

Ergonomic Factors

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ABSTRACT: Ergonomic factors are the factors that are really important to be the performance basis. With a facility that meets the ergonomic standard workers and consumers will get gratification. Where to workers would settle workplace comfort and facilities to support the performance. The purpose of this study is to identify and analyze the available literature; to how learn ergonomic factors will influence the customer and employee satisfaction.

Keywords: Ergonomic factors; Satisfaction; Clinics;

INTRODUCTION

In demography development or growth in the number of students will be increased for each year. Polyclinic aims to enable students can get to know about their health during the university environment. For as in the learning process within the university will undergo a lot of accidents in the learning process or unanticipated events. Therefore the university clinic were made in order to minimize the increase in the level of seriousness of the accident or alleviate disease conditions was happening at that time who were among universities. Ergonomics is a branch of science that is concerned with the achievement of optimal relationship between workers and their work environment. Why do researchers need to conduct research focused on "*The Ergonomic Factor Of Facilities University Polyclinic, About Satisfaction Of Student And Staff*". Which aims to find out what are the factors influence the level of student satisfaction or clinic staff satisfaction working at the clinic. There is also the factor that the facility would be quite vulnerable factor in achieving value on student satisfaction and the staff that works.

LITARATURE

Ergonomics is the science of learning other multidisciplinary science that bridges multiple disciplines and professional, as well as summarize the information, findings, and principles of each of these sciences. Science in question include physiology, anatomy, physiology, physics, and engineering. Ergonomics is the "science" or a multidisciplinary approach that aims to optimize the human - system work, in order to reach tools, ways and healthy working environment, safe, comfortable, and efficient. Ergonomics is the science, art, and technology practices to harmonize or balance between all the facilities that are used both in activity and a break with the capabilities and limitations of humans both physically and mentally so that the overall quality of life for the better .Ergonomics is the science of man in an attempt to improve the comfort in the work environment. Ergonomics is the science and application which seeks to harmonize the work and the environment against people or vice versa in order to achieve productivity and efficiency as high through optimum utilization of man - optimal .Ergonomics is the practice of designing equipment and details of the work according to the capabilities of workers in order to prevent injury to workers [2].

Human Factor & Ergonomic (HF&E) is employed to fulfill the goals of health and safety and productivity. It is relevant in the design of such things as safe furniture and easy-to-use interfaces to machines and equipment. Proper ergonomic design is necessary to prevent repetitive strain injuries and other musculoskeletal disorders, which can develop over time and can lead to long-term disability. Human factors and ergonomics is concerned with the "fit" between the user, equipment and their environments. It takes account of the user's capabilities and limitations in seeking to ensure that tasks, functions, information and the environment suit each user.

To assess the fit between a person and the used technology, human factors specialists or ergonomists consider the job (activity) being done and the demands on the user; the equipment used (its size, shape, and how appropriate it is for the task), and the information used (how it is presented, accessed, and changed). Ergonomics draws on many disciplines in its study of humans and their environments, including anthropometry, biomechanics, mechanical engineering, industrial engineering, industrial design, information design, kinesiology, physiology, and psychology[4].

Ergonomics (of human factor) is the discipline concerned with the understanding of interaction among human and other elements of system and the profession that applies theory, principle, data and methods to design in order to optimize human well-being and overall system performance. The Human Factor & Ergonomic (HF&E)discipline has had a major impact in health care to help those help care leader, and managers understand the human mechanisms in medical errors and the influence of system characteristic on human behavior and human error. Improvement in work design are also necessary for many other health care job categories, for example by job dissatisfaction, stress, burnout, experienced by physicians [12].

The high incidence of musculoskeletal disorders (MSDs) among healthcare workers suggests that the introduction of ergonomic interventions could be beneficial. While laboratory studies have clearly documented the efficacy of ergonomic devices, few studies have examined their effectiveness in the healthcare workplace. This study suggests that ergonomic consultation and financial support for purchasing ergonomic equipment can be an effective intervention to reduce MSDs among healthcare workers [5]. This study evaluated the effect of a statewide ergonomic intervention program on MSD rates among employees among healthcare facilities. The interventions provided through this program were associated with decreased MSD rates. Comparisons among different types of interventions (i.e., reduction of bending, elimination of lifting, reduction of lifting, and a combination of the three) showed that each type of intervention was associated with decreased MSD rates. This study has a number of strengths. The sample size allowed us to

examine the results across facilities rather than individuals. The participating facilities were diverse in type, size, and location. Also, the injury data were collected repeatedly over a 2-year span of follow-up. All these characteristics enhance the utility and generalizability of our findings [5].

Adequate and appropriate exposure to light is critical for health and well-being of patients as well as staff in healthcare settings. A combination of daylight and electric light can meet these needs. Natural light should be incorporated into lighting design in healthcare settings, not only because it is beneficial to patients and staff, but also because it is light delivered at no cost and in a form that most people prefer. Most healthcare settings, as well as other buildings, are lit by a combination of daylight entering through windows and skylights and electric-light sources. It is important to understand how these two types of light sources differ to understand their relative impacts on human health and performance. Sunlight is electromagnetic radiation in the wavelength range that can be absorbed by the photoreceptors of the eye. Sunlight provides a balanced spectrum of colors with elements in all parts of the visible wavelength range. The actual wavelengths present in daylight vary over the day with latitude, meteorological conditions, and seasons. In contrast, light from most artificial electric-light sources, such as cool white fluorescent light and incandescent lights, are composed of wavelengths of lights that are concentrated in limited areas of the visible light spectrum, for example, yellow to red end or orange to red end of the spectrum [3]. Full-spectrum electric light sources such as xenon lamps and some filtered incandescent lights that have a spectral content similar to daylight, though their spectral content does not vary over time, are now available. Studies suggest that daylight is not inherently superior to artificial lighting for performance of most visual tasks. However, natural light has benefits over electric-light sources in regulating circadian rhythms and maintaining overall health. The most obvious effect of light on humans is in enabling vision and performance of visual tasks. The nature of the task as well as the amount, spectrum, and distribution of the light determines the level of performance that is achieved. Performance on visual tasks gets better as light levels increase. If the amount and distribution of light are controlled, most everyday visual tasks (such as reading and writing) can be performed as well under artificial light sources (such as fluorescent light) as under daylight conditions. However, daylight is superior for tasks involving fine color discrimination when it is provided at a high level without glare or any reduction in task visibility caused by veiling reflections or shadows [3].

The Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008, presents evidence-based recommendations on the preferred methods for cleaning, disinfection and sterilization of patient-care medical devices and for cleaning and disinfecting the healthcare environment. This document supersedes the relevant sections contained in the 1985 Centers for Disease Control (CDC) Guideline for Hand washing and Environmental Control. Because maximum effectiveness from disinfection and sterilization results from first cleaning and removing organic and inorganic materials, this document also reviews cleaning methods. The chemical disinfectants discussed for patient-care equipment include alcohols, glutaraldehyde, formaldehyde, hydrogen peroxide, iodophors, or thophthalaldehyde, per acetic acid, phenolic, quaternary ammonium compounds, and chlorine. The choice of disinfectant, concentration, and exposure time is based on the risk for infection associated with use of the equipment and other factors discussed in this guideline. The sterilization methods discussed include steam sterilization, ethylene oxide (ETO), hydrogen peroxide gas plasma, and liquid per acetic acid. When properly used, these cleaning, disinfection, and sterilization processes can reduce the risk for infection associated with use of invasive and noninvasive medical and surgical devices. However, for these processes to be effective, healthcare workers should adhere strictly to the cleaning, disinfection, and sterilization recommendations in this document and to instructions on product labels. In addition to updated recommendations, new topics addressed in this guideline include 1) inactivation of antibiotic-resistant bacteria, bioterrorist agents, emerging pathogens, and blood borne pathogens; 2) toxicological, environmental, and occupational concerns associated with disinfection and sterilization practices; 3) disinfection of patient care equipment used in ambulatory settings and home care; 4) new sterilization processes, such as hydrogen peroxide gas plasma and liquid per acetic acid; and 5) disinfection of complex medical instruments (e.g., endoscopes) [7].

There are many different types of ergonomics job analysis methods. These methods consist of various techniques for taking a systematic look at jobs and work tasks. They help you decide which jobs and specific tasks may contribute to problems. Once you know where problems may exist, it is easier to come up with ideas for making improvements. Some methods are relatively simple, and others require detailed analysis and sophisticated equipment. Checklists are generally a simpler, less comprehensive type of ergonomics job analysis method. More comprehensive methods break jobs down into specific movements (e.g., reach, grasp, place) or use other complicated techniques. Ergonomics job analysis methods also vary according to what types of work activities they address. Some focus on workstation design. Others are more specific to certain types of work (e.g., manual materials handling or the office environment) or focus on the work environment (e.g., lighting, cold exposures). See the Resources section for references on methods that are more comprehensive than the checklist provided here [1].

Client satisfaction occupies an 'intermediate' step in establishing a healthy culture for evaluation within a program or a setting. It often follows process evaluation and cost analysis, and precedes outcome and economic evaluations. Accordingly, measures of client satisfaction lie somewhere between 'process' and 'outcome' measures. When the concern is with the extent to which clients are satisfied with the context, processes, and perhaps the costs of a treatment service or network, the relevant measures of satisfaction can be viewed as process measures. However, when the concern is with the extent to which clients view the program as having been helpful in resolving their problems, client satisfaction becomes a proxy outcome measure. Client satisfaction with treatment processes may both influence, and be influenced by, treatment outcomes. Clients who are not satisfied with a service may have worse outcomes than others because they miss more appointments, leave against advice or fail to follow through on treatment plans. On the other hand, clients who do not do well after treatment may have less than favorable attitudes towards a treatment service, even if it was of high quality by other criteria. In practice, these mutual influences may be difficult to disentangle. It is worth keeping in mind that satisfaction with the treatment processes, treatment compliance, and positive treatment outcomes are interrelated.

Client satisfaction ratings have been criticized as indicators of the quality of human services because they may reflect unrealistic expectations. While this criticism may be valid in some instances, research with clients of mental health services suggests that they can effectively discriminate between services that are different in quality. It is, however, important to recognize that evidence of positive

client satisfaction is not, in itself, sufficient to establish the effectiveness or accessibility of treatment. Clients with no base for comparison may be satisfied with services that are _ineffective _as determined by more objective outcome evaluations. On the other hand, clients may be displeased with services that achieve the objective of reducing their PSU but employ rigid or authoritarian approaches [9].

The —voice of the customer refers to your process for capturing patient and stakeholder related information. Voice of the customer processes are intended to be proactive and continuously innovative to capture stated, unstated, and anticipated requirements, expectations, and desires of patients and stakeholders. The goal is to achieve customer engagement. Listening to the voice of the customer might include gathering and integrating various types of patient and stakeholder data, such as survey data, focus group findings, blog comments and other social media data, and complaint data that affect patients' and stakeholders' purchasing and engagement decisions. Clinics should solicit client comments regarding services provided and use such observations to improve clinic services. Clinics should create a method of soliciting these assessments that is appropriate, depending on the services provided to the client. Clients should be advised that their participation in surveys is voluntary. Customer satisfaction when a product or service meets or exceeds a customer's expectation, the customer is usually satisfied.

CONCLUSION

Based on sources in the literature can be, the author can write the review of relevant literature as a reference guide in making research. So the study entitled "*The Ergonomic Factor of Facilities University Polyclinic, About Satisfaction of Student and Staff*". Expected to provide an overview of the importance of factors ergonomics neighbor is in clinical environments that exist in the area overs. So the facilities are used within the university clinic can meet the standard ergonomic and then ergonomics can be a factor influencing factors on customer and staff satisfaction.

Ergonomics is the study of other multidisciplinary science that bridges multiple disciplines and professionals, as well as summarize the information, findings, and principles of each of these sciences. Science may include physiology, anatomy, physiology, physics, and engineering. Ergonomics (human factors) is the discipline concerned with the understanding of the interaction between man and the elements of the system and the other professions prevailing theory, principles, data and methods to design to optimize human well-being and overall system performance.

Measures client satisfaction occupies a 'middle' in building healthy culture for the evaluation of the program or setting. Often follow the process of evaluation and cost analysis, and precedes the results and economic evaluation. Thus, the size of client satisfaction lies between 'process' and measures 'results'. Client satisfaction ranking has been criticized as an indicator of the quality of human services because they may reflect unrealistic expectations. While this criticism may be valid in some cases, studies with clients of mental health services effectively demonstrate that they can distinguish between different services in quality. "*The Ergonomic Factor of Facilities University Polyclinic, About Satisfaction of Student and Staff*". Which aims to find out what factors influence the level of student satisfaction or contentment clinic staff working in the clinic. There is also the factor that the facility would be quite vulnerable factor in achieving value on student satisfaction and staff who work at the clinic.

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