



Expanding Use of Magnesium Sulfate for Treatment of Pre-eclampsia and Eclampsia

Building Towards Scale in Nigeria

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Background

Simple treatment, complicated delivery

- Eclampsia has high case fatality ratio and is one of the most common causes of maternal deaths in Nigeria
- MgSO₄ can prevent significant number of these cases and deaths if made available and early enough
- However, significant challenges prevent delivery of this drug at scale

The Macarthur Grants

Multiple grants created sustained efforts needed to deliver the drug



Project Activities

Project activities responded to the challenges of the health system

Drug supply

Pop Council and FMOH purchased the drugs and organized UNICEF's supply chain to address supply and distribution issues

Evidence Generation

Two research studies by Pop Council demonstrated efficacy of the drug, and provided useful evidence for advocacy on task shifting to PHC and community level providers

Capacity Building

The FMOH, SOGON and Ipas all trained health workers and EngenderHealth and Pop Council led development of national training curricula for all cadres

Expansion of the model

Expansion considered the 3-tiered nature of the health care system

- FMOH integrated MgSO₄ into clinical services at all its tertiary hospitals
- SOGON raised awareness and advocated for policies at the state level and integrated it into state hospital services.
- Pop Council helped secure approval for task shifting to health workers at the PHC level



Evaluation Findings

In the whole of Kano state, prior to this project there was only one doctor at Murtala Muhammad Specialist Hospital who occasionally used magnesium sulfate to treat eclampsia when he was on shift and the drug was in stock. Consequently, there was high mortality from eclampsia, with a case fatality rate of around 18.5% and accounting for close to 40% of maternal mortality in the state. However, this significantly changed with the coming of the project. The case fatality rate from eclampsia is now around 2–3% and mortality from other maternal causes has now overtaken eclampsia. And all these resulted from a simple training of one and a half days.

— Consultant at Amino Kano Teaching Hospital

Success Factors

Major progress towards integration resulted from recognized scale up steps

Legitimize Change	<ul style="list-style-type: none">▪ The use of the drug was legitimized and integrated through the effective use of research and evaluation
Constituency Building	<ul style="list-style-type: none">▪ Stakeholders were engaged, support from and action by other organizations was galvanized, and a national constituency was built
Modify Organizational Structures	<ul style="list-style-type: none">▪ Policies approved including task shifting to include community health extension workers
Realign and Mobilize Resources	<ul style="list-style-type: none">▪ Financial resources were realigned and mobilized among different partners and institutions
Coordinate Action	<ul style="list-style-type: none">▪ National guidelines and curricula were created and implemented, and the referral system was bolstered
Track Performance and Maintain Momentum	<ul style="list-style-type: none">▪ Drug supply channels were strengthened and systems put in place to monitor the distribution system

Remaining Challenges

- More operations research needed to understand how to overcome obstacles to full scale up
- Continuous advocacy and engagement with policymakers and providers is required to maintain the momentum that has been gained
- Community-based education on pre-eclampsia/eclampsia, its treatment and institutional delivery is needed especially in rural areas
- Continued monitoring is important to make sure that the new guidelines and curricula are included in the training of all new healthcare workers
- Much still needs to be done to strengthen drug supply channels as there are frequent stockouts of magnesium sulfate throughout the country

Recommendations

- Ensure continuum of care from home to hospital
- Adopt targeted social and behavior change strategies to increase hospital births
- Improve public sector supply and logistics system for magnesium sulfate
- Focus on integration of services

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Thank you