

8.1. RECOMMENDATION:

Should LAY HEALTH WORKERS deliver injectable antibiotics for neonatal sepsis, using a standard syringe?

Problem: Poor access to treatment for neonatal sepsis

Option: LHWs delivering injectable antibiotics for neonatal sepsis, using a

standard syringe

Comparison: Care delivered by other cadres or no care

Setting: Community/primary health care settings in LMICs with poor access to

health professionals

Recommendation	We recommend against the option	We suggest considering the option only in the context of rigorous research	We recommend the option				
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	We suggest considering this option only in the context of rigorous research. We suggest evaluating this intervention where a well-functioning LHW programme already exists and where referral to more specialised cadre is available or can be put in place.						
Justification	There is insufficient evidence on the effectiveness of this intervention. However, it is probably acceptable, may be feasible, and may reduce inequalities by extending care to underserved populations.						
Implementation considerations	Not applicable						
Monitoring and evaluation							
Research priorities	Studies are needed to assess the effects and the acceptability of using lay health workers to deliver injectable antibiotics for neonatal sepsis						



8.1. EVIDENCE BASE:

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	CRITERIA	JUDGEMENT	EVIDENCE		COMMENTS AND QUERIES
BENEFITS & HARMS OF THE OPTIONS	Are the anticipated desirable effects large?	No Probably Uncertain Probably Yes Varies no yes	A systematic review (Lewin 2012) identified a number of trials from LMIC settings where packages of care were delivered by LHWs. In one trial, the package included LHWs injecting procaine penicillin and gentamicin to treat sick neonates, apparently using a standard syringe. The trial did not report any adverse effects of LHWs using injectable antibiotics. Overall, the trials suggest that these packages of care may lead to a reduction in neonatal mortality (moderate certainty evidence) and child mortality (low certainty evidence). Annex: page 10 (Lewin 2012 – Table 2)		
	Are the anticipated undesirable effects small?	No Probably Uncertain Probably Yes Varies no yes □ □ □ □			
	What is the certainty of the anticipated effects?	Very Low Moderate High No direct Varies evidence □ ☑ □ □ □			
	Are the desirable effects large relative to the undesirable effects?	No Probably Uncertain Probably Yes Varies no yes			
URCE	Are the resources required small?		Main resource requirements		
			Resource S	Settings in which LHW programmes already exist	
		No Probably Uncertain Probably Yes Varies no yes		I-2 weeks of practice-based training in injection techniques, in diagnosing and managing neontal sepsis	
			Supervision and monitoring	Regular supervision by midwife or nurse	
			Supplies A	Antibiotics, syringes, sterile solution, robust supply chain	
			Referral T	Fransportation, adequate referral centre offering neonatal care	



	CRITERIA	JUDGEMENT	EVIDENCE	COMMENTS AND QUERIES
RESOURCE USE	Is the incremental cost small relative to the benefits?	No Probably Uncertain Probably Yes Varies no yes □ □ □	Uncertain as there is no direct evidence on effectiveness.	
ACCEPTABILITY	Is the option acceptable to most stakeholders?	No Probably Uncertain Probably Yes Varies no yes □ □ □ □ □	A systematic review of LHW programmes (Glenton, Colvin 2012) did not identify any studies that evaluated the acceptability of antibiotics for neonatal sepsis when delivered by LHWs through a standard syringe. We are therefore uncertain about the acceptability of this intervention to key stakeholders. Indirect evidence: • A systematic review (Glenton, Khanna 2012) did identify one study in Nepal where the acceptability of the same intervention when delivered by LHWs using a CPAD device was explored. This study suggests that recipients, LHWs and other health workers find the delivery of antibiotics by LHWs through this device to be acceptable, although the importance of training and supervision is emphasised (low certainty evidence). However, some LHWs voiced concerns about possible social consequences if something went wrong. These concerns were at least partly addressed through support and supervision (low certainty evidence). • Activities that demand that the LHW is present at specific times, for instance during labour and birth, lead to irregular and unpredictable working conditions. Another review suggests that this may have direct implications for LHWs' expectations regarding incentives (low certainty evidence). LHWs may also be concerned about personal safety when working in the community and some LHWs were reluctant to visit clients at night because of safety issues (moderate certainty evidence) (Glenton, Colvin 2012). • LHW involvement in deliveries requires an effective referral system. The same review pointed to a number of challenges with referral of women in labour, including logistics and poor treatment of trained TBAs and women at facilities (moderate certainty evidence) (Glenton, Colvin 2012). Annex: page 33 (Glenton, Khanna 2012); page 26 (Glenton, Colvin 2012)	
FEASIBILITY	Is the option feasible to implement?	No Probably Uncertain Probably Yes Varies no yes □ □ □ □	Significant additional work may be required to add the intervention to an existing LHW programme. It is likely to require changes in regulations; significant changes to drug supplies and training; and validation of appropriate treatment algorithms. Also, implementation would require access to a referral system with trained and equipped healthcare professionals and facilities. Implementation may additionally require consideration of factors affecting referral by LHWs (see under 'Acceptability'). Significant training and supervision provided by skilled health cadres would likely be needed. However, a systematic review (Glenton, Colvin 2012) suggests that ongoing support, training and supervision was often insufficient in LHW programmes (moderate certainty evidence). Annex: page 26 (Glenton, Colvin 2012)	