

Genomics as cutting edge technology to measure and analyze clinically important genomic variants in the treatment of neuropsychiatric disorders

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Current psychiatric pharmacogenomic tests are now available to include many of the most commonly prescribed psychotropic medications. The ability to personalize treatment demonstrates a substantial shift in practice from what worked for a “typical” patient to what now works for each “individual” patient. Pharmacogenomics is the study of how genes affect the way a patient responds to medication. Genomic differences can influence the efficacy of medications, can be the source of serious drug side-effects, and can increase the risk of drug-to-drug interactions. By having an evidence-based report of a patient’s genomic drug suitability profile, a clinician can better understand how their specific patients may react to a medication.

The latest clinical and scientific findings to support clinicians and their patients in selecting medications and treating neuropsychiatric disorders will be reviewed. This includes genetic polymorphisms that impact liver metabolism and mechanism of action of psychiatric medications. Novel methods of reporting this laboratory information will also be reviewed. Recent publications on clinical outcomes of patients receiving such testing will be briefly reviewed.

Pharmacogenomic treatment planning includes understanding of clinically important genetic variants affecting a patient’s response to psychiatric medications. In today’s mental health care climate, it is critical that clinicians make informed, evidence-based decisions about proper drug selection. Prescribing a medication regimen that is more likely to succeed because it is tailored to an individual patient’s genetic profile can help the clinician better manage the patient’s disease and improve patient outcomes.

Biography

Debbie Thomas, EdD, MSN, APRN, PMHNP-BC, PMHCNS-BC completed her master’s degree in Psychiatric Nursing in 1992 from Indiana University and her Doctorate in Education Leadership in 1997 from Spalding University. She has worked in the field of nursing for over 30 years and psychiatric mental health for over 25 years. Currently, she is the director of the graduate psychiatric nurse practitioner program at the University of Louisville School of Nursing. She is the owner of Crescent Hill Psychiatric Services in Louisville, KY. She was most recently recognized by the International Society of Psychiatric Nurses as the International Psychiatric Educator of the Year for 2012. Additionally, she received the Marcia J. Hern award for teaching in 2013. She is an active member in the leadership of the American Psychiatric Nursing Association (APNA) and the International Society of Psychiatric Nurses (ISPN). She presents on a variety of PMH topics annually at the national and/or international level. She is a manuscript reviewer for the Journal of Psychiatric Nursing. She has conducted research and published on a variety of psychiatric topics. She is a recognized professional speaker and leader in cutting edge psychiatric nursing practice and education.

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