

Commentary on the Usefulness of Clinical Research

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Commentary

In an effort to encourage young and old clinicians that are working in the trenches, doing the truly challenging work of seeing a large number of patients and trying to help them flourish or at least heal, the focus of this commentary is to elevate the status of clinical research. Having been a clinician, academician, and a National Institute of Mental Health R-01 international HIV prevention researcher, I feel compelled to extol the virtues of clinical research.

However, to assert the validity of this position, I first have to demonstrate I have the “chops” to have a perspective that is of some value. Because most of the work was done in research teams, I cannot brag or elevate myself, but rather highlight the work and “success” to let the reader know where I am coming from in science. We have published articles and chapters on various topics, most notably, children exposed to violence [1], traumatic stress in children [2], isolated sleep paralysis [3], HIV prevention [4], resiliency [5], violence prevention [6], and most recently prevalence of Neurodevelopmental Disorders in low-income African-Americans [7], and most of our insights into researchable ideas have been culled from our clinical work. Our published observations of problems experienced by low-income African-Americans have spurred many an R-01 grant to be written. Working in academia and participating in many randomized, double blind, clinical trials and psychosocial interventions, it is clear, in order to be an academic; you have to master skills sets that are essential to obtain funding and to produce good clean science, otherwise science deteriorates to “junk science.” These skills consist of random sampling, research designs, how to avoid Type I and Type II errors, statistical methodology, how to write a fundable grant, and more. Moreover, while this is an admirable goal and these are valuable skills, developing these skills, restricts frequent patient contact and often chokes the wellspring of researchable ideas – direct patient care. For example, when we first began seeing large numbers of children who had been exposed violence we became captivated with the damage trauma could do to children [1], but as we began seeing more violence exposed children, we noticed some of them had developed resiliency in the face of trauma [8]. Thus, we were impressed that ‘risk factors were not automatically predictive of bad outcome because of the presence of protective factors in the traumatized victim’s life.’ By “pushing this conversation”, the field of trauma research began to explore the issue of resiliency in traumatized people and this soon metamorphosed into how to cultivate resiliency [5] and the biology of resilience [9]. Of course, we were not the only ones ‘pushing the resiliency conversation,’ and careful exploration of ancient literature in various religious traditions reveals this concept was not new, but only unexcavated by modern science.

For another example, we offer our most recent and potentially greatest public health observation. While working in a low-income African-American community on Chicago’s Southside, I was always aware we had been seeing a phenomena characterized by youth and

adult patient’s having poor affect regulation manifested by bad tempers, intellectual challenges, poor memories, inattentiveness, and poor relationship maintenance skills. Finally, I saw a patient who had all of these characteristics, but who also had telltale fetal alcohol exposure facies, and it all clicked. A clinical article written in 1979 finally became clear [10], I had been on an evaluation team that accessed 274 children who all had the revealing behavioral features of fetal alcohol exposure, but because it had not been an official American Psychiatric Association Diagnostic and Statistical Manual (DSM) diagnosis [11], it had been overlooked. Currently, there are six major Neurodevelopmental Disorders in DSM-5: 1) Autism, 2) Attention Deficit Hyperactivity Disorder (ADHD), 3) Intellectual Disability, 4) Specific Learning Disorders, 5) Communication Disorders, and 6) Motor Disorders and a new proposed diagnosis for further study – Neurodevelopmental Disorder associated with Prenatal Alcohol Exposure (ND-PAE) [12] – also known as Fetal Alcohol Spectrum Disorders. Based on our clinical observations we studied 592 subjects using a clinical research format and we discovered a prevalence rate of 388/1,000 of ND-PAE in a Family Medicine Clinic on Chicago’s Southside [7]. This is an astounding prevalence rate as previous studies using active case ascertainment methodology with Native American populations ages 0–21 found rates of fetal alcohol spectrum disorder between 2-120/1,000 [13]. Thus, a hidden epidemic was uncovered on Chicago’s Southside and, although it is not surprising considering how social determinants of health shape prevalence rates, e.g. the abundance of liquor stores in low-income communities facilitating social drinking in low-income women who did not realize they were pregnant.

There is scientific discovery to be made in high volume clinical work. Ergo, we commend young and old clinicians and researchers to combine these two skill sets and find fertile ground to explore for new research observations. Open access journals such as *Journal of Abnormal and Behavioral Psychology* provide an excellent venue for publication of such findings referred to as “Naturalistic Large-Scale Public Health Research” in the National Research Council and Institute of Medicine’s 2009 Preventing Mental, Emotional, and Behavioral Disorders among Young People: Progress and Possibilities report [14]. Clearly, double-blind randomized control trials have internal validity making them valuable science; however, such trials do not always have good external validity. In addition, academic research is rarely translatable in use in the day-to-day world. Science can often benefit from the experience of everyday clinical observations. Unfortunately, because of their nature, a lot of good work will rarely be entertained by the pristine, academic squeaky-clean journals. None the less, such efforts may well point the way to a scientific observation that is worthy of substantial research funding and which may pan out after three double-blind randomized control trials have been accomplished a decade after the original robust clinical observation was made. There are many unanswered questions in behavioral health and by using a

little “sweat equity,” useful clinical research can be “funded,” harvested and published thereby increasing scientific discourse.

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