TOOL KIT (RESOURCES) FOR MATERNAL AND CHILD MORTALITY REDUCTION PROGRAMMES IN LOW RESOURCE SETTINGS – A CALL FOR GLOBAL ACTION

Key features – The Tool Kit is a resource to be used for guidance in planning and implementing an effective programme for reduction of preventable mother and child deaths in low resource settings, in collaboration with University of Geneva Hospital (HUG)

Background - Maternal and new born mortalities in low resource countries, are largely preventable. These are related not only to medical issues, but also to public health and societal/cultural issues. We believe a holistic strategic action is needed, if we are to move towards reaching the SDG goals. For impact and sustainability, partnership of health care providers with Government, NGOs and civil societies is very necessary. We present a tool kit comprising of ideas and actions based on our experience, available evidence base and opinions/expectations of experienced players in these fields. It is based on the PDCA (plan, do, check and act) principle. The components have been field tested in the Rotary Calmed programme(www.calmedrotary.org)

Rationale - These represent not only a dash board view of but also a helicopter view of the problems in low resource settings, and their strategic solutions. These guidelines should be adapted and up dated.

Maternal and Perinatal Mortality Reduction in low resource settings – Helicopter view		
Indicators	Problems	Solutions
First delay in care - in the community	Lack of awareness in the community, of maternity and child care matters, and family planning	Training/Empowerment programme of community women's groups through pictorial charts, videos with subtitles in local language Group Antenatal Care training
Second delay in care - transport	Lack of emergency transport Lack of understanding re: basic resuscitation facilities at community/primary care level, before ambulance transfer	Low cost ambulance – E-ranger bike Maternity Emergency Response Network (MERN)– resuscitation /stabilisation prior to fast track ambulance transfer "Golden hour" concept
Third delay in care- in hospital facilities	Lack of trained professionals in hospital	BEmONC (WHO) training, through training the trainer model, aiming an extended skills trained workforce; Regular retraining ,

	Lack of supervision on site by trained seniors.	Improved availability/supervision by senior doctors Telemedicine /Telehealth
Dysfunctional hospital,	Lack of medicines, functioning equipment	Obstetric Quality Assurance and correction
Lack of governance, discipline, accountability, persistent failure of programmes	Preventable maternal and perinatal deaths	Training /implementation of MPDSR in partnership with Government and hospital providers, correction of deficiencies
Inequities in outcome in individual areas	Complacency/ignorance /lack of good data	Partnership with govt., regular review, MCH programme manager -remunerated

Six pillars -We have divided the topics into 6 areas, based on our experience of the vocational team based training the trainer model in Calmed programme (www.calmedrotary.org) although there have been inevitable overlaps. Please put your comments, suggestions to drhbasumd@gmail.com – we will endeavour to adapt and enhance.

PROGRAMME DEVELOPMENT STRATEGY – HELICOPTER VIEW

S.1. International experience of preventable maternal and new born mortality in low resource settings, 3 - delay model, MMR (maternal mortality ratio), life time risk(LTR).
S.2. CALMED (Collaborative Actions in Lowering of Maternity Encountered Deaths) programme basics – a template of successful action for reduction of preventable maternal deaths – also reduce morbidities and child mortality. Introduced through Rotary Foundation Global Grants in India.
S.3 – Partnership and collaboration with Governments, Academic bodies, Professional societies, and NGOs – for low cost resources, advocacy and empowerment
S.4. Developing evidence base for Calmed and other related holistic programmes and individual components, for piloting and implementation.
S.5. Establishing a technical network of programme participants – Obstetricians, Paediatricians, Public Health Experts, Maternal and Child Health Champions, members of related Rotarian Action Groups and Rotary Fellowships.

PLANNING AND PREPARATION FOR VTT

P.1. Programme preparatory work – identifying the target area, assessing needs, abilities, priorities, adapting the Calmed template to combined resources and joint priorities. Preparatory work at programme site and international VTT (vocational training team) site (rehearsal, discussions), communication network including skype, working relationship between international and host committees.

P.2. Reconnaissance visit – meeting government – needs assessment, Rotarians, Professionals, Community leaders. Developing two teams; Agree on Check List for programme preparatory partnership, training sites, hosting, administrative issues, funding and procuring resources, risk assessment of the team visit.

P.3. Funding -Rotary Global Grant application, establishment of funding structure, partnership, MOUs with partners, networking including local and global publicity network.

P.4. VTT Team selection – advertising, interview, selection, team building including communication and rehearsal (please see P.5.)
P.5. Trainee/Trainer selection in the host country – Government/Rotary/Professional Group/Hospital staff partnership. A 2-3-year timed programme of training and retraining covering the entire target area. MOU for resources and required permission.

RESOURCES

R.1. Procuring Training Resources – Trainers' Manual, Trainee's manual, Community awareness training manual, presentation tools for lecture, breakout groups, Pre- and Post-test materials for assessment (knowledge, skills, and behavioural change), certificates, charts, videos for training and publicity/awareness, simulators, loading flash drives, cell phones, computers.
R.2. Seeking resources within the country -equipment, pharmaceuticals and others for diagnosis, monitoring, treatment, and publicity.
R.3. Skills Lab set up -a resource for skills transfer training.
R.4. Funding an administrative set up for coordination of the holistic programme – hospital, community, public health and bridging the gaps and inequalities.
R.5. Telemedicine set up for management and Telehealth for awareness.
R.6. Maternity Emergency Response Network – M.E.R.N.
R.7 Group Antenatal Care

MONITORING AND EVALUATION

M.1. WHO Check list (modified)- please see T.4.
M.2. WHO signal functions
M.3. Obstetric Quality Assurance (OQA) – please see T.15.
M.4. Maternal and Perinatal Death Surveillance and Response (MPDSR) – please see T.15.
M.5. – Partnership, collaboration with Government- please see A.1 .
M.6. – Collaboration with NGOs, non-Governmental Private Hospitals – please see A.

ADVOCACY

A.1. Partnership with Government -please see M.5.
A.2. Collaboration with NGOs, Private Hospitals – please see M.6.
A.3. Bridging inequalities in service provision, within the target area.
A.4. Improving access to quality care – financial, geographic, cultural/social barriers.
A.5. Satisfying unmet needs of contraception, including reversible methods.

VOCATIONAL TRAINING TEAM BASED PROGRAMME

V.1. Needs assessment in target areas to identify goals and resources needed.
V.2. Team Visit/Team Work – VTT Team organisation based on the Faculty working on training the trainer model -Team selection, Team briefing, Programme Director, Team Leader, Course Directors, Team members (Faculty), Administrators
V.3. Preparatory Day – unpacking and assembling the simulators, videos, charts, rehearsal for the training days, check list for resources needed for lectures, breakout sessions, agreed template of action.
V.4. Programme Schedule -various training groups (for training,mentoring etc.) – training the trainers, basic trainees, ASHA trainers, Emergency Responders (Ambulance workers, others) training; team briefing, de-briefing, return visits, arrangements for reporting, sharing monitoring and evaluation.

VOCATIONAL TRAINING COMPONENTS IN MATERNAL AND CHILD CARE

T.1.Training-Care of labour – normal labour, Postpartum care, new born care, resuscitation, examination of new born.
T.2 Training -Care of sick babies – resuscitation, preterm, hypothermia, hypoglycaemia, Kangaroo Mother Care (KMC).
T.3.Training- Partograph – normal, abnormal labour.
T.4. Training- WHO Check List (modified) – please see M.1.
T.5. Training -Maternal resuscitation – structured approach.
T.6.Training - Shock and Hypovolaemia
T.7.Training -Antepartum Haemorrhage (APH).
T.8. Training- PET, Eclampsia.
T.9.Training -Postpartum Haemorrhage (PPH)- retained Placenta.
T.10.Training – Maternity Emergency Response Team -Stabilisation prior to transfer-training of Ambulance Crew, Nurses, Midwives, Emergency Box containing equipment, medication, E-ranger bike ambulance, cell phone based training, tracking device, Telemedicine assistance.
T.11. Training - Abnormal Labour – Twins, Breech, Cord prolapse, Shoulder dystocia, Mal-rotated Head, Obstructed labour
T.12.Training – Sepsis in pregnancy, labour, puerperium
T. 13. Training – Anaemia, HIV

T.14 – Group Antenatal care
T.15. Training - Family Planning
T.16. Training – MPDSR, OQA - please see M.3 & M.4.
T.17. ASHA trainers training – pictorial flip charts, videos
T.18. Training – Blood transfusion.
T.19. Training - Caesarean section
T.20.Pre- and Post- test materials – scoring for knowledge, skills, and behaviour changes
T.21. Post training linkages, feedback, mentoring, teleconference with trainers and trainees, return visits
T.22.– Power point slides
T. 23. – Training and related videos, publicity videos
T.24. – Simulators and Training aids – Mama Natalie, Neo-Natalie, Mama U, Resus. Anne, IV access by Phlebotomy, NASG , Episiotomy trainer ,Manual removal of placenta trainer, M.V.A. Trainer etc.
T.25 – Training in Tele Medicine

Appendices –

Keys –

V- Vocational Training Team based programme

A – Advocacy

M- Monitoring and evaluation

P- Planning and preparation

R – Resources

T – Training topics

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