1. Introduction

Comfort in the hospital is a state of comfort and patient tranquility is prioritized to help speed up the healing process, the noise level in each room (room) based on its function must meet health requirements [1]. High noise levels in hospitals can contribute to stress and fatigue in hospital workers. Noise makes concentration problems felt by workers, including being less careful or thorough, difficulty in paying attention, difficulty in completing work, frequently asking coworkers, and unsatisfactory work results [2].

Noise is also a major cause of sleep deprivation and disturbances among patients increasing anxiety and decreasing patient confidence [1]. Noise not only causes sleep disturbances or reduces a person's quality of life, but also contributes to an increase in the prevalence of health problems because it affects the body's biological systems. [3] The permissible noise exposure limit for hospitals is not more than 40 decibels (dB) in a hospital environment, and 35 dB in the interior of the inpatient room [4]. Therefore, tranquility in a health service needs to be considered for the comfort of people around the room.

With this noise problem, the application of technology can help with this problem by measuring the noise level so that it can control the noise that occurs. Noise monitoring research has been successfully carried out and tested [5]. NDPP is no exception, Noise Detection for Public Place (NDPP) is a tool that can measure the noise level in an area. NDPP was successfully developed with the collaboration between the School of Computing and the School of Electrical Engineering at Telkom University, Bandung. Also with the Sound Meter application, Sound Meter is an android-based application to measure noise levels with a smartphone. NDPP and Sound Meter is very possible to be applied in a hospital health service waiting room. However, because the two technologies are built on different technology bases, it is possible that the quality of service provided is also different. So the author uses the Gronroos model to analyze the comparison of the service quality of the two products to its application in the health care waiting room. The Gronroos model is a model to identify the level of service quality in three components, namely technical, functional, and corporate image [14]. With this gronroos model, it is possible to measure the quality between the two services being compared.