

## البحث الخامس

### **IMPLICATIONS OF HANDWRITING IN MOVEMENT DISORDERS AMONG NEUROLOGICAL PATIENTS IN FAYOUM GOVERNORATE, EGYPT**

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#### بحث جماعي

#### **Abstract**

**Background:** Common cumulative neurological diseases and their effects on motor control in general and handwriting in particular. This research aims to introduce the fundamental aspects of common neurological disease as the basis for understanding why and how handwriting changes in the presence of disease. **Methods:** This is the prospective research which study changes of handwriting over 30 neurological patients as (Parkinsonism disease, Essential tremor, and Ataxia) Fayoum Governorate. **Results:** Among the study group, the mean age was (55.4±15.8) years, with 22 (73.3%) were males and 8(26.7%) were females. The present study documents that among all neurological cases included in the study, (10%) of them show the moderate change in neglecting some letters, tendency to small letters, and lack of control to punctuate characters. As regards tremor, 50% had moderate to high change. Not adhering to the line of printed moderate change represents 16.7%, and 6.7% shows the moderate change in pressure of writing. Also, this research illustrated that inbetween parkinsonism cases (30%) of they show the moderate change in neglecting some letters, lack of control to punctuate characters and not to adhere to the line of printed, also 10% moderate change in the tendency to small letters. As regards tremor, 90% had moderate to high change. **Conclusion:** Rehabilitation programs for handwriting problems in neurology disease patients are likely to be helpful. More extensive randomized studies are needed to confirm these results.