Introduction

Kenya has a population of 40 million people; about half are adults (Mwenda, 2012).
- Prevalence rate of diabetes in adults aged 20-79 is 4.66% (720, 730). In 2012, 17,733 adults died of diabetes related causes and 595,400 remain undiagnosed (International Diabetes Federation, 2012).
- Diabetes is the leading cause of kidney disease, heart disease, stroke, adult blindness and non-traumatic lower limb amputations (ADA, 2012).
- Diabetes self-management education (DSME) in Kenya is little known and underserved (MOPHS, 2010).
- There are few providers, diabetes educators and nurses. Ratio of physicians to patients is 1:8900 (Sunday Nation Newspaper, 2012) & that of nurses to patients is 1:1000 (Kenya Health Workforce, 2010).
- Persons in rural areas with diabetes have significant barriers to care and self-management education (Rourke, 2010).
- Approximately 80% of Kenyans are uninsured and 45% live under $1 a day (Kamunyo, 2012).
- Kenya provider payment mechanisms include out of pocket 36.7%, public 29.4%, private companies 3.4%, and others 0.5% (Kamunyo, 2012).
- Diabetes is the leading cause of kidney disease, heart disease, strokes, adult blindness and non-traumatic lower limb amputations (ADA, 2012).
- DSME can lead to improved skills to manage the disease (Hunt & Grant, 2012).
- Community health workers (CHWs) can be trained & utilized to provide culturally relevant DSME for patients in rural areas at a cheaper cost (Hunt & Grant, 2012).
- DSME may act as a stepping stone for other projects that may utilize CHWs to reach rural people with other diseases.

Purpose

To develop a DSME program for underserved rural persons in Kenya with diabetes that will:
- Increase access to diabetes care
- Empower them with knowledge and skills in self-management
- Reduce diabetes complications
- Be delivered by CHWs to increase social acceptability
- Be appropriate to be utilized by hospitals in Kenya

Methods

- Process of preparing DSME program involved development of:
  - Criteria for hiring CHWs
  - Plan for recruiting target population
  - Training modules
  - DSME delivery plan
  - Start-up and operating budget
  - Evaluation materials
  - IRB exempt

Results

- DSME program is complete and ready to be implemented in any hospital in Kenya
- North Kinangop C. Hospital has shown interest in implementing the program.
- Diabetes educators (DEs) will oversee the implementation.
- Project director will provide oversight as needed.
- CHWs will be trained by DEs & registered nurses (RNs).
- Patient identification will be completed in the diabetes clinics.
- Qualifying criteria will be adults with type 1 or type 2 diabetes & HbA1c >6.5%.
- CHWs will deliver DSME and conduct follow up appointments.
- DEs and RNs will conduct weekly visits to the community to provide guidance to CHWs.
- Emphasis will be on prevention of complications from diabetes.
- Complicated cases will be referred to diabetes clinics for further management.
- DEs will keep the diabetes clinics informed of activities taking place in the community.

Evaluation Plan

- Process and outcome evaluation will be completed every three months by the appointed DEs, RNs & CHWs.
- Both process and outcome evaluation will be completed by use of:
  - Questionnaires
  - Interviews
  - Direct observation
  - Review of records

Practice Implications

- DSME program is designed to:
  - Reach rural and underserved patients with diabetes
  - Bridge the gap between rural residents and accessible health care
  - Reduce diabetes complications
  - Improve patient outcomes

Conclusions

DSME may act as a stepping stone for other projects that may utilize CHWs to reach rural people with other diseases.
- Future plan:
  - Continue to improve DSME program
  - Reach more hospitals in Kenya to inform them of the program

References


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