Advancing mental health service delivery in low-resource settings

Integrating mental health services into primary health care in low-resource settings is a pivotal challenge in global health. The SHARP trial conducted by Brian W Pence and colleagues[1] signifies a noteworthy advancement in addressing this challenge. The Article highlights the importance of focusing on implementation strategies to maximise the use of evidence-based practices (EBPs; also referred to as evidence-based interventions), rather than pursuing new innovations. The study's publication in *The Lancet Global Health* underscores the journal's laudable commitment to not only discovering but also delivering innovations in health care.

The approach to implementation science contrasts with traditional health services research, a distinction exemplified by the SHARP trial.[2] To clarify these differences, the PEDALS framework[3] is instructive (figure). The P stands for "Problem", underlining that implementation studies typically begin by identifying specific practice issues. In the SHARP trial, the identified problem is the high prevalence of depression in Malawi, compounded by a scarcity of specialised mental health providers.

The E in PEDALS represents a paradigm shift in research. Unlike traditional health services research, which often focuses on discovering new innovations, implementation research starts with searching existing EBPs. In the SHARP trial, the EBP identified is a collaborative care model (CCM) to address depression, integrating universal screening with the Patient Health Questionnaire (PHQ)-9, peer-delivered psychosocial counselling via the Friendship Bench approach,[4,5] and algorithm-guided antidepressant management by non-specialists. All of these components are supported by existing evidence of their effectiveness and cost-effectiveness. However, it is worth noting that the SHARP trial could have been improved if primary care clinicians had not based their prescriptions almost solely on the results of depression screening via PHQ-9. A more effective method would be for clinicians to use PHQ-9 scores alongside their clinical judgment and training for a comprehensive assessment.

The D in PEDALS represents "Determinants", the barriers and facilitators affecting the implementation of EBPs. Understanding these determinants is pivotal for crafting strategies to minimise barriers and bolster facilitators. However, the SHARP trial seems to have leaped directly to the A for "Action", implementing strategies without first identifying specific barriers, potentially bypassing a crucial step in aligning implementation strategies with the barriers.
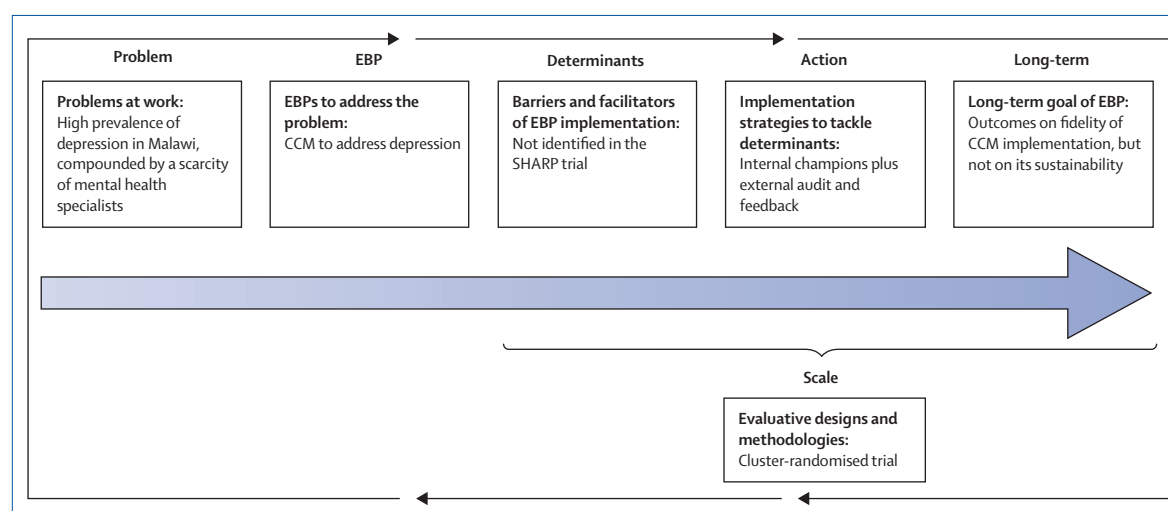
Figure: The SHARP trial illustrated with the PEDALS framework
EBP=evidence-based practice. CCM=collaborative care model.

"Action" refers to the implementation strategy against determinants, highlighting a hallmark of implementation research that typically features two concurrent interventions instead of one in conventional studies. The first intervention is the EBP, like the CCM in the SHARP trial. The second intervention comprises implementation strategies, such as SHARP's use of internal champions plus external audit and feedback, which help in adopting, executing, and maintaining the EBP.

The L in PEDALS stands for "Long-term", indicating that the primary goal of implementation is the sustainable integration of an EBP into routine practice. Consequently, the L highlights the importance of measuring implementation outcomes, such as acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, penetration, and sustainability of the EBP,[6] which might be distinct from health, clinical, and service outcomes. The SHARP trial tracked implementation fidelity; however, unfortunately, it did not measure sustainability.

Finally, the S in PEDALS symbolises "Scale", which is essential for gauging the effectiveness of implementation strategies. P-E-D-A-L suggests a process for implementation practice, but to elevate it to so-called implementation science, we must produce generalisable knowledge, which requires a robust "S" with proper research design and methods. Implementation research, which often involves care delivery systems, typically uses designs like cluster randomisation, as seen in the SHARP trial. Considering the real-world environment of implementation, designs such as Learn-As-You-Go,[7] the multiphase optimisation strategy,[8] and stepped wedge[9] are gaining attention. Implementation research also increasingly turns to various quasi-experimental designs when randomised group assignments are impractical.

The SHARP trial might have overlooked the "Determinants" phase, choosing champions plus audit and feedback strategies perhaps too readily. The trial showed significantly improved follow-up treatment fidelity with an internal champion combined with audit and feedback strategies, yet the appropriateness of these strategies for overcoming implementation barriers is not established. Researchers might deem their mission to be accomplished with evidence on the effectiveness of audit and feedback; however, for implementers, selecting the most suitable strategies for their context is paramount. This divergence might unintentionally create conflict between implementers and implementation scientists, with scientists potentially facing their own implementation obstacles.

Additionally, the implementation of the implementation strategy is as vital as the implementation of the EBP itself. The audit and feedback method applied in the SHARP trial was a 3-day, labour-intensive process, raising concerns about its sustainability following the trial, which in turn might affect the sustained use of the CCM. Although many studies suggest the effectiveness of audit and feedback, there is large heterogeneity in effect size. This disparity could result from the diverse components of audit and feedback (eg, the feedback's deliverer, content, format, medium, frequency, and other variables), as well as context. Optimising the most effective components in specific environments is a key direction for future research.

Despite these challenges, *The Lancet Global Health*'s focus on implementation science marks an important development,[10] signalling a push for the field within the academic community. The authors of the SHARP trial also deserve recognition for their work in implementing the CCM for depression in a low-resource setting.

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