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

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