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### TELE-BASED VIRTUAL BP MANAGEMENT BY PHARMACIST OR NURSE PRACTITIONER VERSUS OFFICE-BASED PCP LED INTERVENTION IN MANAGEMENT OF SYSTOLIC BP. A SYSTEMATIC REVIEW AND META-ANALYSIS.

Poster Contributions

For exact presentation time, refer to the online ACC.22 Program Planner at <https://www.abstractsonline.com/pp8/#!/10461>

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**Background:** Telemedicine was quickly adopted by health systems throughout the United States during the COVID 19 pandemic crisis suggesting its relative feasibility and implementation. Nevertheless, there is limited data on whether a virtual blood pressure (BP) management approach is better than an office led approach. In this systematic review and meta-analysis of randomized clinical trials (RCTs) we aim to compare the differences in systolic BP (SBP) by NP or Pharmacist virtually as compared with primary care physician (PCP) in office.

**Methods:** We searched PubMed, MEDLINE, EMBASE, and Cochrane database for studies from January 2000 till October, 2021 with inclusion criteria of RCTs on pharmacist or NP based virtual (tele) BP management versus PCP based office visit (Usual Care) for BP management. Review manager 5.4 was used for data analysis. We used PRISMA guidelines to report synthesize and report our findings.

**Results:** We included nine RCTs which met our inclusion criteria with total of 3234 participants in both groups. There were 1615 participants in the APP tele visit group and 1619 participants in the PCP usual care/office visit group. Our results show that the use of NP/ Pharmacist based telemedicine visit for SBP management was associated with statistically significant decrease in SBP compared to PCP based office visit (MD: -8.19, 95% CI -10.17, -6.21,  $P < 0.001$ ,  $I^2 = 75\%$ ). In the analysis restricted to duration of follow up for less than 6 months (MD: -8.19, 95% CI: -11.74, -4.65,  $p < 0.001$ ) and 12 months (MD: -8.82, 95% CI: -11.21, -6.43,  $p = 0.08$ ), there is no statistically significant difference ( $p$  value = 0.77). Both the NP as well as Pharmacist based tele visit to control SBP has shown better outcomes compared to PCP based office visit, NP vs PCP (MD: -8.78, 95% CI: -13.93, -3.64,  $P < 0.001$ ) and Pharmacist vs PCP (MD: -8.32, 95% CI: -10.58, -6.06,  $P < 0.001$ ), respectively.

**Conclusion:** Our study showed that tele-based intervention by NP/Pharmacist decreased SBP better than usual care in office by PCP. Virtual BP management should be further explored in these times of COVID-19 despite widespread heterogeneity of results and challenges related to the scope of practice and reimbursement of NP/pharmacists.