

Effectiveness of exercise program on work related stress among sanitary workers working in selected hospitals at kanyakumari District.

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ABSTRACT

The demanding and exhausting working hours, as well as the bad and unsuitable working conditions that prevail in several hospitals, affect employees' physical and mental health. The purpose of this study was to examine the effectiveness of a daily 6-week supervised workplace exercise program on health indices, functional capacity, overall fitness, subjective vitality, and life satisfaction among sanitary workers.

Methods: A pre experimental study was used. With 30 sanitary workers (40–55 years), working in a hospital environment, were divided into two groups: exercise (EG) and control group (CG). EG performed a 6-week supervised concurrent chair-based exercise program (stretching, strength, balance exercises, aerobic dance; 5 days/week, 30–40 min/day, 2 workouts/day lasted 15–20 min) in the hospital. Health indices (body composition, blood pressure, and respiratory function), functional capacity (flexibility, balance), physical fitness (strength, cardio respiratory fitness), subjective vitality, and life satisfaction were measured before and after the completion of the program. Additionally, after the completion of the program, EG Participants enjoyment was assessed.

Results: The pre and post test level of work related stress among sanitary workers in pre test majority of them 14(46.67%) have severe stress whereas in Posttest most of them 22(73.33%) had fairly low stress shows that intervention plays a vital role in reducing Stress level. comparison of mean, standard deviation and unpaired “t” test on post test level work related stress among sanitary workers. The mean score on level of work related stress who receiving Exercise programme was 2.24 with the standard deviation 0.81. In the post test mean score was 5.38 with the standard deviation 1.29. The estimated unpaired “t” test value was 12.13* which was significant at $p \leq 0.05$. It shows that exercise programme was effective

Conclusion:

A workplace exercise program may be safely used for the promotion of employees physical and mental health as well it helps to improve the job satisfaction among the sanitary workers.

Key words: Work related stress, sanitary workers, Exercise program

BACKGROUND

The term “stress” was derived from the Latin word “stringere,” meaning the experience of physical hardship, starvation, torture, and pain. Its chronic form is termed ‘Burnout.’ Stress at the workplace has gained much attention recently. It has been recognized as a global disease due to its negative impact on the physical, emotional, and psychological well-being of people in various occupational groups.

Occupational stress is a harmful response particularly physical and emotional, due to a mismatch between job requirements and the qualifications, resources, and worker’s needs; its chronic form is termed “Burnout.” Stress among health care workers is multifactorial. Its

prevalence among sanitary workers ranges from 27–87.4%. Occupational stress is a significant reason for physical and mental health, substance use, work-related delay, absenteeism, and emigration rate. Additionally, it can lead to patient safety concerns and poor quality of care. The mismatch between job requirements and the available resources, work overload, working environment, work experience, workplace conflict, gender discrimination, marital status, educational status, job satisfaction, and not being rewarded were some of the factors significantly associated with occupational stress among sanitary workers. Moreover, the coronavirus disease 2019 (COVID-19) pandemic introduced additional stressors, such as staff redeployment and the fear of infection. WHO identified good primary health care as fundamental for achieving universal health coverage without financial hardship. Healthcare professionals and sanitary workers physical and mental well-being is crucial for attaining this. Developing culturally and organizationally appropriate early interventions is the need of the hour to prevent a health care worker from entering a stress level that is non-adaptable beyond their coping abilities.

Vassilis Gerodimos (2022) done This survey based descriptive research work has been undertaken in Tirunelveli city, Tamilnadu to understand and differentiate perception of sanitary workers working in both private multi-speciality and single speciality hospitals towards various health related issues arising as a result of work and work place. In order to know the health related problems, the present study has examined twenty variables related to both physical and mental health. The study has sampled 120 sanitary workers (60 from multi-speciality hospitals and 60 from single speciality hospitals) using judgement sampling technique. The results of the study has proved that the health related issues such as pain in back, neck, waist and shoulder, low energy, difficulty in sleeping and getting up from the bed, weight loss, loss of appetite and irregular sleep, hypertension hair fall and digestive disorder have been the health related issues commonly perceived by sanitary workers working in both kinds of hospitals. Skin problems, respiratory problems, minor work related injuries have been highly perceived by sanitary workers working in multi-speciality hospitals than single speciality hospitals.

Statement of the Problem

Effectiveness of exercise program on work related stress among sanitary workers working in selected hospitals at kanyakumari District.

Objectives of the Study

1. To assess the level of stress among sanitary workers in pretest.
2. To assess the level of stress among sanitary workers in posttest.
3. To find out the effectiveness of Exercise programme on stress among sanitary workers
4. To associate the pre-test score of stress among sanitary workers with selected demographic variables.

Hypotheses

H1 - There is a significant difference between pre and post test levels of stress among the sanitary workers receiving exercise programme in selected Hospital at Kanyakumari District.

Research Approach

The researcher has chosen quantitative research approach to test the effectiveness of the intervention for this study.

Research Design

Research design is a plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems. In this study, Pre experimental design was used to determine the effectiveness of exercise programme on work related stress among sanitary workers working in the Hospitals.

Variables

Variables are qualities, properties or characteristics of persons, things or situations that change or vary and are manipulated or measured in research.

Independent Variable

Exercise programme

Dependent Variable

Stress

SETTING OF THIS STUDY

The study will be conducted among sanitary workers working in white memorial Hospital at kanniyakumari district.

POPULATION

The target population selected for this study will be all sanitary workers working in selected hospital at Kanyakumari District.

SAMPLE

The sample selected for this study will be sanitary workers working in white memorial Hospital at Kanyakumari District.

SAMPLE SIZE

The sample size of this study will be 50 sanitary workers working in white memorial Hospital at Kanyakumari District.

SAMPLING TECHNIQUE

Purposive sampling technique will be used for this study.

Methods and Data collection

A quasi experimental study was used. With 50 sanitary workers (40–55 years), working in a hospital environment, were given with exercise group (EG). EG performed a 6-week supervised concurrent chair-based exercise program (stretching, strength, balance exercises, aerobic dance; 5 days/week, 30–40 min/day, 2 workouts/day lasted 15–20 min) in the hospital. Health indices (body composition, blood pressure, and respiratory function), functional capacity (flexibility, balance), physical fitness (strength, cardio respiratory fitness), subjective vitality, and life satisfaction were measured before and after the completion of the program. Additionally, after the completion of the program, EG Participants enjoyment was assessed.

Statistical Analyses

Data pertaining to the demographic characteristics to their age, majority of them 13 (43%) belongs to the age group of 41 - 50 years regarding gender majority 20 (66.67%) were female regarding educational status in experimental group majority of subjects 12 (40%) have secondary education, According to habit in experimental group majority 12 (40%) of them have habits of smoking, alcoholism, tobacco chewing. Regarding their dietary pattern majority of them 23 (77%) were non vegetarians. Regarding their work Experience majority of them subjects 20 (66.67%) were 5-7 Years.

Figure: 1 Frequency Distribution of samples according to work experience

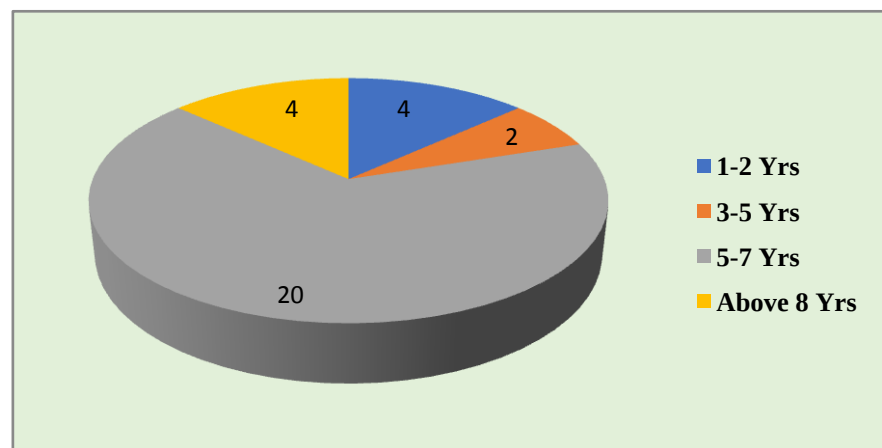


Table: 1
Frequency
Percentage
distribution of
Low back pain level in pre and posttest

n=30

Pain Level	Pretest		Posttest	
	Frequency	Percentage	Frequency	Percentage
Chilled out and relatively calm	2	6.67	4	13.3

Fairly low	4	13.3	22	73.33
Moderate stress	6	20	2	6.67
Severe	14	46.67	2	6.67
Stress level is potentially dangerous	4	13.3	0	0

Table presented the pre and post test level of work related stress among sanitary workers in pre test majority of them 14(46.67%) have severe stress whereas in Posttest most of them 22(73.33%) had Fairly low stress shows that intervention plays a vital role in reducing Stress level.

Comparison of post test level of work related stress among sanitary workers receiving Exercise programme.

Table 2: comparison of mean, standard deviation and unpaired “t” test on post test level work related stress among sanitary workers.

n=30

Variables	Group	Mean	SD	‘t’value
Level of back pain	30	5.38	1.21	12.03*

Significant at $p \leq 0.05$

Table represents the comparison of mean, standard deviation and unpaired “t” test on post test level work related stress among sanitary workers. The mean score on level of work related stress who receiving Exercise programme was 2.24 with the standard deviation 0.81. In the post test mean score was 5.38 with the standard deviation 1.29. The estimated unpaired “t” test value was 12.13* which was significant at $p \leq 0.05$. It shows that exercise programme was effective and reduced the level of back pain. Hence the research hypothesis was accepted.

Discussion

The major finding of the study was summarized as follows. Data pertaining to the demographic characteristics to their age, majority of them 13 (43%) belongs to the age group of 41 - 50 years regarding gender majority 20(66.67%) were female regarding educational status in experimental group majority of subjects 12(40%) have secondary education, According to habit in experimental group majority 12(40%) of them have habits of smoking, alcoholism, tobacco chewing. Regarding their dietary pattern majority of them 23(77%) were non vegetarians. Regarding their work Experience majority of them subjects 20 (66.67%) were 5-7 Years. The pre and post test level of work related stress among sanitary workers in pre test majority of them 14(46.67%) have severe stress whereas in Posttest most of them 22(73.33%) had fairly low stress shows that intervention plays a vital role in reducing Stress level. comparison of mean, standard deviation and unpaired “t” test on post test level work related stress among sanitary workers. The mean score on level of work related stress who receiving Exercise programme was 2.24 with the standard deviation 0.81. In the post test mean score was 5.38 with the standard deviation 1.29. The estimated unpaired “t” test value was 12.13* which was significant at $p \leq 0.05$. It shows that exercise programme was effective and reduced the level of back pain. Hence the research hypothesis was accepted.

CONCLUSION

The study was done to evaluate the effectiveness of exercise programme on work related stress among Sanitary workers working in selected Hospital in kanyakumari District. It found that exercise programme significantly given impact in reducing the level work related stress among sanitary workers.

RECOMMENDATIONS

The following steps can be undertaken to strengthen the study.

- A study can be conducted among large sample.
- A study can be conducted to assess the effectiveness of Isometric and Isotonic Training on work related musculoskeletal disorders among rubber tappers.
- A study can be conducted for the other health related issues.

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