Data for Good: How Ubiquitous Media and Big Data can Shift Norms, Change Behaviours, and Improve Health

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In the rapidly evolving media ecosystem, ubiquitous media generate vast streams of behavioural, attitudinal, and interactional data. These data offer powerful tools to detect, influence, and reshape the social norms that underpin health behaviours. However, without ethical guardrails, the same forces can reinforce harmful norms, propagate misinformation, and deepen inequities.

This keynote introduces the concept of Data for Good—data that are accurate, ethical, meaningful, contextually relevant, and norm-aware. Drawing on various norms-based theories, including the theory of normative social behaviour, Rimal will illustrate how data act both as a mirror, reflecting behaviours and attitudes, and as a megaphone, amplifying specific norms. It outlines a "norm architect" strategy—detect, diagnose, design, disseminate—as a framework for harnessing big data to promote health, counter stigma, and mitigate misinformation.

Two case studies from India exemplify these principles:

- The Reduction in Anemia through Normative Innovations (RANI) Project in Odisha, India—a cluster randomized trial that achieved significant behaviour change among women of reproductive age by reshaping norms around iron-rich diets and iron folic acid consumption.
- The Happy Baby Program in urban Varanasi slums, where WhatsApp was used to affect norms, interpersonal communication, and vaccine confidence to improve caregivers' intentions to vaccinate their infants.

Ethically, these efforts underscore the need for transparency in data collection and analysis, inclusivity in representation, and ongoing evaluation of unintended consequences. Normshaping interventions must guard against manipulating vulnerable populations, inadvertently stigmatizing behaviours, or overlooking marginalized voices in datasets. By embedding ethical review at every stage—from design to dissemination—we can ensure that the use of big data aligns with public health's foundational values of justice, equity, and respect for autonomy.

As norms evolve at unprecedented speed through AI and big data, the challenge is not whether data will shape behaviour—it will—but whether we will guide that process intentionally toward health, equity, and collective well-being.