New Delhi, June 22: Hospital acquired infections affects millions of people worldwide. In the present juncture, when the COVID pandemic is sweeping across the world, transmission through contact is very high, and the risk is even higher while visiting the hospitals.

To tackle this issue, the Department of Biotechnology’s & Biotechnology Industry Research Assistance Council (DBT-BIRAC) is supporting a new non-alcoholic aqueous based
Colloidal Silver solution developed by Weinnovate BioSolutions from its NanoAgCide™ technology for disinfecting hands and environmental surfaces.

Silver nanoparticles have antiviral efficacy against many viruses such as HIV, Hepatitis B, Herpes simplex virus, and Influenza virus. Recent reports have suggested the role of Silver nanoclusters in inhibiting the proliferation of Coronavirus also. Nanoparticles are rapidly emerging as an effective solution to a variety of issues related to COVID-19, from disinfection to imaging. Silver nanoparticles-based materials will be able to prevent the contact infection of health care workers (HCWs), besides preventing patient infection. Colloidal silver can affect COVID-19 spread by blocking the RNA replication and reduce infectivity by blocking the surface glycoproteins.

This proprietary technology is gentle on the skin and doesn't require any special arrangement for storage unlike the alcohol-based sanitizers which are highly inflammable making their production, transportation and storage a risky affair. Another major advantage is that the solution releases the silver nanoparticles on the surface in a slow and sustained manner which ensures its effectiveness for a longer duration.

The product is priced at Rs.450 for a 500ml bottle. An Indian patent has been filed for the process of making the colloidal silver and a test license has been granted for making hand sanitizers and disinfectants. The start-up aims to manufacture 200 litres or more of colloidal silver solution per day to cater to the demand of hand sanitization and disinfection.

### Innovativeness:
- Safe: Aqueous based; no hazardous chemicals
- Effective against bacteria, spores and viruses
- Can be used on all surfaces
- Stays on the surface for a longer time
- More effective
- Non-Inflammable
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