

## Conclusion

Male farmers over 60yrs is at a high risk, probably due to long term exposure to etiological agents (risk factors). Risk index will be useful in implementing preventive strategies and to identify individual risk of each person in particular areas.

## 5.3 RISK FACTORS ASSOCIATED WITH CHRONIC KIDNEY DISEASE OF UNKNOWN AETIOLOGY

Wanigasuriya KP<sup>1</sup>, Peiris-John RJ<sup>2,3</sup>, Wickremasinghe R<sup>4</sup>

<sup>1</sup>Department of Medicine, University of Sri Jayewardenepura, Nugegoda;

<sup>2</sup>Department of Physiology, University of Sri Jayewardenepura, Nugegoda; <sup>3</sup>Section of Epidemiology and Biostatistics, University of Auckland, Auckland, New Zealand; <sup>4</sup>Department of Public health, University of Kelaniya, Ragama, kamaniw@sltnet.lk

1. CKDu in this region mainly affects males who are involved in paddy farming raising the possibility of agrochemical exposure as a cause for CKDu. A descriptive cross-sectional study was carried out to determine if there is an association between CRF and low-level organophosphate pesticide exposure. There was greater inhibition of acetylcholinesterase among patients with CKDu compared with patients with chronic renal dysfunction from a non-agricultural area.

2. In a case controlled study, 183 patients with CRF of unknown aetiology attending TH Anuradhapura were compared with a control group. In a multivariate logistic regression analysis significant predictors of CRF of unknown aetiology included, having a family member with a history of chronic renal dysfunction, a history of having taken ayurvedic treatment and having had a snake bite in the past. A family member with a history with renal dysfunction suggests a genetic aetiology of the disease but it is likely that the disease is triggered by an environmental factor in those genetically predisposed.

3. Risk factors for microalbuminuria (MA) were evaluated in of 425 females and 461 males CKDu. The prevalence of MA was 6.3% in females and 8.6% in males. In the binary logistic regression analysis the significant predictors of microalbuminuria included, age, history of smoking, being under treatment for hypertension and drinking well water in the fields. Subjects who drank well water in the field were approximately two-and-a-half times more likely to have microalbuminuria as compared to those who do not do so.

4. Ochratoxin A (OA) levels were tested in 98 food samples, consumed by people in the NCP. The results indicate that OA is a natural contaminant of cereals and pulses cultivated in these areas, but the levels detected were below the statutory maximal limit.