

## PD23: Association of Al-Quran Memorization on the IQ Level and Quality of Life among Tahfiz Students

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### ABSTRACT

**Introduction:** Research on Al-Quran memorization in Malaysia is very limited and not comprehensive. **Method:** This study was conducted to determine the association of Al-Quran memorization on the IQ level and quality of life among Tahfiz students in Selangor. A cross sectional survey was conducted among 129 students from three Tahfiz schools and one non-Tahfiz school (as control) in Selangor. In Tahfiz schools, students were being divided into three levels of Al-Quran memorization according to juzu' that they had memorized. The sociodemographic data was recorded using questionnaire. The Wechsler Abbreviated Scale of Intelligence-II (WASI-II) kit was used to measure the IQ level and the 36-Item Short Form Health Survey (SF-36) was used to measure the quality of life. Responses were analyzed using descriptive statistics, independent t-test, one-way ANOVA and Pearson correlation. **Results:** There was a significant difference between the level of Al-Quran memorization and the overall component of IQ level ( $p < 0.05$ ) which the highest level of Al-Quran memorization showed the highest score of IQ test. A positively weak correlation was found between the level of Al-Quran memorization on the overall IQ level ( $r = 0.317$ ,  $p < 0.001$ ) and the physical component of quality of life ( $r = 0.341$ ,  $p < 0.001$ ) while there was a very weak correlation found between the level of Al-Quran memorization on the mental component of quality of life ( $r = 0.149$ ,  $p = 0.013$ ). **Conclusion:** The level of Al-Quran memorization has a certain association with the IQ level and quality of life among Tahfiz students.

### KEY WORDS:

*Al-Quran Memorization, IQ Level, Quality of Life, Tahfiz Students*

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## PD 24: Setup Accuracy Comparison Between Two Corrective Systems of Freedom for Oral Cancer Patients Treated with VMAT Techniques

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### ABSTRACT

**Introduction:** Accuracy is an important element in radiotherapy treatment. However, setup error can reduce the treatment accuracy. Hence, correction system has been introduced to cope with this problem. The aim of this study is to compare the accuracy of radiotherapy treatment setup between three and six degree of freedom correction system (DoF) for oral cancer patient. Additionally, a more ideal correction system to be practiced is proposed. **Method:** A total of 121 cone beam computed tomography (CBCT) images from 12 patients were analyzed through image registration process. The images were compared with reference image and shifts made for every translational and rotational axis were measured. Manual and automatic bone matching techniques were used for 3 DoF and 6 DoF respectively. **Results:** The findings showed that there was no significant difference between mean and vector of translational component among the two systems ( $p > 0.05$ ). 6 DoF system showed a smaller standard deviation as compared to 3 DoF. The maximum rotational error measured in 6 DoF system was  $1.33^\circ$ . Margins calculated were almost the same and still within tolerance of 0.3 - 0.5 cm for head and neck cancer treatment. **Conclusion:** 3 DoF system is more ideal based on no-significant difference with 6 DoF. This system is simpler and faster, and it is enough to improve setup accuracy.

### KEY WORDS:

*Oral cancer, setup error, degree of freedom system, radiotherapy*