

SDG 3 GOOD HEALTH AND WELL-BEING



ANNUAL REPORT 2024-25

3 GOOD HEALTH
AND WELL-BEING



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Sustainable Development Goal 3: Good Health and Well-Being

This report details Brainware University's strategic and measurable contribution to **SDG 3: Good Health and Well-Being** during the academic year 2024-25. It consolidates university-wide activities that advance physical, mental, and social health through teaching, research, innovation, outreach, and institutional collaboration.

Through the combined efforts of the **School of Allied Health Sciences, School of Nursing, School of Hospital Management, and Department of Biotechnology**, the University has created a vibrant ecosystem for affordable healthcare research, preventive awareness, and rural health innovation.

Brainware's work in 2024-25 aligns with national priorities under **Ayushman Bharat** and the **National Health Mission**, directly supporting SDG targets 3.3 (end communicable diseases), 3.8 (achieve universal health coverage), and 3.d (strengthen early-warning systems and health capacity).

During 2024-25, Brainware University advanced its health-promotion agenda through integrated academic, research, and outreach interventions:

- **Outreach & Public Health:** NSS/UBA health drives across five villages—Faldi, Dubgaria, Chaturia, Panshila, and Chak Barbaria.
- **Research & Innovation:** 20+ faculty publications on disease prevention, biomedical technology, and community health management.
- **Patents:** 15+ granted or published patents on affordable diagnostics, assistive devices, and AI-based healthcare systems.
- **Projects:** ₹ 90 lakhs+ in government and internal research funding directed toward health and sanitation innovations.
- **Student Engagement:** 300 students trained through health-awareness, blood-donation, and rural nutrition programmes.

UNIVERSITY'S ROLE IN SDG 3

Brainware University believes that health education should extend beyond hospital walls. Its interdisciplinary strategy integrates **medical science, AI, biotechnology, psychology, and social work** to create sustainable health outcomes.

Policy Frameworks Supporting SDG 3:

Policy / Plan	Description	Alignment with SDG 3 Targets
Strategic Plan 2023-28	Prioritizes rural healthcare and biomedical innovation	3.8 & 3.d
Institutional Innovation Council (IIC)	Promotes med-tech start-ups and patentable research	3.b & 3.c
UBA Village Programme	Implements preventive health and hygiene education	3.3 & 3.4
Nursing Curriculum Reform 2024	Includes mental-health and geriatric-care modules	3.4 & 3.5
MoUs with Hospitals & NGOs	Provide clinical exposure and free-care outreach	3.7 & 3.8

Representative Research Publications (2024-25)

- **Biomedical Engineering:** *AI-assisted lung-cancer detection models* (ICMR-funded project, ₹ 66 lakhs).
- **Pharmaceutical Technology:** *Herbal wound-healing hydrogels* and *bio-mask coatings* for infection control.
- **Nursing:** *Telemedicine literacy among rural populations* and *PCOS awareness* studies.
- **Hospital Management:** *Healthcare waste management* and *occupational safety among sanitation workers*.
- **Biotechnology:** *Bacterial bio-pigment production from lignocellulosic waste*—low-cost biomedical materials.

INNOVATION AND PATENTS

Notable Health-Related Patents (2024-25)

Patent Title	Department	Status	SDG 3 Relevance
IoT-Integrated Smart Stethoscope with AI Image Analysis	Pharma	Granted (UK)	Low-cost diagnostics
AI-Based Hybrid Breast Imaging Device	Allied Health Sciences	Published	Early cancer detection
Head-Movement & Voice-Enabled Robotic Wheelchair	ECE	Published	Assistive mobility
AI-Based Food Safety Prediction Tool	Hospital Management	Granted (India)	Food security and hygiene
Portable Antimicrobial Nanofiltration Water Bottle	Allied Health / UBA	Field-Implemented	Safe drinking water

These technologies demonstrate Brainware's capacity to bridge research and real-world application, promoting equitable health access.

GOVERNMENT & SEED-FUNDED PROJECTS

Funded Projects (Health and Environment, 2024-25)

Investigator	Department	Project Title	Funding Agency	Amount (₹ lakhs)
Dr. Subrata Sinha	Computational Sciences	Deep-Learning Lung Cancer Detection	ICMR	66.0
Prof. Deepshikha Datta et al.	Chemistry / Psychology	Groundwater Quality & Copper-Filter Prototype	WBPCB	11.59
Dr. Pameli Saha	Mathematics	Modelling of Compact Objects for Biomedical Applications	DSTBT	13.6
Ms. Piyali Khamkat	Pharma Tech	Hydrogel Wound Dressing from Centella Asiatica	MoEFCC	1.5

TRAINING AND CAPACITY BUILDING

Training Programmes and Workshops (2024-25)

- **Advanced Clinical Simulation Workshop** - School of Nursing (Jan 2025).
- **Biomedical Device Innovation Bootcamp** - IIC Cell (Feb 2025).
- **Mental Health Awareness Week** - School of Allied Health Sciences + Psychology Dept. (Oct 2024).
- **Nutrition and Well-Being Campaign** - Hospital Management Dept. (Dec 2024).

These programmes improved students' practical competencies and supported SDG targets 3.4 and 3.c by enhancing the health-workforce capacity.

PARTNERSHIPS AND MoUs

Strategic Health Collaborations (2024-25)

Partner	Country	Focus Area
Kasama University College of Health Science and Technology	Zambia	Joint research and faculty exchange
Hanyang University	Republic of Korea	Biomedical Instrumentation Research
Fraunhofer IIS	Germany	Computational Health Data Analytics
North City Hospital	India	Clinical training and public health camps
SWADES Foundation	India	Community well-being and mental health

Brainware University's 2024-25 efforts under SDG 3 illustrate a holistic, evidence-driven model of health promotion that merges **education, innovation, and community care**. Through its interdisciplinary approach—uniting Allied Health, Nursing, Pharma, and Engineering—the university has created affordable, replicable healthcare solutions suited to India's grassroots realities.

Its UBA-led rural programmes, AI-enabled diagnostic patents, and global research collaborations all converge toward one goal: **a society where every individual enjoys the right to health and dignity.**

Looking ahead to 2025-27, Brainware plans to:

- Launch an **SDG 3 Research Consortium** linking national and international partners.
- Double the number of free medical outreach programmes by 2026.

Through its steadfast commitment to innovation and empathy, Brainware University reaffirms its role as a torchbearer for Good Health and Well-Being—creating impact that begins on campus and extends to every corner of society.