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"Comparison Of Staff Satisfaction Between 8 And 12 Hour Shifts Among Nurses"

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Abstract:
Introduction: *Staff satisfaction is vital for both the success of an organization and the well-being of its employees. For nurses, longer shifts offer the benefit of a compressed workweek, leading to fewer workdays, more time off, lower commuting costs, and greater flexibility, all of which enhance staff satisfaction. The objective of this study is to assess the impact of the length of working hours on staff satisfaction among nurses.*
Methods: *This study utilized a descriptive cross-sectional design and applied a non-random purposive sampling technique. A total of 360 nurses participated. Out of the total, 180 nurses worked 8-hour shifts, and 180 nurses worked 12-hour shifts, all from healthcare facilities in Dubai.*
Results: *Regarding operating conditions, the staff worked 12-hour shift expressed greater satisfaction (64.3%) than 8-hour shift workers (35.7%). However, in terms of communication, 8-hour shift workers reported greater satisfaction (72.2%) than those working 12-hour shifts (27.8%). Operating conditions are significantly linked to several factors. Older employees (aged 51–60 years) reported higher satisfaction compared to younger age groups (20–30 years). In terms of workplace, staff at Health facility(H) expressed the highest dissatisfaction, while those at Health facility(R) reported highest satisfaction. Regarding work hours, employees working 12-hour shifts reported greater satisfaction compared to those on 8-hour shifts. Senior staff nurses reported higher satisfaction than staff nurses. Additionally, employees with over 10 years of service showed greater satisfaction compared to those with less experience. Communication is significantly influenced by religion, with Muslims reporting the highest dissatisfaction (76.7%), followed by Hindus (69.7%) and Christians (54.4%). Regarding the last shift worked, morning shift employees reported the highest dissatisfaction (63.8%), while afternoon shift workers reported the highest satisfaction (13.5%). Additionally, the likelihood of dissatisfaction with operating condition is 55% lless with 12-hour shift (adjusted Odds Ratio 0.45 with 95% CI. 0.24-0.85, P = 0.014). On the other hand, dissatisfaction with communication is nearly four times more likely among those working 12-hour shift in contrast to those who are satisfied- 8 hour shift (adjusted Odds Ratio: 3.97; 95% CI. 1.19–11.49, P = 0.024).*
Conclusion: *12-hour shift staff are satisfied with their operating condition. However, 8 hour shift staff are 4.7 times satisfied in terms of communication than 12 hour shift staff.*
Key words: *Nurses working hours, staff satisfaction, operating condition and communication*

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I. Introduction:

An increasing challenge in healthcare has been the demand on health management to work together and guarantee the availability of adequate human resources for healthcare.[1] In response, many employers and agencies have started providing various shift options to the nurses, although 8 and 12 hour shifts continue to be the most commonly used shifts. Given that nurses devote a large part of their waking hours to work, their work satisfaction is essential in their overall health, happiness and sense of fulfillment.[2] From the nurses' viewpoint, longer shifts offer the benefit of a compressed workweek, leading to fewer working days, more time off, lower commuting expenses, and increased flexibility which in turn increase their satisfaction[3]. The positive views of hospital nurses towards their work may be affected by shifts in the healthcare system. Staff satisfaction in nursing directly influences the quality of patient care. However, greater work demands increase the likelihood of job dissatisfaction, which can result in higher rates of sick leave and staff turnover [4]. Researches also indicated that staff satisfaction among nurses can be affected by demographic factors, including age, income, shift work, and other professional factors such as years of experience and education.

Staff satisfaction is essential for both organizational success and employee well-being. It reflects how content, valued, and fulfilled employees feel in their positions, including aspects such as job conditions, work life harmony, recognition, interactions with colleagues and management. High levels of staff satisfaction contribute to increased productivity, lower turnover, and a healthier workplace culture. Improving staff satisfaction is essential for fostering a driven and dedicated workforce. Pay is a major motivator for many employees and has a

major impact on work satisfaction. The compensation and benefits provided by an organization greatly affect employees' overall satisfaction with their roles. Promotion on the other hand involves advancing within the organization, brings about better pay, enhanced status, increased opportunities, greater responsibilities, and an improved work environment, all of which foster motivation and staff satisfaction. Favorable working conditions such as supervision, co-workers' attitudes are a vital factor that impacts staff satisfaction. Supervision, which involves overseeing employees' tasks and responsibilities, has been found to have a significant connection with staff satisfaction. Furthermore, the attitude of co-workers—such as their respect, commitment, helpfulness, and innovation—greatly contributes to staff satisfaction. A study by Sahar Nisar et al. revealed a strong positive connection between fringe benefits, such as recreation leave and health protection benefits with staff satisfaction. Communication is also an important factor which encourage the employees to voice their concerns and find solutions. While many studies have explored the levels of staff satisfaction, however very limited studies have been done to compare the working hours length with staff satisfaction, particularly in UAE, are limited. Therefore, this study is intended to compare the length of working hours with staff satisfaction.

II. Aim

To assess the impact of the length of working hours on staff satisfaction among nurses.

III. Objectives

1. To assess the staff satisfaction with 8-hour versus 12-hour work shifts
2. To find out the association between significant staff satisfaction dimensions and demographic variables.
3. To examine the association between staff satisfaction dimensions and duration of working hours using logistic analysis.

IV. Methodology

The study was conducted within Government multispecialty hospitals**.** A cross-sectional descriptive study design was adopted. All Nurses who were working either 12 hours or 8 hours per shift within Dubai Health facilities were accessed.

Calculation of sample size:
OPEN EPI sample size calculation for cross-sectional research studies

Sample Size:X-Sectional, Cohort, & Randomized Clinical Trials	
Two-sided significance level(1-alpha):	95
Power(1-beta, % chance of detecting):	80
Ratio of sample size, Unexposed/Exposed:	1
Percent of Unexposed with Outcome:	5
Percent of Exposed with Outcome:	14
Odds Ratio:	3.1
Risk/Prevalence Ratio:	2.8
Risk/Prevalence difference:	9.2

	Kelsey	**Fleiss**	**Fleiss with CC**
Sample Size - Exposed	162	161	182
Sample Size-Nonexposed	162	161	182
Total sample size:	324	322	364

References

Kelsey et al., Methods in Observational Epidemiology 2nd Edition, Table 12-15
Fleiss, Statistical Methods for Rates and Proportions, formulas 3.18 &3.19
CC = continuity correction
Results are rounded up to the nearest integer.
Print from the browser menu or select, copy, and paste to other programs.

Results from OpenEpi, Version 3, open source calculator--SSCohort
Print from the browser with ctrl-P
or select text to copy and paste to other programs.

The sample size was rounded up to 180 nurses on the 8-hour shift and another 180 nurses on the 12-hour shift.

Sampling method: A convenient, non-random sampling method was adopted for this study.

Sampling selection criteria:

Eligibility criteria:
- Nurses who are working 12-hour and 8-hour shifts.
- Willing to provide written consent to participate in the study.
- Physically and mentally stable enough to provide the details required for the study.

Exclusion criteria:
- Nurses who are medically sick at the time of data collection.
- Nurses who are unwilling to give written consent for participation in the study.
- Charge Nurses
- Nurse Supervisors
- Assistant Director of Nursing
- Director of nursing
- Out Patient Department nurses.
- Nurses not working either 8-hour or 12-hour shifts.

The **data collection tool** consists of two sections:
Section 1: Demographic variables
Section 2: Staff satisfaction (Paul Spector Staff satisfaction Survey) questionnaire

Data Collection method:

The questions were entered into Microsoft Office Forms to generate the link. This link was sent to all nursing staff in the government health facilities. Participants who agreed to take part in the study were requested to answer the questions. Only one response was accepted per participant. Participants could not open the form after submitting their response. The first 360 responses (180 from eight and 180 from twelve-hour shift) were considered.

Ethical consideration:

Approval for the study was obtained from the nursing department, the institutional review board, and the Dubai Scientific Research Committee before data collection began. Informed consent was secured from all participants, and confidentiality was ensured throughout the process.

V. Results:

Table 1: Demographic details of Study participants (n=360)

Characteristics	n (%)
Age	
20- 30 years	56 (15.6)
31-40years	198 (55.0)
41 -50 years	77 (21.4)
51-60 years	29 (8.1)
Gender	
Female	299 (83.1)
Male	61 (16.9)
Place of residence	
Ajman	10 (2.8)
Dubai	209 (58.1)
Hatta	24 (6.7)
Sharjah	117 (32.5)
Place of work	
Multispecialty hospital (D)	170 (47.2)
Multispecialty hospital (H)	68 (18.9)
Multispecialty Hospital (L)	33 (9.2)
Multispecialty Hospital(R)	89 (24.7)
Duration of travel	
0 - 30 minutes	138 (38.3)
31 - 60 minutes	3.89 (42.2)
61 - 90 minutes	125 (34.7)

91 - 120 minutes	52 (14.4)
120 - 150 minutes	31 (8.6)
Religion	
Muslim	30 (8.3)
Christian	259 (71.9)
Hindu	66 (18.3)
Other	5 (1.4)
Marital Status	
single	42 (11.7)
Married	315 (87.5)
widow	1 (0.3)
Separated	2 (0.6)
Hours of work	
8 hours	180 (50.0)
12 hours	180 (50.0)
Education Level	
Bachelor in nursing	348 (96.7)
Masters	11 (3.1)
Doctorate	1 (0.3)
Last shift worked	
morning	177 (49.2)
afternoon	37 (10.3)
night	146 (40.6)
Job Title	
Staff Nurse 2	294 (81.7)
Staff Nurse 3	49 (13.6)
Senior Staff Nurse	17 (4.7)
Length of Service	
Less than 1 year	31 (8.6)
1 -5 year	102 (28.3)
5 - 10 year	81 (22.5)
More than 10 year	146 (40.6)

Table 1 represents the demographic characteristics of study participants.

The majority were female (299, 83.1%). The most prevalent age group was 31–40 years, representing more than half of the sample (198, 55.0%).In terms of residence, most participants living in Dubai (209, 58.1%). Regarding the workplace, nearly half were employed at multispecialty hospital (D) (170, 47.2%). Travel times to work varied, with the largest group reporting a commute of 31–60 minutes (152, 42.2%). Most participants identified as Christian (259, 71.9%).

Marital status showed that the majority were married (315, 87.5%).In education, the majority of participants (348, 96.7%) possessed a bachelor's degree in nursing. Shift schedules indicated that nearly half worked the morning shift (177, 49.17 during the survey.Job titles were predominantly Staff Nurses-2 (294, 81.7%). Length of service varied widely, with the largest group having worked for more than 10 years (146, 40.6.

Table 2: Lifestyle Characteristics (demographic) of Study Participants (N=360)

Characteristics	n (%)
Are you taking prescribed medicines for any disease	
No	255 (70.8)
Yes	105 (29.2)
Currently smoking any tobacco	
No	356 (98.9)
Yes	4 (1.1)
Currently Consumed any alcohol	
No	354 (98.6)
Yes	5 (1.4)
Physical Activity	
1 -2 days	219 (61.9)
3 -4 days	73 (20.6)
5 -6 days	23 (6.5)
All days	39 (11.0)

Table 2: Lifestyle traits of the study participants.

The data show a generally low prevalence of smoking and alcohol consumption, indicating healthy lifestyle habits. However, only 11.0% of participants reported engaging in daily physical activity, while most are active only 1–2 days per week, suggesting a need for initiatives to encourage more regular exercise. Furthermore, 29.2% of participants are taking prescribed medications, indicating the presence of chronic health conditions or illnesses that require ongoing medical treatment within the sample.

Objective 1: To assess the staff satisfaction with 8-hour versus 12-hour work shifts

Null Hypothesis (H0): There is no significant difference in staff satisfaction between nurses working eight- and twelve-hour shifts.

Alternative Hypothesis (H1): There is a significant difference in staff satisfaction between nurses working eight- and twelve-hour shifts.

Table 3. Staff satisfaction and the duration of working hours (8 and 12 hours)

Characteristics	8 hours n (%)	12 hours n (%)	chi square
Pay			
Dissatisfied	40 (22.20)	32 (17.78)	0.364
ambivalent	92 (51.11)	105 (58.33)	
Satisfied	48 (26.67)	43 (23.89)	
Promotion			
Dissatisfied	40 (22.22)	38 (21.11)	0.847
ambivalent	88 (48.89)	85 (47.22)	
Satisfied	52 (28.89)	57 (32.22)	
Supervision			
Dissatisfied	9 (5)	8 (4.44)	0.747
ambivalent	137 (76.11)	143 (79.44)	
Satisfied	34 (18.89)	29 (16.11)	
Fringe Benefits			
Dissatisfied	35 (19.44)	25 (13.89)	0.359
ambivalent	105 (58.33)	114 (63.33)	
Satisfied	40 (22.22)	41 (22.78)	
Contingent records			
Dissatisfied	25 (13.88)	22 (12.22)	0.134
ambivalent	114 (63.33)	100 (55.55)	
Satisfied	41 (22.78)	58 (32.22)	
Operating Conditions			
Dissatisfied	62 (34.44)	55 (30.56)	**0.01**
ambivalent	88 (48.89)	71 (39.44)	
Satisfied	30 (16.67)	54 (30)	
Coworkers			
Dissatisfied	94 (52.22)	99 (55)	0.517
ambivalent	73 (40.56)	73 (40.56)	
Satisfied	13 (7.22)	8 (4.44)	
Nature of work			
Dissatisfied	9 (5)	10 (5.56)	0.12
ambivalent	57 (31.67)	75 (41.67)	
Satisfied	114 (63.33)	5 (2.78)	
Communication			
Dissatisfied	111 (61.67)	100 (55.56)	**0.03**
ambivalent	56 (31.11)	75 (41.67)	
Satisfied	13 (7.22)	5 (2.78)	
Overall Satisfaction			
Dissatisfied	2 (1.11)	2 (1.11)	0.747
ambivalent	165 (91.67)	161 (89.44)	
Satisfied	13 (7.22)	17 (9.44)	

The table 3 illustrates the difference between various staff satisfaction dimensions and shift length (8-hour vs. 12-hour shifts).

Pay: Chi-square ($\chi2$=0.364, df = 2, p > 0.05): No notable difference in satisfaction between eight and twelve hours.
Promotion: Chi-square ($\chi2$=0.847, df = 2, p > 0.05): Satisfaction levels related to promotion do not significantly differ between 8-hour and 12-hour shifts.
Supervision: Chi-square ($\chi2$=0.747, df = 2, p > 0.05): Satisfaction with supervision shows no significant difference between shift types.
Fringe Benefits: Chi-square ($\chi2$=0.359, df = 2, p > 0.05): No significant association between satisfaction with fringe benefits and shift length.
Contingent Rewards: Chi-square ($\chi2$=0.134, df = 2, p > 0.05): Satisfaction levels concerning contingent rewards do not differ significantly between shift lengths.
Operating Conditions: Chi-square ($\chi2$=9.21, df = 2, p = 0.01): Satisfaction with operating conditions differs significantly by shift length.
12-hour workers report higher satisfaction (64.3%) compared to 8-hour workers (35.7%).
Confidence intervals for satisfaction rates: 95% CI (57.5%, 70.5%) for 12-hour workers and 95% CI (30.0%, 42.0%) for 8-hour workers.
Coworkers: Chi-square ($\chi2$=0.517, df = 2, p > 0.05): Satisfaction levels related to coworkers are not significantly linked to shift length.
Nature of Work: Chi-square ($\chi2$=0.12, df = 2, p > 0.05): No significant difference in satisfaction with the nature of work across shift types.
Communication: Chi-square ($\chi2$=7.15, df = 2, p = 0.03): Satisfaction with communication differs significantly between shift types.
8-hour workers report higher satisfaction (72.2%) compared to 12-hour workers (27.8%).

Confidence intervals for satisfaction rates: 95% CI (62.0%, 82.4%) for 8-hour workers and 95% CI (18.0%, 37.5%) for 12-hour workers.

Therefore, it is concluded that there is a significant difference in operating condition and communication within the components of work satisfaction among nurses in the duration of 8- and 12-hours working hours.

And there is no significant difference in the components of pay, supervision, promotion, fringe benefits, coworkers and contingent rewards in staff satisfaction

Figure 1. shows the staff satisfaction levels in terms of payment

Figure 2. shows the staff satisfaction levels in terms of Promotion

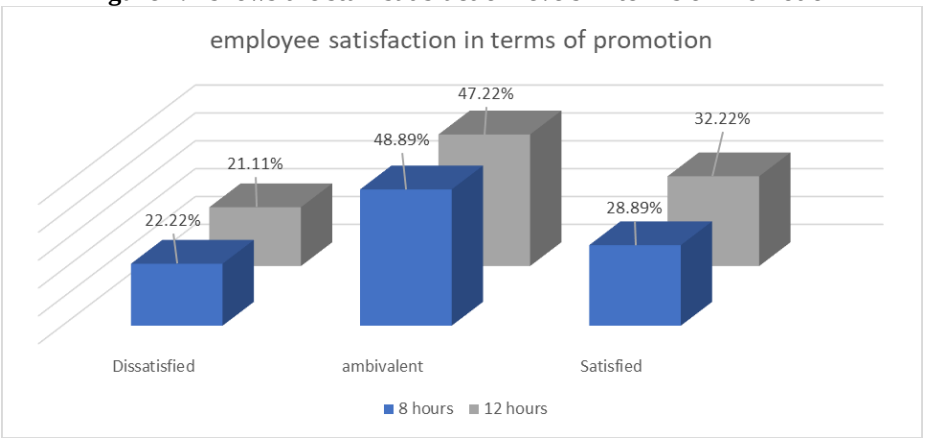


Figure 3. shows the staff satisfaction levels in terms of Supervision

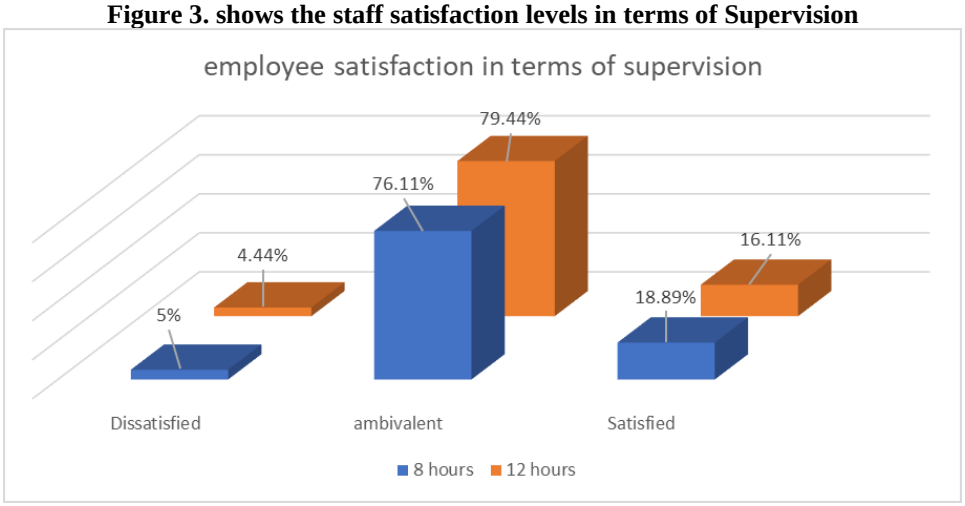


Figure 4. shows the staff satisfaction levels in terms of Fringe Benefits

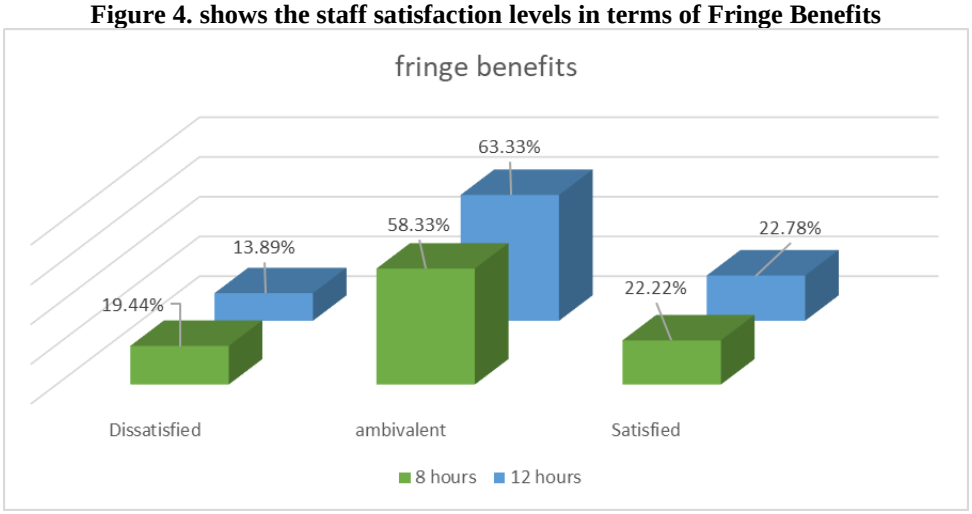


Figure 5. shows the staff satisfaction levels in terms of Contingent Records

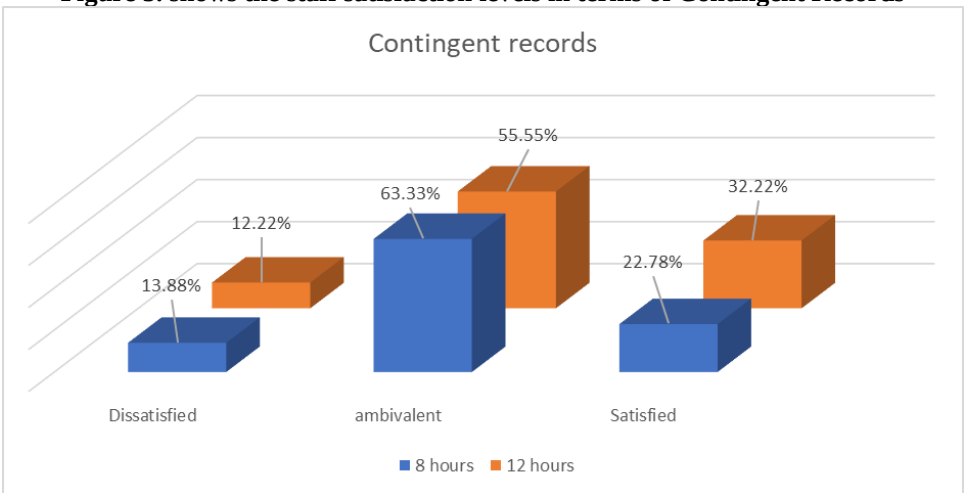


Figure 6. shows the staff satisfaction levels in terms of Operating Conditions

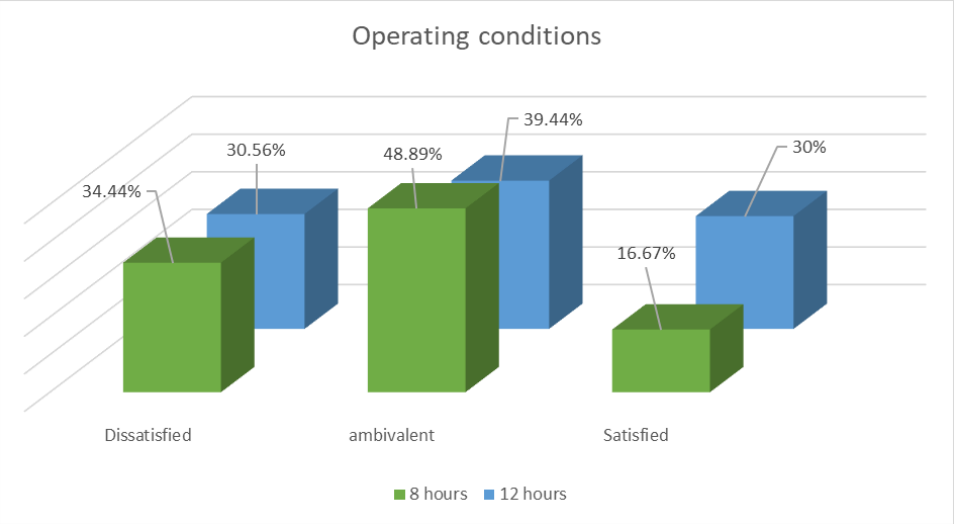


Figure 7. shows the staff satisfaction levels in terms of Coworkers

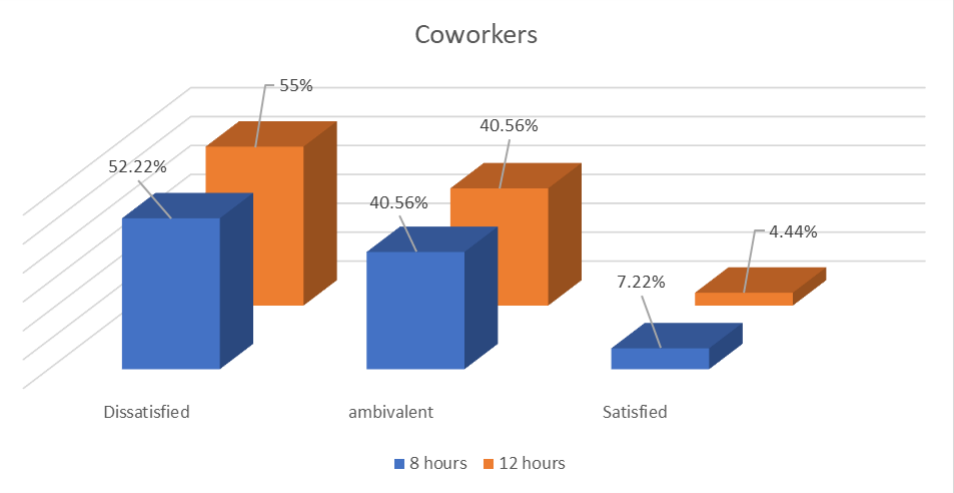


Figure 8. shows the staff satisfaction levels in terms of Nature of Work

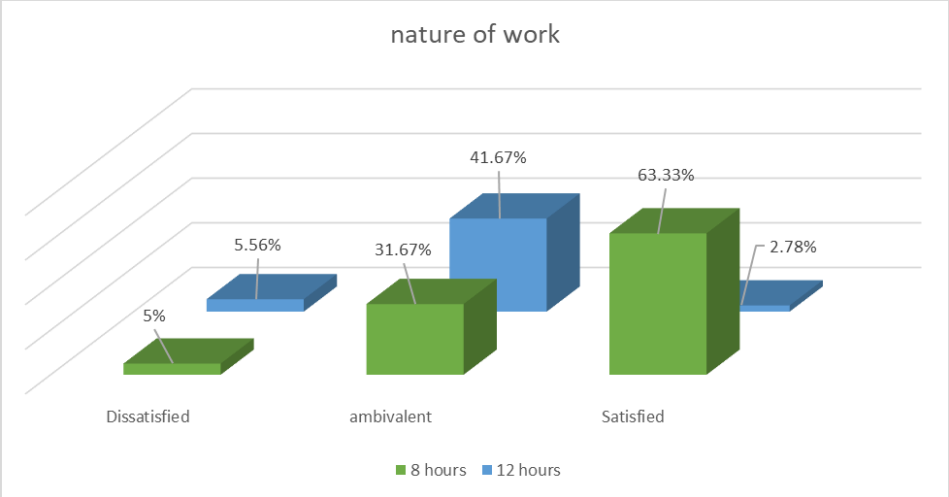


Figure 9. shows the staff satisfaction levels in terms of Communication

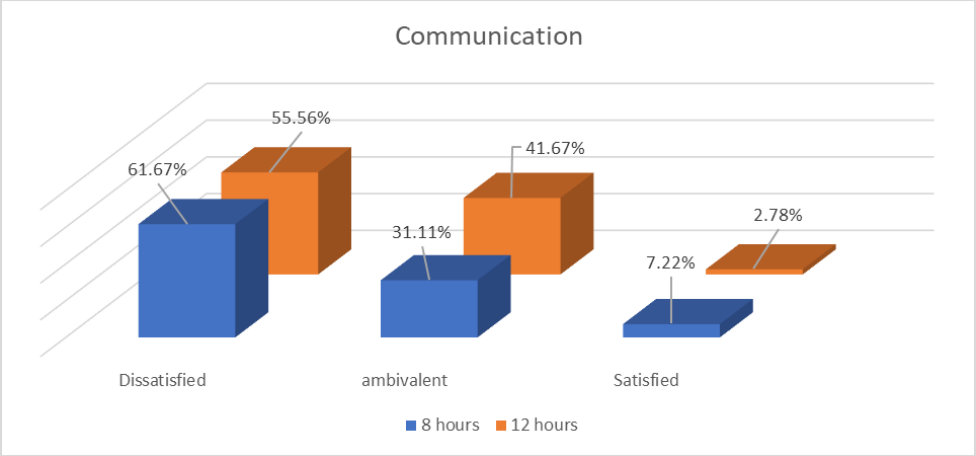
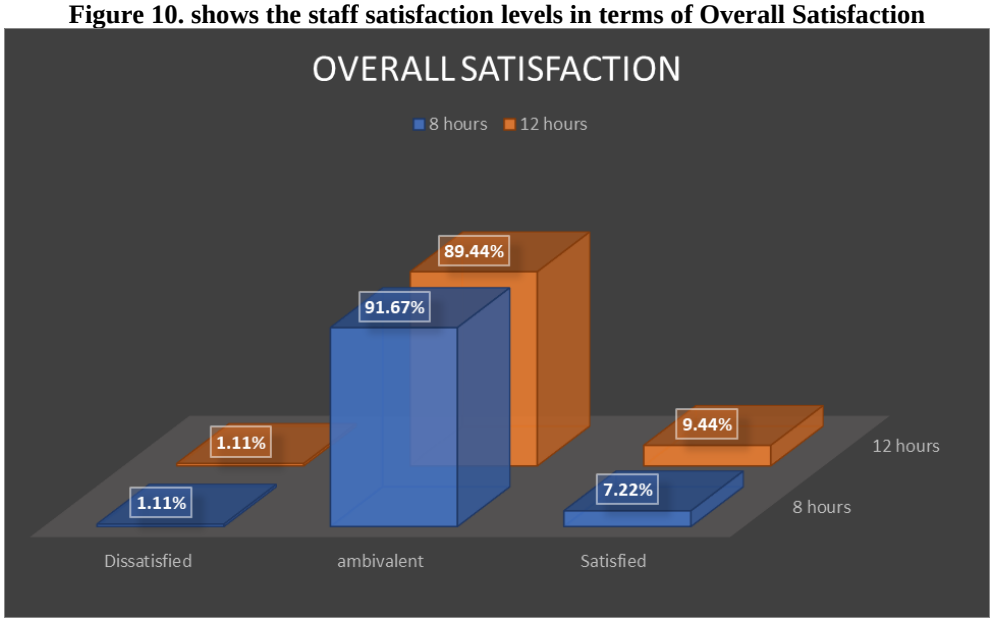


Figure 10. shows the staff satisfaction levels in terms of Overall Satisfaction



Objective 2: To find out the association between identified staff satisfaction components - operating conditions, communication and demographic variables.
Null Hypothesis (H0): There is no significant association between identified staff satisfaction components - operating conditions, communication and demographic variables.
Alternative Hypothesis (H1): There is a significant association between identified staff satisfaction components - operating conditions, communication and demographic variables.

Table 4: Association between Operating Conditions and Demographic variables.

Characteristics	Operating Conditions			Chi Square
	Dissatisfied	Ambivalent	Satisfied	
Age				
20- 30 years	27 (48.2)	23 (41.1)	6 (10.7)	**0.023**
31-40years	65 (32.8)	87 (43.9)	46 (23.2)	
41 -50 years	18 (23.4)	38 (49.4)	21 (27.3)	
51-60 years	7 (24.1)	11 (37.9)	11 (37.9)	
Gender				
Female	98 (32.8)	133 (44.5)	68 (22.7)	0.842
Male	19 (31.1)	26 (42.6)	16 (26.2)	
Place of residence				
Ajman	3 (30)	5 (50)	2 (20)	0.679
Dubai	69 (33)	86 (41.1)	54 (25.8)	

Hatta	10 (41.7)	11 (45.8)	3 (12.5)	
Sharjah	35 (29.9)	57 (48.7)	25 (21.4)	
Place of work				
Multispecialty hospital (D)	56 (32.9)	73 (42.9)	41 (24.1)	0.046
Multispecialty hospital (H)	30 (44.1)	31 (45.6)	7 (10.3)	
Multispecialty Hospital (L)	8 (24.2)	17 (51.5)	8 (24.2)	
Multispecialty Hospital (R)	23 (25.8)	38 (42.7)	28 (31.5)	
Duration of travel				
0 - 30 minutes	39 (28.3)	60 (43.5)	39 (28.3)	0.291
31 - 60 minutes	45 (36)	56 (44.8)	24 (19.2)	
61 - 90 minutes	13 (25)	26 (50)	13 (25)	
91 - 120 minutes	14 (45.2)	10 (32.3)	7 (22.6)	
120 - 150 minutes	6 (42.9)	7 (50)	1 (7.1)	
Religion				
Muslim	11 (36.7)	12 (40)	7 (23.3)	0.413
Christian	79 (30.5)	120 (46.3)	60 (23.2)	
Hindu	26 (39.4)	26 (39.4)	14 (21.2)	
Other	1 (20)	1 (20)	3 (60)	
Marital Status				
single	16 (38.1)	18 (42.9)	8 (19)	0.83
Married	100 (31.7)	139 (44.1)	76 (24.1)	
widow	0 (0.0)	1 (100)	0 (0)	
Separated	1 (50)	1 (50)	0 (0)	
Hours of work				
8 hours	62 (34.4)	88 (48.9)	30 (16.7)	**0.01**
12 hours	55 (30.6)	71 (39.4)	54 (30.0)	
Education Level				
Bachelor in nursing	0 (0)	1 (100)	0 (0.0)	0.589
Masters	2 (18.2)	5 (45.5)	4 (36.4)	
Doctorate	115 (33)	153 (44)	80 (23)	
Last shift worked				
morning	61 (34.5)	79 (44.6)	37 (20.9)	0.492
afternoon	15 (40.5)	14 (37.8)	8 (21.6)	
night	41 (28.1)	66 (45.2)	39 (26.7)	
Job Title				
Staff nurse 2	100 (34)	137 (46.6)	57 (19.4)	**0.005**
Staff Nurse 3	14 (28.6)	16 (32.7)	19 (38.8)	
Senior Staff Nurse	3 (17.6)	6 (35.3)	8 (47.1)	
Length of Service				
Less than 1 year	16 (51.6)	13 (41.9)	2 (6.5)	**0.002**
1 -5 year	43 (42.2)	44 (43.1)	15 (14.7)	
5 - 10 year	21 (25.9)	38 (46.9)	22 (27.2)	
More than 10 year	37 (25.3)	64 (43.8)	45 (30.8)	

Table 4 explains the association between operating conditions and demographic details. Age is significantly associated with operating conditions ($\chi^2 = 11.30$, $p = 0.023$). Younger age groups (20–30 years) show higher dissatisfaction, while older groups (51–60 years) are more likely to be satisfied.

Gender shows no significant difference in satisfaction ($\chi^2 = 0.38$, $p = 0.842$). Place of residence also shows no significant association ($\chi^2 = 1.47$, $p = 0.679$).

Place of work shows a significant association ($\chi^2 = 8.02$, $p = 0.046$). Nurses at Multispecialty hospital (H) reported the highest dissatisfaction, while Multispecialty Hospital (R) staff reported the highest satisfaction.

Duration of travel shows no significant association ($\chi^2 = 5.67$, $p = 0.291$), religion shows no significant differences ($\chi^2 = 2.85$, $p = 0.413$), and marital status shows no significant association ($\chi^2 = 1.42$, $p = 0.830$).

Hours of work show a significant association ($\chi^2 = 9.22$, $p = 0.010$). Greater satisfaction was reported by those on 12-hour shifts compared to those on 8-hour shifts

Education level shows no significant association ($\chi^2 = 1.06$, $p = 0.589$). Last shift worked shows no significant association ($\chi^2 = 1.42$, $p = 0.492$).

Job title shows a significant association ($\chi^2 = 10.75$, $p = 0.005$). Senior staff nurses are more satisfied, and length of service also shows a significant association ($\chi^2 = 13.58$, $p = 0.002$). Employees with over 10 years of service showed higher satisfaction, while those with less than 1 year of service show the highest dissatisfaction.

Therefore, it is concluded that there is a significant association between age, place of work, hours of

work, job title, length of service, and operating conditions.

Table 5: Association between Communication and demographic variables:

Characteristics	Communication			Chi Square
	Dissatisfied	Ambivalent	Satisfied	
Age				
20- 30 years	31 (55.4)	22 (39.3)	3 (5.4)	0.719
31-40years	111 (56.1)	75 (37.9)	12 (6.1)	
41 -50 years	49 (63.6)	26 (33.8)	2 (2.6)	
51-60 years	20 (69)	8 (27.6)	1 (3.4)	
Gender				
Female	176 (58.9)	109 (36.5)	14 (4.7)	0.828
Male	35 (57.4)	22 (36.1)	4 (6.6)	
Place of residence				
Ajman	9 (90)	1 (10)	0 (0)	0.522
Dubai	118 (56.5)	79 (37.8)	12 (5.7)	
Hatta	13 (54.2)	10 (41.7)	1 (4.2)	
Sharjah	71 (60.7)	41 (35)	5 (4.3)	
Place of work				
Multispecialty hospital (D)	104 (61.2)	58 (34.1)	8 (4.7)	0.2
Multispecialty hospital (H)	40 (58.8)	23 (33.8)	5 (7.4)	
Multispecialty Hospital (L)	24 (72.2)	8 (24.2)	1 (3.0)	
Multispecialty Hospital (R)	43 (48.3)	42 (47.2)	4 (4.5)	
Duration of travel				
0 - 30 minutes	73 (52.9)	62 (44.9)	3 (2.2)	0.07
31 - 60 minutes	81 (64.8)	34 (42.9)	10 (8.0)	
61 - 90 minutes	30 (57.7)	34 (27.2)	2 (3.8)	
91 - 120 minutes	19 (61.3)	20 (38.5)	3 (9.7)	
120 - 150 minutes	8 (57.1)	6 (42.9)	0 (0.0)	
Religion				
Muslim	23 (76.7)	7 (23.3)	0 (0.0)	**0.01**
Christian	141 (54.4)	106 (40.9)	12 (4.6)	
Hindu	46 (69.7)	15 (22.7)	5 (7.6)	
Other	1 (20.0)	3 (60.0)	1 (20.0)	
Marital Status				
single	19 (45.2)	23 (54.8)	0 (0.0)	0.163
Married	190 (60.3)	107 (34.0)	18 (5.7)	
widow	1 (100)	0 (0.0)	0 (0.0)	
Separated	1 (50.0)	1 (50.0)	0 (0.0)	
Hours of work				
8 hours	111 (61.7)	56 (31.1)	13 (7.2)	**0.03**
12 hours	100 (55.6)	75 (41.7)	5 (2.8)	
Education Level				
Bachelor in nursing	1 (100)	0 (0.0)	0 (0.0)	0.844
Masters	7 (63.6)	3 (27.3)	1 (9.10)	
Doctorate	203 (58.3)	128 (36.8)	17 (4.9)	
Last shift worked				
morning	113 (63.8)	57 (32.2)	7 (4.0)	**0.04**
afternoon	20 (54.1)	12 (32.4)	5 (13.5)	
night	78 (53.4)	62 (42.5)	6 (4.1)	
Job Title				
Staff Nurse 2	168 (57.1)	109 (37.1)	17 (5.8)	0.41
Staff Nurse 3	30 (61.2)	18 (36.7)	1 (2.0)	
Senior Staff Nurse	13 (76.5)	4 (23.5)	0 (0.0)	
Length of Service				
Less than 1 year	21 (67.7)	7 (22.6)	3 (9.7)	0.164
1 -5 year	60 (58.8)	39 (38.2)	3 (2.9)	
5 - 10 year	39 (48.1)	36 (44.4)	6 (7.4)	
More than 10 year	91 (62.3)	49 (33.6)	6 (4.1)	

Table 5 shows the association between communication and demographic variables

Age: Chi-square: 0.719, p-value: $p > 0.05$. Communication satisfaction is similar across age groups, with no significant variation in responses. The highest dissatisfaction is seen in the 51–60 years group (69%), while satisfaction remains very low across all age groups.

Gender: Chi-square: 0.828, pp > 0.05. Gender does not significantly influence communication satisfaction. Dissatisfaction rates are similar for both females (58.9%) and males (57.4%), and satisfaction levels are low for both.

Place of Residence: Chi-square: 0.522, $p > 0.05$. No significant difference in communication satisfaction

based on place of residence. Ajman residents report the highest dissatisfaction (90%), but satisfaction remains uniformly low across all regions.

Place of Work: Chi-square: 0.2, p > 0.05. There is no significant difference in communication satisfaction across different workplaces. LH shows the highest dissatisfaction (72.2%), while HH has the highest satisfaction (7.4%).

Duration of Travel: Chi-square: 0.07, p > 0.05. Travel time to work does not significantly affect communication satisfaction. The highest dissatisfaction occurs among those with 31–60 minutes of travel (64.8%), while the highest satisfaction occurs with 91–120 minutes of travel (9.7%).

Religion: Chi-square: 0.01, p > 0.05. Significant: Religion influences communication satisfaction, with Muslims reporting the highest dissatisfaction (76.7%) and no satisfaction, compared to Christians (54.4% dissatisfied) and Hindus (69.7%).

Marital Status: Chi-square: 0.163, p > 0.05. Marital status does not significantly affect staff satisfaction. Married individuals show the highest dissatisfaction (60.3%), but satisfaction levels are similarly low across all categories.

Hours of Work: Chi-square: 0.03, p > 0.05. Significant: There is a significant difference in communication satisfaction based on hours worked. Workers on 8-hour shifts report high satisfaction.

Education level: Chi-square:0.844, p > 0.05. Education level does not significantly affect communication satisfaction. Dissatisfaction is similar across all education levels, with the highest dissatisfaction in nurses with a Bachelor's degree (58.3%).

Last Shift Worked: Chi-square: 0.04, p > 0.05. Significant: The type of shift worked significantly affects communication satisfaction. Morning shift workers show the highest dissatisfaction (63.8%), while afternoon shift workers have the highest satisfaction (13.5%).

Job Title: Chi-square: 0.41, p > 0.05. Job title does not significantly influence communication satisfaction. Senior Nurses (SN 2) show the highest dissatisfaction (57.1%), while satisfaction is generally low across all job titles.

Length of Service: Chi-square: 0.164, p > 0.05. Length of service does not significantly impact communication satisfaction. Dissatisfaction is highest among employees with less than 1 year of service (67.7%) and decreases for those with longer service.

Key Findings:

Significant Factors:

Religion: Muslims experience significantly higher dissatisfaction with communication (p = 0.01).

Hours of Work: Those working eight hour shifts report higher dissatisfaction than those working twelve hour shifts (p = 0.03).

Last Shift Worked: Morning shift workers have the highest dissatisfaction (p = 0.04).

Non-Significant Factors:

Age, gender, place of residence, place of work, travel duration, marital status, education level, job title, and length of service show no significant effect on communication satisfaction.

As a result, it is concluded that a significant relationship exists between religion, hours of work, last shift worked, and communication.

Objective 3: To examine the association between staff satisfaction dimensions and duration of working hours using logistic analysis.

Null Hypothesis (H0): There is no significant association between staff satisfaction dimensions and duration of working hours.

Alternative Hypothesis (H1): There is a significant association between staff satisfaction dimensions and duration of working hours.

Table 6. Logistic Regression analysis to examine the relationship between job-related factors and the odds of working a twelve hour shift as opposed to an eight hour shift.

Variables	Univariable OR (95% CI)	P value	Adjusted OR (95% CI)	P value
Pay				
Dissatisfied	0.89 (0.48 - 1.67)	0.721		
ambivalent	1.27 (0.78 - 2.07)	0.340		
Satisfied	1 (reference)	0.365		
Promotion				
Dissatisfied	0.87 (0.48 - 1.55)	0.630		
ambivalent	0.88 (0.55 - 1.42)	0.605		
Satisfied	1 (reference)			

Supervision				
Dissatisfied	1.04 (0.36 - 3.05)	0.747		
ambivalent	1.22(0.71 - 2.12)	0.940		
Satisfied	1 (reference)			
Fringe Benefits				
Dissatisfied	0.70 (0.36 - 1.37)	0.293		
ambivalent	1.06 (0.64 - 1.76)	0.825		
Satisfied	1 (reference)			
Contingent records				
Dissatisfied	0.62 (0.31 - 1.3)	0.183		
ambivalent	0.62 (0.38 -1.0)	0.052		
Satisfied	1 (reference)			
Operating Conditions				
Dissatisfied	0.49 (0.28 - 0.88)	**0.016**	0.45 (0.242 -0.852)	**0.014**
ambivalent	0.45 (0.26 - 0.77)	**0.004**	0.42 (0.222 -0.703)	**0.002**
Satisfied	1 (reference)		1 (reference)	
Coworkers				
Dissatisfied	1.71 (0.68 - 4.32)	0.255		
ambivalent	1.63 (0.64 - 4.15)	0.311		
Satisfied	1 (reference)			
Nature of work				
Dissatisfied	1.33 (0.52 - 3.42)	0.549	1.12 (0.413 - 2.879)	0.821
ambivalent	1.58 (1.02 - 2.45)	**0.041**	1.52 (0.961 - 2.396)	0.074
Satisfied	1 (reference)		1 (reference)	
Communication				
Dissatisfied	2.34 (0.81 - 6.80)	0.118	3.968 (1.190 - 11.493)	**0.024**
ambivalent	3.48 (1.17 - 10.34)	**0.025**	4.702 (1.516 - 14.585)	**0.007**
Satisfied	1 (reference)		1 (reference)	

Significant Findings:

Operating Conditions:

Dissatisfied: The odds of working a twelve hour shift are 55% lower compared to those who are satisfied (adjusted OR: 0.45; 95% CI: 0.24–0.85, P = 0.014).

Ambivalent: The odds of working a twelve hour shift are 58% lower compared to those who are satisfied (adjusted OR: 0.42; 95% CI: 0.22–0.70, P = 0.002).

Conclusion: Dissatisfaction or ambivalence with operating conditions makes it significantly less likely for an individual to work twelve hour shifts.

Communication:

Dissatisfied: The odds of working a twelve hour shift are nearly 4 times higher compared to those who are satisfied (adjusted OR: 3.97; 95% CI: 1.19–11.49, P = 0.024).

Ambivalent: The odds of working a twelve hour shift are approximately 4.7 times higher compared to those who are satisfied (adjusted OR: 4.70; 95% CI: 1.52–14.59, P = 0.007).

Conclusion: Dissatisfaction or ambivalence with communication substantially increases the likelihood of working twelve hour shifts.

Marginal Findings:

Nature of Work (Ambivalent): Individuals ambivalent about the nature of their work have 52% higher odds of working a twelve hour shift compared to those satisfied, but this relationship was not statistically significant in the multivariable model (adjusted OR: 1.52; 95% CI: 0.96–2.40, P = 0.074).

Non-Significant Findings:

Pay, Promotion, Supervision, Fringe Benefits, Contingent Rewards, Coworkers: None of these factors significantly influenced the odds of working a twelve hour shift in either the univariable or multivariable analyses.

VI. Discussion:

The research that compared the length of working hours on staff satisfaction among nurses in Dubai health facilities. The results indicated that nurses on twelve-hour shifts were less prone to dissatisfaction with working conditions compared to those on 8-hour shifts. Moreover, nurses on eight-hour shifts were four times more likely to report satisfaction with communication than those on twelve-hour shifts.

The current study results align with the results of Banakhar et al 5, who performed a systematic review regarding the effects of twelve-hour shifts on nurses' health, happiness, and staff satisfaction. The review encompassed 12 studies, five of which focused on staff satisfaction. Three of these studies determined that nurses

on twelve-hour shifts indicated greater satisfaction than those on eight-hour shifts. A literature review by Utriainen et al6 concerning hospital nurses' staff satisfaction indicates that twelve-hour shifts supports the free time to take care for the families. Griffiths et al 7 also discovered that nurses on twelve-hour shifts reported greater satisfaction with their work-life balance compared to those on eight-hour shifts.

The study also highlighted the challenges associated with communication and patient education during twelve hourshifts, stressing the importance of effective communication and ongoing education to guarantee the provision of high-quality patient care. The absence of adequate breaks and sick time further intensifies dissatisfaction, resulting in a higher chance of nurses quitting their jobs. Varghese, B.et al. (2023)8 conducted research in a tertiary hospital in Qatar, which underscored the difficulties encountered by nurses on 12-hour shifts. It advised hospital administrators to consider transitioning from 12-hour to 8-hour shifts, increasing the nursing workforce, and providing adequate break times to help mitigate fatigue and burnout.

VII. Conclusion:

The operating conditions showed higher satisfaction among 12-hour workers, while communication was rated 4.7 times higher among 8-hour workers. However, there were no significant differences between shift lengths in the dimensions of pay, supervision, promotion, fringe benefits, coworkers and contingent rewards.

VIII. Recommendations:

These results carry significant implications for nursing education, emphasizing the necessity to prepare future nurses with the abilities to face the challenges associated with extended working hours and assist them in making educated decisions regarding their desired shift schedules. In clinical settings, hospitals and healthcare organizations ought to contemplate revising their shift policies to emphasize work-life balance and the wellness of employees, which could result in increased staff satisfaction and improved patient outcomes. Furthermore, healthcare administrators can implement policies that promote staff well-being, such as providing flexible schedules and avenues for career advancement.

Reference:

[1] Nxumalo, N., Goudge, J., Gilson, L., & Eyles, J. (2018). Performance Management In Times Of Change: Experiences Of Implementing A Performance Assessment System In A District In South Africa. International Journal For Equity In Health, 17
[2] Https://Sjr-Publishing.Com/Wp-Content/Uploads/2019/03/Relationship-Between-Nursing-Working-Hours-And-Job-Satisfaction-1.Pdf
[3] Https://Doi.Org/10.1016/J.Ijnurstu.2019.01.011
[4] Https://Pmc.Ncbi.Nlm.Nih.Gov/Articles/PMC9918752/#REF3
[5] Https://Www.Researchgate.Net/Publication/338237323_Factors_Affecting_Nurses'_Work_Motivation_Level_At_A_Governmental_Hospital_A_Cross-Sectional_Study
[6] Utriainen K, Kyngäs H. Hospital Nurses' Staff Satisfaction: A Literature Review. J Nurs Manag. 2009 Dec;17(8):1002-10. Doi: 10.1111/J.1365-2834.2009.01028.X. PMID: 19941574.
[7] Https://Bmjopen.Bmj.Com/Content/Bmjopen/5/9/E008331.Full.Pdf
[8] Https://Bmcnurs.Biomedcentral.Com/Articles/10.1186/S12912-023-01371-0