

What has attachment theory got to do with diabetes care?



Denis Daneman*^{1,2,3}



Meredyth Daneman⁴

“...we should add attachment theory to an ever-increasing list of models of care worthy of our attention...”



The psychologist John Bowlby was the first attachment theorist. He described attachment as a “lasting psychological connectedness between human beings” [1,2]. He postulated that the earliest bonds that are formed by children with their parents or other caregivers have major developmental effects that continue throughout their lives. Central to attachment theory is the notion that mothers who are available and responsive to their infant’s needs establish a lasting sense of security in their children. Positive attachment forms the secure emotional base from which the child can then begin to move out to explore the world. Observations strongly suggest that early attachments can have a lasting impact on future relationships: secure children tend to have good self-esteem, strong interpersonal relationships and the ability to self-disclose to others. Problems in early attachment occur when the mother or other major caregiver is either unavailable or unresponsive to the child’s needs, and can negatively impact behavior indefinitely.

Building on the fundamental work of Bowlby and others, and based on research performed in children and adults, Bartholomew has defined four predominant attachment styles in adults: secure, dismissive, preoccupied and fearful [3,4]. The major features of each of these categories depend on whether the adult perceives himself or herself as worthy of attention (Model of Self), and whether others can be trusted to provide this attention (Model of Other) (Figure 1). In the interaction between an individual with healthcare needs and members of the individual’s healthcare team, attention in this context means care.

So what does all of this have to do with diabetes care? Everything, it seems, if one replaces ‘self’ with ‘the patient’ and ‘other’ with ‘the healthcare provider’. Paul Ciechanowski and his colleagues from Seattle (WA, USA) have led the field in this regard by providing solid evidence of a relationship between adult attachment style and diabetes outcomes, specifically

“Healthcare utilization may be positively associated with the ability to trust caregivers (Model of Other), whereas symptom reporting may be positively associated with self-esteem, the ability to self-report and the tendency to experience distress (Model of Self).”

¹Department of Paediatrics, University of Toronto, Ontario, Canada

²The Hospital for Sick Children, 555 University Avenue, Toronto, Ontario, M5G 1X8, Canada

³RS McLaughlin Foundation Chair in Paediatrics, Canada

⁴Department of Psychology University of Toronto Mississauga, Ontario, Canada

*Author for correspondence: Tel.: +1 416 813 6122; denis.daneman@sickkids.ca

HbA1c [5,6]. Using the Relationship Scale Questionnaire and Relationship Questionnaire, they were able to determine the predominant attachment style as one of the four defined by Bartholomew (see **Figure 1**). Those in the ‘secure’ category had the lowest mean HbA1c, those in the ‘dismissive’ category have the highest, and those in the ‘fearful’ and ‘preoccupied’ categories have intermediate levels. A similar relationship between attachment style and disease outcome has been found in a number of other health-related circumstances, such as lifetime medically unexplained symptoms in patients with hepatitis C; physical symptom reporting in adult female patients attending a health maintenance organization; and chronic pain [7–9]. In the cohorts studied by Ciechanowski and colleagues, 33–40% of patients fit into the ‘secure’ group, with the remainder spread almost equally amongst the other three [5–9].

To summarize here, the findings to date have been interpreted in the following way: health-care utilization may be positively associated with the ability to trust caregivers (Model of Other), whereas symptom reporting may be positively associated with self-esteem, the ability to self-report and the tendency to experience distress (Model of Self). A serious limitation of these studies is that they are based solely on investigations involving the patients and not their caregivers [5–9].

A significant leap of faith has been made on the basis of these results, that is, by knowing the patient’s predominant attachment style, clinical interventions could be developed to target those styles associated with less than optimal outcomes, in the case of diabetes to improve metabolic control. Until empirical evidence is available, it seems reasonable to suggest that there may be merit in trying to understand the patients’ attachment styles as a means of better engaging them in meeting the targets of their care.

But it seems that the situation is much more complex in adults with diabetes and even more so in children and youths with the disorder. Since diabetes care is a multidisciplinary, evidence-based, family- or patient-centered process, there are many questions that warrant study as confounders of the patient’s attachment style for the focus of intervention. What about the caregiver’s attachment style, and their ability to be flexible in intervening in patients with different styles [10,11]? What about the interactions of different styles within the multiple members of the multidisciplinary healthcare team (physician, nurse, dietitian, mental health professional and others)? Recent research suggests that individual physician practice style differences account for very little of the variance in outcome or resource utilization [12]. In children and youths, the dynamic tension that often exists between the parent and child, especially adolescents, should also be considered.

		Model of Self	
		+	-
Model of Other	+	<p>Secure</p> <p>Trusts others</p> <p>Feels worthy of attention</p>	<p>Preoccupied</p> <p>Emotionally dependent</p> <p>Low self-esteem</p>
	-	<p>Dismissive</p> <p>Low trust of others</p> <p>Determinedly self-reliant</p>	<p>Fearful</p> <p>Low trust of others</p> <p>Fear of intimacy</p> <p>Avoidance behavior</p>

Figure 1. Relationship between ‘Model of Self’ and ‘Model of Other’.
 Reproduced with permission from the American Diabetes Association.

And, because there is indisputable evidence of the relationship between metabolic control and the onset and progression of diabetes-related complications, we should also consider how this interferes with attachment, as healthcare professionals seem to want to impose their will – that is, the evidence – on a reluctant, distrusting patient? Finally, what about the impact of technology, insulin pumps, glucose meters and so on, as modifiers of these interactions?

The first step would seem to be one of awareness of attachment theory as a potentially important contributor to the ongoing quality of metabolic control in all individuals with diabetes [5,6]. The second step would be for all healthcare professionals to check their prejudices at the door each time they see another patient, and to work diligently to gain each patient's and/or family's trust, thereby providing a secure haven. Finally, healthcare teams ought to ensure that members of the team are aware of these complexities, not only with respect to patients, but also to each other.

Even though Bowlby described attachment theory more than 40 years ago, clinical applications of attachment theory are still in their

infancy. There can be no doubt, however, that there is significant research, both in terms of understanding mechanisms and testing interventions, that remains to be performed and that may add significantly to our ability as healthcare providers to help our patients reach their glycemic targets and to achieve and maintain good health in the long term. We should add attachment theory to an ever-increasing list of models of care worthy of our attention: psycho-education; motivational interviewing; cognitive-behavioral; stages of change; coping skills; ecological perspectives model and many more [13–15].

Financial & competing interests disclosure

The authors have no relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript. This includes employment, consultancies, honoraria, stock ownership or options, expert testimony, grants or patents received or pending, or royalties.

No writing assistance was utilized in the production of this manuscript.

References

- Bowlby J. Attachment. In: *Attachment and Loss. Volume I*. Hogarth, London, UK (1969).
- Bowlby J. *A Secure Base: Clinical Applications of Attachment Theory*. Routledge, London, UK (1988).
- Bartholomew K, Horowitz LM. Attachment styles among young adults: a test of a four-category model. *J. Pers. Soc. Psychol.* 61, 226–244 (1991).
- Griffin DW, Bartholomew K. The metaphysics of measurement: the case of adult attachment. *Adv. Pers. Relation.* 5, 17–52 (1994).
- Ciechanowski PS, Katon WJ, Russo JE, Walker EA. The patient-provider relationship: attachment theory and adherence to treatment in diabetes. *Am. J. Psychiatry* 158, 29–35 (2001).
- Ciechanowski PS, Hirsch IB, Katon WJ. Interpersonal predictors of HbA(1c) in patients with Type 1 diabetes. *Diabetes Care* 25, 731–736 (2002).
- Ciechanowski PS, Katon WJ, Russo JE, Dwight-Johnson MM. Association of attachment style to lifetime medically unexplained symptoms in patients with hepatitis C. *Psychosomatics* 43, 206–212 (2002).
- Ciechanowski PS, Walker EA, Katon WJ, Russo JE. Attachment theory: a model for healthcare utilization and somatization. *Psychosom. Med.* 64, 660–667 (2002).
- Ciechanowski P, Sullivan M, Jensen M, Romano J, Summers H. The relationship of attachment style to depression, catastrophizing and healthcare utilization in patients with chronic pain. *Pain* 104, 627–637 (2003).
- Zolle O, Odber R. The Foundation Programme in general practice: the value added of the attachment – a Wessex experience. *Educ. Prim. Care* 20, 455–461 (2009).
- Adsheed G. Becoming a caregiver: attachment theory and poorly performing doctors. *Med. Educ.* 44, 125–131 (2010).
- Hofer T, Hayward R, Greenfield S, Wagner E, Kaplan S, Manning W. The unreliability of individual physician 'report cards' for assessing the costs and quality of care of a chronic disease. *JAMA* 281, 2098–2105 (1999).
- Jones H, Edwards L, Vallis TM *et al.* Changes in diabetes self-care behaviors make a difference in glycemic control: the Diabetes Stages of Change (DiSC) study. *Diabetes Care* 26, 732–737 (2003).
- Fisher EB, Brownson CA, O'Toole ML, Shetty G, Anwuri VV, Glasgow RE. Ecological approaches to self-management: the case of diabetes. *Am. J. Public Health* 95, 1523–1535 (2005).
- Egede LE, Hernandez-Tejada MA. Type I diabetes: motivational enhancement therapy delivered with CBT by nurse therapists to people with Type I diabetes leads to lowering of HbA1C values. *Evid. Based Ment. Health* 14, 19 (2011).