EFFECT OF LEECH THERAPY ON BODY COMPOSITION PARAMETERS

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ABSTRACT

Leech therapy treatment is one of the complimentary and alternative medicine that has been categorized as one of the ancient method in treating diseases. Locally unpopular this treatment still has its own believer that practices it for the sake of bloodletting treatment that claims to be successful. Therefore, a series of study should be conducted in order to prove the aforementioned claim by using the bioimpedance analysis. Bioimpedance analysis is way of measuring the fat and fat free mass in much more convenience way. This measurement is normally used by nutritionist as this invasive method is very suitable to determine the health of a person which directly affected by the composition of the fat in the body that can be further subdivide into water, mineral and protein constituents. The result could be used to measure the effectiveness of the leech therapy treatment as the readings and changes are taken into consideration before and after the treatment. Thus, using engineering tools to analyze the result can prove the effect of this therapy quantitatively.

ABSTRAK

Rawatan terapi lintah adalah salah satu kaedah perubatan sampingan dan alternatif yang telah dikategorikan sebagai salah satu kaedah kuno dalam merawat pelbagai penyakit. Secara am, walaupun rawatan ini kurang popular di kalangan penduduk tempatan ianya masih dipelopori oleh segilintir pengamal perubatan lintah yang percaya bahawa perubatan terapi lintah adalah cara yang berkesan dalan bidang perawatan. Oleh itu, beberapa siri kajian perlu dijalankan untuk membuktikan tuntutan yang dinyatakan di atas dengan menggunakan analisis bioimpedance. 'Analisis Bioimpedance' adalah cara mengukur jisim bebas lemak dan lemak dengan cara yang lebih mudah. Penggunaan cara ini biasanya digunakan oleh pakar pemakanan sebagai salah satu kaedah invasif yang sangat sesuai dalam menentukan kesihatan seseorang yang mempunyai kesan secara langsung dengan komposisi lemak dalam badan dan boleh dihuraikan lagi dalam pembahagian komposisi badan dari segi kandungan air dalam badan, mineral dan protein. Hasilnya boleh digunakan untuk mengukur keberkesanan rawatan terapi lintah melalui bacaan dan perubahan yang diambil kira sebelum dan selepas rawatan lintah. Oleh itu, menggunakan alat-alat kejuruteraan untuk menganalisis hasilnya dapat membuktikan kesan terapi ini secara kuantitatif.

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Name of Degree: **Master of Engineering (Biomedical)**

Title of Project Paper/Research Report/Dissertation/Thesis ("this Work"):

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Field of Study: **HEALTH AND BIOIMPEDANCE**
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