Information about medicines in pregnancy has recently been described as ‘cautious at best, scaremongering and inappropriate at worst’. Preece and Riley’s text aims to address this by looking beyond a simple alphabetical classification system of teratogenicity to the clinical implications of long-term developmental outcomes for the child. Classes of drugs of abuse, anticonvulsants, antidepressants and antipsychotics are focused upon. As these alter neurotransmitter levels and function, they have a propensity to be implicated in disruptive behaviours. Effects of short- and long-term exposure in utero are delineated. Obviously, genetics, levels of nutrition, antenatal care and societal pressures also contribute, and these are acknowledged early. The authors further recognise the limited homogeneous epidemiological data available on the topic, particularly relating to alcohol use.

Untreated disease states, such as depression, are associated with insecure infantile attachment, childhood behavioural problems and impaired cognitive and emotional development in adolescence. So while antidepressants may be associated with potential toxicities, a child’s outcome is also threatened if the mother is left untreated. Due to trial methodology limitations, the authors are unable to recommend specific guidelines for practice, though critically appraise the (paucity of) current medical literature to allow the reader to decide for himself or herself. However, to extrapolate on the current poor behaviour of a handful of 4-year-olds compared with a control group of mothers who did not take a similar medication during pregnancy must be regarded with caution.

Information regarding illicit drugs will help make informed decisions and direct future health education and research. Cocaine appears to have a dose–response effect. Buprenorphine and methadone counteract heroin-induced intra-uterine growth retardation (IUGR). Cannabis use in pregnancy is associated with attention-deficit/hyperactivity disorder (ADHD) in childhood. Alarminglly, while pregnant tobacco smokers will have lower birthweight babies, the majority of these infants are at risk of obesity as they grow. Cigarette smoking is also linked to cleft lip, palate and genitourinary malformations. If cigarette smoking is ceased after birth, the two- to fourfold risk of antisocial behaviour (oppositional defiant disorder, conduct disorder, delinquency and crime) and ADHD falls. This indicates an epigenetic interaction between environmental cigarette smoke and susceptible genes. The social and public health implications (and avenues for health prevention) are paramount.

At 291 pages, this slim volume cannot be a definitive guide, rather a primer on applied toxicology on embryology and the developmental stages beyond. Illustrative case studies describe the phenotypes of fetal alcohol syndrome and foetal valproate syndrome well, whereas intervention strategies are directed at pre- and postnatal time points. These are largely UK and international (read USA) based and aim to reduce risk by strengthening, contrary, protective ‘resilient’ factors. The public health advocate, developmental paediatrician, research obstetrician neonatologist and toxicologist will find this text of most relevance – its daily utility to the clinician in an Australian primary care practice will be less.

The deficiencies of this text arise from the limitations of the included studies. As results from current high-quality prospective studies investigating neurodevelopmental effects following drug exposure in utero are known, future editions are sure to live up to their promise.

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Reference


Written by an experienced clinician/medical administrator and two psychologists, this is an excellent account of the havoc wreaked by Jayant Patel in his 2 years as a surgeon in Bundaberg from 2003 and subsequent conviction for medical manslaughter. The authors’ attempts to understand Dr Patel are fascinating and unique. They visited Jamnagar, the town in India where he grew up to ask about his childhood, spoke to colleagues from his years in an Indian medical school and followed his path to the United States, where he undertook surgical training. During his residency in New York, he received a sanction for ‘professional misconduct’ followed by major problems in Oregon, restrictions to his practice not disclosed to the Queensland authorities when he applied to work there. The