

Impact of a nationwide public awareness campaign on delay, symptoms at admission and outcome in patients with acute coronary syndrome

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Background: Time between symptom onset and starting treatment has the greatest impact on outcome in patients with acute coronary syndrome (ACS).

Aim: To assess the influence of a nationwide public campaign "HELP", an awareness and sensitizing campaign to educate the general population to recognise early symptoms of AMI and to react rapidly and correctly in these emergency situations, on delay and outcome in patients treated with ACS.

Methods: All ACS patients documented in the AMIS Plus registry within two public campaign periods (CP) over 8 weeks in 2007 through TV spots, press information, brochures, flyers and promotions targeting Switzerland ("HELP" campaign supported by the Swiss Heart Foundation) were included and compared to four reference periods (RP) in 2005 and 2006.

Results: Overall delay between onset of symptoms and hospital admission in 852 ACS patients (66.7 yrs, 72% males) during CP compared to 1805 ACS patients (66.8 yrs, 72% males) during RP did not decrease significantly (180 min (IQR 90, 540) vs. 194 min (IQR 102, 585) $p = 0.167$). However, there was a trend towards earlier admission during CP in males (165 min (IQR 80, 570) vs. 190 (IQR 100, 539), $p = 0.078$) as compared to females (230 min (IQR 120, 540) vs. 208 min (IQR 113, 707) $p = 0.894$). After exclusion of the outliers the campaign had a significant impact on delay in male patients ($p = 0.034$). Awareness of chest pain at admission increased during the CP as compared to the RP (87% vs. 81%, $p = 0.001$). However, hospital mortality did not change (6.0% vs. 6.5) ($p = 0.665$).

Conclusions: A nationwide public awareness campaign did not effectively shorten the overall median prehospital delay in ACS patients, even if there was a trend towards a shorter delay in males. Although the patients' awareness of cardiac symptoms could be improved during CP, hospital mortality remained unchanged. Further CPs are needed to shorten admission delay in ACS, and special focus should be on female patients.