Strengthening the Family – the 'Five-I' Approach

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his article describes the importance of the family in diabetes care. It lists the multiple ways in which the family is related to diabetes: as a cause or culprit of diabetes, as a tool or technique for delivering diabetes care and as a target of diabetes or diabetes-care-related complications. The authors suggest an alliterative 'Five-I' approach to guide diabetes care professionals in addressing needs, and utilising strengths, of the family of a person with diabetes. The five 'I's stand for: involved independence, iterative information, interactive interviews, inspired introspection and integrated incorporation. This strategy, based upon evidence and experience, is supported by pragmatism and practicality.

Keywords

Biopsychosocial, patient-centred care, person-centred care, family-centred care, IDF, International Diabetes Federation, World Diabetes Day

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'The family and diabetes' is the International Diabetes Federation (IDF) theme for 2018 and 2019.¹ A similar theme was chosen for the Ahmedabad Declaration, released at the annual conference of the Research Society for Study of Diabetes in India (RSSDI). The family has been described as a cause and culprit of diabetes, as well as a tool and technique for ensuring good diabetes care. Family members of persons with diabetes are prone to health hazards, both psychological and biomedical,^{2,3} and should be a target for promotive and preventive health interventions.

The importance of the family is well documented with regards to diabetes self-management education and diabetes self-management support.^{4,5} Current evidence-based standards of care emphasise the active involvement of family members in diabetes care.⁵ However, this is easier said than done. Few healthcare systems have formal pathways of care that focus on family members of people living with diabetes. Most diabetes care providers do involve family members and caregivers in diabetes education, but this is varied on an individualised and ad hoc basis. Due to this, a great potential for the betterment of health is missed. The family of a person with diabetes is at a higher risk of developing diabetes,⁶ but is also well motivated to modify their lifestyle in order to improve health. Thus a family with diabetes care brings with it its own set of hazards, including psychological (compassion fatigue), biomedical (needle stick injuries), social (social ostracisation) and financial.^{2,4,7} Hence, a family with diabetes also represents a high-risk cohort,⁶ which needs to be screened for health and offered medical attention if required.

Principles of family-centred care

The Institute for Patient- and Family-Centered Care (IPFCC) define such care as 'an approach to the planning, delivery and evaluation of healthcare that is grounded in mutually beneficial partnerships among healthcare providers, patients and families'.[®] The IPFCC recognises that families are 'essential allies' in healthcare. The institute lists four core concepts of patient- and family-centred care. These are: dignity and respect, information sharing, participation and collaboration.[®]

A systematic review of family-based interventions for adults with diabetes analysed 26 studies, which were carried out in a wide variety of populations and settings. The researchers reported variable degrees of family involvement and documented evidence for improvement in patients' self-efficacy, perceived social support, diabetes knowledge and diabetes self-care across all studies. They call for studies to describe the role, quality and extent of family participation in diabetes care and compare patient outcomes with or without family involvement.¹⁰

Table 1: The Five-I approach to strengthening the family in diabetes care

- Involved independence
- Iterative information
- Interactive interviews
- Inspired introspection
- Integrated incorporation

The 'Five-I' approach

We propose a 'Five-I' approach (*Table 1*) to help healthcare providers, healthcare system managers and policy makers pay attention to this high-risk group and maximise the health-promoting or salutogenic opportunity that it offers. The five 'I's stand for: involved independence, iterative information, interactive interviews, inspired introspection, integrated incorporation. All these concepts add value to the management of diabetes and its outcome. This strategy is based upon evidence and experience and offers a pragmatic way to practise good diabetes care.

Involvement and independence

The diabetes care provider should motivate the family to get involved in the management of the person with diabetes. Various motivational methods can be used to do so. Usually, however, such motivation is not necessary, as one or more family members demonstrate eagerness to assist in diabetes care. Interest should be tempered with caution as overzealous and misinformed interference in treatment protocols may lead to undesirable outcomes. Involvement should be scaled up gradually over the first few clinical encounters.

At the same time, the family must be allowed independence in their thought process. The healthcare team should not attempt to foist alien value systems and beliefs upon the family.¹¹ Systematic reviews highlight the extensive evidence base related to the barriers and facilitators for culture-specific diabetes education.¹² They suggest that improving communication, addressing prevailing misconceptions, and using culture-specific strategies are all important in diabetes management.

Information and iteration

The skills that are necessary to manage diabetes cannot be developed overnight by any caregiver. The diabetes care provider must share the required information and knowledge in a learner-centric manner.¹² Iteration is often necessary. It would do no harm to remind medical and nursing professionals of the number of years it has taken them to attain their current level of understanding in their chosen subject. Information sharing is a two-way street: diabetes care providers should take detailed histories, from a 360° angle, to identify various social, psychological and economic factors that may contribute to diabetes morbidity.

Interaction and interviews

By itself, the iteration of information are not enough to create behaviour change. The diabetes care professional must interact and interview the family with diabetes in an open and friendly manner. Bidirectional communication must be ensured. Family members should be encouraged to voice their attitudes, needs and concerns freely. A non-judgmental hearing must be given, before suggesting ideas for improvement in diabetes care. The basic steps of motivational interviewing have been encapsulated in the 'WATER' mnemonic. WATER stands for welcome warmly, authentic accessibility, tell truthfully, explain with empathy and reassurance and return.¹³

Introspection and inspiration

Diabetes is a chronic disease and diabetes care is a lifelong process. Challenges, barriers and obstacles are bound to occur. In such situations, timely troubleshooting and resolution is required. The diabetes care professional can assist by providing continuous inspiration and motivation, as well as facilitating introspection when required. Critical introspection allows one to assess the causative and predisposing factors of a particular topic and identify remedial and/or preventative measures. The diabetes care professional takes on the role of a family coach or family friend to fulfil this responsibility.¹⁴ One must thank the family, at regular intervals, for their immeasurable help in caring for the person with diabetes.

Integration and incorporation

The family should be integrated into every step of diabetes management and this should be clearly incorporated in diabetes care pathways and guidelines. The diabetes care ecosystem should be able to encourage active family involvement and support.¹⁵ Diabetes care professionals should convey a strong message to the community that family members are welcome in diabetes consultations. They should proactively reach out to family members and enquire regarding their concerns – related to both their own health and the health of their loved ones.

Conclusion

The family, rather than the individual, must be the focus of attention for the future of diabetes management. Healthy living with diabetes is not possible without the cooperation and involvement of family members. At the same time, family members of persons with diabetes are at high risk of developing biomedical and psychological illness: their health, too, must be optimised for them to function properly. To do so, a change is needed in the way diabetes care professionals view their responsibility. The practical and pragmatic experience-based Five-I approach assists in making this change. We hope that the IDF World Diabetes Day theme will focus attention on the potential importance of the family and hazards faced by family members in the process of diabetes care. This should encourage further research on this topic and help formalise the role of the family in diabetes care. □

- International Diabetes Federation. World Diabetes Day 2018–19. Available at: www.idf.org/e-library/epidemiology-research/54our-activities/455-world-diabetes-day-2018-19.html (accessed 25 October 2018).
- Kovacs Burns K, Nicolucci A, Holt RI, et al. DAWN2 Study Group. Diabetes attitudes, wishes and needs second study (DAWN2TM): Cross-national benchmarking indicators for family members living with people with diabetes. *Diabet Med*. 2013;30:778–88
- king with people with diabetes. *Diabet Med*. 2013;30:778–88.
 Kalra S, Gupta Y. Professional hazards of diabetes care professionals. *J Pak Med Assoc.* 2016;66:483–4.
 Cheval CA, Sherr D, Lipman RD. Diabetes self-management
- Cheval CA, Sherr D, Lipman RD. Diabetes self-management education for adults with type 2 diabetes mellitus: a systematic review of the effect on glycemic control. *Patient Educ Couns*. 2016;99:926–43.
- Powers MA, Bardsley J, Cypress M, et al. Diabetes self-management education and support in type 2 diabetes: a joint position statement of the American Diabetes

Association, the American Association of Diabetes Educators, and the Academy of Nutrition and Dietetics. *Diabetes Care*. 2015;38:1–11.

- Raghavan S, Porneala B, McKeown N, et al. Metabolic factors and genetic risk mediate familial type 2 diabetes risk in the Framingham Heart Study. *Diabetologia*. 2015;58:988–96.
- Sahay R, Baruah MP, Kalra S. Health economics in India: The case of diabetes mellitus. *Indian J Endocrinol Metab.* 2014;18:135–7.

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- Institute for Patient- and Family-Centered Care. Patient- and Family-Centered Care. Available at: www.ipfcc.org/about/pfcc. html (accessed 13 November 2018).
 - Ahmed Z, Yeasmeen F. Active family participation in diabetes self-care: A commentary. *Diabetes Manag.* 2016;6:104–7.
- 10. Baig AA, Benitez A, Quinn MT, Burnet DL. Family interventions to improve diabetes outcomes for adults. *Ann N Y Acad Sci.*

2015:1353:89-112.

- Mayberry LS, Osborn CY. Family involvement is helpful and harmful to patients' self-care and glycemic control. *Patient Educ Couns*. 2014;97:418–25.
- Sohal T, Sohal P, King-Shier KM, Khan NA. Barriers and facilitators for type-2 diabetes management in South Asians: a systematic review. *PloS One*. 2015;10:e0136202.
- Kalra S, Sridhar GR, Balhara YP, et al. National recommendations: Psychosocial management of diabetes in Iradia Indian I Sada mine Market 2017/2017/2017
- India. Indian J Endocrinol Metab. 2013;17:376–95.
 Sherifali D, Viscardi V, Bai JW, Ali RM. Evaluating the effect of a diabetes health coach in individuals with type 2 diabetes. *Can J Diabetes*. 2016;40:84–94.
- Whittemore R, Melkus GD, Grey M. Applying the social ecological theory to type 2 diabetes prevention and management. J Community Health Nurs. 2004;21:87–99.