5 Publication, implementation, evaluation and research gaps

5.1 Publication

This guideline is available to download from the WHO website. Given that an overview of published systematic reviews was used for the development of the guideline, all reviews are already published and available online.

5.2 Implementation and dissemination

WHO regional and country offices, through their contacts with ministries of health, will encourage implementation at country level. WHO will provide technical assistance if substantial country adaptation is required. The HEARTS technical package, which is currently being implemented in 18 countries and has significant partner endorsement, membership and engagement, will be the platform used to implement and disseminate this guideline. The package will be revised to include the implementation tools from this guideline. Separate implementation aspects are being considered as implementation or derivative tools for nonphysician treatment and the treatment of hypertension in areas of humanitarian crises, following publication of the guideline. Implementation support will be extended to countries through all three levels of WHO.

5.3 Evaluation

WHO will monitor uptake and implementation of the guideline in national policies and programmes by reviewing the number of countries that have adapted or endorsed the guideline nationally.

5.4 Future updating of the guideline

The guideline is expected to be valid for a period of five years. This period reflects the fact that new research findings are likely to become available in the meantime but also represents a feasible time frame, considering the costs, time and other resources that are needed for the updating process. If the evidence base or user needs change before the five-year mark, consideration will be given to producing updates sooner.

5.5 Research gaps

Several research gaps were identified by the GDG according to the theme of the PICOs.

Thresholds to determine initiation of therapy and targets to achieve for control

- More evidence is required regarding treatment of those in the SBP 130–139 range who fall into one or more of the following subgroups: diabetes, chronic kidney disease, heart failure, 65 years or older.
- There is a need for better outcomes data from, for example, trials that include heart failure and cognitive impairment among outcomes.
- Clinical significance of adverse events registered in clinical trials needs greater clarity.
- There is a need to quantify the difference in estimates between blinded, placebo-controlled trials and unblinded, active control trials using a standard framework.

- There is a need for periodic analysis of trials in order to capture effects of changes over time in background epidemiology of CVD, non-BP treatments, competing risks, etc.
- More evidence is needed in LICs, MICs and other non-North American/European countries.
- An assessment of the feasibility, resource needs, and costs of intensive treatment in real clinical practice is needed. The resource commitment required for more intensive treatment in LMICs needs to be quantified.
- The opportunity cost of directing resources towards achieving SBP <130 in high-risk individuals needs to be established.
- Research is needed on the feasibility, acceptability, and efficacy of intensive treatment, especially in high-risk populations in LICs and MICs.

Laboratory tests to determine initiation of treatment

- A greater understanding of the essential tests to be performed in all patients to reduce costs and improve outcomes is required.

Role of cardiovascular risk in hypertension treatment

- An exploration is needed of key operational aspects of the implementation of a risk-based approach to CVD prevention and BP-lowering pharmacological treatment in primary health care settings.

Monotherapy versus combination therapy

- A comparison is required of long-term data about hard clinical endpoints between monotherapy and combination therapy.
- There is a need for research studies on real-world experiences, designed and statistically powered, to determine if there is a difference in clinical outcomes, such as reduction in MACE, mortality, and serious adverse events, between single-pill combinations vs multiple-pill combinations.
- Health economic analyses are needed to quantify cost-effectiveness and budget implications of implementing incremental initial combination therapy compared with initial monotherapy.

Frequency of re-assessment

- Criteria establishing the clinical definition of stable BP control will be needed to guide the selection of patients for less frequent follow-up visits.
- Research is needed for early and accurate identification of patients less likely to achieve BP control and less likely to follow up as requested by their health care provider.
- Better evidence is needed on the timing, frequency, and intensity of interventions that improve treatment adherence.

Team-based care for hypertension

- Evidence is needed that remote monitoring and use of community HCWs/navigators can assist in the management of BP.
- Evidence of the feasibility, costs, and effectiveness of community/home-based monitoring of BP is needed.