG NURSES AND PATIENTS IN HOSPITAL CARE SETTINGS: A MULTISITE CROSS-SECTIONAL STUDY

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### ABSTRACT

**Background:** Psychological well-being of nurses, who work in high-stress environments, has a substantial impact on patient outcomes and care delivery, even though patients' mental health frequently receives professional attention. **Objective:** Aims to explore if differences occur in psychological well-being between nurses and patients during dyadic interactions. **Methods:** Study are multisite cross-sectional study. Study was carried out examining 526 nurse-patient dyadic interactions during clinical care in general medical and surgical wards across six sites in Indonesia. **Results:** Total scores of PWB between nurses ( $187.65 \pm 19.33$ ), patients ( $188.41 \pm 19.88$ ) indicate that mean score of patients' PWB is slightly higher than that of nurses. However, there were no significant differences between nurses and patients overall psychological well-being were identified ( $r=0.101$ ;  $p>0.05$ ). Of the six PWB subscales, nurses had greater scores on environmental mastery, personal growth, life's purpose, self-acceptance than patients; meanwhile, patients demonstrated higher scores on autonomy and positive relations. Statistically significant differences were observed regarding both mean total scores in 2 domains of 'autonomy' ( $t=-4.824$ ;  $p<0.001$ ) and 'personal growth' ( $t=2.293$ ;  $p<0.05$ ). **Conclusion:** Psychological well-being is an individual experience indirectly affected during clinical interactions.

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### Submitted:

17-05-2025

### Revised:

29-05-2025

### Accepted:

31-05-2025

**Keywords:** Cross-sectional studies; Hospitalization; Nurse; patient; Psychological wellbeing

## BACKGROUND

Contemporary hospital settings are increasingly under external pressure. Budgetary, resource, and performance tensions can result in both work stress for clinicians, and patient concerns over receiving safe care delivery. As healthcare systems come to understand the significance of mental health for both patients and professionals. Understanding environmental influencers that not only support the psychological wellbeing (PWB) of patients but also that of clinicians caring for these patients may be complex, but it is essential for developing and maintaining healthy, positive clinical environments.

Psychological wellbeing refers to positive functioning, influencing the way we perceive ourselves and relate to others, our autonomy, and the ability to effectively cope with both positive and negative life events (Burns, 2017). For patients, hospitalization can be a source of psychological trauma, altering and thereby affecting usual activities of daily living. This can expose them to vulnerability, with both real and perceived perceptions of reduced self-control and increased dependence on healthcare workers (Vladimirova, 2020) during hospital admission. Experiences of fear, apprehension, anxiety, and depression have been reported in the literature (Streek, 2016). The impact of these negative outcomes would undoubtedly be even more significant in those suffering long-term chronic illness, who may spend prolonged periods in hospital. Focusing on the vigilance of a patient's psychological wellbeing may have a significant impact on their health outcomes (Chhari & Mehta, 2016) as well as the overall patient experience in the hospital.

The importance of patients having a positive PWB can not be underestimated, as it has the potential to influence the course of illness (Winefield et al, 2012), enhance recovery, and play a role in other critical factors related to physical health (Hernandez et al, 2018). Supporting the patients' PWB has shown lower mortality rates (Segerstrom et al, 2016), and for those living with chronic conditions, PWB is acknowledged as a key factor in improving prognosis (Hernandez et al, 2018). The benefits of PWB are also reported to be associated with a lower risk of illness onset and slower disease progression across different samples and types of wellbeing measures (Hernandez et al, 2018). High psychological wellbeing is also pivotal in influencing a range of positive feelings in patients, including trust (Diener et al, 2017).

For nurses, hospital environments as workplaces can also influence their PWB (Gao et al, 2012). Often, through the complexity and busyness of these settings, nurses' quality of work-life and PWB are frequently overlooked by management (Hardjanti et al, 2017). This oversight has the potential to negatively impact vitally important clinical workplace measures such as job performance (Sotoodeh et al, 2016; Shyu, 2019), job satisfaction, engagement, morale influencing workplace culture, absenteeism, and staff retention. Poor nurses' PWB may also affect patient care and nurse-patient relationships that determine the quality of care delivery (Dayma & Mohan, 2017).

For nurse managers, the psychological welfare of both staff and patients is pivotal in providing safe, supportive environments, conducive to healing and caring (Connie & Uhrenfeldt, 2014). Nurses spend up to 70% of their shift performing direct patient care, (Institute of Healthcare Improvement, 2022) making them one of the most involved professions during a patients' hospitalization. Understanding nurse-patient relationships and the influence they have on PWB during periods of care interaction, may assist in identifying both promoters and potential risks to PWB on hospital wards. Investigating the PWB phenomenon during the same dyadic nurse-patient encounters, gaining insight from both parties' perspectives, could provide valuable understanding for nursing managers around factors affecting PWB during these interactions. (Papastavrou et al, 2011).

As PWB is individualistic, it means different things to different people, understanding these nurse-patient differences, may assist in establishing or maintaining better relationships between both. Both groups experience significant levels of stress in hospitals, which makes them the perfect place to monitor psychological health under duress. The hospital environment which is experienced by both groups, but their duties, expectations, and psychological reactions may differ.

Researching this enables new understanding of how people are impacted differently by a shared environment depending on their function and sensitivity. Previous studies have investigated the nurses' PWB and patients separately (Iani et al, 2019; Wong, 2018; Meng et al, 2015); then compared the PWB between healthcare providers (Madhuchandra & Srimathi, 2016). Nevertheless, exploring the PWB during actual nurse-patient dyadic interaction in the hospital care setting, however, has been under-examined.

Thus, this study aimed to fill this gap in knowledge. A comparison analysis provides a more comprehensive view of the psychological climate of the hospital by highlighting common stresses or divergent experiences within the same setting. Studies that compare nurses' and patients' PWB can yield important information for creating evidence-based procedures that improve both groups' wellbeing.

## METHODS

A cross-sectional study incorporating two stakeholder perspectives on PWB captured during the same interaction: nurses as care providers, and patients as care receivers. Study reporting complies with the STROBE guideline (von Elm et al, 2008).

The multisite study involved six public hospitals in East Java, Indonesia, consisting of locations in the west, east, north, and south regions for demographic variability. Participants were recruited from general medical and surgical wards. In Indonesian public hospitals, wards are further divided by ward type and classified by the characteristics of room facilities. To represent heterogeneity of these ward environments, the study consisted of both VIP and non-VIP class types, with non-VIP wards also consisting of further sub-tiers: first, second and third classes. Each participating hospital provided six wards each, contributing a total of 36 wards to the study.

Sampling consisted of two groups, patients and nurses, recruited purposively from medical and surgical wards at the six study sites. Participating nurses were; registered nurses; at least 18 years of age and had worked for a minimum of three months in the clinical setting. Inclusion criteria for the patient group required participants to be; at least 18 years of age; be clinically stable; have been admitted for at least three days to reduce extreme variability and increases sample homogeneity, and have the ability to write, read, and communicate in Indonesian. Sample size was adjusted to achieve 80% power and a level of significance of 5% (two-sided) to declare meaningful differences of means between nurses and patients PWB. Based on the sample size for comparing two independent means with assumed equal group sizes, the study required a minimal sample size of 252 participants from each group. The study found 263 eligible paired samples of nurses and patients recruited from the same setting who interacted during nursing care periods in each ward.

The study used Ryff's 42-item PWB Scale (Ryff, 1989), translated into Indonesian by Engger (2015) with a content validity ratio (CVR=1) and  $\alpha=0.935$ , indicating satisfactory translation. The instrument comprised of six subscales: 'autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance' and measured using a seven-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (7). An approval letter to use the instrument in this study was sought and granted by the author via email.

Data collection was carried out between July and December 2018. In each study ward, nurses who met the inclusion criteria were selected after confirmation that they had already provided care to their patients during the shift (dyadic interaction). Each eligible nurse appointed one patient who had received care on that day. The researcher then identified the eligibility of the selected patient, if selection criteria were met, the sample (nurse/patient) was recruited into the study.

This study used SPSS 20.0 software for data analysis. Mean, median, mode, standard deviation (SD), minimum score, and maximum score were analysed to measure dispersion; and quartiles were analysed to calculate the interquartile range. The data demonstrated a normal distribution ( $p>0.05$ ) as evinced by the Kolmogorov-Smirnov test. An independent t-test compared significant differences in the mean score of each variable of nurses and patients PWB. Pearson's Correlation test at the level of significance of 5% was used to calculate the correlation of PWB between both groups. Of the six subscales of Ryff's PWB score, the scores ranged from lower to higher. High scores indicated fine mastery of a particular statement in the subscale, while low scores indicated respondents felt less comfortable with a particular statement being true (Ryff, 2014).

This study was approved by the Medical Faculty Research Ethics Committee (reference number: 1.311/H25.1.11/KE/2018). Following official approval, permission from the head of nursing administration from each facility was also gained. Signed consent was sought from all participants prior to participating in the study. Personal information was collected, handled anonymously, de-identified and kept confidential.

## RESULTS

A total of 526 participants, consisting of 263 nurse-patient dyadic interactions, were captured in the study. Detailed nurse and patient demographic profiles can be found in Table 1.

### Descriptive statistics of PWB scores for nurse and patient groups

Based on table 2. Obtaining a PWB score of  $187.65 \pm 19.33$  (Mo/Me:188/188); below the median, indicated nurse's PWB was below moderate. In the nurse group, the three domains of 'autonomy', 'envi-

Table 1. Demographic characteristics of participants

Nurse (n=263)		Demographic characteristics	Patient (n=263)	
Frequency	Percent		Frequency	Percent
34.14 ± 5.83		Age (mean; ±SD)	48.82 ± 14.83	
9.99 ± 5.96		Length Tenure	-	
-		Length of stay	3.86 ± 1.60	
		Gender		
145	55.1	Female	119	45.2
118	44.9	Male	144	54.8
		Marital status		
23	8.7	Single	25	9.5
233	88.6	Married	233	88.6
7	2.7	Other	5	1.9
		Religion		
255	97	Muslim	255	97.0
8	3.0	Non-Muslim	8	3.0
		Race		
199	75.7	Javanese	134	51.0
59	22.4	Madurese	126	47.9
5	1.9	Others	3	1.1
		Department		
134	51.0	Medical	163	62.0
74	28.1	Surgical	100	38.0
55	20.9	Medical & Surgical		
		Care Unit Class		
50	19.0	First class	59	22.4
14	5.3	Second class	66	25.1
117	44.5	Third class	138	52.5
82	31.2	All		
		Care Unit		
52	19.8	Private room <sup>1</sup>	57	21.6
35	13.3	Single-gender ward <sup>2</sup>	63	23.9
166	63.1	Mixed-gender ward <sup>3</sup>	143	54.5
9	3.4	All types		
		Education level		
151	57.4	Diploma of Nursing	24	9.1
30	11.4	Bachelor of Nursing	110	41.8
81	30.8	Professional Nursing	48	18.3
		School		
1	0.4	Master of Nursing	60	22.8
		Senior High School		
		Diploma	6	2.3
		Bachelor	15	5.7

Table 2. Descriptive Statistics on Psychological Wellbeing on the Nurse and Patient

Nurses (n=263)							Patients (n=263)							
Variable							Variable							
Modus	Median	Q1	Q3	Min-Max	±SD	Mean	Modus	Median	Q1	Q3	Min-Max	±SD	Mean	
27	28	25	31	14-42	±4.61	28.26	Autonomy	29	28	25	31	14-42	±4.61	28.26
32	30	28	33	19-41	±3.79	30.23	Environmental Mastery	30	28	25	31	14-42	±4.61	28.26
34	33	29	36	16-42	±4.90	32.37	Personal Growth	31	30	28	33	19-41	±3.79	30.23
33	33	30	36	19-42	±4.48	33.11	Positive Relations	32	31	29	36	16-42	±4.90	32.37
37	33	29	36	20-42	±4.40	32.19	Purpose in life	33	30	28	33	19-41	±3.79	30.23
32	32	28	35	17-42	±4.44	31.45	Self-acceptance	34	30	29	36	20-42	±4.40	32.19
188	188	176	200	139-237	±19.33	187.65	Psychological Wellbeing	35	28	28	35	17-42	±4.44	31.45

Table 3. The item level's comparison of psychological wellbeing between nurses and patients

Psychological Wellbeing		Nurses Mean (SD)	Patients Mean (SD)	t (p-Value)	Note
<b>Autonomy</b>		28.27 (4.613)	30.25 (4.804)	-4.824 (<0.001)	*
I am not afraid to voice my opinions, even when they oppose most people's views.		4.13 (1.256)	4.86 (1.134)	-7.031 (<0.001)	*
My decisions are not usually influenced by what everyone else is doing		4.01 (1.352)	4.18 (1.309)	-1.474 (0.141)	**
I tend to worry about what other people think of me.		4.19 (1.482)	4.59 (1.290)	-3.233 (0.001)	*
I tend to be influenced by people with strong opinions.		4.33 (1.401)	3.93 (1.445)	3.217 (0.001)	*
I have confidence in my opinions, even if they are contrary to the consensus.		3.44 (1.547)	4.26 (1.369)	-6.418 (0.000)	*
It's difficult for me to voice my own opinions on controversial matters		3.90 (1.460)	4.00 (1.328)	-0.844 (0.399)	**
I judge myself by what I think is important, not by the values of what others think is important		4.26 (1.426)	4.42 (1.227)	-1.410 (0.159)	**
<b>Environmental Mastery</b>		30.24 (3.795)	30.14 (3.738)	0.301 (0.764)	**
In general, I feel I am in charge of the situation in which I live		4.62 (1.044)	4.60 (1.058)	0.290 (0.772)	**
The demands of everyday life often get me down.		2.04 (1.440)	2.17 (1.317)	-1.074 (0.283)	**
I do not fit very well with the people and the community around me.		4.94 (1.297)	4.75 (1.137)	1.751 (0.081)	**
I am quite good at managing the many responsibilities of my daily life.		4.94 (1.058)	4.84 (0.966)	1.076 (0.282)	**
I often feel overwhelmed by my responsibilities		4.66 (1.291)	4.65 (1.316)	0.100 (0.920)	**
I have difficulty arranging my life in a way that is satisfying to me.		4.61 (1.352)	4.47 (1.256)	1.203 (0.230)	**
I have built a home and a lifestyle for myself that is much to my liking.		4.43 (1.337)	4.65 (1.033)	-2.190 (0.029)	*
<b>Personal Growth</b>		32.38 (4.904)	31.44 (4.441)	2.293 (0.022)	*
I am not interested in activities that will expand my horizons.		4.93 (1.578)	4.92 (1.360)	0.059 (0.953)	**
I think it is essential to have new experiences that challenge how you feel about yourself and the world.		4.61 (1.267)	4.81 (0.958)	-2.019 (0.044)	*
When I think about it, I haven't improved much as a person over the years.		3.43 (1.519)	3.10 (1.473)	2.535 (0.012)	*
I have the sense that I have developed a lot as a person over time.		4.89 (0.997)	4.89 (0.967)	-0.089 (0.929)	**
I do not enjoy being in new situations that require me to change my old familiar ways of doing things		4.51 (1.290)	3.84 (1.360)	5.791 (0.000)	*
For me, life has been a continuous process of learning, changing, and growth.		5.37 (1.025)	5.43 (0.974)	-0.741 (0.459)	**

Continue of table 3. the item level's comparison of psychological wellbeing between nurses and patients

I gave up trying to make significant improvements or changes in my life a long time ago.	4.64 (1.471)	4.44 (1.329)	1.618 (0.106)	**
<b>Positive Relations</b>	<b>33.12 (4.482)</b>	<b>33.50 (4.601)</b>	<b>-0.960 (0.337)</b>	<b>**</b>
Most people see me as loving and affectionate.	4.65 (1.102)	4.84 (0.957)	-2.112 (0.035)	*
Maintaining close relationships has been challenging and frustrating for me.	4.91 (1.259)	4.98 (1.120)	-0.659 (0.510)	**
I often feel lonely because I have a few close friends with whom to share my concerns.	4.81 (1.388)	4.45 (1.283)	3.034 (0.003)	*
I enjoy personal and mutual conversations with family members or friends	4.79 (1.101)	4.94 (0.941)	-1.703 (0.089)	**
People would describe me as a giving person, willing to share my time with others	4.51 (1.101)	4.81 (0.958)	-3.337 (0.001)	*
I have not experienced many warm and trusting relationships with others	4.67 (1.385)	4.66 (1.240)	0.066 (0.947)	**
I know that I can trust my friends, and they know they can trust me.	4.78 (1.082)	4.81 (0.973)	-0.339 (0.735)	**
<b>Purpose in life</b>	<b>32.20 (4.409)</b>	<b>31.98 (3.270)</b>	<b>0.640 (0.522)</b>	<b>**</b>
I live life one day at a time and don't think about the future.	4.94 (1.461)	4.67 (1.528)	2.042 (0.042)	*
I have a sense of direction and purpose in life	5.52 (0.800)	5.44 (0.662)	1.128 (0.260)	**
My daily activities often seem trivial and unimportant to me.	5.06 (1.328)	2.63 (1.106)	1.177 (0.240)	**
I don't have a good sense of what it is I'm trying to accomplish in life	4.67 (1.498)	4.83 (1.278)	-1.284 (0.200)	**
I enjoy making plans for the future and working to make them a reality.	5.05 (1.032)	5.30 (0.818)	-3.043 (0.002)	*
Some people wander aimlessly through life, but I am not one of them	4.53 (1.613)	4.58 (1.305)	-0.386 (0.699)	**
I sometimes feel as if I've done all there is to do in life	2.43 (1.183)	2.22 (0.969)	2.178 (0.030)	*
<b>Self-acceptance</b>	<b>31.45 (4.449)</b>	<b>31.11 (4.933)</b>	<b>0.845 (0.399)</b>	<b>**</b>
When I look at the story of my life, I am pleased with how things have turned out.	4.51 (1.269)	4.73 (1.125)	-2.145 (0.032)	*
In general, I feel confident and positive about myself	5.19 (0.947)	4.99 (0.878)	2.530 (0.012)	*
I feel like many of the people I know have gotten more out of life than I have.	4.01 (1.386)	3.24 (1.347)	6.510 (<0.001)	*
I like most aspects of my personality	4.70 (1.165)	5.00 (0.863)	-3.360 (0.001)	*
In many ways, I feel disappointed about my achievements in life.	4.91 (1.204)	4.84 (1.197)	0.654 (0.514)	**
My attitude about myself is probably not as positive as most people feel about themselves.	3.83 (1.478)	3.94 (1.433)	-0.809 (0.419)	**
When I compare myself to friends and acquaintances, it makes me feel good about who I am.	4.30 (1.392)	4.38 (1.376)	-0.599 (0.550)	**
<b>Total</b>	<b>187.65 (19.338)</b>	<b>188.41 (19.885)</b>	<b>-0.447 (0.655)</b>	<b>**</b>

Table 4. The cross-correlation between domains on psychological wellbeing among nurses and patients

Psychological Wellbeing Domain		Nurse							
		Autonomy	Environmental Mastery	Personal Growth	Positive Relations	Purpose in life	Self-acceptance	Total Score	
Patient	Autonomy	Pearson correlation	0.039	0.648	0.103**	0.018**	0.087	0.000**	0.065**
		p-Value	0.529	0.263	0.094	0.776	0.160	1.000	0.294
	Environmental Mastery	Pearson correlation	0.090	0.076	0.122**	0.005**	0.014**	0.028	0.078
		p-Value	0.146	0.222	0.048	0.934	0.821	0.652	0.207
	Personal Growth	Pearson correlation	0.055	0.074	0.158*	0.068**	0.161**	0.063**	0.135**
		p-Value	0.372	0.232	0.010	0.275	0.009	0.305	0.029
	Positive Relations	Pearson correlation	0.016	0.056**	0.133**	0.076	0.097**	0.075**	0.105**
		p-Value	0.801	0.362	0.031	0.222	0.118	0.223	0.088
	Purpose in life	Pearson correlation	0.019	0.054**	0.126	0.039**	0.112	0.042**	0.091**
		p-Value	0.761	0.381	0.041	0.530	0.069	0.501	0.140
Total score	Self-acceptance	Pearson correlation	0.973	0.936	0.031**	-0.055**	0.044**	0.004	0.005**
		p-Value	0.263	0.263	0.614	0.371	0.481	0.946	0.942
Total score		Pearson correlation	0.045	0.058**	0.142**	0.030	0.111**	0.045**	0.101
		p-Value	0.471	0.348	0.021	0.623	0.072	0.471	0.103

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

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

ronmental mastery', and 'positive relations' reported a slightly greater mean score than the median; indicating tendencies towards higher quality in those domains. Conversely, the remaining three domains of 'personal growth', 'purpose in life', and 'self-acceptance' showed lower mean scores than the median. The nurse group mean scores of PWB from highest to lowest ranked the subscales in the following order: positive relations, then personal growth, purpose in life, self-acceptance, environmental mastery, and autonomy.

In the patient group, a different pattern had arisen. Of the six PWB subscales, only 'purpose in life' reported lower than the median score. The remaining five subscales of 'autonomy', 'environmental mastery', 'personal growth', 'positive relations', and 'self-acceptance', showed a greater score gain than median. The highest to lowest PWB score in the patient group resulted in the following subscale order: 'positive relations', 'purpose in life', 'personal growth', 'self-acceptance', 'autonomy', and 'environmental mastery'. The average PWB score of  $188.41 \pm 19.88$  (Mo/Me:169/185), positioned patients around a moderate quality of PWB.

### **The differences in the six subscales of PWB between nurses and patients**

Based on table 3. The total scores of PWB between nurses ( $187.65 \pm 19.33$ ) and patients ( $188.41 \pm 19.88$ ) indicate that the mean score of patients' PWB is slightly higher than that of nurses, but there are no statistically significant differences between the two groups total scores of PWB ( $t = -0.447$ ;  $p > 0.05$ ). Both nurse and patient groups showed the same position of highest mean score of PWB relating to the subscale of 'positive relations' with ( $33.11 \pm 4.48$ ) and ( $33.49 \pm 4.60$ ), respectively. However, the lowest mean score of PWB in both groups appeared in the domain of 'autonomy' ( $28.26 \pm 4.61$ ) in the nurse group and 'environmental mastery' ( $30.13 \pm 3.73$ ) in the patient group. Of the six PWB subscales, data showed that nurses had greater scores on 'environmental mastery', 'personal growth', 'life's purpose', and 'self-acceptance' than patients; while, patients demonstrated higher scores on 'autonomy' and 'positive relations'. Statistically significant differences were observed regarding both mean total scores in the two domains of 'autonomy' ( $t = -4.824$ ;  $p < 0.001$ ) and 'personal growth' ( $t = 2.293$ ;  $p < 0.05$ ).

### **Cross-correlation for each domain of PWB between nurses and patients**

Based on table 4. Pearson's correlation coefficient test shows no statistically significant relationship between the total score of PWB between nurses and patients ( $r = 0.101$ ;  $p > 0.05$ ), meaning the study found no correlation between nurses' PWB scores to patients' PWB scores and vice versa. A substantial relationship ( $r = 0.158$ ;  $p < 0.05$ ) in the domain of 'personal growth' did occur however, indicating there was a correlation between nurses and patients' personal growth.

## **DISCUSSION**

This study provides a psychological comparison from two points of view in a shared healthcare setting. This study revealed subjective PWB information across two groups; nurses as healthcare providers and patients as care receivers during interactions in medical and surgical wards across the six regional level public hospital care settings on the island of java, Indonesia. Our multicenter, multi-ward class approach allowed exploration of greater generalizability of results (Curley & Johnston, 2013) by drawing on a more diverse heterogeneity of participants representing Indonesian population characteristics.

By directly comparing the psychological wellbeing of nurses and patients who share a hospital setting, this study offers a fresh viewpoint. This study examines the combined effects of the hospital setting on two interdependent groups, in contrast to earlier research that treats these populations separately. The study provides fresh insights into how common stressors affect mental health differently depending on function and vulnerability by highlighting both parallels and variations in their psychological reactions.

During dyadic interactions, nurses demonstrated a moderate PWB, with a lower overall score than patients. This finding may relate to professional conventions which cause nurses to underreport their discomfort. Interestingly, this result is in contrast to a previous Indonesian nurse only study, where those findings indicated nurse PWB was high (Hardjanti et al., 2017). One factor in our study that may have driven nurse's PWB results was the demographic of age. The mean age of study nurses was 34 years old, classifying our participants as a younger nursing cohort. Age may affect several components in relation to

dealing with occupational stressors, such as the PWB subscale of autonomy. Barbosa & Wagner (2015) also discuss the role of age and autonomy, where in general, the older a person becomes, the greater degree of autonomy they exhibit. Our study demonstrates that the overall patient PWB score is higher than the median, indicating moderate PWB, and is placed higher than our nurse's score. During hospitalization, patients frequently receive psychological assistance, which might improve their wellbeing (Alzahrani, 2021). On the other hand, nurses might not receive the same level of support, which could result in a difference in their psychological wellbeing scores (Sharif, Ahadzadeh & Nia, 2017).

Further comparative analysis showed that PWB of both groups was similar on moderate quality. Insignificant PWB differences between nurses and patients resulted from stressful experience. The association between stress and PWB is well established, and can be influenced by emotional stability (Strizhitskaya et al, 2019). Nursing can be considered a stressful profession (Najimi et al, 2012), and for patients, being hospitalized is commonly perceived as a life event that can also trigger psychological distress (Hughes, 2001). Our results implied that PWB is an individual experience, unaffected by the social role in our healthcare settings, for both care provider and care receiver. This is consistent with the literature, Stoddart (2012) also discussed how perceptions of roles and performance influenced individual experiences regarding health and social services.

With both environmental workplace and patient vulnerability stressors, building and maintaining positive relationships is key for the PWB of both nurses and patients in creating favorable settings. A positive relationship can be defined as intimacy with significant others (Ryff, 2014), in the hospital setting, this can translate to opportunity to build trusting relationships between the nurse and patient (Sahusilawane et al, 2017). According to Ryff & Singer (1996), the higher the ability of individuals to develop interpersonal relationships, the more they care for each other's welfare, leading to important attributes for understanding such as empathy. Our study showed that both nurse and patient groups were at equal positioning of PWB when it came to positive relations, an important factor for both. The study however found that the lowest mean scores of PWB in both groups were in different domains, autonomy in the nurse's group, and environmental mastery in the patient's group. Autonomy relates to independence, where nurses perceive they have a sense of control when dealing with social work pressures. It is a strong consideration however, that nurses in our study, measured less in 'autonomous' than other domains of PWB, perhaps because at the clinical ward level, employ collaborative teamwork is generally employed to manage complex, multiple patient needs. Anderson et al. (2019) supports this concept of teamwork as being essential for providing high-quality care in nursing practice.

Patients showed the lowest mean score in environmental mastery. A previous study (Gammon, 1998); confirmed that patient's negative feelings induced by hospitalization may contribute to lower PWB and coping mechanisms. Being hospitalized leads to difficulty managing everyday affairs, inability to control surrounding context, being unaware of surrounding opportunities, and feelings of lack of control over the external world (Ryff & Singer, 1996). During hospitalization, as a patient, the environment, treatments, procedures and uncertainty about recovery are the factors leading to anxiety (Bolosí et al, 2018). The ability of patients to adapt to the hospital environment and develop some sense of control is essential in helping to maintain good PWB. Evidence shows that people with higher levels of wellbeing suffer fewer illnesses, have an increased life expectancy and engage in more healthy behaviours (Gómez-López et al, 2019), thus the present study suggests the importance of promoting patient's PWB during clinical care. Ensuring patients are supplied with information and education, as well as involving them in care decisions will allow greater empowerment and control (Russo et al, 2019), thus increasing their PWB. This can also carry through to discharge, involving them in discharge and follow-up decision making may assist in improved adherence with medications and rehabilitation advice, increase knowledge of their condition and reduce hospital re-admission.

The research results of our study did not indicate that there was a psychological relationship between groups. This correlates with other study findings, such as those by Sahusilawane et al (2017), where there was also no relationship found between Indonesian nurses and child patients' psychological wellbeing. This premise is backgrounded by the hospital environment, hospitalization experience, and the intensity of nursing care (Sahusilawane et al, 2017). The study implied that although built as a mutual social involvement, both the nurse and patient have a different personal role during short and temporary dyadic relationships.

Personal growth between groups was however found to correlate in our study, although in a lower relationship ( $r=0.158$ ). This domain portrays the extent to which they make use of their personal talents and potential (Ryff, 2014). Personal growth is commonly referred to as a positive psychological change that occurs following adversity (Beaune et al, 2017), which is described as enhanced interpersonal relationship, appreciation of life, sense of personal strength, a deeper sense of spirituality, and positive changes in terms of life priorities and goals (Tedeschi & Calhoun, 2004). Self-growth is open to new experiences and views oneself in matters related to growth and development (Megawati & Herdiyanto, 2016). Nurses spend large amounts of time with patients and therefore impact patient experience (Kieft et al, 2014). Mutual interaction between patients and nurses is fundamental in receiving or delivering care. Effective communication not only helps the establishment of relationships, but has a well-documented role in patient harm reduction through adverse events (Guttman et al, 2021). Nurses, who play an active role in the dyad interaction, should maintain this dyadic relationship for desired therapeutic bonds, better communication, empowerment and patient safety.

## CONCLUSION

This study reveals that nurses and patients do not show any difference in overall PWB, although the mean score of patients' PWB was slightly higher than that of nurses. This study implies that PWB is an individual experience indirectly affected during dyadic clinical interaction. Moderate PWB highlights that hospital environments should provide psychological and physiological support for both patients and healthcare providers. Providing nursing care aims to provide physiological, psychosocial, and spiritual care. To gain autonomy, a nurse must maintain clinical competence through continued skill and knowledge acquisition for improved personal growth. To promote environmental mastery, institutions can implement programs to create less anxiety-provoking surroundings for patients and families, promoting a sense of familiarity and control.

## IMPLICATIONS FOR CLINICAL PRACTICE

Nurse managers may utilize the findings to design an institution-level intervention to promote positive care providers and care receivers' PWB. Integrated support solutions that can simultaneously improve staff wellbeing and patient care quality are made possible by this study. Thus, future clinical studies are required for designing and evaluating both individual and institutional-level interventions for promoting PWB in hospital-based settings. The study suggests the importance of designing dual-benefit treatments such as joint mindfulness training, or initiatives that promote the mental health of both employees and patients.

## ACKNOWLEDGMENTS

The authors would like to thank all respondents who have participated in the study and the hospitals that contributed to the study.

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