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**A Prospective Study of Night Shift Work, Sleep Duration, and Risk of Parkinson's Disease**

Those who were employed to work night shifts had a lower chance of developing Parkinson's disease. Risk decreased with increasing years of night shift work. Parkinson's disease and night shift work both affect large numbers of people in the UK; the research provides some reassurance that a causal link between them will not be established.

The Nurses' Health Study cohort began with 121,700 registered nurses; first provided information on medical history and lifestyle practices in 1976. Follow-up questionnaires have been mailed to participants every 2 years thereafter. A question on lifetime occurrence of Parkinson's disease was first included in 1994. Information on work history of rotating night shifts was elicited in the 1988 questionnaire. Those who were free of Parkinson's disease in 1994 and provided shift work information in 1988 (n = 84,794) were followed up until 2000. Outcomes were assessed and confirmed by the treating neurologist.

There was a significant inverse association between night shift work and risk of Parkinson's disease within the time span of this study. The protective effect of night shift work increased significantly with increased number of years of night shift work. The effect persisted even after excluding contributions from the first 4 years of follow-up [reducing the effect of reverse causation].

Years of night shift work	Multivariate risk excluding the first 4 years
0	1.0
1-2	0.79 (95% CI = 0.51, 1.24)
3-5	0.89 (95% CI = 0.56, 1.42)
6-14	0.59 (95% CI = 0.31, 1.12)
≥15	0.51 (95% CI = 0.23, 1.11)

The results had been corrected for the effects of smoking, which was more prevalent in night shift workers.

Comment

Two possibilities: 1) night shift work protects against (or delays) Parkinson's disease (mechanism unknown) 2) those who are in some way predisposed to Parkinson's disease avoid or cannot tolerate night shift work.

Globalisation is likely to lead to further growth in night shift work among office based employees.