

Sowa Rigpa Drug Research and Challenges

Sochad Menrampa tashi dawa
BTMS, MS (Sorig)

Since the award of Nobel Prize in Medicinal Chemistry in 2015, there is quantum surge in the exploration, R & D, technology and investment in Natural Products. A decade has elapsed from the legal recognition of Sowa-Rigpa in India as a system of Indian Medicine in 2009. Not a single step in terms of funding/grant in-aid for projects and academic development has taken place except for Leh, Ladakh. The regulations pertaining to its curriculum, practices and standardization has remained a big gap with other systems of medicine. CCTM founded in 2005, undertook this responsibility based on the guidelines and regulations laid by the Tibetan parliament in Exile. To promote and grow further, there lies a huge responsibility to conserve Sowa-rigpa's authenticity in its original form backed by scientific investigation and validation to cater best health care services for the patients. With the history of more than 2000 years of its practice, the Sowa-Rigpa classics have emerged as a time-tested knowledge. Information relating to many facet of the drugs and its action needs to be authenticated.

Sowa-Rigpa employs only natural products from natural sources for its therapeutic uses, there are volumes of literatures by specific terms; *Nyobhum* which gives macroscopic description and medicinal properties of Plants only and 'Khrung dPe giving more description on materia-medica of plants, minerals, marine origin and organic products, with more details on nomenclature, taxons, physical and innate medicinal properties. *Menjor* are pharmacopeias full of formulations ranging from single plant to poly-herbal combinations. For instance, Gyud Zhi has an inventory of around 2250 different formulations for different ailments. Thousands of avenues are there to specialize, do analytical studies, critical and preclinical research on Sowa-rigpa drugs through basic or applied research. Though single plant part and its chemical component and structure Investigation is a load of work for the Phyto-chemist to identity and quantify them. Chemical analysis and quantification of Poly-herbal and organo-metallic compounds will have series of variation and range of experimental task increases many-folds. Further, assessment through biological assay for toxicity and activity will be challenging due to decomposition and dissolution issues. Thus, standard operating system with a standard drug testing laboratory suitable for such complex compounds needs to be established and reviewed for consideration by the governing bodies. Consequently, many Sowa-rigpa Practitioners have experienced and seen the benefit of Sowa-rigpa compounds in their patients clinically. Still, many facets of challenges crucial for scientific validation and investigations are essential as follows; characterization of molecular components, the molecular mechanism of compounds/formulations, pharmacokinetics and pharmacodynamics, drug-route pathways, product Piracy & safety, mass production & cultivation, mass extinction of plants, Intellectual property rights, preclinical and clinical studies, quality control & assurance and nonetheless, lack of Sowa-rigpa manpower. In Tibet,

the standardization of Tibetan Medicine by the Food & Drug Control Office of China was initiated from year 1993 and with the team work and cooperation among the authorities, they have achieved standardizing and fingerprinting nearly 200 herbs and 136 Tibetan formulations. All of 336 have been patented and standardized through national and regional drug testing laboratory. However, the potential of research in Sowa Rigpa Drugs are innumerable and it's a treasure house for researchers, practitioners, chemist, pharmacist, pharmaceutical and nutraceutical companies.

Goals of the Action plan funded in part or full by government and private firm needs to come up and set time of important updates and improvements for Standard Operating Procedure (SoP) with complete relevance and actionable results suitable to Sowa Rigpa requirements. Employing latest and newest scientific equipment accelerating processes with a frictionless interface to the mainstream scientists and researchers. This will provide an opportunity to assess and make Progress while strategizing the best way to move forward as a system

Keyword: Sowa Rigpa, Tibetan Medicine, CCTM, Research, Development, Drug Discovery, Natural Products
