DO WOMEN HAVE DIFFERENT STROKES? GENDER DIFFERENCES IN STROKE IN A DEVELOPING COUNTRY

U.K. Ranawaka[1], A.M.A Amensi[1], A.T. Gammulla[1], M.A.F. Alexander[1], V.N.R.N. Fonseka[1], A. Kulatunga[2], W.A.J.N. Tissera[2], M.M.S. Cooray[2], A. Pathmeswaran[1], A.R. Wickramasinghe[1]
[1]*Faculty of Medicine, University of Kelaniya &* [2]*Colombo North Teaching Hospital, Ragama, Sri Lanka*
udayaran@yahoo.com

Objective: Data on gender-related differences in stroke characteristics are lacking from developing countries, where stroke types, risk factors, severity and outcomes may differ. We sought to describe the gender-related differences in Sri Lankan patients with stroke.
Methods: We studied all patients with stroke admitted to Colombo North Teaching Hospital (Ragama Stroke Registry) over a one year period. Gender-related differences in stroke characteristics were analysed with bivariate analysis, and factors associated with poor outcome were determined by multiple logistic regression analysis.
Results: Of 547 patients studied, 59.4% were males. Women were older [mean age (SD) –- 66.9(12.1) years] than men [62(12.4) years]; p<0.001. There were no difference in clinical (Oxfordshire classification) or radiological (ischaemic/ haemorrhagic) subtypes of stroke.
Women were more likely to have hypertension (64.9% vs 49.2%; p<0.001), diabetes (35.6% vs 23.4%; p=0.001), high waist circumference (51.6% vs. 15.7%; p<0.001) and a family history of stroke (27.9% vs. 20.9%; p=0.037). Smoking and alcohol use were seen almost exclusively in men.
More women were likely to reach hospital within 4.5 hours (57% vs. 49.2%; p=0.047). No differences were seen in rates of CT scanning, in-hospital treatment and duration of hospital stay. On bivariate analysis, women had more severe strokes on admission (mean NIHSS score 11.1 vs. 9.2; p=0.008), and poor functional outcome at discharge (Barthel index ≤60, mRS ≥3 - p<0.001). However, gender was not independently associated with poor outcome on mutivariate analysis.
Conclusions: Important gender based differences were seen in stroke types, risk factors, stroke severity and early outcome.