#### 原著

### 痛みの感受性と痛み反応の性差及び人間関係 の違いによる差

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## Differences in Pain Sensitivity and Response According to the Sex of the Subject and the Relationship Between Subject and Investigator

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#### **Abstract**

The aim of this study was to clarify whether pain sensitivity, pain response and the analgesic effects of nursing care vary with human relationships and sex differences. Thirty healthy students, seven females who were known to the investigators (A), twelve females (B) and eleven males (C) that the investigators met for the first time, consented to participate in the experiment. A were students in the same department as the investigators, B and C were students from another department. Hot and cold compresses, music therapy, massage and association games were used as nursing cares in this study. Subjects, supine on beds, were attached to devices for recording electrocardiograms (ECG), local sweat volumes and skin temperatures. The stimulus intensity was set at 70~80 on the Visual Analogue Scale of pain (VAS). The following conclusions were drawn: the pain tolerance threshold is higher in males than females, both pain sensitivity and response is related to body fat in males, and the analgesic effect of each care depends on the human relationship between subject and investigator.

人間関係が異なる複数の被験者群において、痛みの感受性と痛み反応、看護ケアの鎮痛効果がどのように相違するか、またそれらに性差はあるかを検討した、被験者は健康な大学生30名で、実験者と既知の女子7名(A群)、初対面の女子12名(B群)、初対面の男子11名(C群)の3群に分けられた、ベッド臥床した被験者の心電図、局所発汗量、皮膚温を測定した。看護ケアとして温罨法、冷罨法、マッサージ、音楽療法、会話に代わるものとしての連想ゲームの5種類を用いた、Visual Analogue Scale(VAS)で70~80の強さに電圧を固定して電気刺激を行い、実験中痛みをVASで表現させた。その結果、耐痛閾値は男性が高いこと、痛みの評価と痛み反応は男性においてのみ皮下脂肪率と関係すること、さらに、ケア毎の鎮痛効果は対人関係の程度に関係することが明らかになった。