

Prevalence of some paralysis and limb amputation disabilities in Iran national epidemiological survey

abstract

A cross sectional study of the prevalence and etiologic factors of limb paralysis and amputation was performed in Iran. Using systematic cluster sampling (each cluster consists of 15 families) 59678 people have been evaluated. The sample size was 1 per 1000 of total population.

The prevalence of different kinds of paralysis and limb defects was 7 per 1000 population. Hemiplegia and paraplegia were the most prevalent, accounted for 2.8 per 1000 population. The prevalence of disabilities due to cerebral palsy, limb amputation and poliomyelitis per 1000 were 2.0, 1.3 and 0.9 respectively.

Prevalence of poliomyelitis was zero in age group 0-4, which supports the recent reports declared that incidence rate of poliomyelitis is very low, and it is the consequence of vaccination done all over the country. 24.5% of all kinds of paralysis and limb defects were congenital, Other etiologic factors were physical injury, infectious disease, non-infectious disease and aging which accounted for 25.6%, 15.6%, 28.8% and 3.1% respectively. Most of the cases of cerebral palsy were congenital (67.2%).

The main cause of hemiplegia and paraplegia was non-infectious disease (54.8%) and the main cause of amputation was physical injury. (73.7%), prevalence of disabilities due to paraplegia, hemiplegia and limb amputation considerably increased with age so it was most prevalent among people of 65 years old and over (29.0 per 1000). The prevalence of the above-mentioned disabilities was 6.3 per 1000 among men and 2.8 per 1000 among women. So male female ratio was 2:1 ($p < 0.000$). Overall, the prevalence of hemiplegia, paraplegia and limb amputation were 4.9 per 1000 in urban and 4.1 per 1000 in rural areas, but after adjusting for "age" difference between urban and rural areas was not significant ($P = 0.059$).

Logistic Regression analysis declared that variables "age", "sex" and "living area" have separately significant effect on odds of hemiplegia, paraplegia and limb amputation. Considering these variables concurrently, "age" and "sex" again showed significant effect but "living area" effects through age. ($p < 0/000$)

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