## **Invited Editorial: This Month's Highlighted Articles**

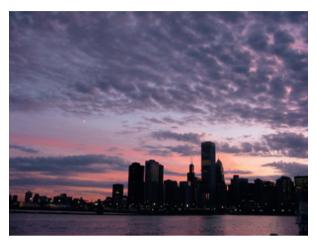
# Beyond the data: moving towards a new DAWN in diabetes

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In this issue, the much-anticipated results of the second Diabetes Attitudes, Wishes and Needs (DAWN2) Study are published in three articles by the DAWN2 Study Group and made free for download on our website. The original DAWN1 study was groundbreaking at the time of its publication in 2001 because of its size, scope and international focus. The findings were also revolutionary because they described in great detail across countries the importance of addressing psychosocial issues, including diabetes-related distress, the value of team care in chronic illness and the need for a new approach to health care for people with diabetes [1]. DAWN1 sent a strong message that addressing the psychosocial and behavioural needs of patients is an essential component of diabetes care in order to achieve glycaemic goals and improve long-term outcomes.

The findings of DAWN2 are no less important because they both confirm and deepen our understanding of these issues. Along with examining psychosocial issues among people with diabetes (Nicolucci et al., page 767), concerns of family members (Kovacs Burns et al., page 778) and health professional perceptions and system issues (Holt et al., page 789) are also explored in DAWN2. Because much of the worldwide growth in diabetes is in developing countries and attributed to major societal, economic and lifestyle changes [2], India, China, Turkey and Russian Federation countries are included in DAWN2. Improving our understanding about diabetes in countries such as these is essential if the global epidemic of diabetes and the increasing burden of this disease on both individuals and nations are to be effectively addressed

There was agreement among the patient and health professional participants in DAWN2 that greater opportunities for diabetes self-management education are needed. Multiple studies confirm the value of diabetes self-management education, demonstrating improved clinical outcomes, quality of life and healthy coping, increased use of primary and preventive services and reductions in diabetes-related costs [3–6]. Despite the evidence for the effectiveness of diabetes self-management education, participation rates were low for both patient and family groups in DAWN2. Less than half of participants with diabetes (48.8%) and less than a quarter (23.1%) of family members reported attendance, although both groups valued diabetes self-management education and found it helpful.



Cover image: Chicago skyline at dawn from Navy Pier. The result of the DAWN2 study was announced at the 2013 Scientific Sessions of the American Diabetes Association in Chicago. Credit: Don Dexter Antonio Photography<sup>TM</sup>. The image is covered under the Creative Commons CC-BY-ND license.

DAWN2 has demonstrated the need to increase accessibility to diabetes self-management education and the availability of diabetes educators. This is the essential first step in preparing patients and their families to actively engage in self-management, their care and the decision-making process. Diabetes self-management education therefore needs to go beyond didactic methodologies and information-based curricula and incorporate the psychosocial, behavioural and cultural aspects of diabetes [3,6,7] throughout the educational process. The inclusion of family members in diabetes self-management education will help them to be more effective in their support efforts and to ease the heavy burden they identified in DAWN2.

In a recent consensus report [6], the authors point out the need for healthcare professionals to understand the individual characteristics of their patients and the context of their daily decisions and self-management efforts in order to create meaningful, realistic and relevant treatment and lifestyle goals. Based on the principles of patient empowerment, this viewpoint recognizes that the majority of diabetes care is provided by the patient and their family members, that goals need to be established collaboratively and that the role of healthcare professionals is to provide diabetes expertise, education and psychosocial support [6,7].

Healthcare professionals participating in DAWN2 indicated that they recognized the importance of greater engagement by patients and their families in order to improve self-management and outcomes. However, study participants **DIABETIC**Medicine Invited Editorial

with diabetes indicated that they do not feel actively engaged by their healthcare professionals and that education and psychosocial support is seldom available. This same perception is reported by family member participants, who struggled with how to best support their loved one's efforts.

Recent guidelines for self-management education [8,9] stress the need not only for diabetes self-management education, but also for ongoing diabetes self-management support in order to sustain the metabolic and other improvements made during diabetes self-management education. Diabetes self-management support can include behavioural, educational, clinical and psychosocial support in order to facilitate both maintenance and continued improvements in outcomes and address ongoing psychosocial concerns [9]. The inclusion of diabetes self-management support is consistent with findings from both DAWN studies, strongly linking selfmanagement to psychosocial issues, but which are rarely adequately addressed in routine care and education. While not all ongoing diabetes self-management support needs to occur within the healthcare system, practice models that incorporate team-based care and include members designated and trained to provide care management, including diabetes self-management support, are consistent with recent recommendations for improving chronic care delivery [10].

While the results of DAWN1 influenced numerous individual healthcare professionals, healthcare systems have been slower to act on the DAWN principles and recommendations. Although effective system changes based on the Chronic Care Model [10], such as patient-centred medical homes, increased patient engagement and empowerment and shared decision making have been widely proposed and debated throughout the world, the true understanding and implementation of these changes has been slow to occur. DAWN2 tells us that we can no longer afford to wait. In order for effective and lasting change to occur, patients with diabetes and diabetes professionals, healthcare systems, policymakers and organizations need to recognize that improvements in diabetes care and education are a shared responsibility. We need to work together to create and adopt approaches that truly engage people with diabetes, their families, health professionals, communities and countries in diabetes care [6].

The messages of DAWN2 are a call to action for all involved in the diabetes community throughout the world. We can no longer do what we have always done if we are going to lessen the global burden of diabetes on patients, their families, healthcare professionals, healthcare systems and nations. DAWN2 provides a clear direction, but we need to fully embrace the lessons it teaches. The time to act is now. We each

have a voice that needs to be heard and a leadership role to play in order to make a new dawn in diabetes care a reality.

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#### Competing interests

None declared.

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### References

- 1 Peyrot M, Rubin RR, Lauritzen T, Snoek FJ, Matthews DR, Skovlund SE. Psychosocial problems and barriers to improved diabetes management: results of the Cross-National Diabetes Attitudes, Wishes and Needs (DAWN) Study. *Diabet Med* 2005; 22: 1379–1385.
- 2 King H, Aubert RE, Herman WH. Global burden of diabetes, 1995–2025: prevalence, numerical estimates, and projections. *Diabetes Care* 1998; 21: 1414–1431.
- 3 Norris SL, Lau J, Smith SJ, Schmid CH, Engelgau MM. Self-management education for adults with type 2 diabetes: a meta-analysis of the effect on glycemic control. *Diabetes Care* 2002; 25: 1159–1171.
- 4 Heinrich E, Schaper NC, de Vries NK. Self-management interventions for type 2 diabetes: a systematic review. *Eur Diab Nursing* 2010; 7: 71–76.
- 5 Duncan I, Birkmeyer C, Coughlin S, Li QE, Sherr D, Boren S. Assessing the value of diabetes education. *Diabetes Educ* 2009; 35: 752–760.
- 6 Marrero DG, Ard J, Delamater AM, Peragallo-Dittko V, Mayer-Davis EJ, Nwankwo R et al. Twenty-first century behavioral medicine: a context empowerment clinicians and patients with diabetes: a consensus report. Diabetes Care 2013; 36: 463– 470.
- 7 Funnell MM, Anderson RM. Empowerment and self-management of diabetes. *Clin Diabetes* 2004; 22: 122–127.
- 8 IDF. Standards for Diabetes Self-Management Education, 3rd edn. Brussels: International Diabetes Federation, 2010.
- 9 Haas L, Maryniuk M, Beck J, Cox CE, Duker P, Edwards L, et al. National standards for diabetes self-management education and support. Diabetes Care 2013; 36: S100–108.
- 10 Coleman K, Austin BT, Brach C, Wagner EH. Evidence on the Chronic Care Model in the new millennium. *Health Affairs* 2009; 28: 75–85.