**NEUROPLASTICITY OF PAIN: A PSYCHO-MEDICAL STUDY AMONG PATIENTS AFTER CAESARIAN SECTION IN A PRIVATE HOSPITAL**

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**Background/Aim**: Post-operative pain after cesarean operation remains one of the major complains after delivery. Depressive conditions are frequent complications of pain after surgery, which is likely to exacerbate to neuroplasticity of pain.

The study aimed to determine the association between neuroplasticity of pain and depression by assessing post-operative pain among women after caesarian session in Ghana.

**Method:** A descriptive pilot study with 54 women who had cesarean operations and reported acute pain after three months from two hospitals were included. The Numeric Pain Scale was used to select participants. The Pain Quality Assessment Scale and Beck Depression Inventory were further completed by participants.

**Results:** The mean (±SD) age of respondents was 34.02 (± 5.11) years, with a modal age of 31 years. On Characteristics of pains: the mean (±SD) score for hot pains was 7.04 (± 2.03); unpleasant pains (7.33 (±1.91)); deep pain (7.35 (±1.82)); (surface pain (7.38 (±1.78)). On the intensity of pain: The mean (±SD) for sensation was 6.43 (±1.81) and sharpness of pain (6.53 (±1.77)); dullness of the pains felt (6.38 (±2.60)); sensitiveness of the skins (6.75 (±1.90)) and itchiness (6.98 (±2.13)). On depression, more than half (51.9%) of the respondents had moderate depression.

**Conclusion**: The study established that, there was a significant association between Neuroplasticity of pain and depression (χ²=21.507; p<0.001). This implied that where there is a rise in intensity of pain, the likelihood of depression among post-operative women is very high.

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