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A Study on Occupational Stress Management and Quality of Life among Salt Pan Workers in Vedaranyam

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Abstract: Salt pan workers constitute one of the most vulnerable groups in the unorganized labour sector due to their continuous exposure to harsh environmental and occupational conditions. The present study entitled "A Study on Occupational Stress Management and Quality of Life among Salt Pan Workers in Vedaranyam" aims to assess the level of occupational stress and evaluate the quality of life of salt pan workers in the Vedaranyam region of Tamil Nadu. The study also examines the socio-economic profile of workers, identifies the major occupational and environmental factors contributing to stress, and analyses the relationship between occupational stress and quality of life. Primary data were collected from 127 salt pan workers using a structured interview schedule through the convenience sampling technique. The collected data were analysed using percentage analysis, Chi-square test, and Pearson's correlation analysis. The findings reveal that the majority of respondents were male, middle-aged, married, possessed only primary-level education, and earned relatively low monthly incomes. Most workers had more than ten years of work experience and worked for 8–10 hours daily under extreme climatic conditions. The study found that a large proportion of respondents experienced moderate to high occupational stress due to excessive heat, heavy workload, low wages, inadequate medical facilities, and financial insecurity. The Chi-square test revealed no significant association between gender and occupational stress ($p > 0.05$). However, Pearson's correlation analysis indicated a significant negative relationship between occupational stress and quality of life ($r = -0.621$, $p < 0.01$), showing that an increase in occupational stress leads to a decline in workers' quality of life. The study concludes that improving workplace safety, providing adequate healthcare facilities, ensuring fair wages, implementing occupational welfare programmes, and strengthening social security measures are essential for reducing occupational stress and enhancing the quality of life of salt pan workers in Vedaranyam.

Keywords: *Occupational Stress, Quality of Life, Salt Pan Workers, Vedaranyam , Occupational Health*

1. Introduction

Occupation plays a vital role in determining the physical, psychological, social, and economic well-being of individuals. The nature of work, working environment, job security, income, and workplace conditions significantly influence an employee's health and quality of life. Among various occupations in India, salt pan work is considered one of the most physically demanding and hazardous forms of manual labour. Salt pan workers perform their duties under extreme climatic conditions, particularly in open fields with prolonged exposure to intense sunlight, high temperatures, saline water, and strong winds. These harsh working conditions often result in physical exhaustion, occupational stress, and several chronic health problems, thereby affecting their overall quality of life. Occupational stress refers to the physical and emotional strain experienced by workers when job demands exceed their capacity to cope effectively. Continuous exposure to adverse working conditions, excessive workload, inadequate wages, lack of occupational safety measures, limited healthcare facilities, and job insecurity contribute significantly to occupational stress. If left unmanaged, occupational stress may lead to reduced productivity, poor job satisfaction, mental health issues, absenteeism, and

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deterioration in workers' physical health. Quality of life is a multidimensional concept that encompasses physical health, psychological well-being, social relationships, economic stability, environmental conditions, and overall life satisfaction. For workers engaged in labour-intensive occupations such as salt production, quality of life is influenced by several factors including income, education, healthcare accessibility, family support, workplace safety, housing conditions, and availability of social welfare benefits. Poor occupational conditions often limit workers' opportunities for personal development and reduce their overall standard of living. Salt production is one of the oldest traditional industries in India and contributes significantly to the country's economy. India is among the world's leading producers and exporters of salt, supplying industrial, commercial, and household requirements. The salt industry provides employment to thousands of workers, especially in coastal regions where climatic conditions favour salt production. Despite their valuable contribution to the economy, salt pan workers continue to experience socio-economic disadvantages, poor occupational health, inadequate infrastructure, and limited access to social security measures.

Vedaranyam, located in the Nagapattinam district of Tamil Nadu, is one of the major salt-producing regions in South India. The region has a long history of salt manufacturing and supports the livelihood of numerous families engaged in salt pan activities. Workers in Vedaranyam perform physically demanding tasks such as preparing salt beds, regulating seawater flow, collecting crystallized salt, transporting salt, and maintaining salt pans throughout the production season. These activities require prolonged standing, repetitive manual labour, and continuous exposure to harsh environmental conditions, making them highly vulnerable to occupational stress and work-related illnesses. Salt pan workers frequently suffer from dehydration, heat stress, musculoskeletal disorders, skin diseases, eye irritation, respiratory problems, and fatigue due to constant exposure to sunlight and saline environments. Additionally, irregular employment opportunities, seasonal income fluctuations, financial insecurity, and inadequate medical facilities further increase their occupational stress. Such challenges negatively affect not only their health but also their family life, psychological well-being, and overall quality of life. Although several studies have examined occupational health among industrial and agricultural workers, relatively fewer studies have focused specifically on the occupational stress and quality of life of salt pan workers, particularly in the Vedaranyam region. Understanding the relationship between workplace conditions, occupational stress, and quality of life is essential for developing effective labour welfare policies and improving workers' living standards. Identifying the major sources of stress and assessing workers' quality of life can help policymakers, employers, healthcare professionals, and government agencies formulate appropriate interventions aimed at improving occupational safety, healthcare services, income security, and social welfare.

In this context, the present study entitled **" A Study on Occupational Stress Management and Quality of Life among Salt Pan Workers in Vedaranyam** " aims to examine the socio-economic profile of salt pan workers, assess their level of occupational stress, evaluate their quality of life, and identify the major occupational and environmental factors affecting their well-being. The findings of the study are expected to contribute to the existing body of knowledge and provide valuable recommendations for enhancing the health, welfare, productivity, and quality of life of salt pan workers in the study area.

2. Review of Literature

Hans Selye (1956), widely regarded as the father of stress research, introduced the concept of the General Adaptation Syndrome (GAS). According to Selye, stress is the body's non-specific response to any demand placed upon it. He explained that prolonged exposure to stressful working conditions leads to physical exhaustion, mental fatigue, and reduced work efficiency. His work laid the foundation for occupational stress studies and highlighted the importance of managing workplace stress to improve employees' health and well-being.

Richard S. Lazarus and Susan Folkman (1984) Lazarus and Folkman developed the Transactional Model of Stress and Coping, which explains that occupational stress occurs when employees perceive that workplace demands exceed their ability to cope. They emphasized that stress depends not only on the work environment but also on an individual's coping mechanisms and available social support. Their study concluded that effective coping strategies and family support significantly reduce occupational stress and improve quality of life.

World Health Organization (WHO) (1995) The World Health Organization defined Quality of Life (QOL) as an individual's perception of their position in life within the context of culture, value systems, personal goals, expectations, and concerns. WHO identified four major domains of quality of life: physical health, psychological health, social relationships, and environmental conditions. The organization emphasized that occupational health and workplace safety are essential determinants of workers' quality of life.

Karasek (1979) Robert Karasek proposed the Job Demand-Control Model, explaining that occupational stress increases when employees experience high job

demands with limited decision-making authority. Workers performing repetitive and physically demanding tasks with little control over their work are more likely to experience stress, burnout, and poor health outcomes. His findings are highly relevant to manual labour occupations such as salt pan work.

Siegrist (1996) Johannes Siegrist introduced the Effort-Reward Imbalance (ERI) Model, which states that occupational stress develops when workers invest considerable effort but receive inadequate rewards such as low wages, poor recognition, or limited job security. He concluded that this imbalance negatively affects employees' physical and mental health, resulting in reduced job satisfaction and poor quality of life.

Joshi et al. (2006) Joshi and his colleagues studied occupational health hazards among salt workers in western India. Their findings revealed that prolonged exposure to saline water, extreme heat, and ultraviolet radiation caused skin diseases, eye irritation, musculoskeletal disorders, dehydration, and chronic fatigue. The researchers recommended improving occupational safety measures and regular medical check-ups for salt pan workers.

Singh and Sharma (2012) Singh and Sharma examined occupational stress among unorganized sector workers in India. They found that inadequate income, long working hours, poor working conditions, and lack of social security significantly increased occupational stress. The study suggested that government welfare schemes and improved workplace conditions are essential to enhance workers' quality of life.

Ramesh and Kumar (2015) Ramesh and Kumar investigated the socio-economic conditions of salt pan workers in Tamil Nadu. Their study revealed that most workers belonged to economically weaker sections, possessed low educational qualifications, and had limited access to healthcare facilities. The researchers observed that occupational stress was closely associated with poor living standards and low family income.

Karthikeyan and Anitha (2018) Karthikeyan and Anitha assessed occupational health problems among salt pan workers in coastal Tamil Nadu. The study reported a high prevalence of musculoskeletal pain, skin infections, eye disorders, and dehydration due to continuous exposure to sunlight and saline water. The authors recommended the provision of protective equipment, drinking water facilities, and occupational health awareness programmes.

Priya and Rajasekar (2021) Priya and Rajasekar analysed the relationship between occupational stress and quality of life among informal sector workers. Their findings showed that higher occupational stress significantly reduced job satisfaction, physical health, mental well-being, and overall quality of life. They concluded that improving working conditions, ensuring fair wages, and providing social welfare benefits would substantially enhance workers' well-being.

3. Objectives of the Study

The present study entitled " **A Study on Occupational Stress Management and Quality of Life among Salt Pan Workers in Vedaranyam** has the following objectives:

- To examine the socio-economic and demographic profile of salt pan workers in Vedaranyam.
- To assess the level of occupational stress experienced by salt pan workers.
- To identify the major occupational and environmental factors contributing to stress among salt pan workers.
- To analyse the physical health problems faced by salt pan workers due to their working conditions.
- To examine the availability and adequacy of medical facilities for salt pan workers.
- To evaluate the job satisfaction level of salt pan workers.
- To study the role of family support in reducing occupational stress among salt pan workers.
- To assess the quality of life of salt pan workers in terms of physical, psychological, social, and economic well-being.
- To examine the influence of climatic conditions on the occupational stress of salt pan workers.
- To suggest suitable measures for reducing occupational stress and improving the quality of life of salt pan workers in Vedaranyam.

4. Research Methodology

The present study entitled “A Study on Occupational Stress Management and Quality of Life among Salt Pan Workers in Vedaranyam” adopted a descriptive and analytical research design to examine the occupational stress and quality of life of salt pan workers. The study was conducted in Vedaranyam, Nagapattinam District, Tamil Nadu, one of the major salt-producing regions in the state.

The population of the study consisted of salt pan workers employed in the selected study area. A total of 127 respondents were selected using the convenience sampling technique. Primary data were collected through a structured interview schedule covering socio-economic characteristics, occupational stress, health problems, job satisfaction, family support, medical facilities, climatic conditions, and quality of life. Secondary data were collected from books, journals, government reports,

websites, and other published sources related to occupational stress, labour welfare, and the salt industry.

The research instrument was developed based on an extensive review of literature and was validated by subject experts. Ethical principles were followed during data collection. Prior informed consent was obtained from all respondents, participation was voluntary, and the confidentiality of the respondents' information was strictly maintained.

The collected data were coded, classified, tabulated, and analysed using appropriate statistical tools. Percentage analysis was used to describe the socio-economic profile and other characteristics of the respondents. Chi-square test was employed to examine the association between gender and occupational stress. Pearson's correlation analysis was used to analyse the relationship between occupational stress and quality of life. The analysed results were presented in tables and interpreted systematically to draw meaningful conclusions. The study was confined to 127 salt pan workers in Vedaranyam. Therefore, the findings are limited to the selected study area and are based on the responses collected during the survey period.

5. Data Analysis and Interpretation

Table 1: Gender-wise Classification

Gender	No of Respondents	Percentage
Male	78	61.4
Female	49	38.6
Total	127	100

***Source** : Authors' calculation based on primary data*

Table 1 reveals that out of the total 127 respondents, 78 (61.4%) were male and 49 (38.6%) were female. This indicates that the salt pan workforce in the study area is predominantly male. The higher participation of men may be attributed to the physically demanding nature of salt pan work, which involves prolonged exposure to sunlight, lifting heavy loads, and continuous manual labour. However, the presence of a considerable proportion of female workers suggests that women also play a significant role in the salt production process, despite the occupational challenges they face.

Table 2. Age wise classification

Age Group	No of Respondents	Percentage
Below 30 Years	24	18.9
31–40 Years	38	29.9
41–50 Years	42	33.1
Above 50 Years	23	18.1
Total	127	100

***Source** : Authors' calculation based on primary data*

The age distribution shows that 42 respondents (33.1%) belonged to the 41–50 years age group, followed by 38 respondents (29.9%) in the 31–40 years category. Respondents below 30 years constituted 18.9%, while those above 50 years accounted for 18.1%. This indicates that the majority of salt pan workers are middle-aged individuals who have accumulated considerable work experience. The lower representation of younger workers may reflect declining interest in traditional salt pan occupations due to better employment opportunities elsewhere

Table 3: Marital Status

Status	No of Respondents	Percentage
Married	89	70.1
Unmarried	25	19.7
Widow/Widower	13	10.2
Total	127	100

***Source** : Authors' calculation based on primary data*

Table 3 indicates that 89 respondents (70.1%) were married, 25 respondents (19.7%) were unmarried, and 13 respondents (10.2%) were widows or widowers. The predominance of married workers suggests that many respondents have family responsibilities, which may increase occupational stress due to financial obligations and household commitments. Married workers may experience greater pressure to maintain stable employment despite adverse working conditions.

Table 4: Educational Qualification

Education	No of Respondents	Percentage
Illiterate	36	28.3
Primary	41	32.3
Secondary	32	25.2
Higher Secondary & Above	18	14.2
Total	127	100

***Source** : Authors' calculation based on primary data*

The educational profile reveals that 41 respondents (32.3%) had completed primary education, followed by 36 respondents (28.3%) who were illiterate, 32 respondents (25.2%) with secondary education, and only 18 respondents (14.2%) had higher secondary education or above. This finding indicates that educational attainment among salt pan workers remains relatively low. Limited educational opportunities may restrict access to alternative occupations, compelling many individuals to continue working in physically demanding salt pans.

Table 5: Monthly Income

Income	No of Respondents	Percentage
Below ₹10,000	48	37.8
₹10,001–₹15,000	42	33.1
₹15,001–₹20,000	24	18.9
Above ₹20,000	13	10.2
Total	127	100

***Source** : Authors' calculation based on primary data*

The income distribution indicates that 48 respondents (37.8%) earned below ₹10,000 per month, while 42 respondents (33.1%) earned between ₹10,001 and ₹15,000. Only 13 respondents (10.2%) earned above ₹20,000. The findings suggest that the majority of workers receive relatively low monthly incomes, which may adversely affect their living standards, healthcare access, and overall quality of life. Low earnings also contribute significantly to occupational stress.

Table 6: Work Experience

Experience	No of Respondents	Percentage
Below 5 Years	21	16.5
6–10 Years	34	26.8
11–15 Years	39	30.7
Above 15 Years	33	26.0
Total	127	100

***Source** : Authors' calculation based on primary data*

Table 6 shows that 39 respondents (30.7%) possessed 11–15 years of work experience, followed by 34 respondents (26.8%) with 6–10 years, 33 respondents (26.0%) with more than 15 years, and 21 respondents (16.5%) with less than five years. This indicates that most respondents have extensive experience in salt pan work, reflecting long-term dependence on this occupation despite its challenging working environment

Table 7: Working Hours per Day

Hours	No of Respondents	Percentage
Below 8 Hours	19	15.0
8–10 Hours	57	44.9
10–12 Hours	35	27.6
Above 12 Hours	16	12.5
Total	127	100

***Source** : Authors' calculation based on primary data*

The findings reveal that 57 respondents (44.9%) worked between 8 and 10 hours daily, while 35 respondents (27.6%) worked for 10–12 hours. Only 19 respondents (15.0%) worked below eight hours, whereas 16 respondents (12.5%) worked more than twelve hours. The results indicate that most workers spend long hours under harsh climatic conditions, increasing physical fatigue and occupational stress

Table 8: Occupational Stress Level

Stress Level	No of Respondents	Percentage
Low	27	21.3
Moderate	58	45.7
High	42	33.0
Total	127	100

***Source** : Authors' calculation based on primary data*

The occupational stress assessment indicates that 58 respondents (45.7%) experienced moderate stress, 42 respondents (33.0%) reported high stress, and 27 respondents (21.3%) experienced low stress. This finding suggests that occupational stress is a significant issue among salt pan workers. Continuous exposure to heat, heavy workload, financial insecurity, and inadequate workplace facilities contribute to elevated stress levels.

Table 9: Physical Health Problems

Response	No of Respondents	Percentage
Yes	82	64.6
No	45	35.4
Total	127	100

***Source** : Authors' calculation based on primary data*

Table 9 indicates that 82 respondents (64.6%) reported experiencing physical health problems, whereas 45 respondents (35.4%) reported no major health issues. The high prevalence of health problems reflects the hazardous nature of salt pan work, including prolonged exposure to intense sunlight, saline water, musculoskeletal strain, skin disorders, dehydration, and eye-related problems.

Table 10: Access to Medical Facilities

Response	No of Respondents	Percentage
Adequate	38	29.9
Inadequate	89	70.1
Total	127	100

***Source** : Authors' calculation based on primary data*

The findings show that 89 respondents (70.1%) considered medical facilities inadequate, while only 38 respondents (29.9%) reported adequate access to healthcare services. This suggests that healthcare infrastructure available to salt pan workers is insufficient to meet their occupational health needs. Limited medical

access may worsen existing health conditions and negatively influence workers' quality of life.

Table 11: Job Satisfaction

Level	No of Respondents	Percentage
Low	31	24.4
Moderate	55	43.3
High	41	32.3
Total	127	100

***Source** : Authors' calculation based on primary data*

Table 11 reveals that 55 respondents (43.3%) reported moderate job satisfaction, 41 respondents (32.3%) expressed high satisfaction, and 31 respondents (24.4%) indicated low satisfaction. Although many workers expressed moderate satisfaction, the findings suggest that financial necessity rather than favourable working conditions may influence their continued employment in salt pans.

Table 12: Family Support

Level	No of Respondents	Percentage
Low	22	17.3
Moderate	47	37.0
High	58	45.7
Total	127	100

***Source** : Authors' calculation based on primary data*

The analysis indicates that 58 respondents (45.7%) received high family support, 47 respondents (37.0%) reported moderate support, and 22 respondents (17.3%) experienced low family support. Strong family support may help workers cope with occupational stress by providing emotional encouragement, financial assistance, and social stability despite difficult working conditions.

Table 13: Quality of Life Level

Level	No of Respondents	Percentage
Poor	29	22.8
Average	61	48.0
Good	37	29.2
Total	127	100

***Source** : Authors' calculation based on primary data*

Table 13 shows that 61 respondents (48.0%) experienced an average quality of life, 37 respondents (29.2%) reported a good quality of life, while 29 respondents (22.8%) experienced a poor quality of life. The findings indicate that although many workers maintain an average standard of living, occupational stress, low income, health issues, and inadequate healthcare continue to limit overall well-being.

Table 14: Stress due to Climatic Conditions

Response	No of Respondents	Percentage
Agree	86	67.7
Neutral	23	18.1
Disagree	18	14.2
Total	127	100

***Source** : Authors' calculation based on primary data*

The findings reveal that 86 respondents (67.7%) agreed that climatic conditions significantly contribute to occupational stress, 23 respondents (18.1%) remained neutral, and 18 respondents (14.2%) disagreed. This demonstrates that extreme heat, prolonged sunlight exposure, and adverse weather conditions are major occupational hazards affecting both physical and psychological well-being.

Table 15: Overall Satisfaction with Quality of Life

Satisfaction Level	No of Respondents	Percentage
Dissatisfied	33	26.0
Neutral	49	38.6
Satisfied	45	35.4
Total	127	100

***Source** : Authors' calculation based on primary data*

Table 15 indicates that 49 respondents (38.6%) expressed a neutral level of satisfaction with their quality of life, 45 respondents (35.4%) were satisfied, and 33 respondents (26.0%) were dissatisfied. The findings suggest that while some workers remain reasonably satisfied despite occupational hardships, a considerable proportion continue to experience dissatisfaction due to low income, health concerns, and stressful working conditions. Overall, improving workplace safety, healthcare facilities, income levels, and welfare measures would substantially enhance the quality of life of salt pan workers in Vedaranya

Table 16. Chi – Square Test

Association between Gender and Occupational Stress Level....

Gender	Low	Moderate	High	Total
Male	14	35	29	78
Female	13	23	13	49
Total	27	58	42	127

Hypothesis

H_0: There is no significant association between gender and occupational stress.

H_1: There is a significant association between gender and occupational stress.

Test	Value
Chi-square	*1.264*

df	*2*
p-value	*0.531*

Since the p-value (0.531) is greater than 0.05, there is no statistically significant association between gender and occupational stress among salt pan workers.

Table 16. Correlation Analysis.

Relationship between Occupational Stress and Quality of life

Variable	r value	p value
Occupational stress and Quality of life	**- 0.621**	**0.000**

There is a significant negative relationship between occupational stress and quality of life ($r = -0.621$, $p < 0.01$). As occupational stress increases, the quality of life decreases.

6. Findings of the Study

The major findings of the study are as follows:

- The study found that 61.4% of the respondents were male, while 38.6% were female, indicating that the salt pan industry in Vedaranyam is predominantly male-oriented due to the physically demanding nature of the work.
- The majority of the respondents (33.1%) belonged to the 41–50 years age group, followed by 29.9% in the 31–40 years category. This shows that middle-aged workers constitute the largest segment of the salt pan workforce.
- It was observed that 70.1% of the respondents were married, suggesting that most workers have family responsibilities, which may increase financial pressure and occupational stress.
- The educational profile revealed that 32.3% of the respondents had completed only primary education, while 28.3% were illiterate. This indicates a low level of educational attainment among salt pan workers, limiting their opportunities for alternative employment.
- The study found that 37.8% of the respondents earned less than ₹10,000 per month, reflecting poor economic conditions and financial insecurity among the workers.
- A majority (30.7%) had 11–15 years of work experience, indicating long-term involvement in salt pan work despite difficult working conditions.
- Nearly 44.9% of the respondents worked between 8 and 10 hours per day, while a considerable proportion worked for more than 10 hours, increasing physical fatigue and stress.
- The findings revealed that 45.7% of the respondents experienced a moderate level of occupational stress, whereas 33.0% experienced a high level of stress, highlighting occupational stress as a serious concern among salt pan workers.
- The study showed that 64.6% of the respondents suffered from physical health problems, including musculoskeletal pain, skin diseases, dehydration, and eye-related disorders caused by continuous exposure to saline water and extreme heat.
- It was found that 70.1% of the respondents considered the available medical facilities inadequate, indicating limited access to healthcare services in the study area.
- The majority (43.3%) reported a moderate level of job satisfaction, suggesting that workers continue in the occupation mainly because of economic necessity rather than favourable working conditions.
- The study observed that 45.7% of the respondents received high family support, which helps them cope with occupational stress and improves their emotional well-being.
- Nearly 48.0% of the respondents reported an average quality of life, while 22.8% experienced a poor quality of life, indicating that occupational and economic challenges continue to affect their overall well-being.
- The findings revealed that 67.7% of the respondents agreed that climatic conditions significantly increase occupational stress, confirming that prolonged exposure to extreme heat and sunlight is one of the major occupational hazards.
- Finally, 38.6% of the respondents expressed a neutral level of satisfaction with their overall quality of life, while 35.4% were satisfied and 26.0% were dissatisfied, indicating that improvements in income, healthcare, workplace safety, and welfare measures are essential for enhancing the quality of life of salt pan workers in Vedaranyam.

7. Suggestions of the Study

- Based on the findings of the study, the following suggestions are made to reduce occupational stress and improve the quality of life of salt pan workers in Vedaranyam:
- Adequate occupational safety measures such as protective footwear, gloves, hats, sunglasses, and sunscreen should be provided to all salt pan

workers to minimize health hazards caused by prolonged exposure to sunlight and saline water.

- Regular medical camps and periodic health check-ups should be organized by the Government and health departments to identify and treat occupational diseases at an early stage.
- Medical facilities in and around salt pan areas should be strengthened by establishing primary health centres, emergency first-aid units, and mobile medical services.
- Employers should ensure the availability of safe drinking water, rest shelters, toilets, and sanitation facilities at the workplace to improve workers' health and comfort.
- Fair and adequate wages should be provided to salt pan workers to improve their economic condition and reduce financial stress.
- The Government should extend social security benefits such as health insurance, accident insurance, pension schemes, maternity benefits, and welfare assistance to all salt pan workers.
- Working hours should be regulated, particularly during periods of extreme heat, and workers should be provided with adequate rest breaks to reduce physical exhaustion and occupational stress.
- Occupational stress management programmes, counselling services, and awareness campaigns should be conducted to improve workers' mental health and coping abilities.
- Educational and skill development programmes should be introduced to improve workers' literacy and create opportunities for alternative employment during the off-season.
- Special attention should be given to women salt pan workers by providing equal wages, maternity benefits, childcare facilities, and a safe working environment.
- Employers should encourage worker participation in decision-making and maintain a supportive work environment to improve job satisfaction and reduce occupational stress.
- Government departments and labour welfare agencies should implement effective labour welfare schemes and ensure their proper implementation for the benefit of salt pan workers.
- Awareness programmes on occupational health, personal hygiene, nutrition, and disease prevention should be organized regularly to promote healthy lifestyles among workers.
- Financial institutions should provide easy access to low-interest loans and self-help group support to improve the economic stability of salt pan workers and their families.
- Continuous monitoring of occupational health and quality of life should be undertaken by government agencies, researchers, and employers to formulate effective policies

8. Conclusion

The present study concludes that salt pan workers in Vedaranyam make a significant contribution to the salt industry despite working under extremely difficult environmental and occupational conditions. The findings reveal that the majority of workers experience moderate to high levels of occupational stress due to prolonged exposure to extreme heat, saline water, heavy physical work, inadequate medical facilities, low wages, and financial insecurity. Most respondents reported only an average quality of life, indicating the adverse impact of occupational and socio-economic challenges. The inferential statistical analysis strengthened the findings of the study. The Chi-square test indicated that there was no significant association between gender and occupational stress ($p > 0.05$), suggesting that occupational stress affects both male and female workers in a similar manner. The Pearson's correlation analysis revealed a significant negative relationship between occupational stress and quality of life ($r = -0.621$, $p < 0.01$), confirming that higher occupational stress leads to a lower quality of life among salt pan workers. The study highlights the urgent need for comprehensive interventions, including improved occupational safety measures, better healthcare facilities, adequate wages, social security benefits, stress management programmes, and effective labour welfare policies. Strengthening these measures will not only improve the physical, psychological, social, and economic well-being of salt pan workers but will also enhance productivity and support the sustainable development of the salt industry in Vedaranyam. The findings provide useful implications for policymakers, employers, labour welfare agencies, and researchers in designing effective strategies to improve the health, welfare, and quality of life of salt pan workers.

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