ABSTRACT

Background: Primary Dysmenorrhea is defined as repeated episodes of cramps in the lower abdomen in the absence of any identifiable pelvic disease, which impacts 50 to 90 percent of all women who menstruate. Pharmacological treatment for the same poses dangers of adverse effects, and it does not work for everyone, thus calling for an alternative therapy that is evidenced-based. The technique of Kinesio Taping (KT) has been recognized due to its mechanisms such as haemodynamic, neurophysiological (gate control theory), and segmental analgesia; yet there is no research to date which compares it between sexually active and sexually inactive women.

Methodology: Quasi-Experimental design (pretest and post-test) – open label study without any sham or control group; stratified according to parity into two groups:

Group A: Sexually Inactive

Group B: Sexually Active; performed for two consecutive menstrual cycles at the Physiotherapy OPD, Brainware Diagnostic Clinic & Research Centre, Kolkata.

Sample Size: 25 subjects participated; 5 dropped out due to skin irritation, relocating and non-compliance. The total number of subjects used for analysis is n = 25; Group A: n = 13; Group B: n = 12.

Results: Statistically significant decrease was observed in both groups in terms of VAS pain scores after KT. Statistically significant decrease occurred in VAS pain scores within both sexually active (VAS mean reduction: 0.92 ± 0.51 cm; $t = 6.167$, $p < 0.001$, Cohen's $d = 1.78$) and sexually inactive participants (VAS mean reduction: 1.69 ± 0.48 cm; $t = 12.702$, $p < 0.001$, Cohen's $d = 3.52$). In comparing results between two groups, it was discovered that non-parous women experienced more pain relief as compared to parous women ($t = -3.897$, $p = 0.0007$, Cohen's $d = 1.56$). This observation was supported by Mann Whitney U test ($U = 26.5$, $p = 0.002$). Correlation analysis showed that age is negatively correlated with pre-therapy VAS scores ($r = -0.716$, $p < 0.001$). There was no statistically significant difference between the groups regarding age ($p = 0.056$), BMI ($p = 0$

Conclusion: KT is an efficacious treatment strategy for dysmenorrhea and can cause marked alleviation in pain intensity among both nulliparous and parous females. It was observed that nulliparous females responded significantly more to the pain-alleviating effects of KT, implying that parity may be a significant clinical variable since it accounts

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