

# Home based Ready to Use Therapeutic Feeding

Blantyre District

Urban and Rural

Malawi

# Investigators

- Jean Nd'gumma
- Agnes Malamulo
- Harriet Chiomba
- Stephane Paulus
- Rebecca Sinfield
- Sue Haves
- Queen Dube
- Taya Banda
- Chikubutso Chimwaza
- Lilian Gondwe
- Andrew Likaka
- Saulos Nyirenda
- Damalawo Phiri
- Anne Nesbitt

# Support from

- Valid International / Concern Worldwide, CTC Research and Development program
- Action Against Hunger
- St Louis Nutrition Programme,
- Dept. Paediatrics and Community Health, College of Medicine, Malawi

# Background to study

- Increasing poverty over past 10 years
- Rapid growth in population
- Agricultural sector under pressure
- Decline in tobacco sales-major cash crop
- Loss of soil fertility /deforestation
- Failed grain harvests 2001/2002
- Southern African Food Emergency 2002/3

# Malawi Health indicators

- 57% under 5's stunted
- Global acute malnutrition rates 4.7%
- 60% under 5's Vitamin A deficient
- Under 5 mortality rate 188/1000
- Life expectancy 37 years
- Immunisations rates high
- ANC HIV prevalence rates 17-25%
- Bellagio Zone 4 child mortality HIV and malaria both >10%

# Moyo House, QECH, Blantyre



# Moyo House, QECH, Blantyre

- Serves as district NRU in a tertiary hospital
- 1500 admissions severe malnutrition/year
- Peak in rainy season January-April
- High mortality rate 30% over past 5 years
- Prevalence rates HIV in-patients >35-40%
- Previous host site for RUTF research
- Coverage rates 65%

# Blantyre 'urban'



# Blantyre 'rural' north



# Blantyre 'rural' south

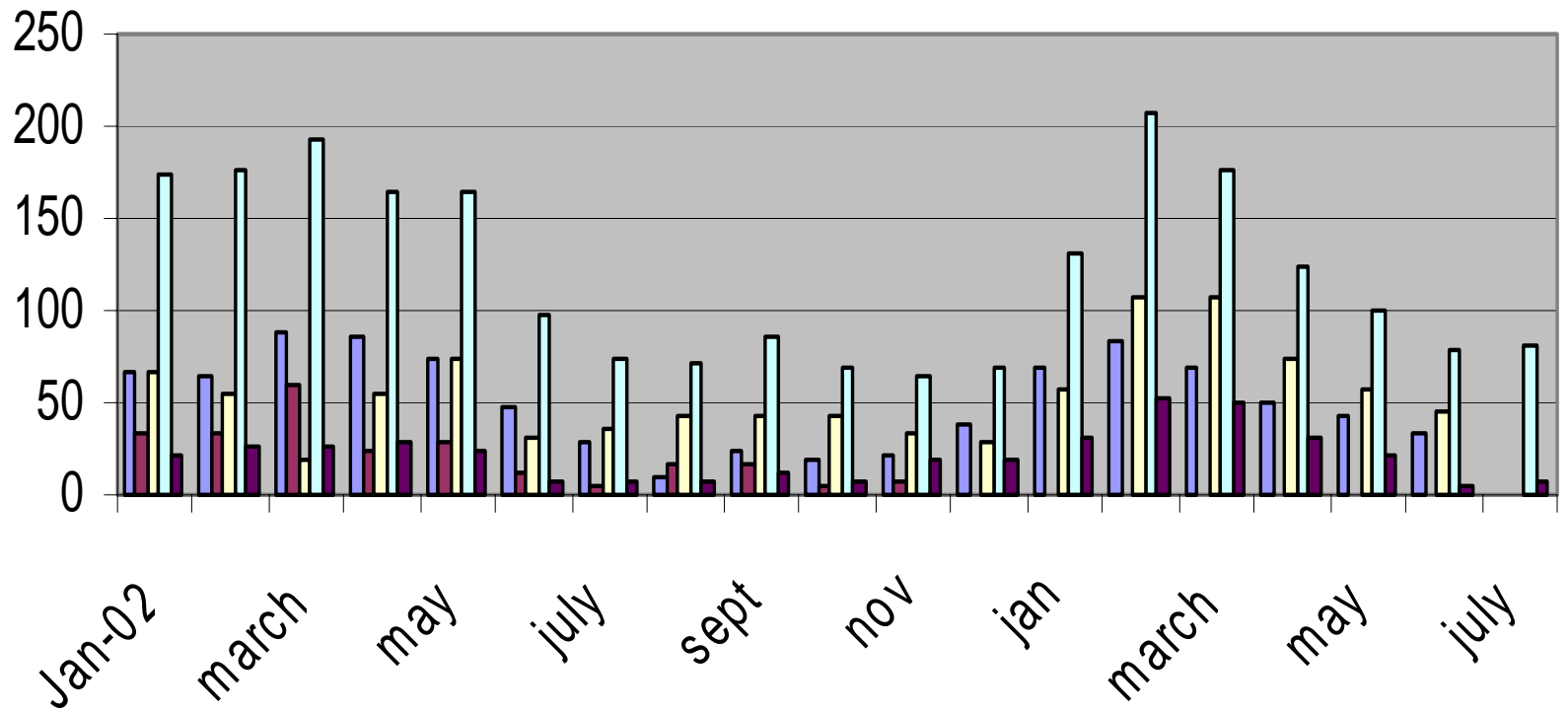


# Response to Food Emergency

- Multi-ministerial Task Force, massive international response
- Supplementary feeding programmes
- Support to all NRU's from Action Against Hunger
- New national guidelines
- Introduction pre-packed F75 , F100, Resomal
- Introduction weight/height measurement
- WHO training course Severe malnutrition

# Admissions January 2002-July 2003

kwash maraskw maras total deaths



# Audit December 2002-February 2003

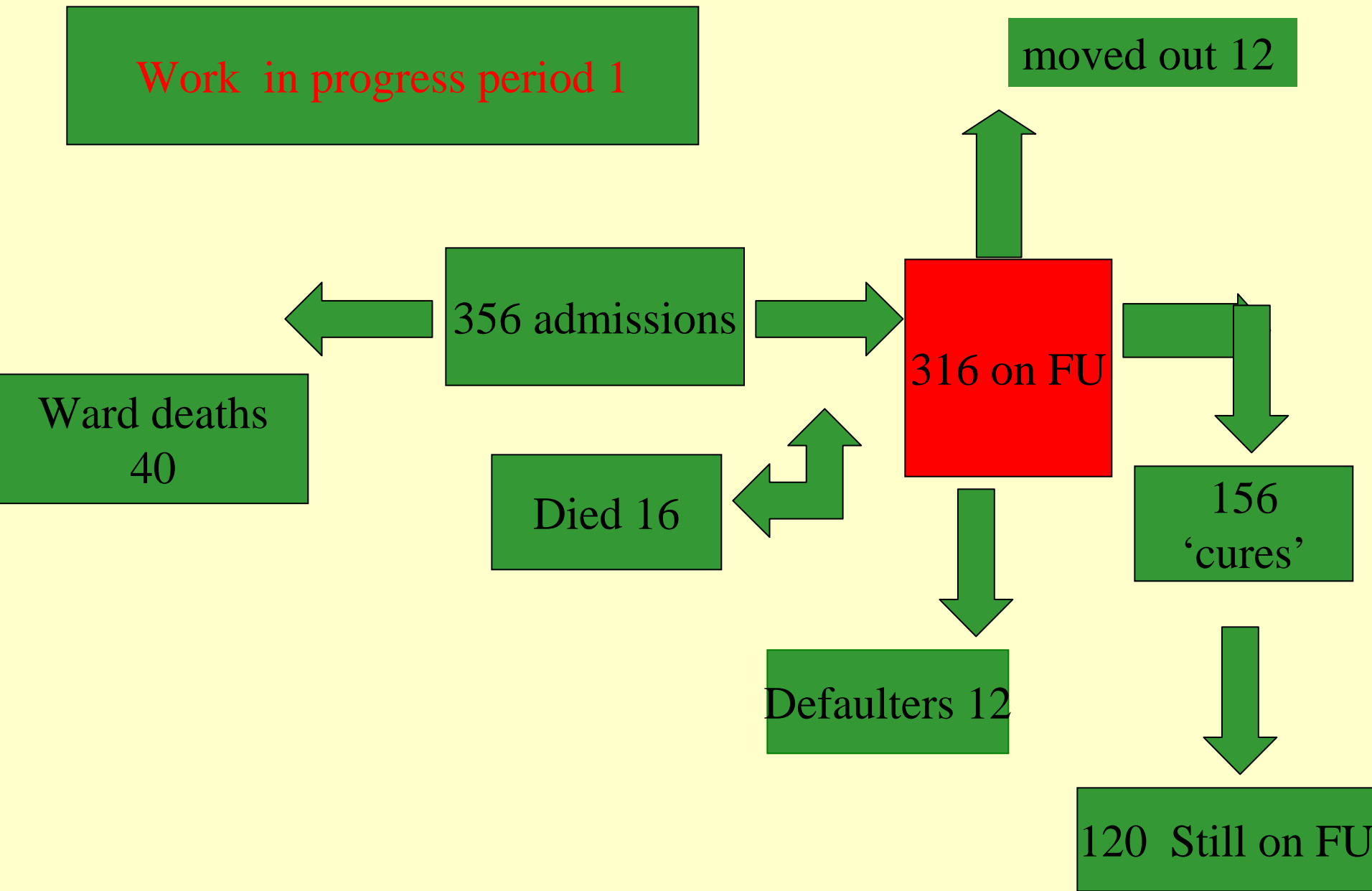
- 350 admissions
- HIV testing on clinical grounds
- Mortality rate 29%
- HIV/AIDS 32% deaths
- 'cure' rate 45%
- Unacceptability F100
- Mean length of stay 14 days
- 21% children discharged HIV +ve
- 20% children had lost one or both parents
- 68% children attended one or more follow up clinics

# Operational Research MOHP pilot site

- Aim- improve ‘cure’ and reduce mortality rates of severe malnutrition, using RUTF and current staff/structures
- Improve phase 1 /stabilisation care
- Integrated FU/provide nutrition support with other clinics-HIV/Palliative care, disability and TB clinic

# Operational research

- Period 1 mid May -mid October 2003 –dry season, establish delivery system,data collection,monitor,patient satisfaction survey,defaulter study, modify
- Period 2 mid October 2003-mid April2004-rainy season, establish whether programme sustainable
- Dowa protocols used



Work in progress period 1

moved out 12

356 admissions

316 on FU

Ward deaths  
40

Died 16

156  
'cures'

Defaulters 12

120 Still on FU

# What have we learnt so far?

- Premature to analyse data -however-
- Ward mortality 11%, overall mortality 16%
- Clinic follow up rates 90%
- Cure rates(>85% wt/ht) currently 50% ,will rise over coming weeks to ? >70%
- Average 38 days to 'cure' post discharge
- Readmissions 20

# Clinical problems 1

- Severe oedematous malnutrition 61%
- Complicated moderate malnutrition 18%
- Severe wasting 21%
- Weight gains
- Severe oedematous malnutrition 5.8g/kg/day
- Severe wasting 8.1g/kg/day
- 75% deaths severe wasting-all AIDS related

# Clinical problems 2

- Anaemia
- 66% PCV <33%
- 25% PCV <20%
- 8% PCV <15%
- Malaria
- 16% have MP's ++ or >

# Clinical problems 3

- 6% children survived septicaemia
- Particular problems with MDR  
Salmonellosis
- 6% children on TB treatment
- 3 children with severe stunting
- 2 children with cancrum oris
- Small cohort of children with cerebral palsy

# HIV+ve cohort

- Children tested on clinical grounds, after carer pre-counselling
- Only ELIZA tests available, no PCR kits
- 50 children, 9 'cured' nutritionally
- 11 died, 4 defaulted, 13 readmissions
- 62% orphans
- Shared care with palliative care team
- Need life time nutritional support

# Satisfaction Survey

- 85 consecutive carer interviews over one month
- 98% satisfied
- 40% children sharing food
- Carers worries-15% children will only eat RUTF
- Transport costs
- Concern re how to feed when better, no money/no food

# defaulters

- Visits
- 10 children well
- 5 children unwell
- 9 children had died
- 2 children moved
- 7 can't find house
- 7 rejoined
- Transport costs (rural mothers)
- Mother unwell
- Concern re confidentiality of HIV diagnosis
- Happy with progress

# Conclusion/Issues study period 1

- Improved cure and reduced mortality rates
- Low default rates/high satisfaction rates
- Systems in place
- 2 additional FU sites in rural Health Centres
- Still need to improve inpatient care
- ?Health education budget/?outreach vehicle
- ?? Programme sustainable in rainy season
- role RUTF in care of disabled/elderly/HIV
- ?ARV's

# clinic day



# Chiponde chapadela

