

## **Is There a Contradiction Between the Bio-psycho-social Model and Evidence-based Practice?**

Evidence-based knowledge is essential to good practice. However, there are fundamentally different ways of developing evidence. Data gathering by epidemiologic surveys is most likely to get at the “truth” when the diseases in question are caused by contingencies over which people have no control. In such cases, the personalities of the individuals within the studied population are relatively unimportant. Looking at the incidence of Influenza in Missouri doesn’t require knowledge beyond whether or not the individuals surveyed caught the flu and lived in Missouri.

By contrast, the epidemiologic method is less reliable when the pathogenesis of the disorder in question has less to do with external contingencies and more to do with psychological and social factors, e.g. the personality of a child, of its parent and their interaction within their parent-child relationship. That kind of evidence requires data collected by naturalistic observation of individual parents and children that goes deeper than is possible during the typical pediatric office visit or survey study.

Commenting on her discouragement with the lack of progress in management of the 40-50% of children with constipation and fecal soiling who don’t respond to treatment after 5 years, Dr. Judith Sondheimer (JPGN, 34: 357-8; 4/02) suggested the potential value of screening 1000 newborns for their threshold of rectal sensation and then following them prospectively to determine whether rectal sensation correlated with the prevalence of functional constipation later in childhood. These data would be interesting and of some importance, but they would be another example of data abstracted from subjects about whom little else was known. Such epidemiologic evidence is less useful to the practitioner attempting to help an encopretic child than evidence derived from the study of individual encopretic children within the context of their family relationships and life experiences.

Please understand that I am not denigrating the value or importance of the epidemiologic method in studying functional disorders of elimination. However, the current “evidence-based” climate seems to value abstract statistical evidence over naturalistic evidence. Bearing in mind Rene Dubos’ aphorism, “Sometimes the more measurable drives out the more important,” I suggest that both approaches are needed. They differ insofar as the kind of work they require. Epidemiologic surveys need investigators who are expert in study design and evaluation of statistical data; they don’t need intense involvement with individuals within a cohort or training in clinical interviewing or the dynamics of the doctor-patient relationship.

Alfred Benet’s research on intelligence required expertly designed IQ tests administered to children otherwise unknown to the test givers. By contrast, Jean Piaget’s discoveries of the cognitive development of children were essentially made by in-depth observation of only 3 children within the context of their existence. Both researchers gave us information of great value. Neither investigator’s method could produce the knowledge gained by the method of the other.

Disparaging naturalistic enquiry and making a fetish of statistical data is a bias that gets in the way of understanding and progress.

**David R. Fleisher, MD**  
Associate Professor, Department of Child Health  
University of Missouri  
School of Medicine  
Columbia, Missouri, USA

[FleisherD@health.missouri.edu](mailto:FleisherD@health.missouri.edu)