Canadian Journal of Biotechnology

ISSN 2560-8304 Poster Presentation **Category: Clinical Genomics**

Geographic Isolation and Endogamous Practices Provide Higher Risk of Genetic Disorders in Jammu and Kashmir

Ekta Rai¹, Arshia Angural¹, Akshi Sapolia¹, Sushil Razdan², Kamal Kishore Pandita³ and Swarkar Sharma¹

¹Human Genetics Research Group, Department of Biotechnology, Shri Mata Vaishno Devi University, Katra, J&K, INDIA

²Neurology Clinic, Bhagwati Nagar, Jammu, J&K, INDIA

³Health Clinic, H. No. 62, Lane 11, Swam Vihar, Muthi, Jammu, J&K, INDIA

Presenting author: ekta.rai@smvdu.ac.in

Abstract

Rare disorders are poorly understood, most often remain uncharacterized or patients are misdiagnosed due to lack of specific clinical resources. Understanding the basics of inheritance is essential in such cases as it helps to figure out the plausibility of a disorder as an inherited or genetic disease. Though identification and characterization of such disorders is complicated, Next generation Sequencing has come up as a tool in recent times and is of great help. It is quite visible in literature that since the advent of this methodology, a drastic increase in identification and genetic characterization of various rare diseases across the world has occurred. We emphasize on NGS/WES, as an effective method in understanding uncharacterized Mendelian Disorders. It is of great help, especially in developing countries and regions like Jammu and Kashmir where, such familial disorders exist in abundance, due to very high consanguinity, but remain undiagnosed/misdiagnosed due to lack of specialized testing. We have collected huge number of highly extended families representing various rare genetic disorders and trying to elucidate the genetic cause and biology of the diseases in these families.

Citation: Rai, E., Angural, A., Sapolia, A., Razdan, S., Pandita, K.K. and Sharma, S. Geographic Isolation and Endogamous Practices Provide Higher Risk of Genetic Disorders in Jammu and Kashmir [Abstract]. In: Abstracts of the NGBT conference; Oct 02-04, 2017; Bhubaneswar, Odisha, India: Can J biotech, Volume 1, Special Issue (Supplement), Page 250. <u>https://doi.org/10.24870/cjb.2017-a234</u>

© 2017 Rai et al.; licensee Canadian Journal of Biotechnology. This is an open access article distributed as per the terms of Creative Commons Attribution-NonCommercial 4.0 International (https://creativecommons.org/licenses/by-nc/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.