Text Messaging Intervention for Postnatal Care of Mother and Child

About the Applicant

- Dr Uma Ram
- Seethapathy Clinic & Hospital, Chennai
- Type: Hospital-based postnatal care service | Mixed Methods Feasibility Study (Mar 2018–Mar 2019)

Problem Statement / Digital Challenge

- Postnatal care has the lowest coverage of all maternal health interventions globally; critical information given at discharge is often forgotten or misunderstood
- New mothers face isolation, postpartum depression (22% pooled prevalence in India), conflicting advice from family and misinformation
- ~100,000 neonatal deaths/year in India preventable with facility delivery + proper postnatal care
- Stakeholders affected: New mothers, newborns, nursing staff, obstetricians

Digital Tool / Solution Implemented

- Free opt-in SMS postnatal messaging service — 1 evidence-based text message/day for 100 days post-delivery
- Outsourced platform: Mobil Train Knowledge Services; content co-developed by consultant obstetricians + health communication expert, validated with mothers
- Key features: Time-sequenced messages aligned to newborn development; topics include breastfeeding, vaccination reminders, diet, contraception, postpartum mental health, newborn care & danger signs; storable/shareable format

Digital Implementation Highlight

- Rollout: Service activated at discharge from two hospital units; IEC approved (EC2021-03, Fetal Care Research Foundation)
- Reach: 1,138 mothers offered service; 682 (60%) activated; 120 surveyed (80 users + 40 non-users); 6 in focus groups
- Champions: Dr Uma Ram (clinical lead), Seethapathy Hospital nursing & OBG teams; University of Warwick research collaboration

Digital Impact

- Engagement: >90% read messages daily; 80% satisfied with frequency; 75% shared content with family/friends
- Top activation reasons: Helped understand postnatal changes (95%); provided continuity of care (90%); clarified conflicting information (89%)
- Operational: 94.9% felt messages helped understand their situation; 89.9% felt the hospital continued to care post-discharge; 82.3% sought the right help at the right time
- Safety: Countered harmful traditional practices (diet restrictions, outdated newborn care); improved vaccination & review visit compliance (78.2%)
- Mental health: Reduced isolation and postpartum anxiety; strengthened mother–provider relationship and patient self-efficacy
- Published: IJEPH 2022 (Sampathkumar et al.); Theory of Change validated

Key Enablers

Enablers:

- Free service — zero cost barrier for mothers
- Hospital-endorsed content — high trust & credibility
- Clinician + communication expert co-development ensured relevance & quality
- Simple SMS format — no smartphone/app/data needed

Challenges:

- 30% non-activators had technical issues; 17% lacked time at discharge
- Message timing misaligned when activated late post-delivery
- 5% cases: husband-controlled phone/decision to activate

Lessons Learned / Replicability

Top Learnings:

- Introduce the service during third trimester visits — not at discharge — to improve uptake, reduce overwhelm and ensure message-to-delivery-date alignment
- SMS outperforms app-based solutions for low-resource settings: no internet, no smartphone, no literacy barrier beyond basic text
- Clinician-endorsed, time-sequenced content is key — mothers trusted it over family advice, internet and social media

What hospitals should consider:

- Expand to vernacular languages to reach public health system users
- Extend beyond 100 days for high-risk groups (GDM, pre-eclampsia) targeting postnatal screening & cardiometabolic follow-up
- Ensure message delivery to mother's own phone — not husband's