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# Frequent Use of Mobile Phones for Calls Linked to Risk of New-onset Hypertension?

Talking on mobile phones for a minimum of 30 hours in a week increases risk of new-onset hypertension by 12%. The risk increased 25% among those who used the phone for more than 6 hours in a week, according to a study published May 5, 2023 in the *European Heart Journal – Digital Health*.[1]

A total of 2,12,046 participants with a mean age of 54 years from the UK Biobank database were enrolled in this study to investigate if frequent use of mobile phones to make or receive calls was associated with incident hypertension. Of these, 62% were women. None of the participants had been diagnosed with hypertension at the time of their recruitment. Data on use of mobile phones was gathered through self-reported questionnaires, which revealed that 88% of the study subjects were mobile phone users, i.e., they used the mobile phone at least once per week to make or receive calls. The follow-up was for a period of 12 years during which 13,984 (7%) study participants developed incident hypertension.

People who were mobile phone users were at higher risk of developing new-onset hypertension with hazard ratio (HR) of 1.07. The risk increased in proportion to the weekly duration of phone use. The HR for weekly usage time of 30 to 59 minutes was 1.08; for 1 to 3 hours of use, the HR was 1.13; for 4 to 6 hours of use, the HR was 1.16 and for those with more than 6 hours of use, the HR was 1.25 compared to participants who used the mobile phone for calls for less than 5 minutes in a week.

The risk was increased 33% among those who were genetically predisposed to develop hypertension and also used their phones for longer hours (≥30 min) during the week with HR of 1.33 compared to use of phone for making or receiving calls less than 30 minutes and low genetic risk of hypertension.

This study has linked the use of mobile phones for making or receiving calls to increased risk of new-onset hypertension. The frequency of use influenced the risk of hypertension. This association was further augmented by genetic susceptibility to hypertension. However, the authors note that their study is an observational study and is "hypothesis-generating". These findings need to be confirmed in further studies. Nevertheless, the study cautions about the prudent use of mobile phones.

## REFERENCE

1. Ye Z, Zhang Y, Zhang Y, Yang S, Liu M, Wu Q, et al. Mobile phone calls, genetic susceptibility, and new-onset hypertension: results from 212 046 UK Biobank participants. Eur Heart J Digit Health. 2023;4(3):165-74.

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