Title: Breaking barriers to diabetes management in rural communities: Student nurses make a difference through the use of point-of-care testing

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Context and setting: Diabetes just like in many parts of the world remains a growing public health concern in Cameroon. Urban populations are more affected than rural population. In recent times however, the change in life style has placed more people at risk of diabetes and this trend has also affected rural areas which are adopting urban way of life. Current data suggest that just like in urban areas, there has been an increase of diabetes in rural communities in Cameroon. Unfortunately diabetes care in the rural communities has always been given less attention. Using point-of-care testing (POCT), final year enrolled nursing students screened and cared for diabetic clients during their community placement in rural areas.

Why the idea was necessary: There are very few diabetic centers in each Region in Cameroon and these are located only in cities. Diabetes management is not one of the packages of activities carried out by the health centers (run by nurses) which serve rural areas. Some reasons advanced are lack of resources such as diagnostic equipment and qualified personnel. Given the increasing prevalence of diabetes in rural communities measures are needed to address the problem.

What was done: A 12-hours curriculum on: the use of POCT devices (Glucometers, digital blood pressure machines and urine strips) and diabetes screening and management through education on life style modification and self monitoring was designed and thought to 14 final-year enrolled nursing students of the St Francis School of Health Sciences. During their 10 weeks community placement in two rural areas in the S.W.R, the students, with the involvement of the health center nurses, screened and followed up diabetic patients and people at high risk of diabetes. Education on life style modification and the use of POCT for self monitoring was done. The impact of the project on the followed-up clients, nurses at the health centers and student nurses was evaluated.

Results and impact: A total of 334 people were screened out of which: 117 (35.03%) were at risk, 37 (11.07%) were at high risk, 16 (4.79%) were diagnosed of diabetes and 157 (47.01%) were free from any signs of diabetes. The followed up clients expressed great satisfaction with the care they received; one client said "It worked like magic, only a little exercise and the numbness in my legs disappeared" another said "if you people did not come I would have died of diabetes without knowing". The nurses also expressed great satisfaction from the project. Almost all acknowledged they have learned a lot and strongly recommend the government should adopt the project and incorporate it into the package of activities at the health centers. The students said the use of POCT made it easier for them to identify and follow-up the clients and strongly recommend the school to adopt and incorporate the project permanently into the school programme. Amongst the problem faced by the students were; lack of compliance, resistance from some lab technicians, and reluctance of some clients participating in the screening for fear knowing their status will get them depressed.