



# Physical working environment and welfare facilities related factors causing heavy workload: an empirical study among sanitary workers

**Durairaj Rajan** Department of Business Administration Faculty of Social and Management Sciences University of Africa, Toru-Orua (UAT) Bayelsa State, Nigeria drdirajan@gmail.com

#### Abstract

This survey, quantitative and empirical based descriptive research has the objective of analysing the perception of sanitary workers working in private multi-speciality hospitals in Tirunelveli city of Tamil Nadu, India towards various physical working environment and welfare facilities related factors causing heavy workload. In order to achieve this objective, the study has sampled 80 respondents using both convenience and judgement sampling techniques; and from the chosen respondents the primary data were collected using schedule method with the help of questionnaire (translating the questions in respondents' mother language, 'Tamil') along with interview. The secondary data were collected from journals, conference proceedings and government websites to add appropriate significance to the study. Percentage method has been administered to analyse both demographic characteristics of the study and perception of the respondents towards physical working environment and welfare facilities related factors causing heavy workload. The result of the analysis has discovered that majority of the respondents strongly agreed that the factors: location of the hospital and absence of transport facilities by the hospital, distance between departments and garbage storage, lack of technical support to transport garbage and disposal wastes, not allowed to use the life and need to use the steps compulsorily, complex layout of both the departments and the entire hospital, and size of the hospital are associated with heavy workload under physical working environment related factors. Similarly, majority of the respondents have agreed that the factors: absence of accommodation facilities to stay, absence of dedicated break areas and dress changing room, absence of convenience facilities (drinking water and separate toilet), absence of maternity related aids (crèche and feeding room), and no free lunch or no food with concession rate under welfare facilities related factors.

**Keywords:** Physical working environment, welfare facilities, heavy workload, sanitary worker, multi-speciality hospital, Tirunelveli city.



# 1. Introduction

### **Background** of the study

Government recognizes that safety and health of workers has a positive impact on productivity and economic and social development. Prevention is an integral part of economic activities as high safety and health standard at work is as important as good business performance for new as well as existing industries. Government of India believes that without safe, clean environment as well as healthy working environment, social justice and economic growth cannot be achieved, and that safe and working environment is considered as fundamental human right. Education, training, consultation and exchange of information and good practices are essential for prevention and promotion of such measures (Government of India, Ministry of Labour and Employment). However, the point to be noted is that whether all business organizations provide the safe and clean working environment to their employees and if the government is strongly and fairly monitoring it. Very few organizations are really concerned about working environment and welfare facilities of their employees; most of the organizations are not, the result of which, the employees are seriously affected. Unlike manufacturing industries, hospital sectors have high risk of infection, and hence, high level of attention should be paid to ensure the safety of the employees. Patients with various diseases and deformities come to the hospitals for treatment, and hence the vulnerability to the infection is high. Moreover, some equipment used by hospital employees are highly risk oriented, especially the equipment such as X-ray, lithotripsy, CT (Computed tomography) and MRI (Magnetic resonance imaging) scan, because these machines emit high level of radiation, which has huge capacity of causing cancer, impotence and other serious disorders. Therefore, the dramatic concern is needed from the management of hospitals towards the safety of all categories of employees in the hospitals.

Similarly, according to Indian Factories Act 1948, with regard to labour welfare aspects, the following facilities should be given to employees to enable them to work comfortable in the workplace: washing facilities, facilities for storing and drying clothing, and facilities for sitting, first aid appliances, canteens, shelters, rest rooms and lunch rooms, crèches and welfare officers. But, this act is not even properly amended in few government institutions, therefore, it is not needed to mention how these facilities are available in private organizations. Very few organizations offer their employees all these facilities following the government's rules and regulations, and also regularly update the facilities subject to the changes the government makes. However, most of the organizations do not, and hence, the employees still have to endure all challenges and continue their work. Most of the hospitals provide all these facilities for medical category employees abundantly, and a significant importance to paramedical category of employees also, but the non-medical category of employees are not given any attention and any facilities in most of the hospitals. Among them, sanitary workers' life in most of the hospitals is highly pathetic. They neither enjoy any safe and clean working environment, nor welfare facilities. However, due to unemployment issues, poverty and community background, they endure all the challenges and stick to their work. Among the non-medical categories employees, sanitary workers are highly ignored and are not cared about at all because of their nature of work, which is mainly cleaning in nature.

Sanitary workers, non-medical category of employees, commonly in most of the organizations come under housekeeping department. They are entirely responsible for maintaining and

ensuring cleanliness environment of an organization. Their functions are not only limited to maintaining clean and hygienic environment in the hospital by means of performing the functions: sweeping; mopping; cleaning toilets; transporting and disposing garbage; segregating biomedical and other wastes; but also, their functions extend to giving care to the patients: cleaning stool and urine of the prolonged bedridden patients; transporting the patients from one department to another department through wheel chair or stretcher (for instance: transporting the patients to laboratory, operation theatre, diagnostic centers, catheterization lab, dialysis unit); giving bath to the prolonged bed ridden patients; preparing the patients for surgery by shaving the parts to be operated; washing glasses and lenses which are used in blood laboratory; in case of death, preparing the patients for transport after death. Their functions also extend to providing assistance to other employees and departments: supplying water to the nursing station; supplying hot water to the patients; supporting to nursing assistants for preparing bed for the newly coming patients; assisting to other departments for their daily routine works (most of these work are not part of their work); washing clothes of doctors and other staffs uniforms and clothes of operation theatre. Thus, sanitary workers' work are fully physical oriented.

The study area has attained a remarkable growth in the recent past years: the numbers of business organizations - hospitals, hotels, transport corporations, textile industries and showrooms, para-medical centers (pharmacies, medical laboratory centers including CT and MRI scan centers), educational institutions (nurseries, schools, colleges and Universities), jewelries, small and medium scale industries, financial institutions, insurance institutions and construction organizations have increased tremendously; and all these sectors have brought a great growth to the city. The population rate in the study area, the literacy rate of the people, numbers of the skilled, supervisory and managerial employees have grown significantly; all these developments contributed drastically towards the development of the city. Although rich development has happened in all business areas, still in many organizations, irrespective of types, the government rules and regulations in terms of manpower management are not in practice, and most of the organizations do not follow it seriously; and hence, employees in many organizations work for low salary, have low job satisfaction, heavy workload and high stress. Still, in many organizations, against the labour law, two shift work system with twelve hours duty is in practice, and the employees are given low salary without any additional financial benefits: incentives and increments. Besides, in many organizations, employees are not given enough concern to their career development and self-respect. Autocratic leadership style with strict monitoring and huge discrimination in the areas of recruitment, salary revision, increment, work-area allocation, transfer and promotion can be seen in many organizations. Moreover, in many organizations, the work environment remains unfavorable for work, and welfare facilities are neither available sufficiently nor standard. All these factors remain not only the dissatisfying factors, but also contribute either directly and indirectly to their heavy workload and employee turnover over the time.

In the study area, as far as sanitary workers are concerned, the situation remains very negative and worse. They are not given any benefits properly, and huge discrimination is shown to them in the areas of: salary, increment, bonus, work area and workload, and leave and weekly offs. The managers of the housekeeping departments show intense autocratic leadership approach toward sanitary workers due to their illiteracy and community background. They are not given any technical support to facilitate their work; and hence, they have to perform all their works physically. The development in the study area in the areas of educational institutions, textile showrooms and other medium and large level business attract sanitary workers towards their organizations; and hence, a big manpower shortage exist in hospital sectors. Besides, the nature of work of sanitary workers in the hospitals push them to leave from the hospital sectors to other sectors. Due to these reasons, the manpower shortage in housekeeping departments at private hospitals is increasingly increasing resorting to heavy workload to the existing sanitary workers. Under this situation, when inadequate welfare facilities, and poor and unsupportive working environment in the private hospitals, in the study area, do not give them support to facilitate the works of sanitary workers, they directly or indirectly are responsible for their high workload. Hence, to know how for both physical working environment and welfare facilities are associated with heavy workload of sanitary workers, this research work has been undertaken in the study area.

#### Statement of the problem

Rest, physical movements within an organization, distance among various departments within an organization, technical support to perform the work, permission to use the facilities such as lift, lay out of the organization, size of the hospital, ventilation, lighting, accommodation facilities, break areas, conveniences, safety measures, health facilities and cafeteria facilities are directly or indirectly associated with determining the workload of the employees irrespective of the level and type of employees. When the employees are significantly satisfied with the factors: adequate rest, limited physical movements, needed accommodation facilities, convenient break areas, adequate health facilities and safety measures, definitely they would feel their work is both easier and lighter despite the works assigned to them are huge, because mental satisfaction and adequate rest are paramount to tackle the high workload. At the same time, if the employees are neither satisfied, nor fulfilled with these factors, the work assigned to them, even if they are lighter, it would seem harder for them. All these factors are needed for the sanitary workers as same as how they are needed for other categories of employees without any restriction and discrimination, because although sanitary workers do not belong to medical and paramedical categories in the hospital, their contribution is not only deciding cleanliness of the hospital, but also is directly associated with prognosis of the patients. But, in majority of the organizations not only health care industry, but also in other industries, the sanitary workers are not given these facilities adequately. And hence, sanitary workers in these organizations perform their duties with inadequate facilities and unhealthy physical working environment.

In the study area, two shift work system, low salary and lack of manpower remain the major challenges in the private hospitals; and all these factors push the sanitary workers to move off from the hospital work. Moreover, in the study area the sanitary workers largely move to other kinds of works: hundred day's employment scheme which the government has recently introduced; and other types of works, which are risk free and shiftless and have short working hours, (eight hours) such as sanitation works in education institutions, textile industries, manufacturing industries and banks which are highly emerging in the study area. Moreover, with the help of self-help groups, a significant numbers of the sanitary workers have started small scale businesses. Although all these changes have brought remarkably admirable growth in the life of the sanitary workers, who mainly come from the downtrodden society, the routine works of the hospital sector get paralyzed in majority of the hospitals; and as a result of which the workload of the other remaining sanitary workers is increasing hugely.

The hospitals which either have adopted or are keen to embrace technologies to assist sanitary workers in order to perform their routine sanitation work regularly follow three shift work system; and provide significantly decent salaries, do not face huge problems that arise as a result of lack of manpower, because in these hospitals employee turnover rate is low and employee satisfaction rate is high. On the contrary, the hospitals which have not adopted the technologies and still follow the traditional way of work patterns with two shift work system and offering lower salaries still face serious challenges due to the lack of manpower. Thus, under the circumstances in which most of the hospitals face serious manpower shortage, when the hospitals have poor physical working environments and facilities: complex layout of the hospital; distance between the hospital and transport station and no transport assistance from the hospital; long distance between two departments; lack of technical support; discrimination and bias shown by the management among the staffs to utilize the hospital facilities, the employees get tired very soon and they feel their work as a burden. The persistence of the same situation for prolonged period push the employees to leave from the job, which again increase the workload of the other remaining employees.

In most of the hospitals, sanitary workers are not given welfare facilities sufficiently; and in some hospitals, even though physical working environment is well facilitated, and welfare facilities are available abundantly; the sanitary workers are not allowed to avail them because of the community and lower level employment. It can be clearly seen in most of the hospitals that the sanitary workers either sit on the floor or outside of the rest room even though chairs are available; and sanitary workers are not given transport allowances (their salary in most of the hospitals are low); safety devices needed to use during their work such as face masks, hand glows, shoes and slippers, vaccination, and wheelchairs and crèches are not given to the sanitary workers and as a result of this the sanitary workers perform their duties without safety devices. Their illiteracy and submissiveness and community background do not allow them to claim these facilities from the management assertively. Similarly, technical support are not given to the sanitary workers sufficiently. Still, in majority of the hospitals including big corporate hospitals, the sanitary workers do not use vacuum cleaner and advanced technical devices to perform cleaning and mopping tasks; instead they use the routine manual methods to perform these functions.

In the study area, due to the population growth and economic development, most of the speciality hospitals have upgraded into multi-speciality hospitals with many floors and various departments to accommodate different kinds of patients and other facilities. The hospitals which have been built recently have lift facilities, but few hospitals do not have ramp facilities. On the contrary, most of the hospitals which were built in olden days do not have lift facilities; and instead they have steps and ramp facilities even though they are multi-speciality and large hospitals. Similarly, although some hospitals are large in size and have all medical facilities, still they do not have the basic facilities meeded for the sanitary workers sufficiently such as stretcher and wheelchair and other facilities are available with no ramp facilities, the sanitary workers can do their work simply and easily by carrying the wastes through lift, but most of the hospitals do not allow the sanitary workers to use lift. Therefore, they have to either drag or lift the wastes and use the steps to transport the wastes. Therefore, in these hospitals, although advanced infrastructures such as lift facilities are available, they are of no use to the sanitary workers. Similarly, although some hospitals have ramp facilities

without lift, the ramps do not cover all the floors. Most of the hospitals have ramp facilities to cover patient care areas; however, other areas which are used for administrative purpose do not have ramp facilities. Therefore, the sanitary workers need to do more physical work to perform housekeeping works, which takes double the energy of them.

Thus, due to either absence or defect in both physical working environment and welfare facilities in the study area, absenteeism and higher employee turnover among the sanitary workers are reported as the major challenges in majority of the hospitals, and they are predominantly higher in rate. The high employee turnover rate increases the manpower shortage; and high absenteeism rate increases workload of the existing employees. Since both physical working environment and welfare facilities are responsible for enhancing employee turnover and absenteeism rates, hospitals need to pay enough attention on these factors and take necessary steps both to fix the defects in physical working environment and enrich the welfare facilities in the hospitals in order to reduce both employee turnover and absenteeism, and thereby reduce the heavy workload of the sanitary workers. Hence, this study assists the hospital management to get deep insight into the various factors associated with physical working environment and welfare facilities related factors causing heavy workload among the sanitary workers.

### **Objective of the study**

The present study aims to identify perception of the sanitary workers towards physical working environment and welfare facilities related factors and their association with heavy workload.

### Scope of the study

The study has focused on sanitary workers working with private multi-speciality hospitals in Tirunelveli city, which is the capital of Tirunelveli District, located in south end of Tamil Nadu State, India. The study has analyzed various variables associated with physical working environment and welfare facilities related factors causing heavy workload.

### Significance of the study

The result of this study will be helpful for three categories of people: hospital administrators, sanitary workers and future research scholars in the following way. The hospital administrators can use the results of this research as a tool examine the physical working environment status in the organization, and make necessary changes either to alter the defect or strengthen the existing facilities or adding new facilities for sanitary workers. For instance, hospital management can build accommodation facilities, rest room and toilet, establish separate drinking water facilities, and introduce new technologies for sanitary workers to enable them both to perform their work in a simple way and to enjoy a comfortable work environment, which will help them to manage their work easily. Similarly, policy level changes can be made to enable sanitary workers to use the following: lift facilities, transport allowance facilities, free lunch or food at concession rate and maternity benefits, all of which directly or indirectly assist them for their mental satisfaction, which eventually reduce their heavy work burden.

To the housekeeping managers, this study assists to get deep insight into how physical working environment and welfare facilities related factors are associated with heavy workload, and help them to take necessary steps, at their level, to reduce their workload by

modifying working environment and welfare facilities. For instance, the housekeeping managers can recommend to the top management about the necessary technologies to be introduced to facilitate the work of sanitary workers. Moreover, the results of this study will help the managers to relook into their leadership style, and how to train their supervisors as to how to deal with the sanitary workers on humanity basis. For example, how to deal with a pregnant woman when both welfare facilities are insufficient and physical working environment is not favourable.

The results of this study will give knowledge to sanitary workers as to how physical working environment and welfare facilities related factors are associated with their heavy workload, and also give them awareness as to how to assertively claim the facilities they deserve to have, that are associated with their welfare and workload. The variables, population, sample size, sampling technique, data collection method, tools of analysis and study area and so on, used in this study give strong base to the future research scholars.

# 2. Review of literature

Workload can be expressed as the amount of work that should be done at a certain time with a certain quality (Saglamari G and Cinabal B, 2008). As for workload perception, it is relative which may vary in accordance with the circumstances that an employee has been experiencing. The concept workload is the perception that the work loaded above normal to the individual in the workplace. For most of the job, if the natural load of the work has not been calculated mathematically, it is possible to state that this concept has an abstract content based on the perception (Keser, 2006). In this present research, the researcher has defined heavy workload as: the volume of work added additionally (both mentally and physically) with routine works of sanitary workers due to improper and lack of physical working environment, and inadequate welfare facilities. The researcher has stated the following factors under physical working environment: layout of the organization, distance between various departments and waste disposal point, technical support given to sanitary workers for their daily routine operational work, size of the firm and manpower support according to it to cover up cleaning work as physical working environment. Similarly, the researcher has referred the following factors under welfare facilities: accommodation facilities, break areas, dress changing room, convenient facilities (toilet rooms and drinking water facility), maternity benefits and free lunch or food at concession rate

Birhanu M et al., (2018) studied workload determines workplace stress among health professionals working in Felege-Hiwot Referral Hospital, Bahir Dar, Northwest Ethiopia and found that most health professionals had high workload due to lack of inadequate staffs, night and weekend call duties besides their routine works. The respondents did not have enough time with their family. They did not get extracurricular activities from their hospital administration that would decrease their work stress. The result found that health professionals who work more than fifty hours per week had more stress and those who worked night shift had more stress than day shift work. Health professionals' educational level did not significantly influence the level of workplace stress. There was no significant association between monthly income and stress level among health professionals. Job requirements more than ability, frequently changing work shift, working with opposite sex, mismatching between hospital and employees' objectives were the sources of workplace stress among physicians. Working with opposite sex, feeling isolation, lack of stability at home and supervising work of other people were the source of work stress among nurses. Working with opposite sex, being not respected, and job requirement more than the ability, lack of stability at home, unclear promotion requirements, no participation in departments' decision making were the sources of stress among radiographers. Workload and working in night shift were significantly associated with workplace stress.

Mercin S et al., (2018) analyzed the workload of nurses by examining average degree of difficulty of the workload of a certain nursing procedure, total workload of nursing procedure and workload of each nurse in different clinics. The study observed that majority of the respondents were in surgery clinic followed by internal medicine clinics, gynecology and obstetrics and pediatrics clinics. The result of the study discovered that the most difficult procedures performed by nurses were: time taken to give newborn baby to the mother, vaginal exam and vaginal delivery. The lowest difficult procedures: giving oxygen, oral medicine, blood glucose measurement. The study also revealed that internal medicine clinic had the maximum workload score per month followed by surgery clinic and gynecology and obstetrics clinic.

Munandar A et al., (2018) studied the effects of work stress, workload and work environment on job satisfaction and its implication on the employee performance of Aceh investment and one stop agency' from 138 civil servants working in the public agency and found that increased job satisfaction can have an impact on decreasing employee job satisfaction. Employees with high stress levels will tend to have low job stress. Conversely, when employees experience low stress levels, job stress will increase. Workload can encourage employees to work better. They are motivated to carryout tasks according to the workload given. When an employee has a little or no workload at all, the employees' performance will be low. The work environment can also encourage an increase in employee performance. Increasing the quality of work environment can directly improve employee performance. The result also found that job stress has a negative impact on the performance of employees. Workload and work environment have a positive influence on the performance of the employees. Job stress is positive and can significantly influence the performance of the employees. The existence of job stress strengthens the effects of work stress on the performance of the employees. The result also indicated that job stress is not able to strengthen the influence of workload on the performance of the employees. Job stress cannot strengthen the influence of the workload on employee performance.

Kokoroko E and Sanda MA (2019) in their study, 'the effect of workload on job stress of Ghanian OPD nurses: The role of co-worker support' tested three hypotheses: the relationship between workload and job stress; coworker support and job stress; and coworker support will significantly weaken the positive relationship between workload and job stress. The result of the study discovered that there was a significant positive relationship between workload and job stress levels of OPD nurses; co-worker support did not significantly correlate with the job stress level of the respondents. Co-worker support strengthen the positive relationship between workload of OPD nurses had a positive effect on their job stress, i.e., as workload of nurses increased, their level of stress relating to their job also increased. The study also found that coworker support level did not significantly correlated with job stress level: a positive relationship between co-workers support level and job stress level. The study also found that co-workers support strengthened

the positive relationship between workload and job stress, which means higher the job stress levels are related to higher workload levels for OPD nurses reporting higher level of coworkers support but not the vase for these reporting lower levels of coworkers support.

Rajan D (2019a) investigated how various leadership related factors associated with workload of the sanitary workers and result found that the factors, bias in workload allocation, not observing and enquiring about health condition, bias in work area allocation, taking revenge and purposefully assigning work, not allowing employees to rest in the course of work during tired, treating employees based on caste, community and religion, allocating work area without consent of the employees, preparing work schedule in bias, not introducing any advanced technology to replace manual work, not stopping or questioning other department employees when they assign work, behaving rudely and disrespectfully and not supplying adequate manpower have been strongly agreed by majority of the respondents. The factors, not listening to personal and health issues, not controlling seniors when they pass their work over shoulder of the juniors and not communicating properly about the tasks and how to perform it have been agreed by majority of the respondents.

Rajan D (2019b) analysed perception of the sanitary workers towards lack of resources related factors causing heavy workload from the sample of 80 sanitary workers working in leading private multi-speciality hospitals, Tirunelveli city of Tamil Nadu, India and found that majority of the respondents strongly agreed that resources related factors such as inadequate manpower, sudden absent of co-worker, sick of co-worker during the work, lack of cooperation and coordination of co-workers and other category of employees, not filling vacancy in the department, lack of equipment and not introducing machineries, repair of machines and management not taking effort to repair it, lack of protective devices to protect from the hazards and inadequate or absence of information about work and work processes and protection from hazards were associated with their heavy workload.

Rajan D (2019c) in his study identified and described the perception of the sanitary workers private multi-speciality hospitals in Tirunelveli city of Tamil Nadu, India toward various shift work related factors causing heavy workload. The result of the study revealed that majority of the respondents strongly agreed that the factors such as two shift work system with 12 hours duty, sudden extension of duty, continuous day or night shift, fixing schedule without consent of the employees, rigid approach in implementing shift schedule, lack of cooperation of co-workers to switch over shift work during emergency situations, no adequate off between two shifts, compulsorily forcing employees to come for duty during their off period, autocratic approach of the managers in preparing and executing shift schedule and managers not permitting to swap shift schedule with co-worker with mutual consent were the factors associated with shift work causing heavy workload among sanitary workers.

Saputera B and Suhermin (2020) studied the influence of workload, work stress and supervision to clinical nurse performance. The study examined four hypotheses: relationship between workload and performance, between work stress and nurse performance, between supervision and nurse performance, and between workload, work stress, supervision simultaneously to nurse performance. The data were collected from nurses in the emergency room, intensive care unit, and operation theatre and inpatient and outpatient installations. The result found that the level of workload was heavy, the level of stress was low and the level of performance was good. The hypotheses analysis discovered: both workload and supervision

did not affect work performance of nurses – the heavier the workload, the better the nurses' performance. Work stress negatively affected work performance of nurses – high stress caused poor nurse performance. The hypotheses also proved that workload, work stress and supervision had a simultaneous effect on nurses' performance – they directly affected work performance.

Rajan D (2020) studied perception of the sanitary workers towards various long working hour related factors and its association with their heavy workload in Tirunelveli city of Tamil Nadu State, India. The study found that, majority of the respondents strongly agreed that, long working hours related factors causing heavy workload to sanitary workers were long and unsocial working hours, rigid rules of the hospital with regard to working hours, inability to relieve from the duty on time, arrival and admission of the patients at the time of relieving from the duty, irregular shift work, inadequate rest in duty and challenges in travelling.

Harmen H et al., (2020) investigated the effect of workload and organizational commitment on employee job satisfaction of PT Perkabunan Nusantara III Medan from the samples of 89 respondents. The study tested three hypotheses: workload affects job satisfaction; organizational commitment affects job satisfaction; and both workload and organizational commitment simultaneously affect job satisfaction. The regression analysis discovered that when the workload and organizational commitment increases or decreases, job satisfaction experience change. As far as effect is concerned, workload does not have a significant effect on employee satisfaction; organizational commitment has a significant influence on employee satisfaction; similarly, both workload and organizational commitment simultaneously affect the job satisfaction of employees.

Hoogendoorn ME et al., (2021) planning on nursing staff on the intensive care: A prospective descriptive multicenter study' described differences in the planning of nursing staff on the ICU in the COVID period versus a recent non-COVID period and to describe differences in nursing workload in COVID-19 patients, pneumonia patients and other patients on the intensive care unit and to assess the possible differences in nursing activities scores between the different groups. The result of the study showed that the increasing demand for nursing care during the COVID-19 period was recognizable in both a higher number of patients per nurse and a higher mean nursing activities scores per nurse, compared to same month in 2019. Although the number of new admission on the ICU was lower, the nursing activities score per nurse and the number of patients per nurse were higher. The higher nursing activities score per patient by the long length of study of COVID-19 ICU patients. The continuous influx of COVID-19 patients in combination with a long length of stay and therefore a delayed outflow contributed to a high pressure on ICU beds. The result of the study clearly showed that COVID-19 patients cause a significantly higher intensive care unit nursing workload compared to pneumonia patients in the non-COVID period. This higher workload was mainly due to nursing intervention like monitoring and titration with bedside observation, respiratory care, mobilization, hygienic procedures and taking care for the patients and his or her relatives. The increase in time for monitoring and titration with bedside observation is possibly related to hygienic procedures. Due to combination of a higher workload per patient, there was an increasing demand for the need for nursing care per intensive care unit patient.

Jornuad PD et al., (2021) investigated the workload, burnout level, work performance of the teacher and also exploring the significant relationship between the teachers' workload and

their burnout experience and between teachers' workload and their work performance. The result of the study showed that most teachers said they generally spent too long on planning and preparation and correcting pupil's work. The findings implied that the teachers experience burnout in the areas of career satisfaction, administrative support, coping with job related stress and attitude towards students. In terms of burnout, teachers have the highest burnout level when they experience emotional exhaustion which is followed by lack of personal accomplishment and depersonalization respectively. The study found that there was a highly significant relationship between workload and career satisfaction; workload and perceived administrative support; and workload and coping with job related stress; workload and attitudes towards students.

Rajan D (2021a) analysed the perception of the sanitary workers working in private multispeciality hospitals in Tirunelveli city of Tamil Nadu, India towards various role and compensation related factors causing heavy workload. The result of the analysis has found that factors: ill-defined roles and responsibilities, receiving conflicting messages from two or more heads at the same time, person's interest remain contradict with the job role, salary is not adequate in accordance with the work performed, discrimination and bias in fixing salary and inadequate non-monetary rewards for effective contribution at work were strongly agreed by majority of the respondents.

Rajan D (2021b) analysed various organization structure and management practice related factors causing heavy workload among sanitary workers, and the results discovered that the factors: complex organization structure; not communicating the objectives of the task and its importance towards organization to the sanitary workers; orientation and clear communication about work processes; lack of participation at departmental and organizational level decision making; frequent changes made in the organization and inadequate information about them; inadequate welfare facilities for sanitary workers; autocratic leadership style with lack of motivation; inadequate respect for sanitary workers and huge discrimination; and low and unfair salary system; discrimination in salary and other benefits were strongly agreed by majority of the respondents that they were associated with their heavy workload.

Rostamu F et al., (2021) in their study investigated the moderating role of job control in relation to mental workload and job satisfaction of health care workers. The result of the study found that mental workload of nurses was higher significantly than midwives and administrative workers and mental workload of midwives was significantly difference compared to administrative workers. Nurses and midwives had significantly higher job satisfaction and job control than administrative workers. The level of job control between nurses and midwives was almost similar. The result indicated that by lowering the workload in employees, more job satisfaction was observed, and they had a better control over the assigned affairs. Age, work experience had a significant relationship with mental workload. However, no significant relationship was found between age and work experience with job control. The study also found that job satisfaction is elderly healthcare workers was higher compared to younger people.

Ramdas IM and Sari DW (2022) examined work related stress on nurses and analyzing its correlation with workload, work shift, work environment, age, gender, education background and working period. The result of the study found that the worst symptoms of work related stress were difficulty in falling asleep and feeling scared. Most frequently experienced

symptoms were anxious feelings and gastro-intestinal symptoms. Most bad symptoms experienced were difficulty in falling asleep and gastro-intestinal symptoms. The study found that there was a significant correlation between the working period of nurses and job stress, which indicates that dissatisfaction and unpleasant condition for nurses during work. Study also found that significant correlation between shift working and nurses' work related stress. Nurses who work in shifts experience higher work stress. The results of the study found that nurses' work related stress was significantly related to workload because of high bed occupancy rate during COVID 19 outbreak which also increased nurses' workload. The study also found that physical work environment was significantly related to work stress.

Maulana A and Risal M (2022) in their study analyzed the effect of work motivation and workload on employee performance in regional research and development agency and found that motivation has a positive and significant influence on employee performance. The result discovered that workload has a positive and significant influence on employee performance meaning that if the workload is getting better or the workload is getter lower, the employees' performance is getting higher. The study also found that in the study area, appropriate workload such as sufficient numbers of employees, predetermined workload standards and clear work targets will improve employee performance in terms of timeliness, quality of work carried out which means that if the workload given is low or in accordance with the provisions, the performance of employees at the study area will also increase. The result indicated that workload and work motivation have a positive and significant impact on the employee performance in the study area population. The study has observed that employee performance in terms of increasing quality, completion of work time is influenced by the motivation given by the leadership, employees who are obedient and obedient to the working hours and employees who take much initiatives. The study suggested that work motivation need to be increased and workload need to be further improved so that the achievement of employee performance will improve better.

From the literatures reviewed, it can be learnt that the study undertaken in the study area concerning heavy workload of sanitary workers have been discussed from leadership, resources, shift work, long working hours, role and compensation point of view, i.e., how leadership, resources, shift work, long working hours, role and compensation, and organization structure and practice related factors are associated with heavy workload of sanitary workers in the study area. So, there is a scope to research as to how physical working environment and welfare facilities related factors are associated with heavy workload of sanitary workers. Hence, this present research has been undertaken in the study area with the objective of how physical working environment and welfare facilities related factors are associated with heavy workload of the sanitary workers, which has not been discussed so far.

### 3. Research methodology

This survey and empirical based quantitative research has adopted descriptive research design since it describes various physical working environment and welfare facilities related factors and their association with heavy workload quantitatively. The element of this research is sanitary worker working in private multi-speciality hospitals in Tirunelveli city. A sample of 80 sanitary workers was chosen from the leading private multi-speciality hospitals in Tirunelveli city of Tamil Nadu using both convenience and purposive sampling techniques.

Primary data for this study were collected directly from the sampled sanitary workers using schedule method of data collection. The structured questionnaire which had been constructed based on knowledge of personal experience and observation of the researcher in the field of hospital administration was administered to collect the primary data. The questionnaire consisted of two sections namely 'Section A' which described demographic characteristics of the respondents and 'Section B' which explained various physical working environment and welfare facilities related factors and their association with heavy workload. The questionnaire was constructed based on Likert's five point scale which carried five responses for each question namely Strongly agree, Agree, No opinion, Disagree and Strongly Disagree that had the values of 5, 4, 3, 2 and 1 respectively. Each question in the questionnaire was translated to the respondents in their mother language, 'Tamil', and their choice of response was recorded. The secondary data were collected from journals, conference proceedings and government websites to add appropriate significance to the study. Percentage method has been administered to analyze both demographic characteristics of the respondents and perception of the respondents towards role and compensation related factors associated with heavy workload.

Variable	Description	Frequency	Percentage	
Sex	Male	16	20.00	
	Female	64	80.00	
Age	Below 30 years	07	08.75	
	Between 30 and 35 years	22	27.50	
	Between 35 and 40 years	33	41.25	
	Above 40 years	18	22.50	
Marital Status	Married	72	90.00	
	Unmarried	08	10.00	
Year of working experience	Below 2 year	12	15.00	
	Between 2 and 4 years	32	40.00	
	Between 4 and 6 years	26	32.50	
	Above 6 years	10	12.50	
Salary (Rs)	Below 5000	12	15.00	
	Between 5000 and 7000	41	51.25	
	Between 7000 and 9000	21	26.25	
	Above 9000	06	07.50	

### 4. Analysis and Interpretation

# Table 1: Profile of the respondents

Source: Primary Data, 2021.

It can be understood from Table 1 that among the respondents, 20.00% were male and 80.00% were female. Of them, 8.75% were below 30years of age, 27.50% between 30 and 35 years, 41.25% between 35 and 40 years and 22.50% were above 40 years of age.

Furthermore, among them, 90.00% were married and 10.00% were unmarried. In all, 15.00% had below 2 years of work experience, 40.00% between 2 and 4 years, 32.50% between 4 and 6 years and 12.50% had above 6 years of work experience. Among them, 15% were drawing below Rs. 5000 of salary, 51.25% between Rs. 5000 and 7000, 26.25% between Rs. 7000 and 9000 and 07.50% of them were drawing above Rs. 9000.

Table 2: Perception of the respondents towards lack of resources related factors causing
heavy workload

Physical working environment and welfare facilities related factors	SA (%)	A (%)	NO (%)	DA (%)	SDA (%)
Physical working environment					
Location of the hospital and absence of transport facilities by the hospital		08.75	0	0	0
Distance between departments and garbage storage		08.75	0	0	0
Lack of technical support to transport garbage and disposal wastes		11.25	0	0	0
Not allowed to use the life; and need to use the steps compulsorily		31.25	0	0	0
Complex layout of both the departments and the entire hospital (poorly designed layout)		11.25	0	0	0
Size of the hospital		01.25	0	0	0
Welfare facilities					
Absence of accommodation facilities to stay		0	0	0	0
Absence of dedicated break areas and dress changing room		05.00	0	0	0
Absence of convenience facilities: drinking water and separate toilet		03.75	0	0	0
Absence of maternity related aids: crèche and feeding room		03.75	0	0	0
No free lunch or no food with concession rate		0	0	0	0

Source: Primary data, 2021.

The researcher presents below the detailed interpretation to the findings of the analyzed data. In the interpretation of each variable discussed in this study, with the analyzed data, the researcher has also added the information collected from the respondents by discussion and observation. Besides to these, the researcher has shared his experience and rich practical knowledge obtained in the field of hospital administration to add appropriate significance to the interpretation.

# Location of the hospital and absence of transport facilities by the hospital

Majority of the respondents have strongly agreed that location of the hospital and absence of transport facilities from the hospital are associated with their heavy workload. When they were interviewed, majority of them said, from their house they have to travel long distance in the bus and also to walk a lot of to reach the hospital for duty; and they have to follow the same when they return home from the duty after the duty hours. They also complained that they do not receive any assistance from the hospital for transport either in the form of vehicle or transport allowance.

Body energy is equally important to perform both physical and mental works. If energy is hugely spent before reaching the working spot, the employees cannot do the work with full effort, and they cannot finish the work completely and perfectly. Travelling plays a major and unavoidable part in the daily working activities; it cannot be expected that every employees can stay at the hospital' hostel; or go to the duty from nearby distance. Definitely, a significant numbers of employees go to the duty from the long distance, because most of the hospitals remain within the city limit; and it is really expensive to live within the city limit. Due to the cost of living in the city limit, most of the employees choose their residential place outside the city limit and travel to the workplace using public transport. Those who are in higher position and highly paid salaried employees either live within the city limit or travel by their own car. Low salaried employees live outside the city limit and travel through public transports or two-wheelers. But, as far as sanitary workers are concerned they neither live in hospital's hostel, nor within the city limit, nor immediately outside the city limit. Instead, they live far from the city limit, especially most of the sanitary workers go to the job from very remote village areas, because all sanitary workers are uneducated, downtrodden people and belong to economically weaker section; and hence they are not affordable to live within the city limit or immediately outside the city limit.

To reach the working spot in the study area, normally the sanitary workers travel through 2 or three buses. They normally use public transport to travel to the work; and public transports always remain crowd because of the cheap transport fares. The stopping point of these public transport vehicles remain usually far from the location of the hospitals in most cases; and hence, to reach the workplace they have to either walk or use auto rickshaw (called in some places as tuk-tuk; baby taxi; moto-taxi - a vehicle used to carry 3 peoples within the city limit) or another city bus. But, normally the sanitary workers choose walking to go to the working spot because it is not affordable to travel by auto rickshaw (it collects much transport fares), and it takes sometimes from 10 to 30 minutes' walk to reach the work spot. Thus, the sanitary workers travel through two to three buses and walks up to 30 minutes to reach the work spot. These activities definitely suck their most of energy. Moreover, in the study area, in the all hospitals, the sanitary workers should reach the work at 8.00 am, especially before all other department employees and the patients arrive at the hospitals, which normally come to the

hospital after 9.00 am. Therefore, the sanitary workers should reach the work spot one hour before other category of the employees and the patients reach the workplace. So, they have to wake up and get ready at house around 6.00 am to 6.30 am to start their journey to the work. Thus, before they reach the work spot they need to travel for 2 hours which include their walk to reach their spot. In the workplace also, they need to work for twelve hours because still at the most of the hospitals twelve hours duty is followed. In the workplace the nature of the sanitary workers work is fully physical oriented and without any mechanical devices they work for twelve hours; and this would suck their energy fully. In addition to the energy they spent during travel, when they do the work in the workplace with fully physically, they feel their workload become double. Thus, the works of the employees start immediately after they start from the house. Therefore, before they reach the work spot half of their energy goes off before they start their work.

Moreover, their working hours also is too long: 12 hours in most of the hospitals in the study area, and all hospitals follow the rules very rigidly especially for sanitary workers. Their working hours start at 8.00 am and ends at 8.00 pm; and although they finish their work in advance, they are not allowed to leave from the duty in advance, but the same is not followed rigidly with other category of employees such as other non-medical, paramedical and medical category employees in the hospital. After their work, they go through the same travel conditions to reach home; thus when they reach home approximately at or after 9.00 pm which are too late for them to prepare their dinner and eat. When they go to the bed after their dinner and other household work, the time may be midnight, which although give them deep sleep due to the physical work and tiredness, they cannot get enough amount of sleep because they have to wake up very early in the next day morning to get ready for the work. Very few hospitals give their employees transport allowance with their salary, which give them at least mental satisfaction despite long distance and absence of transport support from the hospital. However, many hospitals do not provide them any allowance for transport with their salary, which not only causes them mental dissatisfaction, but also causes mental work burden. Thus, since long working hours and location of the hospital, long distance and traffic difficulties are associated with their work, the hospitals can provide either transport allowance or transport facilities at least to cover city limit, which will be of great helpful for employees to not only save little money (because a ransom of amount is gone to travel within city limit), but also assists them to reach the work spot on time.

### Distance between departments and garbage (waste or trash) storage place

Waste collection from multiple ends, transporting them to the particular point and disposing them are the main tasks of sanitary workers besides cleaning, mopping and providing care to the patients. Wastes arise at multiple ends in the hospitals and they vary as both medical and non-medical wastes with significant risk levels. In a day, according to the volume of patients admitted in the hospital as inpatients, intensity of other routine works, and numbers of daily patients arriving at the hospitals, the wastes accumulated vary and transportation of the wastes also varies. Although all employees take role in disposing the wastes and have knowledge about biomedical wastes, their role ends with disposing the wastes in the dust pin. However, the role of sanitary workers is manifolds: from segregating the wastes whether anatomical or non-anatomical wastes by carefully checking and transferring them to the concerned disposal boxes, and transporting them to the disposal point. Thus, in waste disposal, the workload of sanitary workers is higher than others.

Majority of the respondents have strongly agreed that 'distance between departments and garbage storage place' is associated with heavy workload. In interview, majority of them said that they walk many times from wastes originating point and waste disposal point, and the distance between these points is long. In the study area, waste segregation and disposal are highly concerned, because sanitary workers dealing with waste segregation and disposal are highly uneducated; and other employees dealing with wastes do not do their work completely in a responsible way. Moreover, most of the hospitals do not give adequate training to their employees with regard to disposal of wastes; and hence the workload of sanitary workers is high in the study area. Although separate pins (boxes) are used in each department for anatomical waste, microbiology and biotechnology wastes, waste sharps, discarded medicines and cytotoxic drugs, solid waste, liquid waste, and incineration ash and other chemical wastes, most of the employees do not follow the instructions properly; and hence, the work of segregating the wastes according to the rules of bio-medical waste management, all works falls on the shoulders of the sanitary workers. This definitely gives them additional tasks, which normally increase their workload. Because of their lack of assertiveness and illiteracy, sanitary workers do not insist other categories of the employees, who handle the wastes, to use the right way of disposing the wastes, i.e., to put the wastes in the right box according to the types of wastes. In very few hospitals, routine inspection is made to know if the employees of all departments follow the guidelines of disposal of wastes, and if there is any mistake or deviation in following the guidelines, the employees are either advised or cautioned or given training to them. But, most of the hospitals do not do it routinely and hence the work burden of the sanitary workers increase.

Another important matter to be discussed with regard to waste disposal is transportation of the wastes to the point where from the wastes are transported to outside the hospital for permanent disposal; and this is the function of external agency. In most of the hospitals, from the point of generation of the wastes to the point of disposal, either sanitary workers alone, or two or three sanitary workers jointly lift the wastes in the big buckets by hands and transport them; and in most of the hospitals there is no support of the mechanical device to transport the wastes; and hence, the workload of sanitary workers again increase. Few hospitals have given mechanical devices support such as pushing or pulling machines to transport the wastes to the disposal point. Some hospitals do not have ramp facilities and some hospitals do not have lift facilities. In some hospitals, sanitary workers are not allowed to use lift machines, and lift is allowed only for patients. In these hospitals it is more difficult to transport the wastes if there is no mechanical devices' support.

The transportation of the wastes from inside the hospital to the outside to be disposed occupy important place in waste management; and the role of sanitary workers remain paramount in it. Mostly there is external body called biomedical waste disposal agency is looking after this function. There is one or two agencies in each cities or district functioning and collect the wastes from the hospitals and dispose them according to the biomedical norms. They collect the wastes once or twice in a week or two weeks from the hospitals. In the study area, there is one agency which collect the biomedical wastes from the hospitals, (other wastes are collected by city corporation), and it collects the wastes once or twice in a week or month according to the size of the hospitals. In the small hospitals, it collects the wastes once in a week, and in the large hospitals twice in a week. Normally, some hospitals scientifically manage biomedical wastes, i.e., at the point of origin, the employees segregate the wastes according to the norms; and the same is stored in the big container at the point of disposal. Due to this, it is easy for the biomedical agency to carry them and go; but in some hospital on the day in which the biomedical agency comes to collect the wastes, sanitary workers segregate the wastes according to the norms. And in this types of hospitals, the workload of the sanitary workers increase because they have to do huge work to segregate the wastes as per the norms.

Distance between wastes originating points and final disposal point has a significant role in deciding high workload of sanitary workers. In the study area, in most of the hospitals the waste collection and disposal methods are not scientific in nature, and hence, the place where the waste is finally disposed is normally placed at significantly far distance, especially close to the toilet rooms, and those places are neither given importance nor maintained hygienically. When the hospital neither have lift facilities, ramp facilities nor allowing the employees to use lift facilities, definitely the workload of the employees would increase because they have to lift and carry the wastes of a huge weight physically. Similarly, when the sanitary workers carry the weight physically without any mechanical devices, then workload of the employees would normally increase. Thus, distance between wastes originating points and wastes disposal point has an important role in enhancing the workload of sanitary workers; and hence, the hospital management should arrange transport methods to transport the wastes and implement scientific ways of disposing methods to reduce heavy workload of sanitary workers.

# Size of the hospital

Size of the hospital occupies an important role in determining workload of the employees. The large size of the hospital with adequate numbers of sanitary workers does not cause heavy workload; at the same time, large size of the hospital with inadequate strength of the sanitary workers cause heavy workload to sanitary workers. Normally, in all multi-speciality hospitals corridor, car parking areas, visitors' areas, outpatients' waiting areas, and pathways including steps are common areas, and department wise areas such as patient care areas (intensive care unit, private wards, general wards, emergency department, catheterization laboratory, blood laboratory, pharmacy, outpatient departments) and administrative departments are the places to be cleaned by sanitary workers. The workload of sanitary workers vary according to the areas they are posted. Those who are posted in common areas and administrative do not involve in patient care activities, and they just carryout cleaning, mopping and some assistance activities; those who are posted in patient care areas not only perform cleaning and mopping activities, but also involve in the patient care activities. Thus, workload of sanitary workers become lighter or higher depending upon the work areas they are posted. But, since in the hospital sectors, shift work system is in effect, both light and higher work goes in rotation to the employees.

Majority of the respondents have strongly agreed that 'size of the hospital' is associated with their heavy workload. When interviewed, majority of them reported that the layout of the hospital is much complex, and it sucks too much of their energy. In the study area, multi-speciality hospitals, to an admirable extent, have grown largely; and all hospitals are extending their facilities such as car parking areas, large waiting halls and corridors with new styles in order to satisfy all kinds (lower, middle and upper) of people. Similarly, since all private hospitals wish to run their hospitals in corporate style, and like to enchant the patients,

they give more importance to the cleanliness aspects of the hospitals. Hence, those who work in the common areas need to clean and mop the floor at least minimum two times; and need to wash the common toilets which are used by outpatients and visitors frequently. Thus, although they do not involve in the patient care activities, the workload of the sanitary workers being posted in the common areas is as high as sanitary workers in patient care areas. In the patient care areas, in addition to sweeping, mopping and cleaning toilets two times per day, the sanitary workers also need to give patient care activities such as transporting the patients to the diagnostic centers, giving bath to the prolonged bed ridden patients, cleaning the faeces of the patients, preparing the bed for the newly admitting patients and assisting nursing employees.

The important point to be discussed here is that the factor associated with heavy workload: manpower strength and technological support. Depending upon the manpower of the hospital, the numbers of the sanitary workers are devoted to the common areas: either one or two. Usually, since there are no patient care activities in the general areas, usually two sanitary workers are posted. In some hospitals, sanitary workers posted at the general areas also look after gardening work, which adds significant workload to them. In most of the hospitals, if any sanitary worker is either on leave is absent from the duty in the patient care areas, normally sanitary worker from the common area is shifted to the patient care area. Thus, when one sanitary worker is shifted from the common area, the remaining one employee need to perform the work of two employees, which commonly enhances her or his workload. At the same time, if one employee of common area is absent or avail leave, her or his place is not replaced with another employee by the supervisors. Usually, employee absenteeism is high in the housekeeping department and hence the sanitary worker being posted in the common areas need to work alone most of the time. Since one employee works in the common area, most of the time he or she has to work without any rest because of the heavy workload. Moreover, the supervisors and managers of the housekeeping department lack in motivation skills due to their lack of professional qualification, and hence, the employees who work, most of the time, alone in their department do not get any motivation, which itself enhances their work burden mentally. Therefore, the housekeeping manager should ensure that both enough manpower is available in the department and employees are regular to the duty without absent. The housekeeping supervisor should not treat the housekeeping employee working in the common areas without importance; instead, they should treat them as equal as employees in patient care areas.

### Poorly designed layout

Layout of the infrastructure is closely associated with posture and movements of the employees. The scientifically designed and built organizations cause less movement, avoid unnecessary bending of the body and assist to maintain a good postural condition to the body. On the other hand, poorly designed building, without scientific nature, would cause: excessive walking movements, bending activities and poor postures. Unlike other categories of employees, the work of sanitary workers is closely and largely associated with design of the building. The more poorly designed layout of the building, higher the movement of the sanitary workers. Besides routine cleaning and mopping activities, other important tasks of the sanitary workers: cleaning the desks, clearing the dusts and fans, and washing the utensils used in the department. Generally, the administrative departments are designed with lot of small divisions (partitions) for various categories of the employees; in some hospitals, one

entire floor is allocated for administrative functions, where the offices for all top and middle level managers and chairman and vice chairman exist. As far as administrative departments are concerned, although there is no patient care activities involved, the work of the sanitary workers are manifold: cleaning the toilet room once an hour in some hospitals or four or five times in some hospitals; washing the utensils such as tea cup and plates because the visitors from both inside and outside of the organization to the administrative block are huge. Although these are routine and common duties of sanitary workers in all organizations, those who work in administrative departments have lot of movements because higher officials are visited frequently and all of them have to be served tea or coffee, which enhance their workload when sanitary workers do these works besides their routine sweeping, mopping and other housekeeping works.

Majority of the respondents have strongly agreed that, 'poorly designed layout of the hospital' is associated with heavy workload of sanitary workers. As far as study area is concerned, very few hospitals, which were recently built, have well-planned structure facility, and many hospitals are not. Layout of the emergency department, intensive care unit, operation theatre and other diagnostic departments are complexly built in some hospitals. For instance; in some hospitals the intensive care unit remain next to the emergency department, but in some hospitals the distance between intensive care unit and emergency department is long; and in this case, the housekeeping employees need to transfer the patients from one department to another department and it consumes much time. Normally, although sanitary workers are separately appointed for these emergency department, operation theatre and intensive care units, in addition to their routine cleaning and mopping activities, when they perform these transfer and other activities of patient related, their mobility (movements) gets increased especially when the layout of the structure is complex and different departments are located at different places without close connection structurally. Moreover, in some hospitals, samples of urine and stools of the inpatients are passed to the diagnostic departments through the sanitary workers who are posted in that particular department; and therefore when structurally the diagnostic departments such as blood laboratory is far from the patients' wards (departments where inpatients are admitted), the movements of sanitary workers between these two departments are huge; and in some days many times they have to go to the laboratory department from the patient's ward because when different specialists come to check the in-patients, they may refer the patients to the laboratory. As transporting blood samples and urine samples, the sanitary workers need to transport the patients from inpatient wards and outpatient wards to the diagnostic departments such as X-ray, ultrasound and CT and MRI scans; similarly, sanitary workers need to transport the patients from emergency departments and patient care wards to intensive care units and operation theatre, dialysis unit, lithotripsy and catheterization departments according to the requirements with the help of wheel chair and stretcher. When these departments are far from the departments, where from the patients are transported, the movements of the sanitary workers would be huge. In some hospitals, the stretchers and wheel chair are limited; and therefore two wards need to share one stretcher and wheel chair, and in these cases, the movements and mobility of the sanitary workers are very huge, because they have to go to the department where the stretcher and wheel chair exist and bring them to the department and then transport the patients to the place to be transported. Some hospitals do not have lift facilities and in these hospitals sanitary workers have to transport the patient through the ramp; and in this case, the movements of the sanitary workers increase hugely. Thus, the frequent and increased amount of movements of

the sanitary workers would increase their workload further. Thus, in the hospitals where the layout has been poorly designed, the hospital management should strengthen the facilities such as enhancing the numbers of stretchers and wheel chairs; and increasing the numbers of employees; and also streamlining the systems of the hospitals.

### Lack of technical support to transport garbage and disposal wastes

Technology is largely associated with workload of the employees without respect of type of employees, and it reduces the workload of the employees and gets them productive and motivated. More the technical support the employees receive from the organization, higher the satisfaction of the employees. On the contrary, if employees are not provided enough technical support, they not only commit mistakes in their work, but also they fall in sick frequently, which would lead to the absenteeism of the employees. Since sanitary workers' nature of work is completely physical oriented, if they are provided enough material for sweeping, mopping and other activities, definitely their work would be perfect and they would also feel comfortable and easier.

Majority of the respondents' response have fallen under the response of 'strongly agreed' to the question, 'lack of technical support to transport the wastes to the disposal points'; and during discussion majority of the respondents reported: per day minimum two times they collect the wastes from the concerned departments where they work and transport to the disposal point. They also said: two sanitary workers join together and drag or lift the wastes up to the disposal point of wastes. As far as study area is concerned, most of the hospitals are still following traditional method of cleaning and mopping; they have not transformed to the latest cleaning methods. In very few hospitals, vacuum cleaner and mechanical squeeze mop can be seen being used, and in most of the hospitals they are not, and hence, sanitary workers have to do the work physically. In the hospital industry, the sanitary workers, in addition to cleaning and mopping of floors, toilets, rooms and general areas, they also need to give care to the patients. Therefore, when sanitary workers perform all these works physically under the condition of lack of manpower, fundamentally their workload increases. In most of the hospitals, the sanitary workers are not given even movable mop buckets in which the sanitary workers can twist and squeeze the mop; and hence, they lift and carry the water bucket and need to squeeze the mop by hands. When they do these works: lifting and carrying the water buckets to all places to be cleaned and repeatedly squeeze the mop sponge, definitely it would be the lot of work for them. Moreover, most of the hospitals do not provide hand gloves, face masks and shoes sanitary workers, and hence they do all these works (squeezing the mop with close approach with hands which pushes them to inhale the dusts and smell from the water) without safety devices. These activities not only enhance their workload, but also affect their health dramatically.

Transporting the wastes (medical, plastic and other wastes) is the primary duty of sanitary workers. Depending upon the volume of patients, the volume of wastes accumulated varies. In all hospitals, depending upon the volume of patients, the wastes accumulated are transported to the disposal point inside the hospital, where the wastes are carried out by the government or private organizations to be disposed. Different hospitals use different transport vehicles to transport the wastes depending upon the size of the hospital and management style of the organization. Usually, three wheelers auto-rickshaw operated manually, electric vehicles, container carrier system which either can be pulled or pushed with wheel support,

and compaction vehicles are used in the hospitals to transport the wastes from the place of origin to the disposal point. In most of the hospitals in the study area, sanitary workers manually transport the waste boxes. Markedly few hospitals have some equipment such as manually pushing and pulling vehicles to transport the wastes within the hospitals; some hospitals use wheel chair of the patients to carry the wastes. Depending upon the volume of the wastes, either one person or two sanitary workers join together and shift the wastes to the disposal point by lifting and carrying the waste disposal (container) pins in hands. This is really an additional workload to sanitary workers, and it causes them to undergo sick, because when they everyday carry the heavy weight two or three times for long distance through steps (in case if lift facility is not available) they spend too much energy and use their joints too much, which not only get them tired and cause pains in joints and general body pain and push them to absent from the work in the following days. Thus, in order to avoid excessive workload arising as a result of lack of technical support to handle waste disposal, the management should concentrate on mechanizing the department or appointing sufficient manpower to manage the extra works.

#### Absence of dedicated break areas and dress changing room

A dedicated separate break areas for both male and female employees to rest during break times are necessary to freshen up for the employees, because in the health care field the employees need to be standing most of the time. Since sanitary workers' work is fully physical oriented and throughout the day they stand, walk and bend, all their joints function restless; and hence, they need little rest in between the time to refresh them and stretch their muscle and relax their joints in order to enable them to continue their work further. The works they continue without rest will not only make the body tired soon, but also give the employees the thought of high workload. Now a day, all the industries including health care pay high attention to give break areas to their employees in order to comply with labour laws, but very few organizations give importance to arrange break areas for their sanitary workers; and most of the organizations do not; and in these organizations, sanitary workers share the rest areas of the other category employees.

Majority of the respondents have strongly agreed that, the factor, 'absence of dedicated break areas and dress changing room' is associated with heavy workload. When interviewed, majority of them reported that they do not have separate break areas for sanitary workers and they need to use break areas of other departments' employees with lot of challenges. In the study area, some big hospitals have given common break areas with tables, chairs and newspapers; very few hospitals have given a small room with or without chair for their sanitary workers, but most of the hospitals do not. The sanitary workers in the study area mostly share the rest room of the other category employees such as nurses, laboratory technicians, receptionists, and other female paramedical and nonmedical category of the employees. Thus, since they share the rest room of the other category of employees, most of the floor and lie down on the floor bending their knees due to lack of space. Most of the time, they sit outside the room till other category of employees come out of the room after their rest hours; thus, their break hours do not give them a fruitful result. Most of the time, they continue their work without taking enough physical rest.

Since the hospitals neither give importance to the physical rest of the sanitary workers nor give any proper arrangement to use their break hours usefully, they actually sit on the steps or outside the hospitals. If they lie down for a while, definitely it will give them some relaxation, but since they are able to just sit they neither rest nor relax completely. Since, in the study area, the working hour is long and there is no proper support of technology, when the sanitary workers need to do physical work throughout the day without enough rest to their physique, definitely, their work becomes a big burden to them and continuous work without rest itself become heavy workload although sometimes the works are lighter. Since most of the hospitals have not set separate rest areas for the sanitary workers, in some hospitals, sanitary workers set a resting area for them by themselves by hiding some space in the steps or under the steps, and they take some rest in those areas during their break. The reason why the sanitary workers set up a separate rest room for them by themselves is that actually caste discrimination is still highly prevalent in the study area. Ninety nine percentage of sanitary workers come from the downtrodden community in India; and in the hospital industries also, other category of employees see the sanitary workers inferiorly and they neither like the sanitary workers to join them in the rest area nor have lunch with them. Normally, in some hospitals, sanitary workers who are not assertive do not enter into the rest room, and hence, they wait outside the rest room till other category of the employees finish their resting time; or they set their own rest room in some places which are unused by the hospital. Some hospitals do not allow it, but some hospitals allow it understanding their challenges and physical work. In the hospitals where both sanitary workers are submissive and the management do not monitor the other category of employees, who do not allow the sanitary worker to use the common break areas, the sanitary workers do not take adequate rest; and hence, their work burden increases because they have to continue the physical work without enough rest.

Although some hospitals have given break areas for their employees, that break areas are not furnished well; and some hospitals have, for the name sake, have arranged break area with or without table and chairs. Table and chairs are not sufficient for the number of the employees; and the hospital management do not maintain right schedule for lunch and break for their employees; and hence, most of the time employees of different department meet in the break area at the same time. As a result of this, break area is always crowded most of the time all days; and hence, the sanitary workers do not get place inside the break area room. Due to this, they do not take enough rest either by sitting or lying down; and thereby they continue the work without taking enough rest which itself cause their work double. Thus, inadequate and improper break area is associated with heavy workload of the sanitary workers, the hospital management should provide a separate break area for the sanitary workers understanding their physical work and need of adequate physical rest and relaxation.

### Not allowed to use the lift; and need to use the steps compulsorily

Steps, ramps and lift facilities are largely associated with day to day life of the employees of all categories. Although they are structural related factors of the hospital, they are big part of the physical working environment of an organization, and play a major part in deciding the workload of the employees depending on how the employees use them or are allowed to use them. Some hospitals do not have lift facilities; and although lift facilities are available, some hospitals do not allow their employees to use it due to the heavy loss of electricity expenses. Multi-speciality hospitals have two to five floors depending upon the size and speciality of the hospitals. Most hospitals have minimum two floors for patients' service and one or two floors

for administrative and accommodation purposes. In some hospitals, lift and ramp facilities have been made up to the floor of patients' related areas, and steps facilities are given for administrative and accommodation areas. On the other hand, some hospitals have both lift, ramp and also steps facilities for all the floors.

Majority of the respondents have strongly agreed that the factor, 'not allowed to use the lift, and need to use the steps compulsorily' as associated with heavy workload. In the study area, some hospitals do not allow their employees to use the lift facilities; and lift facilities are available only for the patients and medical personnel. And, the employees working in these hospitals have to undergo huge strain since all medical and paramedical employees cannot sit and work; and their nature of work consists of walking and standing. On the other hand, comparatively, the non-medical employees do the work in sitting posture and their movements such as walking and standing are less than medical and non-medical employees. Among the non-medical employees, sanitary workers do all the work in standing and walking positions. Although sanitary workers are posted in one place (ward), their nature of work get them to go to all floors and areas. For instance, after their cleaning and mopping work, they have to transport the wastes to the disposal point which is actually located at the ground floor; and therefore those who work on the first and above floors have to use steps or ramps to transport the wastes. In these cases, if the lift is not allowed their workload becomes high.

With regard to non-work related, since the employees are not allowed to use lift machine, all employees need to use steps or ramp to go to rest room which, in most of the hospitals, are normally located at the ground floor and at the corner. Normally, an employee go to the bathroom at least minimum three to four times in a day, and when they have to use steps and ramp, their movements become huge because most of the hospitals do not have separate rest rooms for the employees in each floor; and hence, they have to use the common rest room. As far as sanitary workers are concerned, when the walking movements they use to go to the rest room in addition to the movements they make towards their work, their movements become double. Other employees' walking movements related to the work are less when compared to sanitary workers.

Some hospitals use a particular floor especially top floor or underground floor as a storage room for medical records, storage rooms for the purchasing department and pharmacy department. Although the housekeeping employees do not have any role with these departments, whenever various medical, non-medical and para-medical departments need to transport the items to and from the storage department, the concerned department's manager use assistance of sanitary workers. Although these are not the works of the sanitary workers as per their job description, they are forced to do all these works without any monetary benefits. Since the lift is not allowed to be used by the sanitary workers, they have to carry all these materials (such as medical records, materials sent by the purchasing departments to various departments and pharmacy medicines) through the steps by walk, and in most of the hospitals ramp facilities are not available for the floors which are not patient care area related. Although sanitary workers are allowed to use lift facilities, when sanitary workers transport the materials from various departments to the storage departments and from the storage departments to various departments, their workload increases because in housekeeping departments of most of the hospitals in the study area, lack of manpower highly exist; and therefore, these works forcefully allocated to them would definitely be the extra burden both physically and mentally; and hence they remain as the heavy workload for them.

Similarly, in some hospitals, the rest rooms for the medical personnel is located on the top floors and in most of the hospitals the administrative block is located either on the underground floor or top (last) floors. Medical personnel usually use the sanitary workers for their personal works such as buying tea, coffee, lunch from the hotel either inside or outside the hospital. Although these works are not part of their work, they, due to their illiteracy and submissiveness and communal background, carryout these works without denial; and these work adds up with their routine work and causes more movements through the steps and remain the heavy workload for them.

#### Absence of accommodation facilities to stay

Accommodation facilities (hostel) occupy a crucial role in deciding rest of employees, which further determine the quality of work in the next working day. Hostels prevent the employees from unnecessary long travel every day and provide them a deep relaxation especially for those who works for long working hours and two shift work system. But, the problem is that sanitary workers are not given accommodation as other category of employees enjoys. Mostly, sanitary workers come from the local communities which are around or close to the hospitals areas, and few employees come from far distance. Moreover, in the housekeeping department, few sanitary workers are unmarried. Although they need hostel facilities, they are not given; and hence they go to the work as a day scholar.

Majority of the respondents have strongly agreed that absence of accommodation facilities is associated with heavy workload of the employees. In the discussion, majority of the respondents reported: 'hospitals do not provide hostel facilities to stay on monthly basis or even for one day period during emergency situations'. Due to high level of absenteeism and lack of manpower, frequently sanitary workers need to extend their duty, and hence they need to stay at hospital. During those times, they use the patients' bathroom as their convenience area and take shower in there, and rest their body just sitting here and there in the hospital without even sleeping for a little time and continue their physical work. Sometimes, during emergency situations, if sanitary workers need to work extra hours, they do not have any place to stay. Although there is free space, they are not allowed to stay at the hostel like how other category of employees do. Sanitary workers just sleep in the hospital beside any steps or any other place where they can rest their body. Hospitals neither provide them a separate and exclusive accommodation facilities (hostel) for sanitary workers, and nor are concerned about their stay. Due to these reasons, they undergo to the situation of sexual exploitation by males because of their lower community background, illiteracy and submissiveness. These kinds of denial and lack of concerns of the hospitals actually get sanitary workers restless mentally and cause them undue stress. These sort of mental stress and restless work increase their mental work burden, which impact on their actual work. Because of denial or absence of hostel facilities for the sanitary workers, they are put in compulsory situation of travelling every day. Those who live close to the hospital premises or reachable distance, do not have any issues if they are not provided hostel facilities. But, for those who go to the duty from far distance, the absence of hostel facility remain a major burden because they spend a significant amount of energy in travel and then when they continue their work they become tired very soon, which affect their work. And, especially, when they continue their work without adequate physical work, definitely their workload become double mentally. The denial and absence of hostel facilities majorly affect unmarried people. Despite strong and no family commitments as married people, when they unnecessarily travel every day long distance, their body gets tired, which also impact on their work and health. Hence, in order to neutralize the heavy workload and promote the rest and health of sanitary workers, the hospitals should provide them a proper hostel facilities for those who are in need considering them as important employees as same as how the hospitals do to other category of employees.

### Absence of convenience facilities: drinking water and separate

Proper convenience facilities are crucially needed for all employees to facilitate their work in the workplace. Large numbers of people, now a day, are suffered with diabetes mellitus; and hence, in most of the organizations, employees above forty years of age frequently go to the convenience, and despite no diabetes mellitus, normally a man goes to bathroom three to four times per day. As far as hospital is concerned, some of the employees work in the intensive care unit which is fully air-conditioned; and hence they go to bath-room many times than other employees do because of the chillness in work environment. Similarly, sanitary workers consume large volume of water than other employees because of their physical nature of work; and hence, they frequently go to bathroom for urination. Under these conditions of employees, if employees are not provided with enough convenience (bathroom) facilities, and they are forced to use the common rest room which customers and all category of employees commonly use, they have to walk every time to the common rest room and need to wait to use it. This kinds of increased walking and waiting time would get added with their workload causing their workload high.

Majority of the respondents have strongly agreed that the factor, 'absence of convenience facilities: drinking water and separate toilet' is associated with heavy workload for them'. When interviewed, majority of them reported that they struggled a lot for drinking water and to use toilet rooms because of lack of enough toilet rooms. In the study area, in most of the hospitals, there are two or three bathrooms available for all women employees irrespective of types of employees; and hence, all employees compulsorily have to use those bathrooms because male employees can go to outside if they are abreast, but it is not possible for women employees. Moreover, the bathroom in most of the hospitals is located at the ground floor, and the employees working at the first or second floor need to walk down either through steps or lift to the bathroom. When an employee need to go to the bathroom three or four times, it would be the unnecessary movements. Other category of employees in hospitals do work in sitting posture; and even if they have to happen to do some work in standing position (e.g. nurse, pharmacists and laboratory technicians) they do not stand for the long time and they can sit after their particular work. But, this is not possible for sanitary workers; they have to do all works physically in standing positions. Therefore, under this condition, if they happen to go to bathroom either from the first or second floors or from under-ground, their physical movements are increasing, which when added with their workload, their workload becomes high. Besides, the employees need to wait in the bathroom to use it in some big hospitals, which also get them spend lot of energy from their body.

The same situation is with drinking water facilities in many hospitals. Drinking water point is commonly located at the particular place, which employees of all departments have to use. In some organizations, the drinking water has been fixed in each floor; all employees in that floor can use that particular drinking water; and in this case, at least the movements of the employees are less. However, when employees of different departments need to use the drinking water placed at one place, the movements of the employees' increase, which, when

added with their routine work additionally, would increase their workload. For administrative and medical category employees, they have separate drinking water facilities; however, other category of employees' especially non-medical category employees who do not have separate departments who sit and do the work do not have a separate drinking water facilities. Especially, sanitary workers do not have a separate drinking water facilities because their office is fully used by their managers; sanitary workers just go to the department to collect resources for their work and information whenever they need. In some hospitals, managers allow sanitary workers to drink water from the water point in the department, however, when the numbers of employees are huge, managers do not allow sanitary workers. Due to these reasons, sanitary workers go to different departments to fetch water when there is no water in the common water point. Thus, lack of drinking water facility is associated with heavy workload of sanitary workers. Therefore, hospital management should make necessary infrastructure that all employees can avail water easily whenever they are in need of.

### Absence of maternity related aids: crèche and feeding room

A significant numbers of housekeeping employees in some hospitals are married and they have kids. As far as private organization is concerned, very few hospitals provide their employees maternity benefits: holidays with monetary benefits, however, most of the hospitals do not. Since all sanitary workers come from downtrodden community with low income level and are illiterate, they usually come to the work till last month of delivery of the child, and immediately after the delivery they begin coming to the job without taking enough rest. Some employees resign their job after the delivery because there is no people at home to take care of their child, and some employees leave their kids at their relatives or elder people at home and go to the job since hospitals do not provide crutch facilities. Very few hospitals which are large and run on corporate style have crutch facilities and have supportive staffs to run crutch center and give enough care to the kids. But, sanitary workers face discrimination, and mostly kids of educated employees are normally taken care of in those crèche.

During the pregnancy period, enough rest is paramount, but in most of the hospitals, sanitary workers are not given sufficient rest because the supervisors of the housekeeping department are not highly educated and are lacking leadership qualities. And hence, the supervisors of the housekeeping departments do not know how to get work from them in a nice way that it does not hurt them and their pregnancy. Moreover, in private hospitals no adequate concern is given to pregnant employees especially sanitary workers. Very few supervisors who are experienced in management field and aged understand the health challenges of pregnant ladies and their family financial issues, and show some leniency in work by allocating lighter workload and simple work areas and permitting them to take rest during the course of work.

Majority of the respondents have strongly agreed that, 'absence of maternity related aids: crèches and feeding room' is associated with heavy workload for them. When interviewed, majority of them reported that they are not provided any maternity benefit (paid leave) and the hospitals do not have the facilities of crèche for their kids. In the study area, those who come to the work from nearby areas of the hospitals go to the house during lunch break and feed the children and then again to the work. However, this happens in very few hospitals and in most of the hospitals this privilege is not provided. The employees have to leave after the working hours, which itself is the mental burden for them. In very few hospitals, supervisors or managers of the housekeeping department allow the employees to leave from the job earlier before the closure of working hours considering their children, but in most of the hospitals they do not. Due to this reason, after the work, they have to rush home and feed the kid; and next day they have to go to the duty without any relaxation in the arrival time to the duty. Since already their body is weak and they have to continue the same level of workload without any changes in their work schedule and work assignments, their workload would be very heavy for them, especially because of their weak health. With weak health, when they climb the steps and ramps, doing mopping, transporting the patients, and collecting and transporting hospital wastes, their work would remain hard for them. Thus, in order to get the sanitary workers work comfortably without stress, the supervisors should assign them lighter workload and enough rest understanding the facilities not provided to them from the hospital side and their financial conditions. Similarly, supervisors can give them some relaxations in their working hours: both arrival and exit time from the duty. In the same way, the hospitals can establish crutch facility for sanitary workers if numbers of employees are huge, which will definitely keep them free from stress and give them mental satisfaction and get them to concentrate on their work.

#### No free lunch or no food with concession rate

The nature of work of sanitary workers is fully physical oriented; and hence, they need to take enough food to enable them to perform their duties. However, their poverty level, family situations, low salary and illiteracy remain the big inhibitors of taking both sufficient and balanced diet. Hence, normally majority of sanitary workers in all hospitals are malnourished and still continue their work. Their family burden is also one of the main reasons for their ill health, because most of the sanitary workers have many kids at home because of their illiteracy; and hence, their household work is also huge; which impacts mainly on their health. Another reason is travel: a significant numbers of employees travel from far distance to the workplace because of living expenses within the city limit, which highly impacts on their health. Low salary also is one the reasons for their poor health. Most of the hospitals do not follow rules and policies of the government in offering salary to their employees; especially sanitary workers are paid low salary. Although there is a small positive changes in many hospitals in offering salary to the sanitary workers, the salary given to them is not enough when compared to their work and contribution. Long working hours and lack of manpower existing in many hospitals are also reasons for their ill health. Therefore, they need to consume sufficient food to effectively manage their heavy workload.

To the question, 'how not getting free lunch or no concession for food received from the hospital canteen, the response of majority of the respondents have fallen under: Strongly agree. In discussion, majority of them reported that they do not receive any food from canteen either at free of cost or concession rate. In the study area, most of the sanitary workers who go to the work from long distance leave from home earlier, and hence they cannot take food at home. They bring food to the workplace and have it from there. But, most of the time, they cannot take food on time; they have to start the work as soon as they arrive at the workplace; and hence, they post pone their breakfast. Moreover, most of the sanitary workers cook only one time per day, especially at night, and take the same food in the morning and bring the same food to the workplace for lunch; therefore, they are already spoiled. Sometimes, they bring insufficient food for both breakfast and lunch, which is not enough for both time. Very few hospitals provide food on concession rate for their employees. Those employees who stay at hostel are given food on concession rate from the

hospital which runs attached canteen. Other day-scholar employees are not given any concession for the food taken from hospital canteen; and hence, they have to take food with the same rate what patients pay to the food, which normally is expensive. Due to expensive rate, sanitary workers do not take food from the hospital canteen; sometimes they go outside the hospital and buy food from the road side food shops if they have money. However, most of the time, they do not take food despite hunger; they manage with tea. Their lack of knowledge about diet cause them not to think about the importance of balanced diet to their health, and hence they skip taking food sometimes, which lead them to develop ulcer and weaken their health.

The condition of night shift employees is worst, because if the employees arrive at the duty at 8.00 pm for night shift, they have to work till next day morning 9.00, which more than 12 hours. Mostly some of the employees who come to the night shift take their food at home, but some employees bring food to the hospital and take it during the rest time. Even at the night shift, the employees do not get any food from the hospital at concession rate. Most of the hospitals close their canteen in the night, and hence, even if the sanitary workers feel hungry at night, they cannot have any food; and they have to continue their work in starving. In most of the hospitals, during night shift, sanitary workers are allocated to the departments in single digit which is not enough to manage the patients' ration in the department; and hence the workload of the employees remain high. Under this condition, if the employees need to perform their work with half-filled stomach or starving, definitely, mentally they feel their work remains heavy, which endanger their health condition; and they cannot concentrate on their work. In the same way, they have to wait to reach home to take their next food. As usual, they cannot exit from the duty on time most of the time because of late arrival of the opposite duty employees; and hence they cannot even take their next food in the morning on time, which also impacts on their health. Hence, the hospital management should provide, atleast, one time food at free of cost as per the government norms or can offer a little concession to the sanitary workers for canteen food to enable them to concentrate on their work fully and work both physically and mentally healthy.

### 5. Recommendation and Conclusion

### Recommendation

Based on the results of the study, the researcher presents the following recommendations to reduce the heavy workload of sanitary workers arising as a result of physical working environment and welfare facilities related factors:

• The hospitals should provide transport facility to travel at-least within a city limit when the location of hospital is not accessible to the public transport to assist employees who come from far distance. Transport allowance can also be provided to them to get them satisfied mentally and to get them to cope up with long working hours.

• In order to cover up the distance between waste originating points (place) and waste disposal point, the hospital should provide mechanical supports (e.g., a small pushing vehicle) to transport the wastes; and also sanitary workers should be provided technical devices (such as vacuum cleaner) to facilitate their cleaning work. Similarly, they should be allowed to use lift facility for work purposes.

• Adequate manpower should be employed in the housekeeping department to balance the work without increasing the workload on few employees; and the housekeeping manager should ensure that each department has sufficient numbers of employees according to the volume of works in the department; and also, the managers should allocate additional manpower if the department is large and complex in nature in terms of layout.

• Hospitals should provide accommodation (hostel) facilities for sanitary workers as equal as other category of employees, and provide a separate, dedicated rest areas to relax during their rest hours, and also the separate toilet and drinking water facilities for them realizing their physical work.

• Hospitals should provide sanitary workers maternity benefits (paid leave) and crèche facility as how they are given to other category of employees. The managers should be much concerned when assigning tasks to the pregnant employees. In the same way, hospitals should either provide a free lunch or offer food at concession rate at the canteen for sanitary workers.

### Limitation of the study

The study has the following limitations. The first limitation is the study area; number of hospitals and type of hospital: The study has focused on only Tirunelveli city, and not entire District. Besides, it has included limited leading private multi-speciality hospitals, and not all hospitals in the study area. And, it has not focused on single speciality hospitals, government hospitals, diagnostic centers and clinics. The second limitation of this study is sample size and sampling technique: The study has sampled only 80 respondents using both convenient and judgement sampling techniques which are non-probability sampling techniques. It has not used any probability sampling techniques. The third limitation of this study is the target respondents: The study has researched about sanitary worker (the non-medical category of employees); and it has not covered any other type of medical employees such as junior medical officers, medical consultants and surgeons; other non-medical category of employees such as cafeteria department employees, security guards, maintenance department employees, front office employees and other administrative employees; and paramedical category of employees such as nurses, pharmacists, laboratory technicians and radiographers. The fourth limitation of this study is variables analyzed in this study: The study has analyzed two variables namely physical working environment and welfare facilities related factors, and their association with heavy workload, but it has not focused on any other factors which are associated with heavy workload such as shift, working hours, professionalism, leadership, resources, role, compensation, and motivation. As a result of these limitations, caution is strongly required to generalize the results of this study to other category of employees, other type of hospitals, and study area, because physical working environment may be well structured or not; and similarly welfare facilities may be strong or weak in other hospitals in the study area, and hospitals in other areas in the same District, other Districts, entire state and entire country.

# **Direction for future study**

This present study will serve as a strong base for future research studies in multiple ways. Firstly, future research can be undertaken with the same topic covering sanitary workers in all hospitals in the study area with large sample size and using probability sampling techniques; and also be extended to the entire District, other Districts, and entire State. Secondly, future research can be undertaken applying the same concept to different professionals in other sectors such as banking, insurance, hotel, education, transport and so on. Thirdly, comparative study can be undertaken as to how far the organization structure and management practice related factors causing heavy workload among sanitary workers in private multi-speciality hospitals differ from, and similar with sanitary workers of other type of hospitals such as single speciality hospitals, diagnostic centers, and government hospitals. Fourthly, Similarly, besides extending the same concept to other category of employees in the health care field such as other non-medical, medical and paramedical disciplines to know how for physical working environment and welfare facilities related factors have influenced their workload; the same concepts can be analyzed as a comparative study between disciplines, (between paramedical and medical, or paramedical and nonmedical category employees), district wise and state wise. Fifthly, future research can be undertaken administering other variables such as shift, working hours, professionalism, leadership, work-life imbalance, resources and, motivation as independent variables; and how far they are associated with heavy workload of not only sanitary workers, but also other category of employees in not only health care industry, but also other industries.

#### Conclusion

This survey, quantitative and empirical based descriptive research analysed the perception of sanitary workers working in private multi-speciality hospitals in Tirunelveli city of Tamil Nadu, India towards various physical working environment and welfare facilities related factors causing heavy workload. In order to achieve this objective, the study has sampled 80 respondents using both convenience and judgement sampling techniques; and from the chosen respondents the primary data were collected using schedule method with the help of questionnaire (translating the questions in respondents' mother language, 'Tamil') along with interview. The secondary data were collected from journals, conference proceedings and government websites to add appropriate significance to the study. Percentage method administered to analyse both demographic characteristics of the study, and perception of the respondents towards physical working environment and welfare facilities related factors causing heavy workload has discovered that majority of the respondents strongly agreed that the factors: location of the hospital and absence of transport facilities by the hospital, distance between departments and garbage storage, lack of technical support to transport garbage and disposal wastes, not allowed to use the life and need to use the steps compulsorily, complex layout of both the departments and the entire hospital, and size of the hospital are associated with heavy workload under physical working environment related factors. Similarly, majority of the respondents have agreed that the factors: absence of accommodation facilities to stay, absence of dedicated break areas and dress changing room, absence of convenience facilities (drinking water and separate toilet), absence of maternity related aids (crèche and feeding room), and no free lunch or no food with concession rate under welfare facilities related factors. The study has recommended the hospitals that sanitary workers should be provided with the following facilities to reduce both their mental and physical work burden: transport facility, transport allowances, technological support, accommodation, drinking water, toilet, separate rest area, maternity leave with salary and crèche. Besides, the management should appoint adequate manpower to avoid heavy workload accumulated on few employees, and also should provide leadership training to the managerial level employees to treat sanitary workers with humanity without bias. In sum, since sanitary workers are highly responsible

for maintaining cleanliness of hospital environment, which is the primary deciding factor of patients' satisfaction and reputation of the organization, hospitals should pay high attention to provide them with rich and harmless working environment, and adequate welfare facilities to enhance their mental satisfaction and reduce both their physical and mental work burden.

#### References

- Birhanu M, Gebrekidan B, Tesefa G and Tareka M (2018). Workload determines workplace stress among health professionals working in Felege-Hiwot Referral Hospital, Bahir Dar, Northwest Ethiopia. Journal of environmental and public health, 1-8.
- Harmen H, Amanah D and Harahap DA (2020). The workload and organizational commitment to job satisfaction. The international journal of humanities and social studies, 8 (6), 205-215.
- Hoogendoorn ME, Brinkman S, Bosman RJ, Haringman J, Keizer NF and Spijkstra JJ (2021). The impact of COVID-19 on nursing workload and planning on nursing staff on the intensive care: A prospective descriptive multicenter study. International journal of nursing studies, 121, 1-8.
- Jornuad PD, Antiquina MM, Cericos EU, Bacus JA, Vallejo JH, Dionio BB, Bazar JS, Cocolan JV and Clarin AS (2021). Teachers' workload in relation to burnout and work performance. International journal of educational policy research and review, 8(2), 48-53.
- Keser A. (2006). Research of Workload Level and Job Satisfaction of the Call Center Personel. Journal of Kocaeli University Institute of Social Education), 1, 100-119.
- Kokoroko E and Sanda MA (2019). The effect of workload on job stress of Ghanian OPD nurses: The role of co-worker support. Safety and health at work, 10, 341-346.
- Mercin S, Ipcioglu I and Koca G (2018). 'Analysis of the workload of nurses'. Health care academic journal, 5 (3), 238-245.
- Maulana A and Risal M (2022). The effect of work motivation and workload on employee performance in regional research and development agency. Jurnal Mantik, 5 (4), 2280-2285.
- Munandar A, Musnadi S and Sulaiman (2018). The effects of work stress, workload and work environment on job satisfaction and its implication on the employee performance of Aceh investment and one stop agency. Journal of Magister Manaj, 2 (1), 123-134.
- Ramdas IM and Sari DW (2022). Work related stress among nurses during COVID 19 pandemic and its correlation with workload, work environment, shift work and working period. Malaysian journal of medicine and health sciences, 18 (3), 49-54.
- Rajan D (2019a). Leadership related factors causing heavy workload: An empirical study among sanitary workers. *Training and Development Journal*, 10 (1), 11-32.
- Rajan D (2019b). Lack of resources related factors causing heavy workload: An empirical study of sanitary workers. *QUEST: Journal of management and research*, VIX (2), 1-26.
- Rajan D (2019c). Perception of work shift and workload among sanitary workers: An empirical study. *PRERANA: Journal of management thought and practice*, 19 (2), 1-22.
- Rajan D (2020). Long working hours related factors causing heavy workload: An empirical study among sanitary workers. *Indian journal of applied economics and business*, 2 (2), 143-169.
- Rajan D (2021a). Role and compensation related factors causing heavy workload: An empirical study of sanitary workers. *Eurasian journal of higher education*, 2 (2), 16-38.

- Rajan D (2021b). Organization structure and practice related factors causing heavy workload: An empirical study among sanitary workers. London journal of social sciences, 1 (2), 99-129.
- Rostamu F, Babaei-Pouya A, Teimori-Boghsani G, Jahangirimehr A, Mehri Z and Feiz-Arefi M (2021). Mental workload and job satisfaction in health care workers: The moderating role of job control. Front. Public health, 9:683388, 1-11.
- Saglamari G and Cinabal B. (2008). Burnout Concept: It's Importance in terms of Individual and Organizations. Management and Economy, 15 (1), 131.
- Saputera B and Suhermin (2020). Understanding nurse workload, work stress and supervision on influence of clinical performance. A paper presented in the first international conference on business and social sciences on 'Sustainable business practices in digital environment' 3<sup>rd</sup> and 4<sup>th</sup> October 2020.
- https://labour.gov.in/policies/safety-health-and-environmet-work-place, accessed on 19-03-2022.