

Spotlight on Antenatal Corticosteroids for Preterm Respiratory Distress Syndrome

Over one million babies die each year due to preterm complications, most commonly from Respiratory Distress Syndrome (RDS) resulting from lung immaturity (Black et al., 2010). Studies have found that the antenatal corticosteroid (ACS) injection for women at risk of preterm delivery is the most effective intervention to reduce the risk of RDS for preterm babies, and is the standard of care in most high-income countries—reducing neonatal mortality by 31 percent and moderate/severe RDS by 45 percent. Unfortunately, in middle- and low-income, high-burden countries, ACS coverage is only 10 percent (Lawn, Ruban, & Rubens, 2008) and, as such, has been identified by the UN Commission on Life-Saving Commodities for Women’s and Children’s Health as one of 13 commodities that if more widely accessed and properly used, could save the lives of more than six million women and children worldwide.

A review was conducted to analyze and synthesize current key evidence in order to understand the social and behavioral drivers of ACS demand and utilization, examine effective practices in implementing demand generation programs, and inform future programming. The evidence review found six documents related to demand generation for ACS that met the inclusion criteria, five of which were published in the peer-reviewed literature. The evidence was documented from Latin America (1), Cameroon (2), the United States (1) and the United Kingdom (1).

Social and Behavioral Drivers

In addition to financial barriers, lack of supplies and lack of governmental promotion of interventions, studies show that awareness and knowledge of ACS were key factors in determining use among providers. A study in Cameroon found that awareness of ACS was associated with a 15-fold increase in practice. In that country, only 29 percent (95/328) of health workers in the study knew about ACS and only 10.2 percent (33/328) had ever used ACS. Barriers to awareness cited by these providers included: lack of continuing education, adequate formal training (curricula do not emphasize use of evidence-based care), access to educational resources (journals, newsletters, databases), habit of self-learning (lack of reading culture and updating knowledge) and exposure to evidence-based interventions, and slow dissemination of new interventions (Tita et al., 2005).

There is greater use of ACS in Latin America as compared with Africa, although great variation exists across countries. In a multi-country regional study, researchers found that the proportion of providers administering ACS on women with threatened preterm labor varied—from 70 percent in Mexico to 97 percent in Ecuador. The same study found that barriers to ACS use included availability of ACS commodities, provider fear or doubt of side effects, economic barriers and women’s misinformation about the correct use of ACS (Aleman et al., 2013).

Demand Generation Interventions

The scope of research on demand generation for ACS is extremely limited, with existing evidence focused on educating and training health workers. One study evaluated dissemination strategies aimed at increasing appropriate use of ACS for fetal maturation. A focused dissemination effort—including a year-long educational effort led by influential physicians and nurses at a health facility, coupled with grand rounds, chart reminders, group discussions of case scenarios, and monitoring and feedback—significantly increased odds of ACS use (Leviton et al., 1999).



Presenters at the 2011 Maternal, Newborn, and Child Health Integrated Program (MCHIP) conference recommended that ACS use could be increased through the training of providers and maintenance of the supply chain. More specifically, the presenters noted that, from the health system perspective, hiring and/or training skilled birth attendants who can identify women at risk of preterm births, have knowledge regarding appropriate timing and use of ACS, and can refer mothers to higher levels of care, is necessary for effective scale-up of ACS use (McClure et al., 2011).

The conference also identified a number of key issues in communities where the majority of births and related care occur in home settings; for example, how to engage both mothers who intend to deliver at home and their families to identify early signs of preterm labor; and how to encourage families to seek care at hospitals that provide ACS and newborn care. The presenters concluded that community engagement is important for the success of most strategies aimed at addressing preterm birth.

Conclusions and Recommendations

Although the scope of research on demand generation for ACS is extremely limited, tentative recommendations to overcome the barriers identified include: (1) increasing provider knowledge of ACS; and (2) training skilled birth attendants and community members to identify early signs of preterm labor and seek care at hospitals.

To read the full report, visit <http://sbccimplementationkits.org/demandrmnch/evidence-synthesis/>.

For tools and resources on demand generation for life-saving commodities, visit <http://sbccimplementationkits.org/demandrmnch/>.

References

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