APPRAISAL SYSTEM FOR NURSES IN BINGZHOU TERTIARY PUBLIC HOSPITAL: BASIS FOR STRENGTHENING THE PERFORMANCE MANAGEMENT SYSTEM

Haiying Yang[1*], Suqing Zhao[2], Ying Zhang[3],

[1*]*Department of Orthopedics, Binzhou People's Hospital (affiliated to the First Medical University of Shandong Province), China, yanghaiying6688@163.com; 18366869556.*
[2]*Department of Medical and Pharmaceutical Affairs, Binzhou Municipal Health Committee, 673107055@qq.com.*
[3]*Department of Nursing, Binzhou People's Hospital (affiliated to the First Medical University of Shandong Province), China, China, ying789123@126.com.*

*Corresponding Author:
yanghaiying6688@163.com

Abstract:
Hospitals, as an important part of the service industry, have an urgent need for performance management reform in order to maximize the interests of patients and encourage employees to work effectively. Nurses make up the largest percentage of the health workforce. The ability and willingness of nurses largely determine the success of medical interventions. However, poor practices in the implementation of performance management have been reported to adversely affect employees' sense of responsibility and fairness, which in turn leads to poor clinical outcomes and high employee turnover. The purpose of this study was to determine the current status of the nurses' appraisal system in tertiary public hospitals in Binzhou City by soliciting the opinions of direct users (nurses and their immediate supervisors). Descriptive statistics, t-test analysis and one-way ANOVA were used in this study. It is recommended that hospitals need to standardize performance management by establishing effective and fair departments and systems to discuss and recognize nurses' outstanding achievements.

INTRODUCTION:

Performance appraisal (PA) is termed as a formal structural interview between supervisor and sub-ordinate that typically happens on a periodic basis (semi-annually or annually), in which the supervisor examines and discusses the subordinate's work preference, in order to identify the strengths and weaknesses, and potential opportunities for development and improvement [1]. PA helps to assess the employees' achievement and appraises their valuable contribution towards the common goals of the organization.

The hospital industry is an imperative part of the service industry where patients (as customers) represent the most significant stakeholders. Consequently, substantial importance should be assigned to the people element, in order to encourage the hospital work staff to effectively discharge their duties and ensure maximum satisfaction of the patients. Since PA enables the determination of employees' training needs therefore this process is highly beneficial for the management and employees; thus, eventually leading to overall organizational development and customer satisfaction [2]. Although, similar to other management procedures, the evaluation appraisal process also carries different drawbacks [3].

As discussed in one study, public hospitals represent the main body of medical service in China, which stands for the non-profit medical facilities that are operated through administrative budgets of the state authorities at all levels, excluding primary healthcare and medical centers (Health institutions and clinics), and specialized health institutions for the public[4]. These medical institutions are operated to serve the wider medical interests of the public. Notably, the government monitors public medical institutions from the perspective of the service price, access qualification, personal appointment, service behavior, and service quality. The continuous development of public medical reforms connotes that as a matter of urgency, public management needs to effectively optimize the government's measures and policies for the performance management of public medical institutions. Thus, there is a dire need to not only improve the overall performance but to also enable effective adaptation of public medical institutions as a part of the development and advancement of China's new-era socialism. The nursing staff represents the largest portion of the health force workers. The ability and willingness of nurses significantly define the success ratio of health care intervention[5]. In addition to this, PM systems are an effective tool to keep nurses encouraged, motivated, trained, and compensated properly[6][7]. Although, regardless of several benefits associated with the PM such as job satisfaction, high morale, and improved motivation, PM systems are substantially contested. Resultantly, there is a dire need to analyze PM practices and methods, with the aim of understanding their influences on nursing professionals[8][9].

Owing to the increasing need for improved medical practices and high-quality healthcare services, the significance of performance management and high-quality healthcare has been highlighted in BinZhou Public Tertiary Hospital, China. Nevertheless, poor practices in the PM implementation are reported to exert an adverse influence on the workers' perceptions of accountability and fairness; consequently, leading to poor clinical outcomes and high turnover of staff[10] [12].

This research identified the status of the appraisal system for the nurse in Binzhou tertiary public hospital by eliciting the opinions of its direct users, that is, both the nurses and their immediate superiors with the end view to strengthening the overall performance management system.

Methods:

Research design

This research employed a descriptive research design to identify the perspective of performance appraisal factors of employees in Binzhou Tertiary Public Hospital in Shandong, China, which is used to find any existing relationship between two or more variables. The use of a descriptive technique shall help in identifying the perspective of performance appraisal factors of employees in Binzhou Tertiary Public Hospital in Shandong, China. Furthermore, quantitative analysis will be utilized in generating and analyzing numerical data to define the evaluation of the factors influencing the PA of nurse-employees.

The study was approved on October 25, 2022, by a panel of examiners. Respondents participated voluntarily and signed an informed consent form.

Population and Sample

The respondents are the 69 Superiors and 381 nurses of Binzhou People's Hospital. The respondents' number was estimated through the Cochran Sample Size technique. The confidence level at 95% with a margin of error of 5% was set.

Data Collection

The data collected from the online survey of 381 nurse respondents and 69 superiors between late-October to and mid-November 2022.

Instruments

The research adopted a modified questionnaire and was validated in two ways to remove the inconsistencies. The first was conducted through expert validation utilizing the faculty members. The second validation was through the pilot

testing of the research instrument to 30 target participants from the Binzhou Hospital. The responses of the respondents served as input to the Cronbach Alpha Test (CAT = 0.862) that established the reliability and acceptability of the research instrument. Besides, statistical validation was applied to test the instrument through Cronbach Alpha-coefficient.

The research instrument was divided into four separate parts. The first section pertains to the respondents' profiles. The second part conducts the evaluation of the factors of PA based on the objective setting, interpersonal factors, rater accuracy, and recognition. The third part shows the assessment of the issues of PAS, and last part extends the possible solutions given by the respondents.

The computed weighted means were interpreted using the following scales:

Scale	Range	Verbal Interpretation
4	3.26 – 4.00	Strongly Agree (SA) Very Good (VG)
3	2.51 – 3.25	Agree(A)Good/ (G)
2	1.76 – 2.50	Disagree(DA)/Poor (P)
1	1.00 – 1.75	Strongly Disagree(SD)/Very Poor (VP)

Statistical Treatment

The data collected for this study was put through a quantitative analysis. Different statistics such as percentage and frequency are adopted to establish the respondents' profile. Assessment of the performance appraisal was interpreted using weighted mean.

The hypotheses tests of this study were conducted using a 5% significance level, and SPSS software. To access the comparison of an average number of two samples, the t-test was utilized. To access the sum of squares and the mean squares, the One-Way Analysis of Variance (ANOVA) was utilized.

Results:

1. Assessment of respondent-nurses and respondent-superiors on the accuracy of the PAS in reflecting the true performance of nurses from the perspectives of:

4.1 interpersonal factors

Table 4.1 Assessment of respondent-ratees and raters on the accuracy of the appraisal system in reflecting the true performance of nurses in terms of Interpersonal Factors

Interpersonal Factors	Mean		SD		Verbal Interpretation	
	Superior	Nurse	Superior	Nurse	Superior	Nurse
The performance of nurses throughout the rating period is considered rather than the superior's relationship with the nurse.	3.23	3.12	0.942	0.716	Agree	Agree
The performance appraisal system in this hospital is objective rather than subjective.	3.26	3.09	0.834	0.682	Strongly Agree	Agree
I believe it is better to give more weight to assessing the quantitative rather than the qualitative contribution of nurses.	3.35	3.09	0.819	0.709	Strongly Agree	Agree
Supervisors of nurses in this hospital set aside their personal relationships with the nurses during the process of their performance evaluation.	3.36	3.04	0.822	0.74	Strongly Agree	Agree
The present performance appraisal system in this hospital reflects the "true" performance of the nurses.	3.01	2.99	0.931	0.724	Agree	Agree
Overall Rating	**3.24**	**3.07**	**0.870**	**0.714**	**Good**	**Good**

Results indicated that Superior and nurse respondents assessed the accuracy of the appraisal system in the context of personal factors as good based on the over-all average score of 3.24 and 3.07. All the indicators of the accuracy of the PAS in the context of personal factors, Supervisors of nurses in this hospital set aside their personal relationships with the nurses during the process of their performance evaluation was rated the highest with an overall mean of 3.36 as per the assessment of Superior-respondents; while nurse-respondents' assessment yielded a mean score of 3.04. In contrast, the present PAS in this hospital reflects the "true" performance of the nurses and was rated the lowest with means scores of [MR, [WM=3.01 and NR=2.99] both with a verbal interpretation of Agree (A).

4.2 Objective setting

Table 4.2 Assessment of respondent-ratees and raters on the accuracy of the appraisal system in reflecting the true performance of nurses in terms of objective setting

Objective Setting	Mean		SD		Verbal Interpretation	
	Superior	Nurse	Superior	Nurse	Superior	Nurse
1. Nurses in this hospital participate in target setting with their superiors at the start of the performance appraisal period.	3.26	3.01	0.834	0.761	Strongly Agree	Agree
2. Nurses in this hospital are aware their targets are aligned with the overall goals of the hospital.	3.2	3.1	0.833	0.68	Agree	Agree
3. The performance standards of the hospital are clear to all nurses.	3.14	3.03	0.845	0.708	Agree	Agree
4. Supervisors in this hospital give clear-cut direction to nurses to meet their performance targets.	3.14	3.05	0.845	0.707	Agree	Agree
5. Nurses in this hospital can negotiate with their superiors on the reasonableness of targets during performance target setting.	2.99	3.04	0.962	0.728	Agree	Agree
Overall Rating	**3.15**	**3.05**	**0.864**	**0.717**	**Good**	**Good**

Results indicated that Superior and nurse respondents assessed the accuracy of the appraisal system from the perspective of personal factors as good based on the over-all mean score of 3.15 and 3.05. Of all the indicators of the accuracy of the PAS in the context of an objective setting, Nurses in this hospital participating in target setting with their superiors at the start of the PA period was rated the highest with an overall mean of 3.26 as per the assessment of Superiorrespondents; while nurse-respondents gave an average score of 3.01. On the other hand, Superior-respondents assessed the indicator, Nurses in this hospital can negotiate with their superiors on the reasonableness of targets during performance target setting with the lowest with mean score of 2.99; while nurse respondents rated the same with a mean score of 3.04 interpreted as Agree.

4.3 Rater accuracy

Table 4.3 Assessment of respondent-ratees and raters on the accuracy of the appraisal system in reflecting the true performance of nurses in terms of rater accuracy

Rater's Accuracy	Mean		SD		Verbal Interpretation	
	Superior	Nurse	Superior	Nurse	Superior	Nurse
The performance raters (superiors) in this hospital ensure that the ratees (nurses) "true" performance is reflected in their performance appraisal rating.	3.07	3.01	0.81	0.73	Agree	Agree
The performance raters (superiors) in this hospital are aware of the real nature of the work of the nurses to ensure their fair appraisal.	3.07	3.03	0.81	0.72	Agree	Agree
The performance raters (superiors) in this hospital perform their role objectively, especially during the appraisal period.	3.1	3.03	0.88	0.73	Agree	Agree
The performance raters (superiors) in this hospital considers the entire rating period rather than looking only at recent success/failures of the nurse concerned.	3.16	3.06	0.78	0.67	Agree	Agree
The perceived fairness of performance raters (superiors) influences the overall performance delivery of nurses in this hospital.	3.28	3.07	0.8	0.72	Strongly Agree	Agree
Overall Rating	**3.14**	**3.04**	**0.816**	**0.713**	**Good**	**Good**

Results indicated that Superior and nurse respondents assessed the accuracy of the appraisal system in terms of rater accuracy as good based on the over-all mean score of 3.14 and 3.04. Of all the indicators of the accuracy of the PAS from the perspective of the rater's accuracy, the perceived fairness of performance raters (superiors) influences the overall performance delivery of nurses in this hospital was rated the highest with an overall mean of 3.28 as per the assessment of Superior-respondents; which; while nurse-respondents gave an average score of 3.07. Conversely, The performance raters (superiors) in this hospital ensures that the ratees (nurses) "true" performance are reflected in their performance appraisal rating and The performance raters (superiors) in this hospital are aware of the real nature of work of the nurses to ensure their fair appraisal with the lowest with mean score of 3.07; while nurse respondents rated the same with a mean score of 3.01 and 3.03.

4.4 Recognition

Table 4.4 Assessment of respondent-ratees and raters on the accuracy of the appraisal system in reflecting the true performance of nurses in terms of recognition

Recognition	Mean		SD		Verbal Interpretation	
	Superior	Nurse	Superior	Nurse	Superior	Nurse
The performance appraisal system in this hospital ensures that "real performers" (nurses) are recognized accordingly.	3.13	3.06	0.87	0.69	Agree	Agree
Knowing that good work is recognized in this hospital has given opportunity to nurses to work beyond the requirements of their job.	3.14	3.04	0.85	0.7	Agree	Agree
The proper recognition of doing a job well has influenced the nurses to perform better the next time.	3.32	3.13	0.78	0.67	Strongly Agree	Agree
The nurses in this hospital prefer to receive monetary recognition rather than token recognition.	3.13	2.99	0.86	0.76	Agree	Agree
There is not an instance in this hospital where nurses who are not performing well	3.06	3.01	0.82	0.71	Agree	Agree
were given recognition.						
Overall Rating	**3.16**	**3.05**	**0.834**	**0.705**	Good	Good

Results indicated that two groups of respondents assessed the accuracy of the PAS in reflecting the true performance of nurses in terms of recognition as good as reflected in the overall rating of 3.16 and 3.05. Superior respondents strongly agreed on the indicator, The proper recognition of doing a job well has influenced the nurses to perform better the next time which was assessed as very good as revealed the highest rating of 3.32; while nurse-respondents rated The proper recognition of doing a job well has influenced the nurses to perform better the next time with the highest mean score of 3.13 interpreted as good. However, there is not an instance in this hospital where nurses who are not performing well were given recognition and obtained the lowest rating of 3.06 from the assessment of Superior-respondents; and nurse respondents rating of 3.01.

2. Significant difference in the assessment of the accuracy of the appraisal system when the respondents are grouped according to their profile variables

4.5 age

Table 4.5 Significant Difference in the Assessment of the accuracy of the appraisal system when the respondents are grouped according to age.

One-Way ANOVA (Fisher's)

	F	df1	df2	p-value	Decision	Conclusion
Objective Setting	2.19	8	441	0.027	Reject Ho	Significant
Interpersonal Factors	1.719	8	441	0.092	Accept Ho	Insignificant Significant
Rater's Accuracy	1.645	8	441	0.110	Accept Ho	Insignificant Significant
Recognition	0.97	8	441	0.459	Accept Ho	Insignificant Significant

Note: *Tukey Post Hoc Analysis

Significant Difference exists in **OBJECTIVE SETTING** between	Mean Difference (P value)
31-35 yo and 46-50 yo	-0.715 (p = 0.049)

There is no significant difference in the evaluation of the accuracy of the appraisal system variables in terms of interpersonal factors(P=0.092), rater's accuracy(P=0.110), and recognition(P=0.459) when the respondents are grouped in accordance with their ages.

4.6 Sex
Table 4.6 Significant Difference in the Assessment of the accuracy of the appraisal system when the respondents are grouped according to sex.

Independent Samples T-Test

		Statistic	df	p-value	Decision	Conclusion
Objective Setting	Student's t?	-2.65	448	0.008	Reject Ho	Significant
Interpersonal Factors	Student's t?	-2.62	448	0.009	Reject Ho	Significant
Rater's Accuracy	Student's t?	-3.25	448	0.001	Reject Ho	Significant
Recognition	Student's t?	-2.84	448	0.005	Reject Ho	Significant

* significant at p <0.05

There exists a significant difference in the assessment of the accuracy of the appraisal system variables in terms of the interpersonal factors(P=0.009), objective setting(P=0.008), rater's recognition(P=0.001), and accuracy when the participants are classified consistent with their sex.

4.7 civil status
Table 4.7 Significant Difference in the Assessment of the accuracy of the appraisal system when the respondents are grouped in the line with marital status

One-Way ANOVA (Fisher's)

	F	df1	df2	p-value	Decision	Conclusion
Objective Setting	8.45	3	446	<.001	Reject Ho	Significant
Interpersonal Factors	8.53	3	446	<.001	Reject Ho	Significant
Rater's Accuracy	7.14	3	446	<.001	Reject Ho	Significant
Recognition	7.91	3	446	<.001	Reject Ho	Significant

* significant at p <0.05, p <.001
Note: *Tukey Post Hoc Analysis

There exists a significant difference in the appraisal of the accuracy of the PAS variables in terms of interpersonal

Significant Difference exists between	Mean Difference (P value)
Single - Widower	-1.115 (p = 0.003)
Single - Married	-0.389 (p <.001)
Single - separated	-0.461 (p = 0.011)

factors(P=0.003), objective setting(P<0.001), rater's recognition, and accuracy(P=0.011) when the respondents are classified as per their civil status.

4.8 length of service
Table 4.8 Significant Difference in the Assessment of the accuracy of the appraisal system when the respondents are grouped according to the length of service

One-Way ANOVA (Fisher's)

	F	df1	df2	p	Decision	Conclusion
Objective Setting	5.15	8	441	<.001	Reject Ho	Significant
Interpersonal Factors	5.96	8	441	<.001	Reject Ho	Significant
Rater's Accuracy	5.49	8	441	<.001	Reject Ho	Significant
Recognition	4.26	8	441	<.001	Reject Ho	Significant

* significant at p <0.05, p <.001

Significant Difference exists between	Mean Difference (P value)
Less than 3 years to 3- 5 years	-0.693 (p <.001)
Less than 3 years to 6-10 years	-0.777 (p <.001)
Less than 3 years to 11-15 years	-0.697 (p <.001)
Less than 3 years to more than 15 years	-0.581(p =0.01)

* significant at p <0.05, p <.001

There exists a significant difference in the appraisal of the PAS variables' accuracy in terms of, rater's recognition and accuracy, interpersonal factors, and objective setting when the participants are categorized in accordance with a number of years in service($P<0.001$).

3. Issues and challenges are encountered by the respondent ratees and raters in using the appraisal system for the nurses

4.9 interpersonal factors
Table 4.9 Issues and challenges are encountered by the respondent ratees and raters in using the appraisal system for the nurses in terms of interpersonal factors

Interpersonal Factors	Status	
	Superio r (n = 69, %)	Nurse (n = 381, %)
None	1(1%)	1(1%)
Complex interpersonal relationship	0	61(16%)
Evaluation of staff and some departments' performance evaluation results in CI interest relationships	0	13(3%)
Evaluation of staff with personal feelings	0	158(41%)
Lack of careful supervision of Superiors	13(19%)	13(3%)
The subjectivity is too strong, and the lack of third -party execution of no interest	29(42%)	29(8%)
Unable to avoid the impact of interpersonal relationships	26(38%)	106(28%)

With regard to interpersonal factors, The subjectivity is too strong, and the lack of third -party execution of no interest got 42% among Superior respondents; while Evaluation staff with personal feelings obtained 41% from nurse-respondents.

4.10 objective setting
Table 4.10 Issues and challenges are encountered by the respondent ratees and raters in using the appraisal system for the nurses in terms of objective setting

Objective Settings	Status	
	Superior (n = 69,%)	Nurse (n = 381, %)
The difficulty of performance assessment data collection and quantification	25 (36%)	133(35%)
Insufficient scientific and fairness of the indicators of performance assessment	11(16%)	11(3%)
Lack of unique strategy and frequent changes in hospital management can impact performance appraisal	0	13(3%)
Nurses' performance goals setting unreasonable	0	50(13%)
Performance goals are unclear	0	43(11%)
The performance index system is not systematic	3(4%)	3(1%)
Performance target lacks individualization	0	7(2%)
The actual operation of the assessment index is not strong	29(42%)	29(8%)
The quantization of performance goals is difficult	0	22(6%)
The target setting is unscientific and unreasonable	1(1%)	70(18%)

In terms of the objective setting variable The actual operation of the assessment, index is not strong yielding the highest percentage of contextual problems among Superior respondents; while the Difficulty of performance assessment data collection and quantification among nurse-respondents. 4.11 rater accuracy.

4.11 rater accuracy
Table 4.11 Issues and challenges are The hospital through the HRD unit should revisit the PA to reflect the "true" performance of the nurses

2. The PA goals must identify training needs and should be structured to effectively identify the essential and relevant training which when specified shall result in better staff performance.
3. The management should set clear expectations for raters.
4. Team building seminar among nurses and Superiors be conducted.
5. Give recognition to nurses for exemplary achievement.
6. Performance appraisal form for nurses and guidelines is recommended and presented in Appendix Replicate study involving other respondents is recommended for future researchers. encountered by the respondent ratees and raters in using the appraisal system for the nurses in terms of the rater's accuracy.

Rater Accuracy	Status	
	Superior (n = 69,%)	Nurse (n= 381, %)
Evaluation of staff and some departments' performance evaluation results CI interest relationships	0	40(10%)
Head nurses do not give a fair evaluation	36(52%)	81(21%)
Insufficient ability to evaluate personnel	13(19%)	37(10%)
Strong subjective consciousness	0	49(13%)
The subjectivity is too strong, and the lack of third -party execution of no interest	18(26%)	51(13%)
There are differences between different evaluation staff	0	121(32%)
Insufficient capacity of evaluators	1(1%)	1(1%)
Scale setting is more objective and measurable	1(1%)	1(1%)

With regard to issues and challenges on rater, accuracy revealed that the Head nurse does not give fair evaluation resulting to 52% from Superior-respondents; while nurse-respondents, There are differences between different evaluation staff, yielding 32%.

4.12 recognition

Table 4.12 Issues and challenges are encountered by the respondent ratees and raters in using the appraisal system for the nurses in terms of recognition

Recognition		Status	
		Superior (n = 69,%)	Nurse (n = 381, %)
Lack of communication		67(97%)	146(38%)
Lack of performance culture	management	1(1%)	127(33%)
Lack of training		1(1%)	72(19%)
None		0	36(9%)

In terms of recognition, there were 97% of Superior –respondents who considered Lack of communication as one of the issues and challenges encountered in using an appraisal system for nurses; whereas among nurse-respondents, there were 38%.

4.Solutions proposed by the respondent ratees and raters on the issues and   challenges encountered in using the appraisal system for nurses

4.13 interpersonal factors

Table 4.13 Solutions proposed by the respondent ratees and raters on the issues and challenges encountered in using the appraisal system for nurses in terms of interpersonal factors

Recommend solution to deal with the challenge encountered in terms of Interpersonal Factors	Status	
	Superior	Nurse
Employment of third parties to evaluate	69(100%)	237(62%)
Establish an effective performance supervision mechanism	0	91(24%)
Strengthen supervision	0	46(12%)
None	0	7(2%)

Results revealed that the two groups of respondents 69 or 100% of the total Superior-respondents and 237 or 62% of the nurse-respondents recommend the Employment of third parties to evaluate as one of the solutions to the issues and challenges encountered in using the appraisal system for nurses

Establishing an effective performance supervision mechanism was recommended by 91 or 24% of the nurserespondents; while strengthening supervision was recommended by 46 or 12% of the nurse-respondents.

4.14 objective setting

Table 4.14 Solutions proposed by the respondent ratees and raters on the issues and challenges encountered in using the appraisal system for nurses in terms of objective setting

Recommended Solution to deal with the challenge encountered in terms of Objective Settings	Status	
	Superior	Nurse
Innovate the performance management system, formulate a target management system,	69(100%)	201(53%)
Set quantifiable target	16(23%)	88(23%)
Strengthen the top-level design	32(46%)	92(24%)

All Superior-respondents, 69 or 100% of them, and 53% or 201 nurse-respondents recommend innovating the performance management system, and formulating a target management system; while 16 or 23% of Superior-respondents and 88 or 23% of the nurse respondents recommend setting quantifiable target; 32 or 46% of Superior-respondents, and 92 or 24% of the nurse-respondents recommend to strengthen the top-level design.

4.15 rater's accuracy

Table 4.15 Solutions proposed by the respondent ratees and raters on the issues and challenges encountered in using the appraisal system for nurses in terms of the rater's accuracy

	Status	
Recommend a solution to deal with the challenge encountered in terms of Rater Accuracy	**Superior**	**Nurse**
Establish the qualification review and evaluation mechanism for evaluation staff	69(100%)	222(58%)
Hire a third party	69(100%)	159(42%)

In terms of rater accuracy, all Superior-respondents, or 100% of them, and 222, or 58% of the nurse-respondents recommend Establishing the qualification review and evaluation mechanism of evaluation for staff; Hiring a third party recommended all Superior-respondents or 100% of them, and 159 or 42% of the nurse-respondents.

4.16 recognition

Table 4.16 Solutions proposed by the respondent ratees and raters on the issues and challenges encountered in using the appraisal system for nurses in terms of recognition

	Status	
Recommend a Solution to deal with the challenge encountered in terms of Recognition	**Superior**	**Nurse**
Carry out performance inspections	2(3%)	2(1%)
Create a performance assessment culture	50(72%)	38(10%)
Go deep into the department to answer questions	66(96%)	124(33%)
Hold the performance training meeting of the clinical department Superiors;	1(1%)	110(29%)
Professionals carry out performance counseling	0	107(28%)

Results from the table above show that the two groups of respondents recommend: Going deep into the department to answer questions as one of the solutions to deal with the challenges encountered in using the appraisal system; followed by creating a performance assessment culture as recommended by 38 or 10% of nurse-respondents; Hold the performance training meeting of the clinical department Superiors; and Professionals carry out performance counseling.

Discussion:

We conclude from the above results two groups of participants assessed the accuracy of the PAS in reflecting the true performance of nurses based on the objective setting, interpersonal factors, and the rater's accuracy, and recognition as good based on the rating given by them in the aforementioned variables.

These relate to interpersonal effect, a like-dislike association between a supervisor and subordinate, has conventionally been hypothesized as a mean of bias in PA, that both affect and performance level are reported to exert significant impacts on performance ratings[2]. The study results reflect the proposed effect may not operate as a bias in the PA process. Additionally, the raters may demonstrate a desire to preserve their own effect toward the rate[13][14]. It can be inferred that nurses believe in their capacity to negotiate with their superiors on the reasonableness of performance target setting. Goal setting is assumed as the core of the whole system in the PA process, which helps the employees to have a clear idea about their corporate roles and appraisal system in the organization. Conversely, this needs to be discussed and worked out between staff and management to achieve strategic organizational goals[15][16]. Meanwhile, in our study, researcher observed that raters are fair in their evaluation, though they have some doubts as to whether true performance is reflected in their rating. Performance ratings depend on the rater's assessment which is subjective to human errors and judgment biases. Fairness in the PA serves as the major factor of effective PA, as demonstrated by several scholars[17] [19]. Workers are substantially restless regarding the fairness of PA[20]-[22]. Therefore, there must be an appropriate development of the PAS, in order to eliminate potential biases and subjectivity in the grading. Recognition is one of the essential drivers of employee motivation[23][24]. This helps to not only emphasize the significance of performance in achieving organizational goals but also defines the prospect of individuals joining and remaining in the organization while affecting the extent to which efforts are mobilized for the growth of organizational future capacities[25]. In particular, when correctly dispensed, employee recognition can lead to a charming attitude for the corporation. Non-financial rewards include recognizing achievements and providing opportunities for growth[26]. Meanwhile, it can be used to support performance pay decisions, but this is neither an essential nor an inevitable part of the process[27][28].

We observe that there does not exist significant differences in the appraisal of the two groups of respondents on the accuracy of the appraisal system in reflecting the true performance of nurses in terms of interpersonal factors, objective

setting, rater's accuracy, and recognition when their profile variables relative to civil status, sex, age, and a number of years in service were taken as test factors.

Performance ratings depend on the rater's appraisal which is subjective to human errors and judgment. Prejudices and personal factors are expected to affect the ratings[29] [31]. Therefore, proper development of the PA should be focused on to eliminate bias and subjectivity in the ratings[34]. It is reported that certain female juniors were basically appraised from a masculine perspective. Contrary to this, male superiors who appraise women subordinates would often make improper masculine interpretations of female abilities, attributes, and aptitudes for superior work. Consequently, personality-based evaluations detriment minorities and females in the form of less of the desired characteristics than their male counterparts[16]. We infer that marital status is a factor in the accuracy of the PAS, and prejudices and personal factors are inclined to impact the ratings. In addition, errors due to race, age, and gender affect the rater's evaluations[17]. In some cases, raters can be extremely lenient or harsh on the ratee; consequently, adversely affecting the accuracy of the appraisal. One study showed the impacts of the demographic attributes of ratees on the performance ratings[33]. Accordingly, demographic variables influence performance ratings in certain settings (specifically laboratory studies). Nonetheless, it is also argued that the proposed variables do not demonstrate a significant impact on the performance ratings in the field. Though different variables such as age, race, and gender affect several organizational functions, but the PA outcomes do not seem to be substantially affected by the aforementioned demographic variables[34][35].

The most ranked issues and challenges issues and challenges encountered by the respondent ratees and raters in using the appraisal system for the nurses are the following: Complex interpersonal relationship; The subjectivity is too strong, and the lack of third -party execution of no interest; The actual operation of the assessment index is not strong; Difficulty of performance assessment data collection and quantification; Head nurse do not give a fair evaluation, and Lack of communication.

Solutions proposed by the respondent ratees and raters on the issues and difficulties faced in adopting the PAS for nurses include the following: Innovate the performance management system, formulate a target management system; Employment of third parties to evaluate; Establish the qualification review and evaluation mechanism of evaluation staff; and Go deep into the department to answer questions.

As researchers, we propose the following specific programmes:
1. The hospital through the HRD unit should revisit the PA to reflect the "true" performance of the nurses
2. The PA goals must identify training needs and should be structured to effectively identify the essential and relevant training which when specified shall result in better staff performance.
3. The management should set clear expectations for raters.
4. Team building seminar among nurses and Superiors be conducted.
5. Give recognition to nurses for exemplary achievement.
6. Performance appraisal form for nurses and guidelines is recommended and presented in Appendix
7. Replicate study involving other respondents is recommended for future researchers.

Reference:
[1]. Chahar B. Performance Appraisal Systems and Their Impact on Employee Performance: The Moderating Role of Employee Motivation. Information Resources Management Journal. 2020;33(4):N.PAG. doi:10.4018/IRMJ.2020100102
[2]. Varma A, Pichler S. Interpersonal Affect: Does It Really Bias Performance Appraisals? Journal of Labor Research. 2007;28(2):397-412. doi:10.1007/BF03380053
[3]. Khan S, Vandermorris A, Shepherd J, Begun JW, Lanham HJ, Uhl-Bien M, Berta W. Embracing uncertainty, managing complexity: applying complexity thinking principles to transformation efforts in healthcare systems. BMC Health Serv Res. 2018 Mar 21;18(1):192. doi: 10.1186/s12913-018-2994-0. PMID: 29562898; PMCID: PMC5863365.
[4]. Yaqing Li, Wensheng He, Li Yang , Keshuang Zheng. A historical review of performance appraisal of public hospitals in China from the perspective of historical institutionalism. Front Public Health. 2022 Oct 10;10:1009780. doi: 10.3389/fpubh.2022.1009780. PMID: 36299757; PMCID: PMC9590688.
[5]. Zhu J, Song X. Changes in efficiency of tertiary public general hospitals during the reform of public hospitals in Beijing, China. Int J Health Plann Manage. 2022 Jan;37(1):143-155. doi: 10.1002/hpm.3309. Epub 2021 Sep 7. PMID: 34494295.
[6]. J. A. Determinants of employee engagement and their impact on employee performance. International Journal of Productivity & Performance Management. 2014;63(3):308-323. doi:10.1108/IJPPM-01-2013-0008.
[7]. Ahmetoglu G, Harding X, Akhtar R, Chamorro-Premuzic T. Predictors of Creative Achievement: Assessing the Impact of Entrepreneurial Potential, Perfectionism, and Employee Engagement. Creativity Research Journal. 2015;27(2):198-205. doi:10.1080/10400419.2015.1030293
[8]. Madlabana CZ, Mashamba-Thompson TP, Petersen I. Performance management methods and practices among nurses in primary health care settings: a systematic scoping review protocol. Syst Rev. 2020 Feb 21;9(1):40. doi: 10.1186/s13643-020-01294-w. PMID: 32085801; PMCID: PMC7035770.
[9]. Nevala MS, Vuorela S. Early Nurse Management Experiences from Finnish COVID-19 Hubs: An In-Action Review.

[10]. Int J Environ Res Public Health. 2022 Apr 17;19(8):4885. doi: 10.3390/ijerph19084885. PMID: 35457757; PMCID: PMC9031167.

[11]. Dal Corso L, De Carlo A, Carluccio F, Girardi D, Falco A. An Opportunity to Grow or a Label? Performance Appraisal Justice and Performance Appraisal Satisfaction to Increase Teachers' Well-Being. Front Psychol. 2019 Nov 26;10:2361. doi: 10.3389/fpsyg.2019.02361. PMID: 31849733; PMCID: PMC6888955.

[12]. Dong S, Millar R, Shi C, Dong M, Xiao Y, Shen J, Li G. Rating Hospital Performance in China: Review of Publicly Available Measures and Development of a Ranking System. J Med Internet Res. 2021 Jun 17;23(6):e17095. doi: 10.2196/17095. Erratum in: J Med Internet Res. 2021 Jun 22;23(6):e31370. PMID: 34137724; PMCID: PMC8277410.

[13]. BARRICK MR, THURGOOD GR, SMITH TA, COURTRIGHT SH. Collective Organizational Engagement: Linking Motivational Antecedents, Strategic Implementation, and Firm Performance. Academy of Management Journal. 2015;58(1):111-135. doi:10.5465/amj.2013.0227.

[14]. Eldor L, Harpaz I. A process model of employee engagement: The learning climate and its relationship with extrarole performance behaviors. Journal of Organizational Behavior (John Wiley & Sons, Inc). 2016;37(2):213-235. doi:10.1002/job.2037.

[15]. Farndale E, Murrer I. Job resources and employee engagement: a cross-national study. Journal of Managerial Psychology. 2015;30(5):610-626. doi:10.1108/JMP-09-2013-0318.

[16]. Díaz-Fernández MC, González-Rodríguez MR, Pawlak M. Top management demographic characteristics and company performance. Industrial Management & Data Systems. 2014;114(3):365-386. doi:10.1108/IMDS-04-20130210.

[17]. Sarıköse S, Türkmen E. The relationship between demographic and occupational variables, transformational leadership perceptions and individual innovativeness in nurses. J Nurs Manag. 2020 Jul;28(5):1126-1133. doi: 10.1111/jonm.13060. Epub 2020 Jun 23. PMID: 32497365.

[18]. Gupta V, Kumar S. Impact of performance appraisal justice on employee engagement: a study of Indian professionals. Employee Relations. 2013;35(1):61-78. doi:10.1108/01425451311279410.

[19]. Bauwens R, Audenaert M, Huisman J, Decramer A. Performance management fairness and burnout: implications for organizational citizenship behaviors. Studies in Higher Education. 2019;44(3):584-598. doi:10.1080/03075079.2017.1389878.

[20]. Bibi M. Linkage between performance of healthcare professionals and management practices in health care organizations. J Pak Med Assoc. 2021 Feb;71(2(B)):725-729. doi: 10.47391/JPMA.941. PMID: 33941967.

[21]. Selvarajan TT, Singh B, Solansky S. Performance appraisal fairness, leader member exchange and motivation to improve performance: A study of US and Mexican employees. Journal of Business Research. 2018;85:142-154. doi:10.1016/j.jbusres.2017.11.043.

[22]. Peter Kavanagh. Understanding performance appraisal fairness. Asia Pacific Journal of Human Resources. 2007;45(2):132-150. doi:10.1177/1038411107079108.

[23]. Shrivastava A, Purang P. Performance Appraisal Fairness & Its Outcomes: A Study of Indian Banks. Indian Journal of Industrial Relations. 2016;51(4):660-674. Accessed July 31, 2023. https://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=115686459&lang=zh-cn&site=ehost-live

[24]. Bradler C, Dur R, Neckermann S, Non A. Employee Recognition and Performance: A Field Experiment. Management Science. 2016;62(11):3085-3099. doi:10.1287/mnsc.2015.2291.4.

[25]. Hansen F, Smith M, Hansen RB. Rewards and Recognition in Employee Motivation. Compensation & Benefits Review. 2002;34(5):64. doi:10.1177/0886368702034005010.

[26]. Edmonds J, Hoops A, Schreffler I. A Framework for Strategies in Employee Motivation. Proceedings for the Northeast Region Decision Sciences Institute (NEDSI). January 2018:1-19. Accessed July 31, 2023. https://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=132304043&lang=zh-cn&site=ehost-live.

[27]. Kushwaha DW, Lodhwal RK. Factors Influencing Employee Motivation in Indian University: A Case Study of Banaras Hindu University. Journal of Organisation & Human Behaviour. 2016;5(2):6-13. doi:10.21863/johb/2016.5.2.031.

[28]. Olanye PA, Eyela EC. Driving employees' motivation through reward system in selected organisations in Lagos State, Nigeria. Finnish Business Review. January 2017:1-13. Accessed July 31, 2023. https://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=129834837&lang=zh-cn&site=ehost-live.

[29]. Usugami J, Park K-Y. Similarities and differences in employee motivation viewed by Korean and Japanese executives: empirical study on employee motivation management of Japanese-affiliated companies in Korea. International Journal of Human Resource Management. 2006;17(2):280-294. doi:10.1080/09585190500404697.

[30]. Ellington J, Wilson M. The Performance Appraisal Milieu: A Multilevel Analysis of Context Effects in Performance Ratings. Journal of Business & Psychology. 2017;32(1):87-100. doi:10.1007/s10869-016-9437-x.

[31]. Schuh SC, Zhang X, Morgeson FP, Tian P, van Dick R. Are you really doing good things in your boss's eyes? Interactive effects of employee innovative work behavior and leader–member exchange on supervisory performance ratings. Human Resource Management. 2018;57(1):397-409. doi:10.1002/hrm.21851.

[32]. Roch SG, McNall LA. An Investigation of Factors Influencing Accountability and Performance Ratings. Journal of Psychology. 2007;141(5):499-524. doi:10.3200/JRLP.141.5.499-524.

[33]. Wei Z, Siyal AW, Bhand S. Impact of personal bias on performance of employees in public sector banks. Journal of Public Affairs (14723891). 2019;19(2):N.PAG. doi:10.1002/pa.1924

[34]. DeNisi AS, Murphy KR. Performance appraisal and performance management: 100 years of progress? J Appl Psychol. 2017 Mar;102(3):421-433. doi: 10.1037/apl0000085. Epub 2017 Jan 26. PMID: 28125265.

[35]. Morandi F, Angelozzi D, Di Vincenzo F. Individual and job-related determinants of bias in performance appraisal: The case of middle management in health care organizations. Health Care Manage Rev. 2021 Oct-Dec 01;46(4):299307. doi: 10.1097/HMR.0000000000000268. PMID: 31855878.

[36]. Bol JC. The Determinants and Performance Effects of Managers' Performance Evaluation Biases. Accounting Review. 2011;86(5):1549-1575. doi:10.2308/accr-10099