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BDA The Association of UK Dietitians

What do Diabetes Specialist Dietitians do?

Background

The aim of the Diabetes Specialist Dietitian (DSD) is to improve the health and the quality of life of people with Diabetes. Secondary outcomes include improving clinical outcomes, medicines management, optimising systems and creating efficiencies. DSD have made major contributions and improved standards of care to patients.

Summary

- Dietitians are the only degree-trained, registered & regulated Healthcare Professionals to translate the science of nutrition of health and disease into understandable and practical information about food and lifestyle.
- DSD support patients with complex conditions including: gestational diabetes - antenatal care for Type 1 & Type 2 diabetes, cystic fibrosis, eating disorders, gastrointestinal conditions and those being enterally fed. They work in a variety of setting which include: primary & secondary care; outpatient & inpatient; home & educator providers; research centres; charitable sector; and commercial & freelance.
- Many DSDs have undertaken further qualifications and or training for example, masters and doctoral level degrees and teaching for pump training.
- In paediatric services, the Paediatric Diabetes Best Practice Tariff (BPT) is paid (in England) if quality standards are met. This includes all under 19s being reviewed quarterly by a DSD as part of the multidisciplinary team, in addition to at least one individual annual dietetic review.

Evidence

- Dietetic intervention in newly-diagnosed Type 1 diabetes can offer an additional 8mmol/mol improvement in HbA1c[1].
- Reductions in HbA1c of up to 22mmol/mol have been reported in Type 2 Diabetes[2], with intensive diet interventions associated with improved glycaemic control[3,4].
- Dietetic intervention has shown to be cost effective and resulted in fewer visits to both physicians & health services, as well as reductions in the need for diabetes medication[5].

The role of the DSD in a range of setting

Nutrition in Health & Disease	Optimising intake, analysing macro and micro nutrients to provide a healthy nutritional status and prevent disease progression & development.
Diabetes Prevention & Type 2 Remission	National Diabetes Prevention Programme. Using medically supervised diets/ meal replacement programmes to induce diabetes remission. Supporting remission as part of bariatric surgery
Education & advisory role	Provide education for patient, family and caregiver as well as: MDT, staff & students, social services, industry & charitable sector, GPs, CCGs, parliament and media & commercial. Deliver structured education: DAFNE, Expert, BERTIE
Diabetes Specialist Dietetic Skills 1: Carbohydrate counting	Allowing individuals to self-manage their insulin depending on their intake, activities & lifestyle. This optimises medicine use and reduces short & long term risks.
Diabetes Specialist Dietetic Skills 2: Manipulation of insulin	Accommodates the patients glycaemic index, fat & protein in meals to manage post-prandial glucose levels.
Technology (insulin pumps, continuous/flash glucose monitoring, wearable health tech)	Using extensive knowledge of nutrition to educate on pump features, sensor interpretation to optimise glycaemic control

Current situation

Adult

- According to a BDA Diabetes Specialist Group survey (2016) Dietetic Services had on average 2.0WTE diabetes dietitians (Adult & Paediatric)
- The number of DSDs per team has changed insignificantly since 2010[6] despite the number of people with diabetes increasing from 2.6 million to 3.8 million in the same period.

Paediatric

- Current actual numbers of Paediatric DSDs are unavailable but expect that this figure has increased since BPT was introduced in 2012, however this remains insufficient.
- ISPAD Guidelines[8] recommend 0.5 WTE Paediatric DSD per caseload of 100 patients are needed to provide an optimal service.

Adult & Paediatric

- Difficulty in recruiting existing DSDs means teams employ non-specialist Dietitians (without Paediatric +/- Diabetes expertise) to train on the job.
- Inequality in commissioning of dietetic service and level of specialism across trusts and CCGs exists.
- Competencies and outcomes measures exist and are being developed to support DSDs in all settings and specialist areas.
- Dietitians frequently report an inability to impact Diabetes outcomes due to lack of capacity. Low staffing levels and an emphasis on structured patient education results in reducing availability of individual care.

"We are only seeing the tip of the iceberg"

Call to action

- Diabetes UK[7] suggests 4WTE Adult DSD per 250,000 total pop. ISPAD Guidelines[8] suggest 0.5WTE Paediatric DSD per 100 <19s years old. This should be met as a minimum.
- BPT should be rolled out across all of the UK for all under 19s.
- Recognise and address the lack of provision for inpatient services in order to reduce length of stay, waiting times, recovery time and improve quality of life.
- We need to increase the time for education and mentoring for MDT members.
- Services should enhance the provision of individual advice to patients following structured patient education.
- We must increase the 'extended roles' of DSDs (prescribing, medicine alteration, tech provision) to improve the quality & efficiencies of services to the patient and the MDT.
- We need time to better audit the impact of Dietetic-led services, including a national audit of Dietetic outcomes
- Dietitians are playing a leading role in interventions including DiRECT. Current Dietitian numbers would not enable the trial model to be rolled out in Primary Care thus impacting on the outcome results seen. Non-qualified professionals and/or apps cannot replace DSD skills and input, creating inequality across the UK.
- In light of insufficient research, and an increasing obesity crisis in <19s, we need to form a consensus opinion on how best to manage overweight children with Type 1 & Type 2 Diabetes.

References

1. Kulkarni K et al. Nutrition practice guidelines for type 1 diabetes mellitus positively affect dietitian practices and patient outcomes. *J Am Diet Assoc* 1998; **98**:62-70
2. Franz MJ et al. Evidence-based nutrition practice guidelines for diabetes and scope and standards of practice. *J Am Diet Assoc* 2008; **108**: S52-S58
3. Coppell KJ et al. Nutritional intervention in patients with type 2 diabetes who are hyperglycaemic despite optimised drug treatment – Lifestyle Over and Above Drugs in Diabetes (LOADD) study: randomised control trial. *BMJ* 2010; **341**:c3337
4. Deakin TA et al. Structured patient education: the diabetes X-PERT Programme makes a difference. *Diabet Med* 2006; **23**: 944-954
5. Pastors JG et al. The Evidence for the effectiveness of medical nutrition therapy in diabetes management. *Diabetes Care* 2002; **25**(3): 608-13
6. https://www.diabetes.org.uk/professionals/position-statements-reports/healthcare-professional-staffing-competency/workforce-audits-2010
7. Twenefour, D and Dyson, PA (Eds). Evidence-based nutrition guidelines for the prevention and management of diabetes. *Diabetes UK* 2018. Available online: https://www.diabetes.org.uk/professionals/position-statements-reports/food-nutrition-lifestyle/evidence-based-nutrition-guidelines-for-the-prevention-and-management-of-diabetes [accessed 11th July 2018]
8. International Diabetes Federation. Global IDF/ISPAD Guideline for Diabetes in Childhood and Adolescence. 2011. Accessed online: https://cdn.ymaws.com/www.ispad.org/resource/resmgr/Docs/idf-ispad_guidelines_2011_0.pdf [Accessed 15th August 2018]

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