

# Predictive, Preventive and Personalized Medicine & Molecular Diagnostics

September 01-03, 2015 Valencia, Spain

## Phyto-therapy and hepato-protection: Transition of tradition to technology

**Sangeeta Shukla**  
Jiwaji University, India

Liver disease including hepatitis, cirrhosis and liver cancer is the leading cause of death. Approximately 25,000 Americans die per year from chronic liver disease and more than 300,000 people are hospitalized per year due to cirrhosis. The harmful use of alcohol results in 2.5 million deaths worldwide per year. Excessive alcohol consumption is a major cause of preventable premature death, accounting for 1.4% of all deaths registered in England and Wales in 2012. Thus to create new herbal-based therapeutic approaches that are targeting the liver has been explored. This aims to develop effective drugs that can stimulate hepatic function or helps to regenerate hepatic cells. *Artemisia absinthium*, *Rosa damascena*, *Butea monosperma*, *Nigella sativa*, *Rewand chini*, *Polygonum bistorta* and polyherbal formulations were investigated against toxicants (CCl<sub>4</sub>, acetaminophen, alcohol, galactosamine, anti-tubercular drugs like isoniazid, rifampicin etc.) Research has also shown that herbals enhance the detoxification rate of toxicants by reducing the oxidative stress/associated with drug metabolizing system, protected DNA from oxidative damage and reversed the level of hepatic markers. Choleric activity, hexobarbitone-induced sleep time and plasma bromosulphalein retention also improved liver functions after herbal therapy. The histopathological observations revealed that cellular and ultra-structural pathological changes were reversed by mitigating of toxicant metabolic effects indicating improve hepatic morphology and physiological functions. The data suggests that herbals have an efficient protective mechanism against hepato toxicants. Statistical analysis of these herbal agents showed significant hepato-protective index. Thus, it can be concluded that these herbal agents may be considered as a good hepatoprotective agent by medical practitioners for liver ailments.

### Biography

Sangeeta Shukla is Vice Chancellor of Jiwaji University. She has wide experience of research in the field of Reproductive Biology, Biochemical Pharmacology and Environmental Toxicology. She has been awarded fellowship from Wellcome Trust, Indo-French Government Fellowship UK and many others. She has published 105 papers in SCI journals good citation indices. She has also edited book and contributed chapters in books. In recognition of her efforts, she held international positions as Vice President for Asian Continent of International Centers for Trace Element Study for UNESCO, France including Council Member of ISTERH. She has completed ten major research projects and supervised 18 PhD thesis and many dissertations of MPhil and MSc students.

[profsshukla@gmail.com](mailto:profsshukla@gmail.com)

### Notes: