KIDNEY PROTECTION PROGRAM IN ALEXANDRIA REGION (KIPP-ALEX): THE FIRST EDUCATIONAL PROGRAM AMONG UNDERGRADUATE MEDICAL STUDENTS TO SCREEN FOR MAJOR NON-COMMUNICABLE DISEASES

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INTRODUCTION AND OBJECTIVES

It is well established that non-communicable diseases (NCD's) are the leading cause of death in the world, responsible for 63% of the 57 million deaths that occurred in 2008.

The early detection and prevention of progressive disease is the principle way to reduce the burden of NCD's through management of risk factors and interventions.

To achieve such a goal successful screening programs for NCD's are needed. Hence, the goal of Kidney Protection Program in Alexandria region (KiPP- Alex) is to train undergraduate medical students and junior physicians to create a generation aware of the important role of prevention of NCD's in general and CKD in particular and to be able to screen people for major NCD's including CKD, hypertension, diabetes mellitus and obesity. Thus, KiPP- Alex has educational and epidemiological objectives.

METHODS

It was a population based screening program for CKD, hypertension, diabetes and obesity.

A representative sample of 2000 persons was considered to cover four governorates (Alexandria, Kafr El-Sheikh, Behira and Matrouh) representing the three sectors of population, urban, rural as well as Bedouins.

Educational workshops were performed. Trained participants were responsible for screening their adult neighbors collecting the general information on demographic data, diet, smoking, herbal use, alcohol and drug consumption and physical activity.

Physical examination was performed and included body mass index and blood pressure.

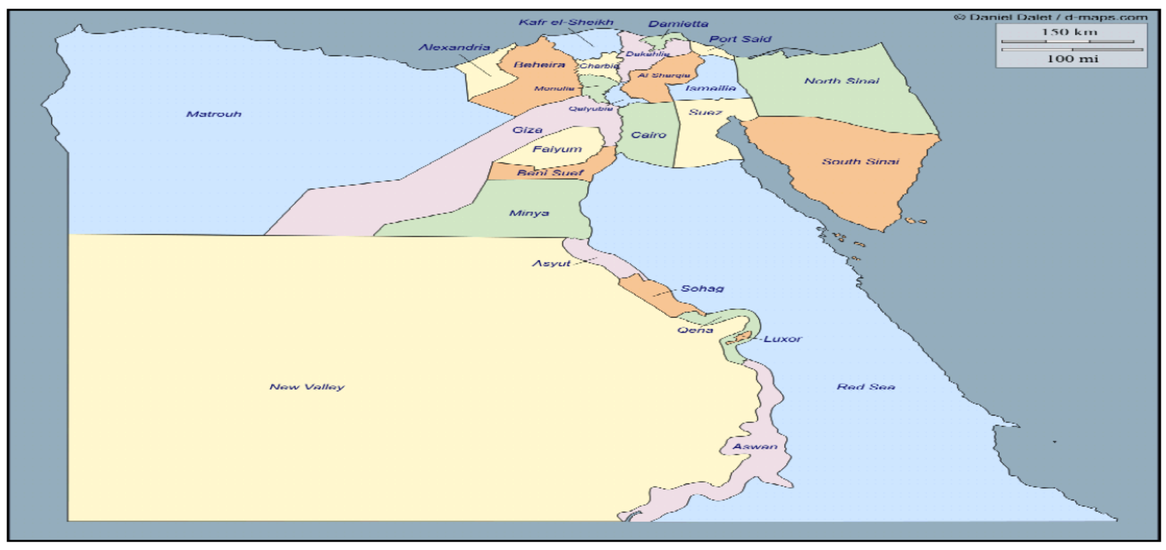
Laboratory investigations included the followings: Urine protein/ creatinine ratio, serum creatinine concentration, fasting plasma glucose, fasting plasma cholesterol and triglycerides. Ten screening campaigns were performed to complete the allocated sample.

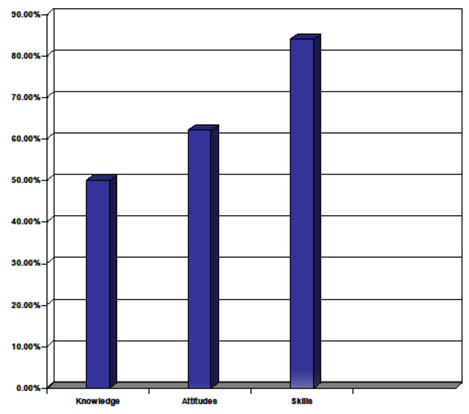
RESULTS

Four educational workshops were performed for 200 undergraduate medical students and house officers to attain knowledge about chronic kidney disease and cardiovascular disease, diabetes mellitus, obesity and dyslipidemia, basis for research methodology and statistics, basis for electronic submission.

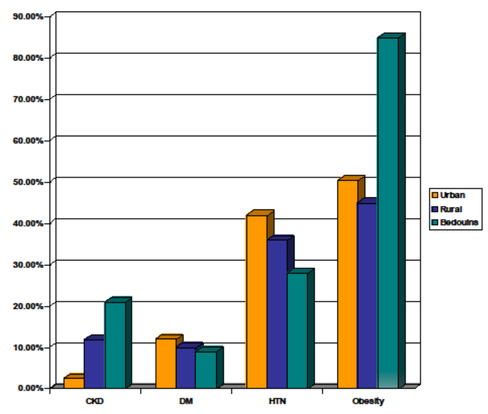
Training for different skills as vene-puncture, blood sampling, proper blood pressure measurement as well as electronic skills were included in educational workshops. Improvement of participants learning objectives including knowledge, attitudes and skills were achieved by a mean of 87%.

The prevalence of chronic kidney disease varied from 2-21%, diabetes reached up to 12%, hypertension exceeded 40% and obesity reached up to 83% in some regions. The risk factors including smoking, drinking water, herbal use, dietary habits and others were found to be correlated with the occurrence of CKD and other NCD's. Many proposed plans of action were suggested.





The mean increments of learning objectives of knowledge, attitudes and skills of the studied participants



The prevalence of chronic kidney disease, diabetes, hypertension and obesity in the three different sectors of population.

CONCLUSIONS

KiPP-Alex succeeded in raising awareness about NCD's prevention and control among junior medical staff and medical students and screening Alexandria region for NCD"s. Similar projects could be applied in different universities to raise the awareness among junior staff about NCD's prevention and control as well as to screen the whole country. Further control programs should be applied to combat our real enemy which is NCD's.

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