

HERO GUIDANCE ON RECENT RESEARCH REPORTED BY THE MEDIA: FEATURING THE 2020 JAMA CARDIOLOGY STUDY ON HYPERTENSION CONTROL

EXECUTIVE SUMMARY

In 2014, HERO asked recognized experts to address the question, “Do workplace health promotion (wellness) programs work?”¹ Their collaborative paper provided an overview of the substantial evidence base, which indicated that well-designed, comprehensive workplace health and well-being (HWB) initiatives integrated into supportive organizations yield high participation rates, sustained behavior change, improved health and workplace performance, and positive economic outcomes. Evidence based on dozens of studies demonstrates positive outcomes of best-practice HWB initiatives.¹

Prompted by media coverage of recent studies reporting both positive and negative findings, many readers may have questions about what these results tell us about the effectiveness of corporate HWB initiatives. This commentary is intended to help HERO members evaluate findings from recent studies and provides guidance on how to critically examine research on program effectiveness. To illustrate how these tips can be used in practice, we apply them here to the 2020 randomized clinical trial (RCT) of a workplace-based multicomponent intervention aimed at hypertension control.²

Critical reviews of published studies should pose questions about the study’s design, the research methods and the quality of the HWB intervention rather than relying on selective and incomplete details offered in media stories. Whether you are reading the original study in a scientific journal or have only seen media coverage about it, approach it with these questions in mind:

Lessons learned from a Chinese workplace study

The study by Wang et al represents a rigorous evaluation of a multicomponent, science-based intervention that allowed 2 years of intervention before measuring impact.² Unlike two other recent RCT studies publicized in the media,^{3,4} randomization in this study was done at the workplace rather than at the individual level, which allowed for elements of the workplace environment to be evaluated in addition to the individually tailored aspects of the intervention. Also unlike the other two studies, intervention elements included implementation of health-promoting policies and workplace environmental changes. Due to the study’s focus on hypertension, employees were also provided monthly visits with physicians. As a result, this research tests the effectiveness of a worksite HWB initiative that is coordinated with surveillance and treatment from a health system. While the study focused on clinical health outcomes, the intervention also encouraged physical activity, healthy eating, tobacco use, and stress management—lifestyle-related behaviors that affect blood pressure. The design of the intervention was grounded in the socioecological model and based on recommendations from the American Heart Association and Chinese hypertension management guidelines. Because this study was conducted in a Chinese workplace and health system, U.S.-based companies should be mindful of the “specificity-generalizability paradox.” This paradox suggests that the more specific an intervention is to one setting, the less generalizable the findings may be to other settings. Still, the intervention was successful in producing substantial changes in blood pressure outcomes and related lifestyle factors. A closer examination of the study ([available to HERO members on the HERO website](#)) identifies strategies all employers may consider to improve the effectiveness of their HWB initiatives.



How is this single study similar to or different from the many previously published studies on HWB program effectiveness?



Does the tested intervention represent a best practice approach?



Was enough time allowed for the intervention to meaningfully impact the outcomes studied?



Did the study use an evaluation method that can support the research hypothesis and study objectives?



Are the outcomes of choice appropriate for the intervention design?



Are there indications the researchers had preexisting beliefs or conflicts of interest that influenced their research methods or interpretation of results?



Were there unexpected or important findings not reported in media coverage of the study?



Cited References

1. Goetzel RZ, Henke RM, Tabrizi M, et al. Do workplace health promotion (wellness) programs work? *J Occup Environ Med* 2014; 56(9): 927-934.
2. Wang Z, Wang X, Shen Y, et al. Effect of a workplace-based multicomponent intervention on hypertension control. *JAMA Cardiology*. March 4, 2020. Doi: 10.1001/jamacardio.2019.6161
3. Song Z and Baicker K. Effect of a workplace wellness program on employee health and economic outcomes: A randomized clinical trial. *JAMA*. 2019; 231(15): 1491-1501.
4. Reif J, Chan D, Jones D, et al. Effects of a workplace wellness program on employee health, health beliefs, and medical use. *JAMA Internal Medicine*. 2020. Doi: 10.1001/jamainternmed.2020.1321.