Childhood attachment

Despite its considerable public health importance, childhood attachment is seriously under-represented in medical training and practice. Furthermore, the current ethos of medical practice means that unless awareness increases steeply, it is destined to remain so. Consideration of the complex and long-term implications of childhood relationships does not sit comfortably in a cash-strapped, timestrapped, evidence-based, label-based, protocol-based system which selectively protects the narrow focus at the expense of the bigger picture. Children are by definition dependent, and their dependency means that the nature of their family relationships profoundly influences their experiences in both health and illness.

Attachment can be understood as being the enduring emotional closeness which binds families in order to prepare children for independence and parenthood.1 Bowlby suggested that early attachment experience creates 'internal working life-long templates for preconceptions of the value and reliability of relationships, close and otherwise.2 Attachment allows children the 'secure base' necessary to explore, learn and relate, and the wellbeing, motivation, and opportunity to do so. It is important for safety, stress regulation, adaptability, and resilience. The length of childhood indicates the complexity of the task, and the breadth of the implications of dvsfunctional attachment. A web of interrelating problems is characteristic, readily leading to vicious circles, of which poor self esteem is an integral part.

Children's attachment patterns are substantially influenced by those of their parents. The attachments of both child and parents affect children's physical, psychological, behavioural, developmental wellbeing. In any illness, children behave and parents respond in ways influenced by their respective attachment patterns, colouring 'use' of symptoms and professional relationships. Attachment is an important consideration in numerous paediatric problems behavioural difficulties, infant crying, feeding problems, failure to thrive, poor eye contact, toileting problems, accidents,

infections, autism, and attention deficit hyperactivity disorder (ADHD), among many. Attachment should be the focus of child protection and substitute care.³

The legacy of inadequate childhood attachment poses a considerable burden for the individuals themselves, for society, and for public services. Disturbed childhood attachment relates to adult physical and psychological ill-health, including major causes of mortality. It is a key factor in intergenerational parenting difficulties, and predisposes children to substance abuse, temper problems, homelessness, promiscuity, early pregnancy, and criminality.

The issue is not whether children are attached, but how — whether they experience relationships as valuable, reliable, and safe. Ainsworth observed toddlers' responses to separation from and reunification with their mothers in the 'strange situation test'. The patterns she described broadly equate with 'attachment styles' identifiable using the 'Adult attachment interview' (C George, University of California, Berkeley, 1985. Unpublished data).

HEALTHY AND UNHEALTHY ATTACHMENT

While attachments develop throughout the lifespan, clinical and neurobiological evidence indicates the importance of early foundations, remaining, as in a wall, important whatever is added.6-8 Like any relationship, infant attachment is a twoway, mutually-reinforcing process, which depends on what each contributes, on opportunity for closeness, on the attitudes of others, and on wider social factors. It develops through sophisticated maternal attunement to the baby's overtures, involving tone, pitch and rhythm of voice, posture, facial expression, movement, and touch.9 In this way, the parent reflects back the baby's emotions, giving them meaning and regulating them, which moulds development of the right pre-frontal cortex. This requires the baby's ability to elicit a response, and the parent's to respond.

Attachment allows emotional regulation before infants can self-regulate. Involuntary stress regulation, mediated by the

hypothalamus-pituitary-adrenal (HPA) axis (indicated by salivary cortisol), is 'set' in infancy - and probably antenatally - at a level adaptive to the prevalent environment and reflecting the effectiveness of calming.10 Stress regulation is important for exploration, learning, independence, and effective relationships. While poorly regulated infant stress can produce persistently exaggerated stress responses, serious abuse can cause them to 'switch off', leading to fearlessness, and, for example, relative bradycardia. Altered HPA axis function relates to childhood behavioural difficulties, anxiety, depression, and post-traumatic stress disorder.11-15 Disturbed attachment may also affect immunity and healing, and predispose to 'psychosomatic' illness, mediated by physical manifestations of autonomic dysfunction.16-18 While neuronal plasticity, developing cognition, and experience modulate stress responses, they do so around a baseline influenced by the first relationship an infant experiences.

Attuned parenting imparts meaning to the 'inner world' of body signals (for example, hunger, satiety, full bladder, thought, and emotions). It teaches children that others recognise their needs, and establishes foundations for trust, empathy, understanding relationships, and verbal and non-verbal communication. Preconceptions are established for subsequent relationships, close and otherwise.²

Anything that interrupts the cycle of attunement affects the quality attachment. If substance abuse depression, for example, intermittently disturb otherwise good attunement, children experience attention as valuable, unreliable, and not necessarily easily achieved, causing anxiety. Maternal stress, anxiety, and fatigue have similar consequences, by affecting the reading of social cues and subtlety of response. These children learn strategies for achieving and holding attention - over-compliance, constant smiling, disruptiveness, soiling, or use of symptoms — whatever works. Any attention, positive or negative, may be better than none. Management involves focusing attention on desired behaviour. The emotional 'separation' of discipline is difficult to tolerate and fear of rejection colours relationships. Breaks in attunement are unreliably resolved and stress is poorly regulated.

Sometimes attuned, sometimes antagonistic parenting conveys attention as valuable, but unreliable and frightening, causing children to be ambivalent about seeking or sustaining it. Hypervigilance to parental mood affects concentration and causes 'over-reading' of disapproval. These can be difficult and confusing children to parent. They may seem to push away those to whom they are closest, while also craving their attention.

Consistently unattuned parenting (for example, because parents have poor foundations for attachment, or learning difficulties), fails to teach children the benefit of closeness, while aggression can make them fear it. These children become 'avoidant' loners, inept at understanding non-verbal cues and the subtleties of language, and often seeking control through 'sameness'. The resulting picture resembles 'innate' autistic spectrum disorder.

Pervasively abusive parenting can leave children disorganised and ineffective both in self-sufficiency, and with relationships, and without empathy. Successful independence is improbable, and adult criminality likely.

Throughout life, individuals fall on a continuum of attachment style, ranging from 'loners' to those craving attention and approval - some seeming wary of sustaining the relationships they seek. The pathology implied by the labels 'avoidant', 'anxious', or 'ambivalent' attachment styles respectively (collectively described as 'insecure attachment'), has qualified justification when 40% of the population are so categorised. However, the greater the deviation from 'secure' attachment, the greater the likelihood of dysfunction. In the middle of the spectrum are the 60% who are classified as 'securely attached'. They may find the more comfortable personal path through life, valuing relationships yet independently competent. Although moulded by subsequent experience, childhood attachment continues to be reflected in adult personal, social, and professional relationships, and in approach to parenting. Adult attachment style also relates to how trauma and loss are handled,19 and to career choice. For example, medical students with 'secure' attachments are more likely to opt for a career in primary care than those tending to

avoidant or anxious patterns.²⁰ Childhood attachment might also influence aging, which relates to HPA-axis function.²¹

Potential conflict between individual and societal benefits from attachment styles is reflected in historical and cultural variation in approaches to emotional expression, education, discipline, and individual rights. Societies benefit from individual strengths, which tend to accompany 'insecure' attachment styles. Characteristics such as authoritarianism and strategic decisiveness, which are important to the organisation, defence and development of society, may tend to cluster towards the 'avoidant' side of the range, as may eminence in mathematics, computers and invention. Those thriving on validation - on being needed or noticed - may enrich society as 'helpers', socialites, or performers. For example, numerous eminent actors describe dysfunctional parenting, which continues to be reflected in unstable adult relationships. Thirst for attention in the children's homes where he grew up led Stevie Starr, a 'professional regurgitator' in the US, to develop his talent 'of 'regurgitating' (light-bulbs, goldfish, and so on). Insecure attachment may fuel creative genius, which, it has been observed, rarely thrives on personal contentment.22

Over- as well as under-attuned parenting can result in children's insecurity. Total attunement does not allow development of independent competence, or selflessness. Breaks in attunement allow controlled exposure to stress. They also allow the crucial experience that relationships can withstand difficulties, teach conflict resolution, and promote trust. Through trust comes the ability to tolerate the emotional 'separation' of discipline, acceptance of authority, and self-worth. Trust is a prerequisite for developing secure independence from parents, throughout childhood and adolescence.

UNDERSTANDING CHILDREN'S ATTACHMENTS

Attachment-related difficulties centre broadly around use of relationships, communication, awareness of the 'inner world', coping with the outside world, and stress regulation. They are often further complicated by issues relating to their cause (for example, intrauterine drug exposure), by the continuing implications of associated trauma, and by their secondary consequences.

Understanding children's attachments involves putting together a jigsaw of pieces

of varying clarity — of what is known, or can be assumed about the parents' own foundations for attachment, about perinatal and postnatal risk factors (for example, drugs, alcohol, neonatal separation, postnatal depression), and about the child's experiences (for example, multiple carers, domestic violence, neglect, separation, moves), in the context of the current picture.¹

The central question is whether the child's behaviour suggests that they experience relationships as valuable, reliable, and safe. Do they seek attention too much, appropriately, or too little, and, having achieved closeness, does it calm them? Does the parent attune to the child's needs and repair breaks in attunement effectively? Does the child differentiate appropriately between family members and strangers when seeking attention, help or comfort?

The more dysfunctional the attachment, the more prominent the secondary consequences, including difficulty in understanding emotions, body signals and relationships, lack of empathy, and poor stress regulation. Labels of 'ADHD', 'Asperger's syndrome', 'conduct disorder', and 'obsessional compulsive disorder' are commonly acquired.

Clinically, the question is how the child's attachment pattern relates to the presenting problem. An 'in your face' child is liable to 'use' symptoms, unlike a 'loner' — who may in fact, as a result of unattuned parenting, disregard discomfort. Children who crave attention are particularly drawn to behaviours that are difficult to ignore, such as feeding and toileting problems. 'Avoidant' children, however, may soil, wet, overeat, or vomit, through disregard of 'body signals'.

Attachment is generally relevant to behavioural difficulties, whether arising through thirst for attention, distrust, difficulty reading relationships, fear of rejection, impulsivity, parental 'unavailability', or associated trauma. ADHD relates complexly to attachment as cause and effect, and can be an important treatable component.

Attachment is fundamentally important to child protection. It is usually not the bruise but the relationship it represents that causes the greater lasting harm, yet decisions usually revolve around the more readily-defined physical or sexual abuse. 'Attachment' helps conceptually with the notoriously difficult task of defining emotional abuse, but depends on building a picture over time and across generations — a task in which primary care services have an important role.

PROFESSIONAL ROLES

Attachment is too all-encompassing to be a matter only for specialists. Risk factors and established difficulties need to Attachment should recognised. incorporated routinely into antenatal teaching and postnatal support. In managing established difficulties, a broadbased approach is needed, addressing all remediable contributory factors, since vicious circles are characteristic.1 The professional task is, on the whole, to equip parents to understand and respond consistently to the feelings behind the child's behaviour. The parents' job is to show the child, through their responses, that close family relationships are valuable, predictable, safe, readily attainable, and able to withstand separation.

For example, with a crying baby and depressed mother, the starting point may be immaterial. Whichever comes first, poor attunement through fatigue and depression tends to lead to unregulated infant stress, and so to crying. Management includes explanation, social support, treating depression, calming strategies for parent and child (for example, infant massage), and teaching attunement — recognising that a mother whose own emotional needs

are unmet cannot meet those of her baby.

The more entrenched the attachment problem, the more prominent are the secondary difficulties. While substitute parenting is an important therapeutic tool, it is no panacea. Recovery can be a complex, long-term, and often incomplete process as foster carers or adopters struggle to manage the implications for their family of the child's distorted preconceptions of relationships, of their inner world, and of the outside world. The child, the parents or the whole family, are likely to need considerable professional support, perhaps for many years.

If children reach adolescence without achieving stable parental attachment, the professional task becomes one of damage limitation, aiming to give as safe as possible a transition to independence, and to halt intergenerational perpetuation of dysfunctional attachment. Many such young people experience discontinuity in every aspect of their lives, and offering professional continuity is a priority in organising their care.

Dysfunctional childhood attachment is of major public health importance and underlies many of the difficulties of contemporary society. Its underrepresentation in medical training, practice and research needs to be rectified. Protection of attachment should be recognised as a professional responsibility of all who work with children. It must not be regarded as someone else's job.

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REFERENCES

- 1. Rees CA. Thinking about
 - children's attachments. *Arch Dis Child* 2005; **90(10):**1058–1065.
- 2. Bowlby J. Attachment and
 - loss. London: Hogarth Press;
- 3. Rees CA. The care of
- looked-after children. *Current Paediatrics* 2006; **16:** 83–90.
- 4. Felitti VJ. The relation
- between adverse childhood experiences and adult health: turning gold into lead. Z Psychosom Med
- Psychother 2002; 48: 359-369.
- Ainsworth MD, Blehar MC, Waters E, Wall S. Patterns of attachment: a psychological study of the strange situation. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc, 1978.

- Howe D. Parent-reported problems in 211 adopted children: some risk and protective factors. *J Child Psychol Psychiatry* 1997; 38(4): 401–411.
- O'Connor TG, Marvin RS, Rutter M, et al. Childparent attachment following early institutional deprivation. Dev Psychopathol 2003; 15: 19–38.
- Perry BD. Childhood experience and the expression of genetic potential: what childhood neglect tells us about nature and nurture. *Brain and mind* 2002; 3: 79–100.
- 9. Stern DN. *The first relationship*. Cambridge, MA: Harvard University Press, 1977.
- Schore AN. Back to basics. Attachment, affect regulation, and the developing right brain. Linking developmental neuroscience to paediatrics. *Pediat Rev* 2005; 26: 204–217.
- Snoek H, Van Goozen SH, Matthys W, et al. Stress responsivity in children with externalizing behavior disorders. Dev Psychopathol 2004; 16 (2): 389–406.
- Van Bokhoven I, Van Goozen SH, van Engeland H, et al. Salivary cortisol and aggression in a populationbased longitudinal study of adolescent males. J Neural Transm 2005; 112(8): 1083–1096.
- Van Bokhoven I, Matthys W, van Goozen SH, Van Engeland, H. Prediction of adolescent outcome in children with disruptive behaviour disorders — a study of neurobiological, psychological and family factors. Eur Child Adolesc Psychiatry 2005; 14(3): 153–163.
- Nemeroff CC. Early-life adversity, CRF dysregulation, and vulnerability to mood and anxiety disorders. Psychopharmacol Bull 2004; 38(1): 14–20.
- Heim C, Owens MJ, Plotsky PM, Nemeroff CB.
 Persistent changes in corticotropin-releasing factor
 systems due to early life stress: relationship to the
 pathophysiology of major depression and post traumatic stress disorder. *Psychopharmacol Bull* 1997;
 33(2): 185–192.
- Picardi A, Battisti F, Tarsitani L, et al. Attachment security and immunity in healthy women. Psychosom Med 2007; 69 (1): 40–46.
- Ebrecht M, Hextall J, Kirtley LG, et al. Perceived stress and cortisol levels predict speed of wound healing in healthy male adults. Psychoneuroendocrinology 2004; 29: 798–809.
- Maunder RG, Hunter JJ. Attachment and psychosomatic medicine: developmental contributions to stress and disease. *Psychosom Med* 2001; 63: 556–567.
- Field NP, Sundin EC. Attachment style in adjustment to conjugal bereavement. *Journal of Social and Personal Relationships* 2001; 18: 347–361.
- Ciechanowski PS, Russo JE, Katon WJ, et al.
 Attachment theory in health care: the influence of relationship style on medical students' specialty choice. Med Educ 2004; 38: 262–270.
- Ferrari E, Cravello L, Muzzoni B, et al. Age-related changes of the hypothalamic-pituitary-adrenal axis: pathophysiological correlates. Eur J Endocrinol 2001; 144(4): 319–329.
- Goertzel V, Goertzel MG, updated by Goertzel TG, Hansen AMW. Cradles of eminence. Scottsdale, Arizona: Great Potential Press, Inc, 2004.