

* Phase 2 (confirmatory phase): All suspected cases of PD were referred to the neurological department of the Al-Kadhiymia Teaching Hospital where history and neurological examination is performed by senior neurologist.

Patients with confirmed diagnosis of PD would be questioned about: the duration of their symptoms, type of onset, drug ingestion (neuroleptics, antidopaminergic), family history of PD or tremor, presence of medical illness, smoking, number of rooms,

family members and total years of education (*see appendix*).

Diagnosis criteria

According to the WHO definition^[1] PD was diagnosed when the patient had at least 2 of the cardinal signs (resting tremor, bradykinesia, rigidity and postural instability) with no signs of nervous system involvement, such as corticospinal deficit, cerebral dysfunction, conjugate down or lateral gaze impairment, or prominent early automatic nervous system involvement. Patients with drug induced Parkinsonism were excluded.

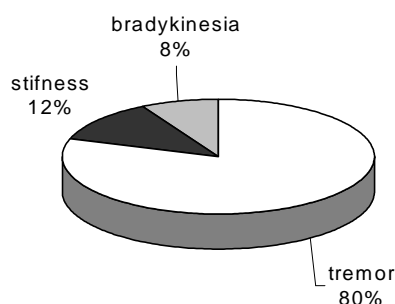


Figure 1: The distribution of onset symptoms in patients with Parkinson's disease

Statistical analysis

Our data was computed in Pentium III system using the statistical analysis system (SPSS version 10.0). We calculated the prevalence rates as crude and category specific (age, gender, and residency). The quantitative data were expressed as mean (X) standard deviation (SD). We determined whether differences in prevalence rates were statistically significant or not by student (t) test and chi-square (X^2) test. A probability limit (p value) of <0.05 was considered statistically significant.

Results

The cross-sectional survey started from December 1st 2000 till September 15th, 2001. The total population involved in this study was 22988 individuals, 11645 (50.7%)

of them were females and 11334 (49.3%) were males. Individuals living in urban areas were 16646 (72.3%) and in rural ones were 6364 (27.7%). 76 individuals with suspected PD were referred to the Al-Kadhiymia Teaching Hospital, 55 (72.3%) of them responded and 21 did not.

Those who did not respond two of them had written certificate of diagnosis of PD by a senior neurologist, two were bedridden with full certificate of PD confirmed by the neurologist, and for the other a second visit was done for reassessment that revealed exclusion of diagnosis. A total number of 25 cases of PD were collected, 13 males (52%) and 12 females (48%). Three cases (12%) were not diagnosed yet by the time of the survey. Those who were referred but not diagnosed as