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FACTORS IN SELECTION OF FLOORING MATERIALS IN
PUBLIC HOSPITALS

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ABSTRACT

Hospitals design such as flooring element must be good to ensure patients, staffs or health worker and visitors in terms of outcomes and safety. Therefore, the main purpose of this research is to identify most common type of flooring material, to determine the factors in choosing an appropriate flooring material to fulfill the satisfaction of hospital users and to recommend the most suitable flooring material to fulfill the satisfaction of hospital users. Each type of flooring material has its own specific properties that are appropriate for its intended use. Hard, resilient, and soft flooring materials are the three types of flooring materials and as for this research study, the flooring materials consist of ceramic tile, vinyl tile and carpet respectively. A literature review has been done and also focused on the factors in selection of flooring materials in public hospitals such as safety, environmental stressors, traffic usage, ease of handling, cleaning and maintaining, ability of the long lasting material, cost of floor cleaning as well as aesthetic value. Besides, some literature on recommendations or approaches done by previous researchers for flooring has been carried out. Therefore, to achieve all the objectives of this research, a quantitative method is chosen and questionnaire survey as tool were distributed to hospital staffs, patients and visitors of public hospital in Kinta district, Perak. The data will be then collected and evaluated by using Statistical Package for the Social Science (SPSS) software. The discussions on the findings were obtained and analyzed in forms of tables, pie charts and graph. In conclusion, from this research, it is hoped that proper hospital design in terms of flooring to be designed in the future in order to enhance the safety.

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CHAPTER 1

INTRODUCTION

~~1.1 BACKGROUND OF STUDY~~

A hospital should be good in design in terms of flooring to ensure patients, staffs or health workers and visitor's outcomes and safety. The selection of appropriate flooring materials for health care facilities are important steps such as choices of hard, resilient or soft materials categories. Each category of flooring material has their own characteristics which suitable as their function. There are three categories of flooring materials which are hard, resilient and soft flooring material.

Hard flooring materials tend to be durable but difficult to repair. 'Some hard surfaces repel potential stains, whereas others readily absorb materials that can stain' (Harris, 2000). Examples of hard flooring material are ceramic tiles, stone and concrete. Next, resilient flooring material refers to the ability of the material to return back to its original form after compression, without leaving indented marks and generally considered to be durable, non-conductive and non-static.

'Resilient flooring is a popular choice of in health care facilities, due to its durability, ease of cleaning and routine maintenance, low cost, comfort, and the broad range of available designs (Lent et al.2010, Waters 1964). Examples of resilient flooring materials are linoleum, vinyl tile, sheet vinyl and rubber.

Then, the soft flooring material mostly used for commercial applications which are predominately made of synthetic materials but may be made of natural fibers. 'Soft material has acoustics and comfort benefits besides slip resistant, durable and has excellent appearance retention' (Harris, 2000).