

Diabetes education: a keystone in the management of diabetes

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SUMMARY

Diabetes is reaching epidemic proportions in many countries of the world and the World Health Organization (WHO) predicts a tripling of the current prevalence rates by 2025. In reality there will not be sufficient physicians to cope with this epidemic. One solution is to utilize highly skilled allied health professionals to do much of the routine diabetes education and management. Convincing hospital administrators of this need, however, can be problematic especially when for many years the focus of the health service has been on communicable diseases. Selection of appropriate staff is very important as they will need to take on much of the burden of the work. Of course these staff require comprehensive clinical training beyond what is expected of most health professionals. In addition to this, it is generally recognized that a multidisciplinary team is an effective method of providing diabetes care. However, a multidisciplinary team is not simply the sum of different health professionals who work independently. Rather, the various members of the diabetes health care team, while working within their own scope of practice, need to integrate their roles to complement each other and blend together. Diabetes is one of the foremost health challenges facing the world in the new millennium. It has the potential to overwhelm health budgets. Health administrators and health service planners need to heed the warnings as the toll from this serious disease mounts.

Introduction

Globally, diabetes is a disease in evolution. These changes are creating a serious burden for many countries, particularly nations like Papua New Guinea where it was estimated by the World Health Organization (WHO) that there were 181,000 people living with diabetes in 2000. Of great concern is that it was estimated that only approximately 5% of these people were aware of their diagnosis. Moreover, WHO predicts that the number of people affected by diabetes worldwide will nearly triple by 2025. Much of this rise will occur in the Western Pacific Region. So how are health systems and administrators going to cope with this devastating disease, with its chronic nature and multi-organ complications?

Currently, in many countries of the world, there are insufficient trained doctors to care for everyone with diabetes. One solution is to include other health professionals in providing diabetes care and to train them in such a way

that they become increasingly involved in providing the care. Hence this article will address issues of selection and training of diabetes educators as well as outlining the importance of an integrated team approach to the management of this life-threatening chronic disease.

Selection and training of diabetes staff

Diabetes education is the keystone of diabetes care and management. It is a universal principle that every person with diabetes has a right to comprehensive expert advice. Diabetes education enables individuals to manage their diabetes-related health to the full extent of their abilities. It enhances well-being, adaptation, acceptance and quality of life. Clearly these outcomes can only be achieved if there are sufficient numbers of health professionals allocated to providing diabetes care and if they are knowledgeable about diabetes and its impact on the affected persons and their families.

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When considering the issue of training of the diabetes educator, a common trap is to take a narrow focus and concentrate only on teaching skills in patient education. While obviously this is important and integral to the role of the diabetes educator there is much more depth to educating the educator. If a diabetes educator is properly trained and given the right opportunities they can provide a wide range of diabetes clinical services.

The first step in the long process of developing a diabetes service is to convince hospital and health ministry personnel that a diabetes educator is required. Administrators need to be convinced that diabetes is a serious disease. In the Western Pacific Region, where diabetes is often considered to be a disease of the affluent and communicable diseases present a more immediate medical crisis, this can be a major obstacle. Most importantly, the person selected to do the job should be appointed to a permanent position. It is not uncommon in some countries for nursing administration not to understand the complex and specialized role of the diabetes educator and thus to treat them as regular ward nurses who can be moved depending on demand. In this situation it is not possible to progress past a very rudimentary role such as teaching injection technique and blood testing, which are techniques generally known by all nurses. Rotating placements make it almost impossible to achieve positive clinical outcomes or developing a diabetes service to its full potential.

Selecting the person most suitable for the position is vital to success. Select the person who will contribute most. Sometimes administrators, not recognizing the specialized nature of the new position, offer the position to an 'older' nurse who has spent many years in the hospital and 'deserves this new job'. Nor should the position be automatically given to the person who has the most experience, at the time, unless of course they are very good. While this may have some benefit in the short term you may not obtain the qualities that are being sought for the future of the service. It is important to select a professional who is intelligent, flexible in nature and keen to work beyond the traditional role of their training (see below for further discussion of this point).

Skills needed by educators are: patience and

commitment, teaching, learning, presentation, writing, counselling and interviewing. Additional skills needed but sometimes not considered include: negotiation, marketing, clinical astuteness and an open flexible mind. The educator should be knowledgeable about health and illness behaviours, conducting a focus group, developing validated questionnaires and developing learning objectives which form the basis of any successful education program. It is also important that educators understand how people learn, the stages of learning, how to help people learn, what are the barriers to learning, and how to write education materials for patients.

The need for quality training is well recognized. Three International Diabetes Federation (IDF) Leadership Needs Assessment Workshops conducted recently in the East Mediterranean-Middle East Region, the South America-Central America Region and the Western Pacific Region determined that the most significant issues affecting diabetes care are the lack of trained health professionals in diabetes education and the need for structured training programs. In addition, leaders in diabetes education representing the Pacific Islands identified the following issues which were also critical for the diabetes education they provided:

- professional isolation
- inadequate physical facilities for providing education
- lack of education materials written for an appropriate reading age
- poor community understanding of diabetes
- geographical isolation making accessing health services very difficult
- shame associated with having diabetes
- inadequate funds to develop patient education materials
- insufficient follow-up of patients.

An integrated team approach to diabetes care

The Royal Prince Alfred Hospital (RPAH) has been conducting training programs for

diabetes health professionals from around the world for many years. Indeed, three nurses from Papua New Guinea have been trained at the RPAH Diabetes Centre. From our experience it has become apparent that, while imparting knowledge is important, it is not enough. People with diabetes are not going to benefit from the teaching of nurses or other health professionals about areas such as screening and treating complications of diabetes if those health professionals are unable to put this knowledge into practice when they return home. In many cases this will need a change of attitude and behaviour by the health professionals themselves and their colleagues if current training initiatives are really going to have an impact on the quality of care.

The management approach to a chronic disease differs significantly from the approach used for an acute condition. In particular, people with diabetes have to develop self-management skills as they have the responsibility for their own day-to-day medical care. To achieve this level of expertise patients require significant support. While in theory this can be done by a single person, the reality is that no health professional can singlehandedly provide all the care that is required. Thus in most instances a team of health professionals is required. At a minimum this team should consist of doctors, nurses, dietitians and, where available, podiatrists and social workers/psychologists. However, these staff are unfortunately not available in many countries and, in others, job demarcation commonly occurs between the roles of the nurses, dietitians and doctors. Each member of the team has their clearly defined area and often get upset if they see that others are invading their 'territory'. The perspective is that nurses should stick to nursing issues, dietitians should discuss food and only doctors should do clinical management. This philosophy does not work well in chronic diseases such as diabetes.

Furthermore, a multidisciplinary team is not simply the sum of health professionals of different disciplines who work independently. Rather it is where attitudes and behaviour change so that each member of the team, no matter how junior or senior – whether doctor,

nurse or dietitian – becomes so interdependent that each can influence the direction of the team. It is crucial that the team leader works effectively so that all roles can complement each other and blend together. Otherwise there is significant potential for staff to feel jealous and territorial about their roles. This team philosophy remains whoever makes up the team. In some countries where doctors are abundant, such as in China, the team may be made up primarily of doctors. In other countries, where doctors are a scarce resource, the team may be largely multidisciplinary with few doctors.

To achieve this truly integrated team, every team member has to change and adapt his or her behaviour:

Doctors. If the doctor is dictatorial then the staff will respond in this formal way and it may be difficult to get their support and input. There are often many issues that need to be addressed for patients, so if the doctor is not approachable then the patient will miss out on care. This type of hierarchical system is not a true multidisciplinary team, rather it's a team with a 'boss' and subordinates. If, however, the doctor adapts his behaviour, is approachable and considers and treats the team as equal members, the support and willing assistance will be considerable, the work will be rewarding and the clinical outcome greatly improved.

Nurses. Nurses can choose to stay in their traditional role. But if they do, they will never learn beyond this. If they attend training programs and acquire new skills but cannot use them, they will only become frustrated and there will have been no benefit from attending the program. On the other hand, if the nurse is working in a team where the leader is open-minded and they are given the opportunity to extend their role, nurses can be a great support to the doctor and do much of the day-to-day clinical work. This transfer of skills then allows the doctor more time to concentrate on the difficult aspects of conducting a diabetes service, such as planning the future direction of the service or writing research grants.

Dietitians. It is essential that dietitians should be realistic not idealistic. After all, there is

very little scientific evidence to underpin any of the dietary therapies used in diabetes treatment and much of what we advise patients is not evidence-based. If the diet is rigid and inflexible, this makes the patient's life very difficult and the patient is more likely to tell what they think the dietitian wants to hear rather than to explain what they are truly eating. This situation helps no one. Moreover, dietitians are in the perfect position to expand their job into clinical management because it is almost impossible to separate what people eat from the medication they require. For example, the RPAH Diabetes Centre dietitian is responsible for our carbohydrate counting program for type 1 patients. Not only does the dietitian advise about food choices, but is also actively involved in the ambulatory stabilization of patients and makes the decision as to whether a patient is suitable for level 1, 2 or 3 carbohydrate counting.

Obviously if there is to be a blurring of professional boundaries, a standardized 'partyline' is important. It is extremely frustrating for a patient to have three different team members give three different answers to a question. So everyone, whether doctor, dietitian or nurse, needs to know the target level for blood pressure or for cholesterol, and everyone gives the same advice on food, etc. As new staff come into the team they should also adopt the common philosophy of diabetes management. This approach of a standardized partyline is a lot easier to organize in a large group of nurses and dietitians who are a stable workforce than with junior doctors who rotate every few months.

Achieving and maintaining a standardized partyline takes training. Whilst we all have to

be responsible for our continuing education, it is the primary responsibility of the team leader to ensure that staff are well-trained. The situation should never arise where team members are denied the opportunity to gain knowledge and are excluded from training sessions simply because they are not medically qualified.

As stated previously, training and staff behavioural change are important but need to be backed by quality diabetes services. These services must have adequate infrastructure and be well-planned. Simply being a good doctor or a good nurse, whilst excellent for the patients, is not enough to survive in the tough world created by health bureaucrats and hospital administrators. Yet few of us have ever been taught the skills required to tackle this environment and have relied on instinct alone. Therefore the achievement of high-quality diabetes services requires staff with not only clinical knowledge but also management and leadership skills.

Diabetes is one of the foremost public health challenges to face the world in the new millennium. It has the potential to overwhelm health budgets, health administrators and health personnel. Therefore, in addition to developing and implementing effective prevention strategies, we need to utilize previously unrecognized human resources in a unified manner, ensuring that people with diabetes receive the highest possible level of care. If care can be provided by a reasonable critical mass of professionals who are well trained and supported, desirable clinical outcomes can be achieved. Governments and health facilities need to heed these warnings as the burden of diabetes mounts.