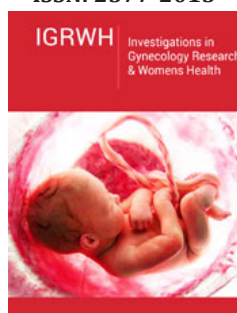


Role of Non Wovens in Gynaecology and Women's Health

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Opinion

Nonwoven fabrics are materials made from fibers bonded together by heat, chemicals, or pressure, rather than being woven. In women's health, they are essential for managing periods, bladder leaks, and medical recovery. They offer high absorbency, softness, and infection control, making daily life much easier and more comfortable.

Key applications in women's health

- Menstrual & incontinence care:** Products like sanitary pads, panty liners, and adult diapers use nonwovens for their top sheets (the layer against your skin) and acquisition/distribution layers (the layer that quickly pulls fluid into the core).
- Medical devices & surgery:** Hospitals use nonwovens for surgical gowns, drapes, and sterile instrument wraps to prevent germs from spreading during procedures.
- Medicated delivery:** Researchers are testing specialized nonwoven devices designed to hold and release medicine smoothly in the body without leaking.

How they work

Imagine a nonwoven top sheet as a tiny one-way door. It is made using materials like spunbond nonwovens:

- Softness:** The material is gentle on sensitive skin.
- Liquid movement:** It lets fluid pass through to the absorbent core quickly.
- Dryness:** It stops the liquid from coming back to the surface, keeping you dry and preventing rashes.
- Popular Nonwoven Products in India**

For everyday intimate health, you can find nonwoven items easily online or at local pharmacies in Coimbatore. Some popular choices include:

- Bliss natural sanitary pads:** Made with plant-based nonwovens to prevent rashes and itching.
- Pee safe panty liners:** Daily liners that use cottony-soft nonwovens infused with aloe vera to keep you fresh.

Personal hygiene products

Nonwovens are the backbone of modern single-use hygiene products because they feel soft on the skin and lock moisture away.

- a. **Baby diapers:** Used for the top sheet (against the baby's skin), leg cuffs to prevent leaks, and the middle core to trap fluid.
- b. **Feminine care:** Found in sanitary pads and panty liners for their quick absorbency and comfortable, non-irritating feel.
- c. **Adult incontinence:** Used in disposable pads and underwear to provide high-volume fluid retention and skin dryness.
- d. **Wipes:** Used for baby wipes and cosmetic wipes because of their softness and wet strength.
- e. Medical and surgical use

In healthcare, nonwovens help prevent the spread of infections. Because they are single-use, they arrive sterile and eliminate the need for washing.

- a. **Face masks:** Surgical and N95 masks use a special nonwoven layer called meltblown. This layer acts like a wall that traps tiny germs and dust particles.
- b. **Surgical gowns and drapes:** Gowns and sheets used during surgery are often made of a mix of spunbond and meltblown fabrics. They block blood, body fluids, and bacteria from passing through to doctors and patients.
- c. **Wound care:** Nonwoven gauze and bandages are softer, stronger, and shed less lint than traditional woven cotton. They help absorb wound fluid while keeping the area clean.
- d. **Sterile packaging:** Medical instruments are wrapped in porous nonwovens that allow sterilizing gases (like steam) to pass through while keeping the tools germ-free.