

## **The Effect on Repetitive Listening to Pirith Blessing Sounds on Human Brain (Healthy Individuals) by Using EEG and Functional MRI**

C.Abeywardana, Udaya Ranaaka<sup>11</sup>, Chandrasiri Palliyaguru<sup>22</sup>

Back ground- A number of Sri Lankan and foreign studies have been done on Sri Lankan rituals earlier, including Buddhist rituals. Many studies have been done regarding Buddhist pirith chanting, sound therapy, music therapy, drumming etc. No studies have been done on the effect of repetitive listening to pirith on human brain

Sri Lankan Buddhist rituals (Chanting of pirith, Bodhi Pooja, sethkavi,) are believed to promote health and well being and are widely practice in Sri Lanka.

From among the 24 paritta sutta described in the Pirith Potha, five parittas viz Girimananda Sutta, Isigili Sutta, Maha Kassapa Thera/ Maha Moggallana Thera/ Maha Cunda Thera Bhojjhanga by Buddha is said to be specifically discoursed to cure illnesses.

Objectives -

1. to find out the effects of pirith on brain activity that will be measured by EEG changes.
2. to find out the effects of pirith on brain activity that will be measured functional MRI changes.

Methodology- This will be an observation study. Study subjects are healthy volunteers university students, Between age range of 20-30 , Male/female in equal composition, Ethnicity and religion are not considered.

Input indicators: literature review was done. In foreign studies describe the effects of various levels of sound on brain using EEG. Those experiments focused mainly on two types of brain waves. Alpha wave is important as stress indicator,. Some Sri Lankan studies have shown the effects of pirith on human biological parameters (heart sounds were regulated).

process indicators:. Planning to exposé to study subjects (low frequency (40-70 Hz) pirith blessing sounds for a period of ten minutes and measured by EEG changes will be recorded

All study subject Expose to vowel sound (40-70 Hz) for a period of ten minutes and measured by EEG. there will be three repetitive sessions (beginning, 1 month, 3 month) in same time (morning), same environment (auditorium)

Output indicators: changing the patterns of waves and levels of alpha and theta waves in subjects during exposure to pirith and vowel sounds

Ethical review will be taken from university of Kelaniya (faculty of medicine)

Keywords:., Sri Lankan Buddhist Rituals; pirith; repetitive sounds; EEG; functional MRI

<sup>1</sup> Faculty of Medicine, University of Kelaniya, Sri Lanka

<sup>2</sup> University of Kelaniya, Sri Lanka