Effective Diagnosis, Treatment, and Monitoring of Hypertension in Primary Care: Training Workshop

Session 1

Burden of Cardiovascular Disease and Hypertension around the Globe and in [COUNTRY]

Content should be adapted with country-specific information prior to use. Red text denotes places where modification may be required. Guidance on how to adapt the training is provided in the Course Overview.
Competency and objectives

Competency

Ability to convey to patients, health care workers, and leaders the importance of improved treatment of hypertension.

In this session, you will gain knowledge on:

• The burden of cardiovascular disease and hypertension—globally and in [COUNTRY]
• Reasons to focus on hypertension
• Essential components of a scalable hypertension programme
The global cardiovascular disease crisis

Heart disease and stroke kill, and will continue to kill, the most people worldwide.

Total annual deaths: 56.4m

Deaths from NCDs: 39.5m

Deaths from CVD: 17.7m

Deaths from stroke: 6.7m

Deaths from CHD: 7.4m

Source: WHO, Global Health Observatory
Cardiovascular disease not only kills the elderly.

2015: 15 million people died from NCDs between the ages of 30 and 69.

These premature deaths could largely have been prevented.

Source: WHO Global Health Estimates.
High blood pressure: The world’s leading killer

High blood pressure kills nearly as many people worldwide each year as all infectious diseases combined.

Source: World Health Organization, 2010
Hypertension control key to reducing CVD deaths

The percentage by which deaths from cardiovascular diseases (CVDs) could be reduced if specific risk factors were brought under control:

- Hypertension: -60%
- High cholesterol: -50%
- High sodium: -40%
- Air pollution: -30%
- Tobacco: -20%
- Overweight: -10%

Risk factors not mutually exclusive.
Burden of HTN in [COUNTRY]

Slides 8-11: Examples from India. Replace with slides from your country.
Burden of HTN in India

• Nearly 1/3 of Indian patients had raised blood pressure
  ○ Urban higher than rural
• Of these, 25% rural and 42% of urban Indians are aware of their HTN status.
• Only 25% rural and 38% of urban Indians are being treated for their HTN.
• Only one-tenth of rural and one-fifth of urban population with HTN have their BP under control.

Source: Anchala, BMJ Open, 2014
Prevalence of HTN in various Indian states

Source: DLHS- 4 survey 2012-13
Current scenario of HTN in India

**Tamil Nadu:** 50% population screened in 4 districts studied; at least 50% of patients registered had blood pressure controlled but:

- <30% were aware at the population level
- <20% were on treatment
- <15% of those with hypertension had blood pressure under control

**Delhi:** Two cross-sectional surveys in urban and rural areas showed

- **Overall there was no improvement** in awareness, treatment or control rates of hypertension in the population from 1991-1994 to 2010-2012. But the prevalence of HTN had rapidly increased.

National action plan with respect to CVDs

• National action plan includes specific targets to be achieved by 2025:
  o 25% relative reduction in overall mortality from CVD
  o 30% relative reduction in mean population intake of salt/sodium
  o 25% relative reduction in prevalence of raised blood pressure

• Focus on achievement of these goals within the existing healthcare system

• Recently, the Government of India has started universal screening of HTN and DM as a component of comprehensive primary healthcare
Hypertension – A silent killer

Hypertension can cause:

**Brain**
- Stroke
- Dementia

**Arteries**
- Artery damage and narrowing
- Aneurysm
- Leg amputation

**Heart**
- Coronary artery disease
- Heart attack
- Congestive heart failure

**Kidneys**
- Kidney failure
- Kidney artery aneurysm
Hypertension control

Most people with hypertension do not have it under control.

- **100%** Have high blood pressure
- **37%** Aware they have it
- **47%** Receiving treatment
- **14%** BP controlled

A reduction of 20 mmHg systolic BP halves vascular mortality at ages 35-69

Why focus on hypertension treatment?

• It is affordable
• It is simple
• It is essential

Treatment of hypertension in primary care can save more lives than any other primary care treatment programme.
EXERCISE 1

Exam Room Role Play

**Person 1** plays the role of a patient newly diagnosed with hypertension but with no symptoms.

**Person 2** plays the role of the health care provider explaining why treatment is necessary.

In pairs, take turns so that each person plays each role.
1. Simple, detailed protocols
2. Administrative and operational procedures in place to enable task sharing
3. Regular and uninterrupted supply of medications
4. Patient-centered services that reduce the barriers to adherence, including:
   - Cost reduction
   - Convenient medical visits and medication refills
   - Once-daily treatment regimens
   - Fewer tablets, including through combination medications
   - Improving access to blood pressure monitoring
   - Public education
5. An information system that allows real-time feedback on adherence and blood pressure control among individual patients and different treatment systems to facilitate continuous programme improvement
Technical packages under Global Hearts Initiative

- **Monitor**: Monitor tobacco use and prevention policies
  - Protect: Protect people from tobacco smoke
  - Offer: Offer help to quit tobacco use
  - Warn: Warn about the dangers of tobacco
  - Enforce: Enforce bans on tobacco advertising, promotion and sponsorship
  - Raise: Raise taxes on tobacco

- **I. SURVEILLANCE**: Measure and monitor salt use
- **II. HARNES INDUSTRY**: Promote the reformulation of food to contain less salt
- **III. ADOPT STANDARDS FOR LABELING AND MARKETING**: Implement standards for effective and accurate labeling and marketing of food
- **IV. KNOWLEDGE**: Educate and communicate to empower individuals to eat less salt
- **V. ENVIRONMENT**: Support settings to promote healthy eating

- **H**: Healthy lifestyle counselling
- **E**: Evidence-based treatment protocols
- **A**: Access to essential medicines and technology
- **R**: Risk-based management
- **T**: Team-based care
- **S**: Systems for monitoring
Hearts Technical Package

**Healthy lifestyle counselling**
Counselling on tobacco cessation, diet, physical activity, alcohol use and self-care

**Evidence-based treatment protocols**
Simple, standardized algorithms for clinical care

**Access to essential medicines and technology**
Access to core-set of affordable medicines and basic technology

**Risk-based management**
Total cardiovascular risk assessment, treatment and referral

**Team-based care**
Decentralized, community-based and patient-centred care

**Systems for monitoring**
Patient data collection and programme evaluation
Integrating HEARTS into Primary Care

- **District Hospital**
- **Primary health care**
- **Community health worker**

**Specialist treatment**
- Initial review of high-risk patients and all secondary prevention cases
- Review of complex cases referred from outpatient health clinic
- Provide doctor to supervise medical clinics in primary health care

**Risk screening, assessment and management**
- Cardiovascular risk assessment
- Measurement of blood pressure, body mass index, urinalysis, blood glucose, total cholesterol

**Health education**
- Screening of population for risk factors
- Providing lifestyle interventions (tobacco cessation, physical activity, diet)
- Referral of individuals with risk factors to primary health care