PLANNING AND ORGANIZING HOSPITAL HYGIENE POLICY FOR A MODERN UNIVERSITY TEACHING HOSPITAL

Thesis

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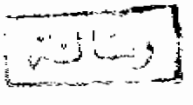

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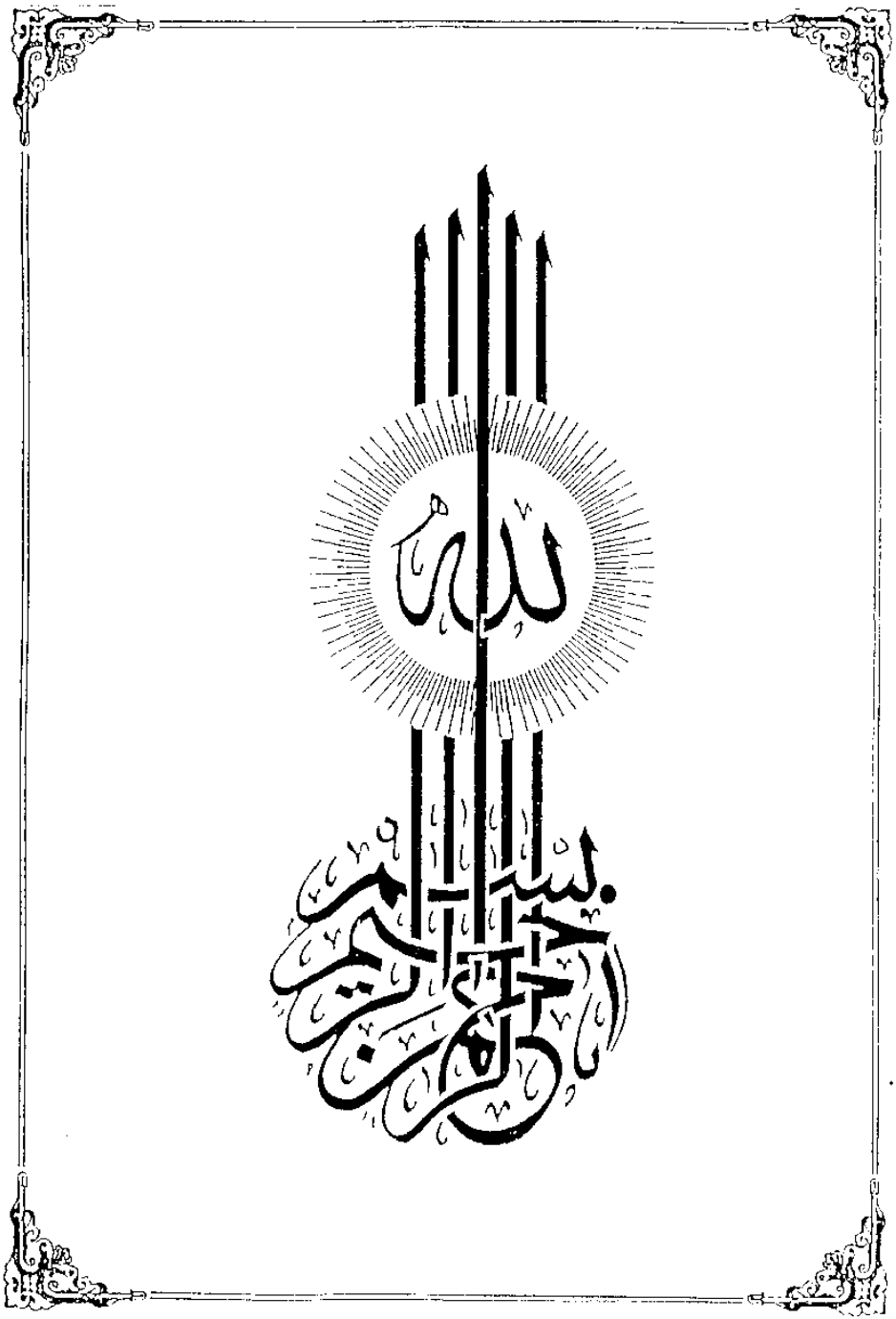

CONTENTS

AIM OF THE WORK

This work aims at designing a plan of hospital hygiene policy which could be applied in a modern university teaching hospital.

It also aims at evaluating the most recent hygienic measures used in hospitals with special emphasis on hospital cleaning and disinfection as important measures in prevention and control of hospital acquired infections. This evaluation is done through the examination of records of hospital infection during 6-month period after implementing the policy.

This study was conducted in an attempt to accumulate knowledge in the field of hospital hygiene that is to choose the best applicable measures in this field.

INTRODUCTION

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Infection acquired in health-care facilities continues to be a serious public health problem. Effective control of infection requires an ongoing comprehensive program. Many personnel in infection control today operate in an atmosphere of crisis; little long-range planning takes place. Today's hospital is a complex technical and political institution, and the application of modern management principles has been instrumental for improving the effectiveness of hospital programs (Terry, 1981).

Streeter et al. (1967) stated that various infection control programs have been described in literature with different professional workers assuming their primary responsibility.

According to Valenti et al. (1980) many existing policies and practices are simply long-standing habits, and often they have no basis in scientific fact, and that other policies are based on data that are no longer applicable to today's modern hospital and they may require review and revision.

Terry (1981) has added that few studies have been published concerning the application of standard management techniques to the organization and planning of infection control programs.

Garner et al. (1982) confirmed that in many hospitals, infection control practicies in the operating room which have not received scientific or budgetary scrutiny have become part of the perioperative routine. They also found wide variation in practice among hospitals due to such factors as lack of convincing scientific basis for evaluation or relative efficacy of alternative practices, the strong influence of industry marketing, the individual preferences of surgeons and operating room supervisors and lack of completeness and agreement of statements from various scientific and professional organizations.

One of important results of a three-year infection control program done by Streeter et al. (1967), was a reduction in actual numbers of patients who develop infections during their hospital stay.

In addition, Daschner (1984) has pointed out the possibility of cost reduction in hospital infection control, which could be achieved by means like discontinuing unnecessary

disinfection procedures which saved 91,000 DM within one year in one hospital.

Simpson (1984) has attributed the continuing high prevalence of infectious diseases in developing countries - in contrast to dramatic decline of such diseases in the west-to many factors among which poor sanitation and hygiene. He also stated that despite limited resources and adverce geographical factors are important consideration in formulating public health policies, effective health measures also call for understanding the local cultural practicies and religious beliefs.

From the above we can draw to the necessity of having well planned and organized comprehensive policy for infection control adapted to our environment and could be implemented in the technically and politically complex hospital society aiming at minimizing the rate of hospital acquired infection and cost reduction.

REVIEW OF THE LITERATURE

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Terry (1981) has suggested that the application of modern management techniques of infection control can help in organizing programs that are productive and successful The steps suggested include the attainment of a thorough familiarity with the requirements of accrediting and licensing agencies, a careful assessment of the strengths and weaknesses of the hospital's infection control program; the setting of specific, attainable, and measurable objectives, and the organization of the day-to-day activities of the program. Such an approach moves the infection control program out of a crisis-oriented stance into a creative, systemic, and effective position.

Maurer (1974) stated that planning a policy is primarily the responsibility of the infection control committee with other members of staff and that the smaller the group of people involved, the simpler will be the planning.

Membership of the infection control committee should include, as stated by U.S. Department of Health and Human Services (1972), the hospital epidemiologist, representatives of the major clinical departments, the microbiologist, the infection control nurse, the director of nursing, an

administrative representative and ex officio members as appropriats.

Haley (1980) reviewed and recorded that for several decades, recommendations for establishing infection surveillance and control programs in hospitals have included the position of hospital epidemiologist, and that this position should be filled by a physician with special knowledge and interest in infectious diseases, hospital epidemiology, and biostatistics; the hospital epidemiologist should be a member of the infection control committee, or its chairperson; and the responsibilities of the hospital epidemiologist should include: advising and directing the infection control nurse, supervising the accurate collection and evaluation of information on the occurance of infections, initiating special studies to elucidate suspected infection problems, recommending or instituting measures to prevent or control epidemic or endemic infection problems, and serving as a liason between the infection control committee and the medical staff.

According to Haley (1981), in most U.S. hospitals, there is a small nucleus of staff members assigned the responsibility for preventing infection, this group, hereafter referred to as the infection surveillance and

control program (ISCP) staff, is usually composed of an infection control committee, an infection control nurse, and in some instances a physician supervisor called the hospital epidemiologist.

Equally evident in the literature was the strong conviction that nosocomial infections must be reduced and prevented when possible. Although many issues remain unresolved in the field of infection control, the literature shows that efforts are being made to determine in what direction the practice of infection control should move (Ellis, 1980).

Dixon and Millison (1980) have confirmed that once establised, the policies and procedures must be implemented; and that the infection control committee, primarily through the infection control practitioner, encourage their implementation through vigorous programs of education for new employees and in-service training for other staff members.

Brachman et al. (1981) stated that because of the limits of resources, careful planning is needed to establish and maintain an effective program for controlling and preventing nosocomial infections. McGowan (1981 a)

have added that the increasing influence of those who ultimately finance hospital care should increase the pressure on hospitals and health care workers to remove the practices that cost more than they are worth.

Since it is niether necessary nor possible to sterilize all environmental objects, hospital policies should provide for cleaning, disinfection or sterilization as necessary to decrease the risk of infection (Simmons, 1983).

The following risky zones and procedures will be reviewed:

1. Hospital cleaning.
2. Disinfection.
3. Sterilization and distribution of sterile supplies.
4. Kitchen and meal distribution.
5. Laundry and linen distribution.
6. Circulation of patients, staff, visitors and supplies.
7. General hygiene regulations.
8. Basic care techniques.
9. Special care techniques.
10. Refuse disposal.
11. Vector and rodent control..
12. Environmental surveillance.
13. Training of hospital staff.
14. Surveillance of hospital acquired infection.

1. Hospital Cleaning

Lowbury et al. (1981) stated that clean hospital environment is necessary to provide a background for the required standards of hygiene and asepsis and to maintain patients' confidence. Cleaning was defined by Simmons (1983) as the physical removal of organic material or soil from objects and that it is usually done by using water with or without detergents. Generally, cleaning is not designed to kill microorganisms but to remove them

Housekeeping procedures, such as mopping and dusting, are as important as nursing procedures in many areas of the hospital, and housekeeping personnel should be educated in the importance of their role in prevention of infection. The objective is to remove soil, not to rearrange it, and the main purpose of cleaning is to remove physically microorganisms from the various fomities that might transmit them to patients (Putsep, 1979). Simmons (1983) stated that although the role of microbial contamination of environmental surfaces in transmitting nosocomial infection is probably minor, proper housekeeping can decrease the likelihood that large numbers of microorganisms from such surfaces will come in contact with the patient.