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SELECTING IDEAL CONTROL GROUPS IN MEDITATION RANDOMIZED CONTROLLED TRIALS

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To the Editor

I read with appreciation the meta-analysis by Goyal *et al.*¹ that summarized evidence for effects of meditation programs on psychological stress and well-being. It restricted studies to RCTs that used active control groups. The review was nicely done, however, I am concerned it excluded studies with certain types of existing practice control groups such as usual care control groups. This decision was in juxtaposition to the 2009 Institute of Medicine report, entitled “Initial National Priorities for Comparative Effectiveness Research,” that recommended to “Compare the effectiveness of mindfulness-based interventions (e.g., yoga, meditation, deep breathing training) and *usual care* in treating anxiety and depression, pain, cardiovascular risk factors, and chronic diseases.”²

Goyal *et al.* stated that “clinicians need to know whether meditation training has beneficial effects beyond self-selection biases and the nonspecific effects of time, attention and expectations for improvement.” Controlling for attention is done in explanatory trials to evaluate if effects of interventions occur over-and-above the attention that participants receive from providers or fellow group members. However, for pragmatic trials on meditation interventions (and many other types of behavioral interventions), attention and its related social support may not be a rival explanation for effects of meditation programs. Attention and group support within meditation practice groups may be important *components* of meditation training, and for providing continued meditation practice support afterwards, similar to behavioral change programs for alcohol abstinence (e.g. Alcoholics Anonymous) and weight loss (e.g. Weight Watchers).³

Freedland *et al.*⁴ stated, “The assumption that it is always necessary to control for attention in psychotherapy or behavioral intervention trials rests on the questionable premise that attention is always a threat to internal validity. It is a genuine threat to the internal validity of standard drug trials because they are designed to answer questions about chemical compounds, not about their clinical delivery. Psychotherapy differs from pharmacotherapy in that clinical attention is an integral component of psychotherapy, not something that is coadministered with it.” It is important to show results for trials that have usual care control groups, in addition to non-specific and specific active control groups, as this provides pragmatic evidence on whether meditation interventions in their entirety are useful

compared to the care that community members typically receive. This is what was recommended by the aforementioned Institute of Medicine report.² It is a question that many community members have, and may ask physicians' advice on.

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