



Communication of the Board of the Consortium on the Epidemic of Nephropathy in Central America and Mexico (CENCAM) July 8, 2016

CENCAM is a formal regional and international network of over 100 scientists studying chronic kidney disease of unknown etiology (CKDu), which was established during the 1st International Workshop on Mesoamerican Nephropathy held in November 2012 in Costa Rica. CENCAM's mission is to contribute to knowledge generation and to promote and facilitate activities and policies to reduce CKDu occurrence in Central America and Mexico.

This month, a document reached the Board of CENCAM named “SER San Antonio Initiatives 2016”, elaborated for marketing purposes by SER Holding Co, the proprietary of Ingenio San Antonio (ISA). Specifically, the document states that “*i) studies carried out by Boston University, Baylor University, and the London School of Hygiene and Tropical Medicine have all been inconclusive as to the cause of the Mesoamerican Nephropathy; ii) all have determined likely multiple causal factors; and iii) research is ongoing.*” In addition, in the section of frequently asked questions of the website of Ingenio San Antonio (<http://isaresource.com/faq/>), the question “*Does any link exist between CKDnt and sugarcane cultivation?*” is answered as: “*A 2014 study published in the American Journal of Kidney Disease reported - At present, Mesoamerican nephropathy is a medical enigma yet to be solved -, which was supported by a subsequent study published in the same publication in 2015.*”.

These allegations omit important information emanating from a considerable number of published and ongoing scientific studies.

Visit www.regionalnephropathy.org to see the MeN 2015 [Statement](#) by CENCAM Board and Scientific Committee issued after the 2nd International Workshop on Mesoamerican Nephropathy held in Costa Rica in November 2015, and a [bibliography of peer-reviewed scientific publications](#) related both to the Mesoamerican nephropathy and CKDu epidemics in other parts of the world. The technical report of the 2nd International Workshop on the MeN will be available online shortly on the same site.

The statement by CENCAM and the workshop's Scientific committee on what is currently known about MeN says the following:

- There is consensus that MeN has a predominant occupational component. This conclusion is based on multiple studies with various designs by different research groups in several countries.



- There is growing evidence for a causal role of strenuous work, heat and insufficient rehydration as risk factors in MeN, and progress has been made towards clarifying pathophysiological pathways for heat stress leading to chronic kidney disease. Intervention studies to reduce heat stress and dehydration in high risk workers are warranted, and one major study has been initiated.
- It is quite possible that other factors also play a role, perhaps in combination with heat stress and dehydration. Exposures to specific agrochemicals or other yet-unknown toxins need further evaluation as possible risk factors related to disease initiation or progression.
- Based on studies conducted to date, no evidence exists for exposure to heavy metals or alcohol as sole or important risk factors for MeN. The roles of infectious agents, NSAIDs, genetic susceptibility, gene-environment interactions and social determinants as contributors to disease onset and progression also need to be clarified.
- Social and economic drivers of the disease, including working conditions, unemployment and precarious employment, and poverty in general need to be analyzed both in community and workplace studies. The need for alternative, improved work environments, particularly concerning heat conditions and agrochemical exposures, was underlined as was the need for improved healthcare for the victims of the epidemic.