March 29, 2016

Dear CENCAM members,

On behalf of the CENCAM Board, I have the pleasure to send you a statement to summarize the results of the 2nd International Workshop on Mesoamerican Nephropathy, held in San José, Costa Rica in November 2015. It was drafted by CENCAM Board members and members of the Scientific Committee of the workshop, and in addition was circulated among the members of the Workshop Organizing Committee for comments. The statement summarizes key issues whereas the full procedures of the workshop will be published and distributed in some months.

We encourage you to distribute this statement in your networks as widely as possible. We would appreciate your suggestions of opportunities where CENCAM could promote or publicize this statement through professional societies, the professional press and the lay press.

Kind regards,

Ineke Wesseling
Chair CENCAM
The 2nd International Workshop on the Epidemic of Mesoamerican Nephropathy (MeN) was held in San José, Costa Rica, November 18-20, 2015, three years after the first workshop. A total of 75 experts from 18 countries discussed the evidence regarding possible causes of MeN, pathophysiological pathways, and similarities and differences with other epidemics of chronic kidney disease unrelated to traditional CKD causes of diabetes and hypertension (CKDu) in Sri Lanka and other parts of the world. The discussion also addressed methods to assess different aspects of the epidemic, ranging from etiologic questions to interventions aimed at prevention. A comprehensive technical report is in preparation, but an interim statement of some key conclusions about MeN is justified considering the urgency of taking action to address this fatal disease.

There was a consensus that MeN has predominantly an 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. However, 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.

Coordinated regional approaches to study prevalence, etiology, and to evaluate interventions were given high priority. Emphasis was also given to a global focus on CKDu, for understanding of the similarities and differences of CKDu epidemics in different geographic areas. In particular, there is a need for standardized studies (including simple prevalence studies) to enable valid comparisons between countries and regions. This is an important step in ascertaining whether the epidemic of CKDu in Central America that we have called MeN is pathophysiologically similar to what is occurring in other parts of the world. In turn, a better understanding of the extent to which CKDu is occurring in multiple locations would provide important information regarding the likely causes of this fatal disease.