

**Prevention of Recurrent Heart  
Attacks and Strokes in Low and  
Middle Income Populations**

## Tobacco cessation

Benefits of smoking cessation after MI/stroke

The most CE strategy not resolved

Health professional advice is effective

Nicotine replacement and antidepressant drugs  
have short-term benefits.

Widespread use costly

Are there specific dietary changes in the diet of patients that reduce CVD risk?

Increasing intakes of oily fish, omega-3 and omega-6 fatty acids/ fruit and vegetables - likely to reduce the risk of recurrences.

Reducing intakes of TF (<30% of calories), SF intake (<10% of calories) salt intake (5 grams or 90 mmol per day) is likely to be beneficial.

Does regular PA and exercise/rehabilitation reduce the risk of recurrent vascular events?

Reduction in CHD mortality associated with exercise-only interventions 31% (metaanalysis).

No evidence of any marked effect on non-fatal cardiovascular outcomes.

Is it appropriate to offer non-pharmacological interventions in combination?

### Evidence

Effects of cigarette smoking, PA and diet on CHD risk are largely independent.

Based on risk reductions of 46% from smoking cessation , 20% from increased exercise and 17% from dietary change an overall risk reduction of the order of 64% expected.

# Benefits

Aspirin

BB

ACEI

Statins

Established from randomized controlled trials and from large-scale meta-analyses.

	<u>RR reduction</u>	<u>2-year event rate</u>
<u>None -----</u>		8.0%
Aspirin	25%	6.0%
b-blockers	25%	4.5%
Statin	30%	3.0%
ACEI	25%	2.3%

Cumulative risk reduction if all four drugs are used is about 75%

Events = cardiovascular death, myocardial infarction, or strokes.

Does lowering the blood pressure level reduce the risk of vascular events in subjects with CHD?

No direct evidence from RCTs of the benefits of BP reduction .

Strong presumptive evidence of benefit from observational studies and from clinical trials of blood pressure reduction in the primary prevention of coronary heart disease.



What is the place of CABG and PTCA in the management of patients with CHD?.

CABG surgery improves survival and improves symptoms in moderate and high-risk patients (little impact in lower risk patients).

PTCA useful in relieving symptoms in refractory angina in patients on optimal medical treatment .  
No proven impact on mortality and morbidity.

Does long-term treatment with aspirin reduce the risk of recurrent vascular events in patients with cerebrovascular disease?

The benefits of long-term aspirin in the secondary prevention of stroke presumed to be the result of cerebral infarction are securely established from RCTs and from large-scale meta-analyses.

Does lowering the blood pressure level reduce the risk of vascular events in subjects with cerebrovascular disease?

BP reduction is effective in reducing the risk of recurrent vascular events and should be considered in all patients with TIA/ stroke.

Based on the WHO/ISH guidelines target <130/<80-85