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Electronic Sterilization of Tableware Using Ultraviolet Light Radiation

Sterilisasi Peralatan Makan Secara Elektronik Menggunakan Radiasi Sinar Ultraviolet

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The hospital is one of the health service institutions that conducts complete individual health services that provide inpatient, outpatient and emergency services. Where in the hospital is also a gathering place for many people, namely the patient and also the patient's family. This is also a factor that bacteria and microorganisms can grow rapidly. As found on the patient's tableware. Because the tableware used continuously and alternately will make bacteria grow faster, especially if the process of washing the cutlery is less clean. From this problem emerged the idea to design a tool "Electronic sterilization of tableware using ultraviolet radiation". This tool utilizes ultraviolet radiation that has been studied and has been tested to inhibit bacterial growth. This design is made by finding references originating from journals, books and also articles which are then made a plan or description of the tool that aims to plan what kind of tool will be made, design in the form of hardware in the form of connections between input devices, processes and also outputs , while the software in the form of a program as a system driver. After the design is complete, the tool will be tested and analyzed. Based on the analysis conducted, there are several types of bacteria found in these tableware. After being irradiated with UV light for 15 minutes of exposure, it is found that the bacteria that were originally attached to the cutlery can die completely. This is evidenced by testing conducted in the microbiology laboratory with supervision by experts in their field.

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