

Abstract G248 Table 1 Child Mortality Outcomes for baseline and long term follow-up for Makwanpur cRCT of WPGs

	Intervention	Control		
	n [#]	n [#]	Odds ratio (95% Confidence Intervals)	Adjusted OR (adjusted for clustering and pairing of clusters)
documented births	3036	3400		
live births	2959	3322		
stillbirths	77	78		
Neonatal deaths	83	128		
Maternal Deaths	4	15		
Stillbirth rate per 1000 live births	25.4	22.9		
Neonatal mortality rate per 1000 live births	28.1	38.5		
alive at 4 weeks	2876	3199		
known deaths after 4 weeks	79	116		
known alive after 4 weeks and at follow-up	2100	2111	0.68 (0.51, 0.92)	0.69 (0.49, 0.96)
additional reported deaths after 4 weeks	7	17		
additional reported alive after 4 weeks	425	567		
total potential deaths after 4 weeks	86	133		
total potential alive after 4 weeks	2525	2678	0.69 (0.52, 0.90)	0.67 (0.51, 0.90)
total known deaths from birth	162	244		
total known live from birth	2100	2111	0.68 (0.55, 0.84)	0.69 (0.56, 0.86)
total presumed deaths from birth	169	261		
total presumed live from birth	2959	3322		
known child mortality rate per 1000 live births	54.7	73.4		
presumed child mortality rate per 1000 live births	57.1	78.6		
% known reduction in child mortality per 1000 live births	25.46			
% estimated reduction in child mortality per 1000 live births	27.31			

[#]data on an additional 164 infants and their mothers that were not available in the original trial analysis were included in the analysis of the follow-up
WPG: women's participatory groups; cRCT: cluster randomized control trial

G250

DOES AN EMERGENCY TRIAGE ASSESSMENT AND TREATMENT PLUS ADMISSION (ETAT+) COURSE FOLLOWED BY REPEAT VISITS OF UK CONSULTANT PAEDIATRICIANS TO DISTRICT HOSPITALS IN A LOW INCOME COUNTRY IMPROVE CHILDREN'S CARE?

¹M Becker, ²RL Boon, ³C Daman-Willems, ⁴J Langton, ⁵D Schapira, ⁶P Ntigurirwa, ⁷J Wachira, ⁸T Lissauer. ¹General Paediatrics, Hinchinbrooke Hospital, Huntingdon, UK; ²General Paediatrics, Royal Manchester Children's Hospital, Manchester, UK; ³General Paediatrics, University Hospital Lewisham, London, UK; ⁴General Paediatrics, Queen Elizabeth Central Hospital, Blantyre, Malawi; ⁵General Paediatrics, Royal Hampshire County Hospital, Winchester, UK; ⁶General Paediatrics, Muhima Hospital, Kigali, Rwanda; ⁷General Paediatrics, Gertrude's Children's Hospital, Nairobi, Kenya; ⁸General Paediatrics, Imperial College London, London, UK

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Aims To evaluate the ETAT+ course on the recognition and treatment of sick children, supported by visits from UK Consultant Paediatricians, in 6 district hospitals in Rwanda.

Methods RCPCH supported ETAT+ courses were delivered followed by four, six monthly one week visits by six UK Consultant Paediatricians for training, support and review of service delivery. At each visit implementation plans were devised and progress reviewed. Changes were identified by internal assessment and direct observation.

Results

Service evaluated (6 hospitals)	At start	End of programme	Changes made
Paediatric triage system as per ETAT+ and separate from adults	1/6	4/6	2 hospitals adopted their own triage system
Appropriate facilities for paediatric emergency assessment with drugs and resuscitation equipment	1/6	6/6	2 new facilities built; Resuscitation trolleys obtained and assessment areas reorganised in all
Newborn care unit and resuscitation tables and equipment in unit and labour ward	1/6	6/6	Three hospitals created newborn units, two created newborn medical teams, all now have resuscitation facilities
Kangaroo Mother Care facilities	4/6	6/6	Two new, expanded units, one improved location
Up to date paediatric protocols	0/6	6/6	ETAT+ guidelines - via posters and pocket books
Paediatric continuing medical education program with resuscitation training	0/6	6/6	Resuscitation manikins provided; skills drills in four hospitals
Clinical audits	0/6	2/6	All have formal education programmes
Use of remote mentorship	0/6	0/6	Two hospitals undertook several audits, but concept is new

Abstract G248 Table 2 Maternal Mortality Outcomes for baseline and long term follow-up for Makwanpur cRCT of WPGs

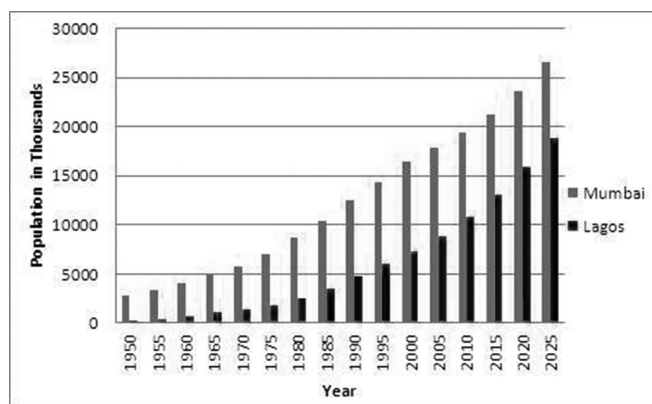
	Intervention		Control		Odds ratio (95% Confidence Intervals)	Adjusted OR (adjusted for clustering and pairing of clusters)
	n	n	n	n		
documented births	3036	3400				
live births	2959	3322				
stillbirths	77	78				
Neonatal deaths	83	128				
Maternal Deaths	4	15				
Stillbirth rate per 1000 live births	25.4	22.9				
Neonatal mortality rate per 1000 live births	28.1	38.5				
Maternal mortality rates (per infant born)						
mothers alive at 4 weeks (per infant)	3032	3384				
known deaths after 4 weeks	60	85				
known alive after 4 weeks and at follow-up	2255	2373	0.74 (0.53, 1.04)		0.74 (0.53, 1.04)	
additional reported deaths after 4 weeks	13	15				
additional reported alive after 4 weeks	649	827				
total potential deaths after 4 weeks	73	100				
total potential alive after 4 weeks	2904	3200	0.80 (0.59, 1.09)		0.80 (0.59, 1.10)	
Maternal mortality rates (per individual mother)						
mothers alive at 4 weeks (per infant)	2766	3057				
known deaths after 4 weeks	49	73				
known alive after 4 weeks and at follow-up	2051	2148	0.70 (0.49, 1.01)		0.70 (0.48, 1.02)	
additional reported deaths after 4 weeks	13	15				
additional reported alive after 4 weeks	600	748				
total potential deaths after 4 weeks	62	88				
total potential alive after 4 weeks	2651	2896	0.77 (0.55, 1.07)		0.77 (0.55, 1.08)	

#data on an additional 164 infants and their mothers that were not available in the original trial analysis were included in the analysis of the follow-up
WPG: women's participatory groups; cRCT: cluster randomized control trial

Abstract G248 Table 3 Estimated Child Mortality Rates by Treatment arm and Estimated Intervention effects in the Makwanpur women's group trial

	Intervention arm	Control arm	
Number of clusters	12	12	
Total deaths	79	116	
Total person-years	23226.5	23330.2	
<i>Analysis based on individual level data</i>			
Overall rate/1000 person years	3.30	4.97	
Rate difference (per 1000 person-years)			-1.67
Rate ratio			0.66
<i>Analysis based on cluster summaries</i>			
Mean of cluster rates	3.7	4.6	
SD of cluster rates	3.9	3.3	
Rate difference (per 1000 person-years)			-0.90
Rate ratio			0.80

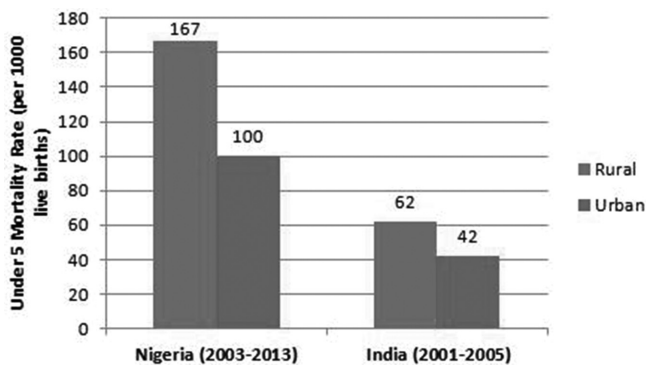
Conclusion There have been marked improvements in service delivery in all hospitals over two years. Hospital directors fed-back a desire to improve services through review and training

**Abstract G249 Figure 1** The historical and projected growth of Mumbai and Lagos

and guidance by external experts providing impetus for improvements. Remote mentorship was not utilised, with feedback suggesting issues with language, internet access and fear of criticism.

	Urban Population (Thousands)	% Urban	Annual Urban Growth Rate	Urban Slum Growth Rate	Predicted Urban Population 2020 (Thousands)	Predicted Annual Urban Growth Rate (2015-2020)
World	3,632,457	52.1	2.24	2.22	4,289,818	1.77
South Asia	562,971	32.6	2.89	2.20	699,281	2.38
SSA	309,463	36.7	4.58	4.53	426,522	3.53

Abstract G249 Figure 2 Regional urban and urban slum growth rates



Abstract G249 Figure 3 Average under-5 mortality rates in rural and urban Nigeria and India

G251 CHILDHOOD PNEUMONIA – LESSONS LEARNED FROM AN AUDIT OF THREE KENYAN HOSPITALS

M Lester, L Ford, H Gannon. *Global Links, RCPC, London, UK*

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Background Globally 1.2 million children die every year from pneumonia and it remains amongst the leading causes of under 5 childhood mortality. Auditing current practice is an essential step in reducing the morbidity and mortality associated with childhood pneumonia and helping to achieve Millennium Development Goal 4. The Kenyan Paediatric Association (KPA) has evidence based guidelines on the management of pneumonia. The aim of this study was to compare the management of children with pneumonia to this standard.

Method A retrospective audit was carried out in two government hospitals and one missionary hospital in Kenya over a 1 month period in 2013. The study population included all patients admitted with a clinical diagnosis of pneumonia and data was collected directly from patient notes.

Results - 148 children admitted with pneumonia were included with a median age of 21 months and a 5% mortality.

- 69% of patients were classified correctly and 55% of patients were given the correct antibiotics.

- 37% of patients across all three hospitals had their observations checked 24 hly or less than 24 hly.

- 35% of patients who had not improved after 5 days of treatment had their HIV status checked.

Conclusion Clearly displayed guidelines and the distribution of Kenyan Paediatric Handbooks would support medical staff in classifying and managing children with pneumonia correctly.

Regular observations are crucial in recognising clinical deterioration to enable early intervention to reduce mortality.

As healthcare providers we are failing to check the HIV status of high risk children. All children should have their HIV status checked as good practice.

While great progress has been made in the management of pneumonia, we have demonstrated the need to further improve practice, to limit the morbidity and mortality associated with pneumonia in Kenyan children.

The future Our plan to improve care for children with pneumonia involves delivering the following interventions at each of the hospitals:

- A targeted teaching session on childhood pneumonia to all healthcare professionals;
- Ensuring each acute area has the KPA pneumonia protocol clearly displayed;
- Meeting with nursing staff regarding observations of acutely unwell children;
- To re-audit and complete the audit cycle.

G252 IMPROVING NEONATAL CARE IN THE FIRST 24 H OF ADMISSION: A COMPLETED AUDIT CYCLE

H Spiers, S Agaba. *Paediatrics, Bwindi Community Hospital, Bwindi, Uganda*

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Aims Neonatal death accounts for 24% of under 5 mortality in Uganda, making it the largest cause. In a community hospital in rural Uganda, we aimed to review the care provided in the first 24 h of admission on the neonatal unit and identify areas to improve. We looked at history taken, treatment given, observations performed and outcomes. We used standards from World Health Organisation guidelines and hospital protocols.

Method A retrospective case note review was performed on all admissions to the neonatal unit in August 2014. Interventions