

# Children's bad dreams linked to a higher risk of dementia and Parkinson's disease in adulthood, finds new study

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Can children's dreams foretell events that will happen nearly 40 years into the future? Yes, according to the results of my latest study published in the journal *eClinicalMedicine*.

More specifically, it showed that children who experience regular [bad dreams](#) and [nightmares](#) between the ages of seven and 11, may be nearly

twice as likely to develop [cognitive impairment](#) (the core feature of [dementia](#)) by the time they reach age 50. And they may be up to seven times more likely to be diagnosed with [Parkinson's disease](#) by age 50.

For some background to these startling findings, in 2022 I discovered that middle-aged and older adults who experience frequent bad dreams and nightmares could be more than twice as likely to develop [dementia](#) or [Parkinson's](#) in the future.

Given that a large proportion of people who experience regular nightmares as adults also report having had regular nightmares [when they were children](#), this made me wonder whether having lots of bad dreams during childhood might predict the development of [dementia](#) or Parkinson's disease later in life.

To find out, I used data from the well-known [1958 British birth cohort study](#), which follows the lives of all children born in England, Scotland and Wales during the week of March 3–9, 1958.

When the children were aged seven (1965) and 11 (1969), their mothers answered a range of questions about their health, including whether they had experienced bad dreams in the previous three months (yes/no).

I grouped the 6,991 children based on how regularly they experienced bad dreams at ages seven and 11: "never", "occasional", or "persistent". I then used statistical software to determine whether the children with more regular bad dreams were more likely to develop cognitive impairment or be diagnosed with Parkinson's by the time they turned 50 (2008).

The results were clear. The more regularly the children experienced bad dreams, the more likely they were to develop cognitive impairment or be diagnosed with Parkinson's disease.

Remarkably, compared with children who never had bad dreams, those who had persistent bad dreams were 76% more likely to develop cognitive impairment and were 640% more likely to develop Parkinson's. This pattern was similar for both boys and girls.

These results suggest that having regular bad dreams and nightmares during childhood may increase the risk of developing progressive brain diseases like dementia or Parkinson's disease later in life. They also raise the intriguing possibility that reducing bad [dream](#) frequency during [early life](#) could be an early opportunity to prevent both conditions.

Further studies will be needed to confirm whether bad dreams and nightmares truly cause these conditions.

The frequency with which we experience nightmares as children is to a large degree determined by our [genetics](#). And one gene known to increase our risk of having regular nightmares ([PTPRJ](#)) is also linked to increased risk of developing [Alzheimer's disease](#) in old age. So it's possible that nightmares and progressive brain diseases are both caused by a shared set of genes.

My hunch is that both theories could be true. That is, nightmares and progressive brain diseases are linked by shared genetics, as well as through nightmares directly causing brain diseases by disrupting the [brain-restoring elements of sleep](#).

## **Don't be alarmed**

Although these findings sound alarming, put in their proper context, they shouldn't be. Of the roughly 7,000 children included in my study, only 268 (4%) had persistent bad dreams according to their mothers. Among these children, only 17 had developed cognitive impairment or Parkinson's disease by age 50 (6%).

So it is likely that the vast majority of people who have persistent bad dreams in childhood are not going to develop early-onset dementia or Parkinson's.

However, the risk of developing progressive brain diseases increases substantially in old age. Being aware that bad dreams in childhood may signal a higher risk of dementia or Parkinson's later in life suggests that there could be a window of opportunity to implement [simple strategies](#) to lower those risks. And for young people with frequent distressing dreams that persist over time, [getting help for nightmares](#) might be one such strategy.

The next step for my research is to use [electroencephalography](#) (a technique to measure brainwaves) to look at the biological reasons for bad dreams and nightmares in children.

In the longer term, the aim will be to use this knowledge to develop new treatments for all people troubled by bad dreams and nightmares. The ultimate goal is to improve their [sleep quality and mental health](#) and reduce their chance of developing dementia or Parkinson's disease later in life.

**More information:** Abidemi I. Otaiku, Distressing dreams in childhood and risk of cognitive impairment or Parkinson's disease in adulthood: a national birth cohort study, *eClinicalMedicine* (2023). [DOI: 10.1016/j.eclinm.2023.101872](https://doi.org/10.1016/j.eclinm.2023.101872)

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