

WHITE PAPER

A roadmap to recognise diabetes educators in sub-Saharan Africa



DIABETES AFRICA CHAMBER
ON SUSTAINABLE EDUCATION



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A roadmap to recognise diabetes educators in sub-Saharan Africa

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Background

Our work

Diabetes Africa is a non-profit organisation dedicated to helping healthcare professionals, entrepreneurs and decision-makers reach more people and make a greater impact fighting diabetes in Africa and with people of African heritage around the world.

With the help of our network, we support the production and management of projects in the field of creative media, marketing and communications, medical education and events. When relevant and needed, we also provide reliable information and advice to decision-makers who can make a difference against diabetes.

This is done in collaboration with our community of expert professionals and people living with diabetes.

Our work is structured around professional faculties and policy chambers. Our chambers cover top issues to be resolved such as: access to devices and equipment, access to care and medicine, data collection, promotion of best practices, disease awareness and follow-up, sustainable education and telehealth.

About this paper

This paper is designed to inform decision-makers responsible for the funding and delivery of healthcare service across Africa. It focuses on one of the most potent interventions to reduce the risk of costly and life-threatening complications from diabetes.

Expert members from the Chamber on Sustainable Education authored this paper, with logistical and

coordination support from the Diabetes Africa central office.

The Chamber on Sustainable Education exists to bring forth solutions to instil essential diabetes care knowledge among healthcare personnel and people living with diabetes, with a focus on economic sustainability.

A note on terminology

In this publication, we use the terminology 'diabetes educator' to describe the role of a nurse, dietitian, doctor, pharmacist, or other licensed health professional who has undergone further specific training to deliver diabetes education and coaching to people living with diabetes.

We are aware that our work has an international readership, and that in some settings the term 'diabetes educator' is being retired in favour of newer expressions such as 'diabetes trainer' or 'diabetes care and education specialist'.

For the purpose of this paper, we have chosen to use 'diabetes educator' to refer to the role as the term is widely used across Africa, and will aid familiarity with the topic. Word usage will not be addressed in detail in the present publication.

Executive Summary



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Training healthcare professionals to impart culturally appropriate, practical knowledge to people living with diabetes is key to addressing diabetes in low- and middle-income countries, particularly in sub-Saharan Africa.

Diabetes self-management education allows people with diabetes to manage their conditions in the community outside of a medical environment. This white paper describes

pathways for the development of diabetes educators as a cost-effective, targeted intervention that is likely to yield the most results in reducing the burden of diabetes in Africa.

1. See p. 22 for details

Executive Summary

Situation

Diabetes can lead to serious and costly complications, for individuals and for society.

This is the reality that people living with diabetes, and decision-makers in sub-Saharan Africa and other low-and-middle income countries, are faced with.

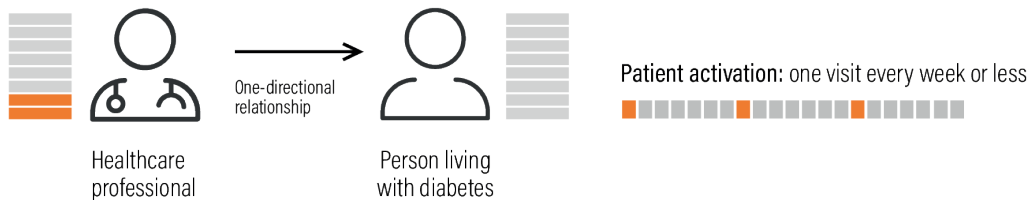
Diabetes self-management education (DSME) is the process by which trained healthcare professionals communicate holistic, practical and lifestyle knowledge to people living

with diabetes to help them manage their conditions in the community outside of a medical environment. DSME has been shown to be a cost-effective, targeted intervention in diabetes care.

Despite the urgent need, studies in low-and-middle income countries show there is a lack of trained diabetes educators to meet the requirements of people living with diabetes in sub-Saharan Africa.

"Diabetes self-management education is the process by which trained healthcare professionals communicate holistic, practical and lifestyle knowledge to people living with diabetes to help them manage their condition in the community outside of a medical environment."

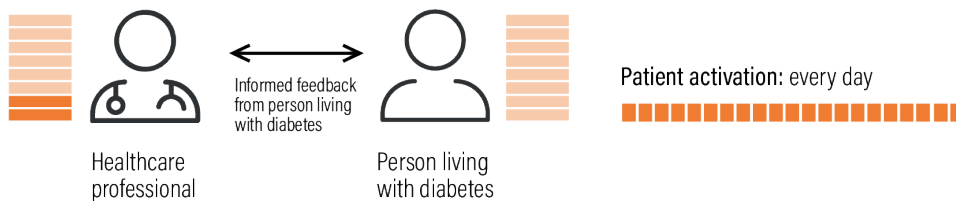
Without diabetes education and educators



Legend

- Basic academic knowledge of diabetes
- Practical, up-to-date knowledge of diabetes
- Knowledge gap(s) on daily diabetes care

With diabetes education and educators



Legend

- Basic academic knowledge of diabetes
- Practical, up-to-date knowledge of diabetes
- Knowledge gap(s) on daily diabetes care

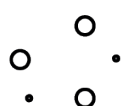
Without diabetes education and trained diabetes educators, healthcare systems rely on family physicians within communities or at the hospital to pass knowledge onto people living with diabetes at irregular or distant intervals. This limits the ability of people living with diabetes to manage their condition.

With structured diabetes education and trained educators, a larger proportion of the healthcare workforce is able to provide up-to-date, practical knowledge to people living with diabetes. In turn, people who have received accurate and reliable information are able to manage their condition every day.

Executive Summary

Challenges

A lack of buy-in among policy and decision-makers has impeded the development of diabetes education in sub-Saharan Africa.



Diabetes education programmes for healthcare professionals have had limited impact, sustainability and replicability beyond their original setting.



Healthcare professionals trained in diabetes education have not seen their additional qualifications recognised officially and reflected in their remuneration and professional development opportunities.



Contrary to the situation in Europe and North America, the development of 'diabetes educator' as a qualification or profession for middle- and highly-skilled health professionals has not been prioritised.



In the absence of a publicly recognised diabetes education programme at national levels, critical guidance for people living with diabetes is being lost among competing and occasionally misleading messages from unqualified individuals originating from social media and other online sources.

Executive Summary

Recommendations

Coordinated efforts from government, healthcare professionals, professional associations, care institutions, civil society and donors should be encouraged to:



Prioritise data collection and results dissemination in the field of diabetes care education.



Encourage key stakeholders and decision-makers (e.g. ministries of health, regulatory bodies, professional associations etc) to support the role of diabetes education and diabetes educators from the outset;



Recognise and champion sufficient remuneration, recognition and retention of specialist diabetes educators as essential for sustainability;



Develop a strategy to evaluate the mid- and long-term effectiveness of training and actual changes in clinical practice for healthcare professionals who have undertaken diabetes education training;



Create compelling and easy to understand communications to showcase the ongoing impact and value of diabetes education as cost-effective in the management of diabetes.

Report Situation

An ever-growing burden that can be managed

01

The latest International Diabetes Federation (IDF) Diabetes Atlas indicates that over half (60%) of adults with diabetes in sub-Saharan Africa (SSA) are undiagnosed, the highest proportion of undiagnosed diabetes across all regions of the federation. In those fortunate enough to be diagnosed, the mortality rate is incredibly high; 73.1% of all deaths attributable to diabetes in SSA occurred in people under 60 years old. This is the highest proportion in the world. This indicates that unfortunately, people with diabetes in SSA are dying younger than anywhere else in the world. And yet “Africa has the second lowest diabetes-related expenditure (USD 9.5 billion) associated with diabetes, 1% of global expenditure” according to the International Diabetes Federation Diabetes Atlas (IDF, 2019).

Preventing the economic costs of diabetes from spiralling up in the short and medium term is an important challenge for policy makers in sub-Saharan Africa. Total healthcare costs attributable to diabetes in SSA have been estimated to be between US\$35 billion to US\$59 billion by 2030 (Atun et al 2017). By comparison, the total spent on HIV/AIDS, one of the continent’s priorities, was estimated at \$18.0 billion in 2015 (Micah AE, Chen CS, Zlavog BS, et al, 2015).

Undiagnosed diabetes means that people are presenting late to healthcare professionals, and many with established complications. The potential complications from diabetes include nerve damage, foot ulcers, cardiovascular and kidney disease, among others. Targeted interventions such as screening and sensitizing the population can help diagnose more cases, and at an earlier stage where the condition can be managed with greater success. In some cases, and when diagnosed early, type 2 diabetes can be put into remission, avoiding serious and costly complications.

There is more to managing diabetes than taking medicine and following the occasional advice received on a visit to a healthcare professional. An above-average understanding of the processes involved in regulating blood glucose, and managing a range of risks (hypertension, imbalance in cholesterol levels etc.) can make a real difference in the life of a person with diabetes. In addition to this foundational knowledge, practical knowledge on proper footcare or injection technique, for example can also make a difference. This foundational and practical knowledge is best described as diabetes education.

Diabetes education programmes around the world have been shown to be effective in improving outcomes for people with diabetes. In the United Kingdom, the DAFNE (Dose Adjustment For Normal Eating) diabetes education programme, tailored for people with type 1 diabetes, has been shown to significantly improve glycaemic control. HbA1c, a marker of exposure to blood glucose, was reduced among participants by 1.0% at six months (DAFNE Study Group, 2002). In addition, the risk of severe hypoglycaemia declined by 67% and that of ketoacidosis by 61% (Elliot et al 2014). Reports of anxiety and depression were also reduced in people who had undergone the programme (Hopkins et al 2012). A 2016 systematic review assessing the effect of diabetes self-management education on glycaemic control in adults with type 2 diabetes showed that 61.9% reported reductions in HbA1c (Chrvala et al 2016).

What does diabetes education entail?

To maximise life expectancy, people diagnosed with diabetes must adopt a new lifestyle, which will help them carry out their daily activities

“The objective of diabetes education is not to train diabetologists, but to impart up-to-date knowledge that is sufficient to facilitate self-care and prevent complications in people with diabetes.”

while minimising the risks of complications. Guidance on lifestyle is part of the health interventions that can be made to control diabetes, alongside education relating to eating habits and exercise, as well as the prescription of medicines.

Coming to terms with a lifelong diagnosis can be daunting for people living with diabetes; therefore, diabetes education will also incorporate discussions on the thoughts and feelings of the individual around the condition. Coaching techniques focused on empowerment and planning practical ways forward can also be incorporated. This new knowledge can be overwhelming for people living with diabetes, regardless of their socio-economic or education background; it takes time and ongoing engagement for the new reality to sink in and changes to be embedded.

Therefore, health interventions are often

ineffective without sustained and consistent input from health professionals trained in and delivering high quality diabetes education.

Creating the conditions for successful diabetes education

For diabetes education interventions to be successful, diabetes education training for healthcare professionals should not solely focus on the ‘textbook’ clinical knowledge on diabetes, but also on the functional, practical and coaching skills required to empower people with the condition to manage on a day-to-day basis. Diabetes education is distinct from diabetes awareness and diabetes expertise. The objective of diabetes education is not to train diabetologists, but to impart up-to-date knowledge that is sufficient to facilitate self-care and prevent complications in persons with diabetes. Despite the desperate need, there is a lack of trained diabetes educators in sub-Saharan Africa.

Report

Challenges

02

The need to legitimise and incentivise diabetes education

In most countries in sub-Saharan Africa and other low-and-middle income countries there has been little or no effort to establish professional positions and clear career path development for diabetes educators. This has resulted in negative impacts on training of diabetes educators.

In the absence or active avoidance of national recognition and/or qualifications for diabetes educators, diabetes

education initiatives in sub-Saharan Africa often take the form of training workshops for healthcare professionals and volunteer-led meetings for people living with diabetes. These initiatives are often carried out under the leadership of local endocrinologists and diabetes experts.

Diabetes education is not seen as an attractive career option for other healthcare professionals, particularly at the primary care level.



“Diabetes education is important and forms one of the pillars of diabetes care”.

Prof. Silver Bahendeka, Chair,
East Africa Diabetes Study Group (EADSG)

Communicating what diabetes education is and the value it brings

The first hurdle to overcome in the race to sustainable education for diabetes educators is to ensure that the value of what the role brings is clear to all with the power and the remit to enable their inclusion in the client care pathway. There is a lack of understanding of what diabetes education is and the value it brings to healthcare consumers and the healthcare system. This lack of understanding is caused in-part due to limited available data on the clinical and economic impact of diabetes education. There are also challenges in sharing information in an effective and engaging manner with decision-makers, who may not be healthcare professionals and may feel overwhelmed with the flow of data coming to them.

Proper delivery of diabetes education leads to earlier diagnosis of diabetes and prevention of diabetes complications. Diabetes educators encourage client ownership in relation to their condition, increasing self-management behaviours such as adherence to treatment and blood glucose testing. This, alongside associated improvements in nutrition and exercise, result in improved quality of life and health outcomes for individuals with diabetes, their relatives, communities, and society at large. Despite this, there is often a lack of recognition of the value of diabetes education in the multi-disciplinary healthcare team (MDT).

A 2016 study exploring interprofessional collaboration during the integration of certified diabetes educator nurses into primary care highlighted that establishing new ways of working requires role clarification, and frequent and effective modes of formal and informal communication to nurture the development of trust and mutual respect, are vital to success (Gucciardi et al 2016). This is a challenge in most sub-Saharan healthcare settings due to extremely high workload, limited access to resources, significant staff shortages and hierarchical power struggles between professions.

Diabetes education professionals also have to compete with messaging and 'fake news' from social media and the internet. For example, in the space of just two weeks in 2018, the Daily Express (UK newspaper) alone published or republished 17 clickbait headlines on diabetes, often misleading, and designed to appeal to readers' fears about their health (IDEAL diabetes, 2019).

There is an urgent for a publicly recognised diabetes education programme based on a curriculum that has been approved by national governing bodies to ensure consistent standards and acceptance at a national level.

"The relevance of diabetes education as an important part of diabetes management is not well recognised".

Prof. Felicia Anumah, Dean,
Faculty of Clinical Sciences,
University of Abuja (Nigeria)



There may also be the need to 'redesign and repackage' DSME so that it is culturally sensitive and contextually appropriate.

Diabetes education: typology of initiatives across Africa

Patient Education Session
Abass Ndao Hospital, Dakar

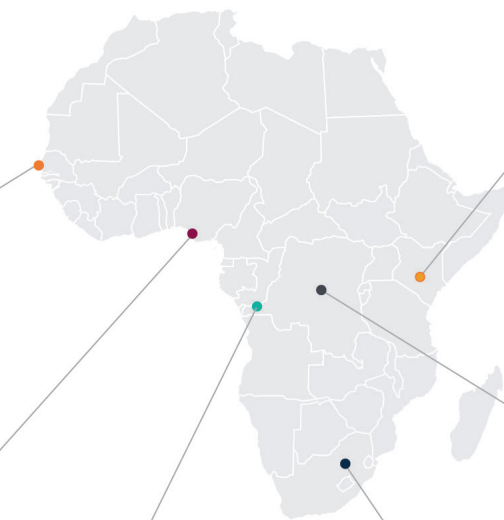


Hospital-hosted patient education
Venue: hospital or health centre
Audience: people living with diabetes
Topics: specific (for ex. nutrition, footcare)

Workshop on diabetes foot care
Nigeria



Specialised workshop for professionals
Venue: hospital or health centre
Audience: healthcare professionals
Topics: specific (for ex. nutrition, footcare)



'Diabetes and Health' Education Centre, DR Congo



Dedicated walk-in education centre
Venue: bespoke venue
Audience: people living with diabetes and professionals
Topics: general (covers a range of topics)

Diabetes Short Course for Nurses
Kenya



Online curriculum for professionals (selected)
Venue: online
Audience: segment of professionals
Topics: general (covers a range of topics)

Awareness-raising session
Rural health centre, DR Congo



Rural outreach to people with diabetes
Venue: non-medical venue
Audience: people living with diabetes
Topics: general (covers a range of topics)

Online Foundation Course on Diabetes Care for Healthcare Professionals



Online curriculum for professionals (all)
Venue: online
Audience: healthcare professionals
Topics: general (covers a range of topics)

Report

Recommendations



03

Ensuring buy-in from key stakeholders

Lack of buy-in from policy and decision-makers have put limitations on the impact, sustainability and replicability of diabetes education programmes for HCPs. Initiatives that seek to tackle systemic challenges involving multiple stakeholders are most successful when the various parties are 'taken along for the journey' from the beginning.

“An early attempt at establishing an association didn't succeed because the foundation was missing. There wasn't enough external recognition for educators”.

Dr Eva Njenga, Chair, Kenya Medical Professionals and Dentists Council and Chair of NCD Kenya Alliance

Bringing together the key stakeholders that have decision making or budgetary power gives each party the opportunity to contribute their insights and take ownership, as well as flagging potential challenges early on.

By being aware of key issues upfront, the initiative is more likely to be delivered successfully, on time, and meet the needs and wants of the target community.

Training healthcare professionals using a diabetes education curriculum that has been approved by national governing bodies is also extremely important for acceptance and sustainability.

In Kenya, the Kenya NCD Alliance, alongside the Ministry of Health, the Kenya Diabetes Study Group, Kenyan Medical training colleges, and the Nursing Council of Kenya have partnered to create a Diabetes Short Course for Nurses.

Over 1,000 nurses registered to complete the accredited diabetes education course. The course certificates that the healthcare professionals received is accepted by the Nursing Council of Kenya, Nursing Associations, including all the other bodies

“The training programme must be owned by the trainers, the training institutions, the government and the organisations that regulate health care providers. We need a certificate, a diploma or even a degree that counts towards your career progression”.

Dr Eva Njenga, Chairperson,
Kenya Medical Practitioners
and Dentists Council

“Whether you have a degree or you don't, it won't matter if nobody recognises that diabetes educators are important”.

Prof. Silver Bahendeka, Chair,
East African Diabetes Study Group

within the Ministry of Health that cater for the nurses. The certificates can also be used as evidence to justify a higher posting and their promotion, or as evidence to support application to entry-level nursing posts.

Remuneration and role vacancies for diabetes education trained HCPs

Research focussing on identifying potential barriers to increasing the number of diabetes educators identified 'lack of employment opportunities' as a key factor in hesitancy to specialise (Dickinson et al 2015).

Therefore, it is important to seek agreement from funding bodies, such as the Ministry of Health or private hospital management teams, as well as professional regulatory bodies on what the resulting recognition, remuneration and job opportunities will be for course graduates. With Africa having the second lowest diabetes-related expenditure associated with diabetes, increased investment is also crucial.

In Uganda, the process for recognition and remuneration of diabetes educators is underway. Currently, the Nursing Council will accept a diabetes education course certificate, however the public service, which is the employing body, has not yet created a position of a nurse or diabetes educator within

the public sector. It is hoped that the creation of public diabetes educator roles will soon be under consideration by the Public Service Commission.

Develop a strategy to evaluate the long-term behavioural change of trained HCPs

Diabetes education is a significant time and financial investment, and so it is important to evaluate how effective the training has been at improving HCP behaviour and practice in the mid to long-term.

Aspects to review could include; how much of the core knowledge the diabetes educator has retained, how confident the HCP is in delivering the management of diabetes, and demonstrated practical skills expertise. It is also important to assess and review the impact that the trained diabetes educator has had on the outcomes of people with diabetes.

There may also be the need to 'redesign and repackage' DSME so that it is culturally sensitive and contextually appropriate.

“We need to find ways of monitoring and evaluating behaviour change”.

Dr Eva Njenga,
Chair, Kenya Medical Practitioners
and Dentists Council, and Chair of NCD Alliance of Kenya

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