

Community support for diabetes

Assah FK, Atanga EN, Enoru S, et al. **Community-based peer support significantly improves metabolic control in people with type 2 diabetes in Yaounde, Cameroon.** *Diabetic Medicine* 2015; 32: 886-889

An interesting recent report from Cameroon has examined the effect of community support on poorly-controlled type 2 diabetes. All subjects had an HbA1c >7.0%, and there were 96 in the intervention group and 96 age and sex-matched controls. All patients received routine diabetes care, but the intervention group were helped by trained 'peer supporters'. During 6 months of follow-up contact between patient and peer supporters was maintained by group meetings, one-to-one interviews, and telephone calls. This resulted in significant improvement in glycaemic control - HbA1c at baseline was $9.6 \pm 1.7\%$ (1 SD), and after 6 months intervention it was $6.6 \pm 0.9\%$. The control group also lowered their HbA1c but not to as great an extent ($9.8 \pm 1.6\%$ to $8.5 \pm 2.0\%$). The intervention group also had significant falls in BMI, lipids and blood pressure. These are very impressive results, though follow-up of 6 months is relatively short. It will be interesting to know whether these improvements can be maintained longer-term.:

Treating diabetic foot osteomyelitis

Tone A, Nguyen S, Devemy F, et al. **Six-week versus 12 week antibiotic therapy for non-surgically treated diabetic foot osteomyelitis: a multicentre open-label controlled randomised study.** *Diabetes Care* 2015; 38: 302-307

Foot ulceration is a major problem in diabetes, and usually occurs with peripheral sensory neuropathy. Deep ulcers may be associated with osteomyelitis of the bones below - often the metatarsal heads. It used to be thought that in such cases, surgical removal of the infected bone was always needed. However, it is now recognised that prolonged antibiotic therapy can cure significant numbers of cases. The ideal type of antibiotic, and duration of treatment is uncertain; which has led to French diabetologists trialling 6 weeks versus 12 weeks of out-patient oral antibiotics. There were 20 patients in each group, and the cure rate was 65% in both. The type of antibiotic varied, but was usually rifampicin in combination with one other (eg. doxycycline, ciprofloxacin or trimethoprim-sulphamethoxazole). Most of these antibiotics will be available in Africa, and this means that a six-week course should be the initial treatment

for patients with diabetic foot ulceration and underlying osteomyelitis. Surgery only needs to be considered if this fails.

Sleep duration and diabetes

Shan Z, Ma H, Xie M, et al. **Sleep duration and risk of type 2 diabetes: meta-analysis of prospective studies.** *Diabetes Care* 2015; 38: 529-537

There has been a suggested association between sleep duration and the risk of type 2 diabetes for some time, but the association has been unclear. A group of Chinese and American researchers have therefore undertaken a meta-analysis of 10 studies involving 482502 participants, of whom 18433 developed type 2 diabetes. The minimum risk of diabetes occurred with a sleep duration of 7 to 8 hours and the risk increased at both shorter and longer durations - a 'U-shaped' curve effect. The relative risk (RR) of T2DM was approximately 1.15 for both 5 hours and 10 hours sleep duration. Length of sleep can be associated with a number of potentially confounding factors - for example socio-economic status, depression, other co-morbidities and exercise patterns. These could affect diabetes risk, but the authors statistically adjusted for these variables, and the association remained. The reasons for this strange effect is unknown, nor do we know whether 'normalisation' of sleep duration will reduce diabetes risk.

Diabetes and depression in Zambia

Hapunda G, Abubakar A, Pouwer F, et al. **Diabetes mellitus and comorbid depression in Zambia.** *Diabetic Medicine* 2014; 31: 814-818

Studies in the USA and Europe have found a clear link between depression and diabetes, but there is very little information on the subject in Africa. This paper from Zambia examined 157 patients with diabetes (93 type 1 and 64 type 2), and a non-diabetic control group of 773 subjects. Using the 'Major Depression Inventory', depressive symptoms were significantly more common in the diabetic versus non-diabetic cohort (19.1 v 15.1 p <0.001). Depression was also significantly linked to female sex and low socio-economic status. This information supports some similar work from Nigeria, and suggests that African patients with diabetes have similarly increased risks of depression as those in western countries. These results are of particular concern, as there is a great scarcity of psychiatric and psychological support in Africa for these patients.