

Hollow mattress

Country of origin | Bangladesh

Health problem addressed

People with spinal cord injuries often develop pressure sores due to prolonged sitting or lying without changing position. Sitting or lying on hard surfaces makes the situation worse. Many people while sitting in a wheelchair use a pressure relief cushion but do not have the capacity to afford a pressure relief mattress. As a result they often develop pressure sores, which are difficult to manage and expensive to treat, especially in low and middle income countries.



Product description

The product is a mattress with an opening to accommodate the pressure relief seat cushion of the patient's wheelchair.

Product functionality

By having the space to accommodate the pressure relief seat cushion in the mattress, the pressure is relieved at the usual pressure points, such as in the tailbone and hip bones, while in the supine position. The wheelchair seat cushion is placed in the hole of the mattress to make a full mattress. The whole mattress is covered with water resistant fabrics.

Developer's claims of products benefits

This modified pressure relieving mattress prevents development of pressure sores in the supine position. It saves on unnecessary health care expenditures to heal/manage the pressure sores. It also helps to reduce the time needed for full rehabilitation. It can be made locally with easily available and accessible resources such as an ordinary foam mattress. It is affordable and water resistant.

Development stage

The product has been used in a rehabilitation centre for people with spinal cord injuries. This product has been approved by the multidisciplinary team of the specialized Spinal Cord Injury Unit of the largest paraplegic centre of Bangladesh.

Use and maintenance

User: Self-use, family member, care-giver

Training: Not required

Maintenance: Not required

Environment of use

Settings: Rural, urban, ambulatory, at home, primary (health post, health center), secondary (general hospital), tertiary (specialized hospital)

Product specifications

Dimensions (mm): Variable

Weight (kg): 7-8

Consumables: No

Life time (years): 5

Shelf life (years): 5

Retail price (USD): 25 (without the cost of cushion)

List price (USD): 25 (without the cost of cushion)

Other features: Mobile, continuous-use

Year of commercialization: 2008

Currently sold in: Bangladesh