Geneva, August 31, 2016

World Stroke Organization Submission


The World Stroke Organization (WSO) welcomes the process to update Appendix 3 of the Global Action Plan on the Prevention and Control of NCDs 2013-2020 (GAP), as well as the opportunity for civil society to comment online and in-person on the WHO Discussion Paper presenting a draft updated Appendix.

Appendix 3 is a most important document as it highlights the core elements in prevention and control of the NCDs globally.

Objective 3. To reduce modifiable risk factors for noncommunicable diseases and underlying social determinants through creation of health-promoting environments.

WSO welcomes the revisions made on Objective 3. Scientific progress in this area includes the recently published updated INTERSTROKE study (1), which demonstrated that ten potentially modifiable risk factors were collectively associated with about 90% of the population attributable risk (PAR) of stroke in each major region of the world, among ethnic groups, in men and women, and in all ages. Another recent study from the Global Burden of Disease stroke group (2) showed that more than 90% of the stroke burden is attributable to modifiable risk factors, and achieving control of behavioural and metabolic risk factors could avert more than three-quarters of the global stroke burden. Air pollution had emerged as a significant contributor to global stroke burden, especially in low-income and middle-income countries, and therefore reducing exposure to air pollution should be one of the main priorities to reduce stroke burden in these countries. The findings emphasize the need for intersectorial actions in stroke prevention.
Objective 4. To strengthen and orient health systems to address the prevention and control of noncommunicable diseases and the underlying social determinants through people-centred primary health care and universal health care.

The strengthening and orientation of health systems for the prevention and control of stroke represents one of the most important actions in the stroke field. The WSO notices the appropriate inclusion of CV 8 "Care of acute stroke and rehabilitation in stroke units", which represents a corner stone for stroke care globally. Of all actions on stroke, stroke unit care is the single most effective intervention overall on a population perspective.

WSO notices also the appropriate inclusion of CV 6 "Anticoagulation for medium- and high-risk non-valvular atrial fibrillation and for mitral stenosis with atrial fibrillation" and CV 7 "Low-dose acetylsalicylic acid for ischemic stroke". Another important principle in stroke prevention is statin treatment which is included under CV 1a and CV 1b. The application of CV 6, CV 7 and parts of CV 1a and b requires the availability of computerized tomography (CT) scan to differentiate ischemic from hemorrhagic stroke. CT scan is also essential to rule out e.g. tumors, abscesses, traumatic intracranial hemorrhages – rare but important differential diagnoses to stroke.

WSO notices the omission of treatment of acute ischemic stroke with intravenous thrombolytic therapy under Objective 4. Redirecting health systems to include acute management of stroke represents one of the most important advances in the stroke care of any time. Before any acute therapy was available, it was common that a proportion of acute strokes were treated at home, and for those admitted to hospital the priority status in the emergency care pathway was the lowest, even omitting the fundamental differentiation of intracerebral hemorrhage and ischemic stroke since it would not change management. This practice is still routine in many parts of the world. The demonstration of an early treatment window where acute ischemic stroke could be treated effectively and brain damage reduced, provided an impetus to redesign stroke services to allow rapid assessment and delivery of thrombolytic therapy. The most recent meta-analysis based on individual data from 6756 patients (3) showed showed a consistent efficacy of tPA across age, severity, and subtype of ischemic stroke. Within 3 hours, the NNT for an extra mRS 0 to 1 outcome was 8, or 4 if considering shift in mRS by ≥1 category. Several cost-effectiveness analyses have been made in Canada, UK, Denmark, Australia and the US demonstrating tPA to be cost-effective and in many cases a cost-saving/dominant strategy for treating eligible patients with acute ischemic stroke (4). WSO notes the inclusion of CV 2 “Treatment of new cases of acute myocardial infarction with either: acetylsalicylic acid, or acetylsalicylic acid and clopidogrel, or thrombolysis, or primary percutaneous coronary interventions (PCI)” in the Draft Updated Appendix 3. An analogous inclusion of “Treatment of acute ischemic stroke with either acetylsalicylic acid,
or intravenous thrombolytic therapy” under Objective 4 in Appendix 3 would be warranted both from an effectiveness and economic perspective in our opinion.

WSO has developed the “World Stroke Organization global stroke services guidelines and action plan” which is a synopsis of the core recommendations and quality indicators adapted from ten high quality multinational stroke guidelines (5). The Global Stroke Services Action Plan was conceived as a tool to identifying key elements in stroke care across a continuum of health models. At the minimum level of resource availability, stroke care delivery is based at a local clinic staffed predominantly by non-physicians. In this environment, laboratory tests and diagnostic studies are scarce, and much of the emphasis is placed on bedside clinical skills. The essential services level offers access to a CT scan, stroke unit management, the potential for acute thrombolytic therapy, and essential preventive therapies. WSO promotes that regions with a minimum services level should be facilitated to reach the essential services level.

By inclusion of “Treatment of acute ischemic stroke with either acetylsalicylic acid, or intravenous thrombolytic therapy” in Appendix 3, the core elements of effective and cost effective stroke care of the essential stroke services level would be included in this important WHO document.

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References


3 Emberson J et al. Effect of treatment delay, age and stroke severity on the effects of intravenous thrombolysis with alteplase for acute ischemic stroke: a meta-