C010 HOME BLOOD PRESSURE MEASUREMENT CARRIED OUT BY POST SAVES OFFICE VISITS
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Office blood pressure measurement causes high yearly costs. We randomized 189 previously treated or untreated hypertensive patients (aged 34–77 years) to one-year follow-up using either usual care (UC) (n=85) or home monitors (HM) (n=103). The treatment goal was diastolic blood pressure (DBP) ≤90 mmHg. The patients in the home monitor group posted their home BP results every six weeks to their doctor who if necessary asked them to come to the office. The usual care group was treated ordinarily in the doctor’s office. Home blood pressure measurement was performed to all patients during three weeks both at the beginning and at the end of the one-year follow-up.

According to office measurements SBP decreased 9.4 (17.7) in HM group and 12.0 (20.4) mmHg in UC group (p=ns). DBP decreased accordingly 5.7 (10.3) and 8.8 (11.2) mmHg (p=ns). According to three week home measurement SBP decreased 11.7 (14.8) in HM group and 12.0 (13.5) mmHg in UC group (p=ns). DBP decreased 5.5 (7.8) and 7.1 (7.1) mmHg accordingly (p=ns). Blood pressure <140/90 mmHg was achieved in 21.7% of the patients according to office measurement and in 43.4% according to home measurement. The UC group needed 5.3 (5.6) extra visits when the HM group needed only 1.4 (1.9). No changes were seen in quality of life (SF-36).

Our study suggests that home measurement carried out by post achieved the same blood pressure level as the usual office care but needed fewer office visits thus saving money.

Key Words: Home blood pressure measurement