A study on possible Nano-particles found in Sri Lankan Indigenous Medical Texts

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Abstract

Sri Lankan Indigenous Medical System known as Deshiya Chikitsa has a history dating back to almost 3000 years. Today, Sri Lankan Indigenous medical system has become Sri Lankan Ayurvedic medical system because it is a mixture of Ayurveda, Deshiya Chikitsa, Unani, and Siddha medicine. Nanotechnology based on Nanoscience is a highly used technology at present due to the wide range of application in the fields of medicine, computers, automobiles, communication, etc. The material used in Nanotechnology is called Nano-particles which have very small dimension in the range of 1 – 100 nm. Although the concept of Nanotechnology is relatively new, nano-particles have been used centuries earlier. The present study was performed to find out the possible nano-particles used in Sri Lankan Indigenous Medical system by obtaining data from the most extensively used 3 texts in Sri Lankan Indigenous Medicine Vatika Prakaranaya, Thalapathe Piliyam volume 1–21, and Deshiya Chikitsa Samgrahaya. Researchers have already found that Bhasma used in Ayurvedic medical system are at nano-particle level. All types of Bhasmas used in Ayurvedic and Sri Lankan Indigenous medical system are checked for their quality known as Bhasma pariksha. During Bhasma pariksha they check for the particle size using ancient techniques. Researchers have also identified Viyandumbulu used in Sri Lankan Indigenous medicine is also at nano-particle level. From this study it was revealed that there are over 15 Bhasmas used in internal as well as external preparations and Viyandumbulu is also extensively used externally for inflammation, orthopedics (kedum bindum) and internally as a Raktashodhaka and for Antragata roga. This is a literary study to find out the use of nano-particles in Sri Lankan indigenous medicine. For further studies the above mentioned different types of Bhasmas should be analyzed microscopically through SEM and TEM techniques and confirmed whether all the *Bhasmas* are at nano-particle level.

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