Development of cognitive training method with music therapy

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Purpose:

For elderly people living in the community, intervention using a combination of music therapy and cognitive training are implemented in order to clarify whether there will be significant differences at cognitive function and stress level among before intervention, during non-intervention period, and after the intervention.

Method:

The target was recruited for 200 people by public offering and there were 162 registrants. Music therapy was a 90-minute session once a month and compared 3-month intervention group with non-intervention group. The measurement scale was measured by Montreal cognitive test (MoCA test) which was a screening scale of mild cognitive impairment (MCI) and measurement of stress level by checking sublingual saliva α-amylase value. Then we conducted comparison test by one-way analysis of variance. The correlation between cognitive function and stress level was confirmed by Pearson moment correlation coefficient.

Result:

Regarding the cognitive function, there was a significant improvement after the intervention in both immediate regeneration task ($p < 0.05$) and delayed recall task ($p < 0.01$). The score after the intervention improved even in total score to evaluate the suspected MCI ($p < 0.01$). The salivary α-amylase value indicating the stress level also decreased after intervention ($p < 0.05$), and a correlation was confirmed between the stress level and the cognitive score ($p < 0.05$).

Conclusion:

After implementation of cognitive training method incorporating delayed recall task in music therapy, significant improvement of cognitive function and decrease of stress level were seen. Therefore, this method is a great advantage that elderly people can do training without stress, and it is a challenge to continue to develop methods in the future.

Biography: Kazue Sawami is a professor at Nara Medical University and completed her PhD at health science. Her research is about the cognitive abilities of elderly people, please view current clinical trials below. http://www.g-nursing.com/katsudou.php
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