5 Provide essential commodities

Knowledge Summary: Women's & Children's Health

2010

Access to good quality, affordable medicines and supplies would enable health workers to provide better care to girls, women, newborns and children. Currently, access is hampered by inefficient procurement and supply systems, poor partner collaboration, and the lack of crucial reproductive, maternal, newborn and child health (RMNCH) commodities on national essential medicines lists.[1] There is evidence on how to ensure commodity security, particularly in relation to vaccines and contraceptives. Applying these lessons across the RMNCH continuum of care would help ensure that women and children have access to the essential interventions they need, when and where they need them.[2]

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The Partnership for Maternal, Newborn & Child Health

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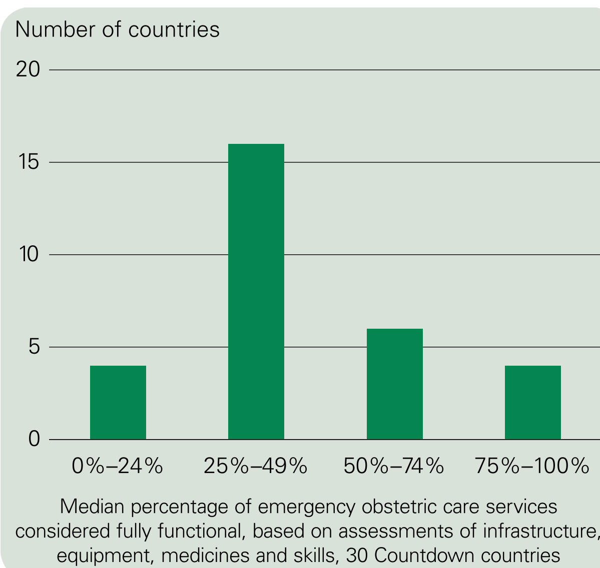
"Women without access to quality care and commodities face an increased risk of birth complications, unintended and mistimed pregnancies, infectious diseases and deaths."[3]

There are several reasons why drugs, equipment and other commodities for RMNCH are in short supply. National procurement and supply systems are often weak and result in poor storage conditions, such as overstocking in central medical stores and stock-outs in remote areas. Inefficient national procurement systems lead to the development of parallel mechanisms to procure drugs and devices, thereby further reducing efficiency. Another challenge is the lack of coordinated implementation and information exchange between the private and public sectors, across countries, and between local, national and global levels.[4]

Figure 1

Countries with fully functional emergency obstetric care services



Adapted from Countdown to 2015 Decade Report (2000-2010): Taking stock of maternal, newborn and child survival (PDF) www.Countdown2015mnch.org/documents/2010report/CountdownReportAndProfiles.pdf

The equipment, medicines and skills required for emergency obstetric care are available in less than half of the *Countdown* countries studied. Such shortages in supplies are also reflected in the high mortality rates, particularly at the time of delivery, and low usage rates of facility-based healthcare.

What works?

Stable and long-term funding

An integrated RMNCH commodities financing strategy is feasible even in the poorest countries. Some countries receive sector-wide or pooled funding from donors, and are also increasingly allocating their own funds. Such financing can be used to facilitate procurement of drugs and to subsidize medicines. For instance, in Lao PDR, one course of magnesium sulphate to treat pre-eclampsia currently costs up to US$24. Here, public financing is being used to help reduce the charge to the patient.[5] Innovative financing strategies that used multiple sources to fill funding gaps have helped to maintain continuous supplies in, for example, Burkina Faso.[6] In some countries,

Box 1 – Missed opportunities to save lives: effectively treating childhood pneumonia

An estimated 18% of deaths among children under five and 4% of newborn deaths are caused by pneumonia (totaling almost 2 million deaths in 2008).[1] Pneumonia can be treated with a simple course of antibiotics that costs around US$0.27 per case.

Since there is limited access to fixed health facilities in so many developing countries, prompt treatment may require training frontline health workers to diagnose and treat children in the community. This approach is proving effective, affordable and straightforward. In Nepal, for example, a 3-year study showed that such a community-based approach led to a 28% reduction in the risk of death from all causes. A recent analysis of nine studies using the same approach showed that under-5 deaths were reduced by about 24%.[2]

Unfortunately, these types of effective interventions currently reach very few children. Only an estimated one in five care-givers in the developing world know the two key symptoms of pneumonia— fast and difficult breathing —which require immediate treatment. And only about half of children with pneumonia receive appropriate medical care.[2]

The Global Action Plan for Prevention and Treatment of Pneumonia (GAPP) recommends treating childhood pneumonia in a holistic way through interventions to Protect (breast feeding), Prevent (vaccination) and Treat (case management). Together these interventions will cost an additional annual investment of about US$12.9 per child.[3]

Sources:

1 Black, R et al. 2010. Global, regional, and national causes of child mortality in 2008: a systematic analysis. Lancet. 2010 Jun 5;375(9730):1969-1987

2 Wardlaw, T et al. 2006. Pneumonia: the leading killer of children. The Lancet, 368(9541):1048-1050.

3 WHO and UNICEF. 2008. Global Action Plan for Prevention and Treatment of Pneumonia (GAPP)

such as Mexico, decentralized health spending has helped to increase funding for reproductive health supplies. However, decentralization does not work in all cases, with large amounts of pooled funding remaining unspent and delivery systems fragmented.[7]

Essential medicines lists

The World Health Organization's (WHO) Model Lists of Essential Medicines and Devices can guide countries in planning for RMNCH supplies. Inclusion of the right commodities in the national essential medicines lists is crucial to improving women's and children's health. In Mongolia, for example, ergometrine - an important drug for the management of heavy bleeding during/after childbirth, is not on the essential medicines list.[8] Although in the Philippines this drug is included in the national essential medicines list, the composition used is not optimal for the prevention and treatment of heavy bleeding.[9]

Box 2 – Centralized information systems

Online information systems improve coordination by keeping track of donor, government, and program activities. For example, the web-based system RHInterchange (http://rhi.rhsupplies.org) provides detailed information about shipments of donor-supplied contraceptives and related supplies to countries around the world. Program managers can track the supplies they have ordered from various organizations, and determine their arrival time and quantities. Better coordination of procurement helps programs to avoid running out of stock due to incomplete orders and shipment errors.

Extracted from: "Elements of success in family planning programming." Population Report (PDF). http://info.k4health.org/pr/J57/J57.pdf

Integrated systems, better training and coordination

Requirements for each commodity are often different, for example, in terms of shelf life or sufficient suppliers, so vertical supply chains are common. In countries where these chains have been integrated, duplication has been reduced and supply logistics made more efficient. For example, Uganda's efforts to strengthen its health system included integrating procurement and supply systems.[10]

Moreover, the effectiveness of medicines and supplies also depends on the abilities of both health workers and logistics staff. In post-conflict countries like Liberia, improvements were made by training service providers in logistics management systems, and by integrating the training into national health education.[11]

Coordination among partners is also key to improving delivery of commodities in countries. For example, joint forecasting and planning by partners and subsequent negotiation with manufacturers has been undertaken successfully by The Reproductive Health Supplies Coalition (RHSC) (See Box 2). In some countries, such as Nicaragua, Tanzania, Ghana, Uganda and Bangladesh, contraceptive coordination committees (which have representatives from the government, donor agencies and NGO service providers) have also been able to improve delivery of supplies. However, shortages at primary and district health facility levels still need to be addressed.[4, 12]

Box 3 – Tracking access to medicine

The Access to Medicine Index analyzes and ranks the efforts of the world's largest pharmaceutical companies to ensure access to medicines, and aims to help them improve their commitments and practices. Latest trends show: increased sharing of intellectual property for research; more research and cross-company collaborations; innovative approaches to improve access; and some increased capacity in poor countries. However, challenges still remain.

www.accesstomedicineindex.org/publication/access-medicine-index-2010-full-report

Box 4 – Zimbabwe: innovative delivery improves supplies

The Delivery Team Topping Up (DTTU) system was adopted in 2004 to improve the availability of contraceptives at healthcare facilities by ensuring deliveries every four months. The team's technical advisor keeps a record of supply levels and the average monthly consumption over the previous four months, and then estimates needs for the next four months. Supplies are replenished as required.

This system helped by:

- Taking responsibility for inventory management away from the over-burdened clinical staff. As clinics no longer had to place orders with central warehouses, the need to train healthcare workers in inventory management was removed.
- Reducing the number of occasions when stocks ran out (stock-outs). Nationwide stock-out rates for condoms, injectable contraceptives and oral contraceptives were over 20% in some places before the project. However, in 2005 and 2006 they were below 5%.

The system now serves nearly 99% of the country's health care facilities.

Extracted from: "Elements of success in family planning programming," Population Report (PDF). http://info.k4health.org/pr/J57/J57.pdf

Advocacy delivers results

International advocacy has helped greatly to highlight the issue of shortages in supplies (see Box 3). Advocacy strategies at national level have also advanced the agenda for reproductive health supplies. Civil society organizations in Uganda, for instance, have highlighted gaps in reproductive health supplies, and lobbied for a range of commodities to be included in the essential medicines list for the country.[13] In Tanzania, district contraceptive security committees now monitor supplies and ensure they are adequate.[4]

Some terms explained

Commodity security

- Reproductive health commodity security exists "when every person is able to choose, obtain, and use quality contraceptives and other essential reproductive health products whenever s/he needs them" *(IWG 2001)*
- The WHO essential medicines strategy aims to "help save lives and improve health by ensuring the quality, efficacy, safety and rational use of medicines, including traditional medicines, and by promoting equitable and sustainable access to essential medicines, particularly for the poor and disadvantaged" *(WHO 2004)*.

Partnerships support commodity security

The involvement of external service providers at the level of delivery has helped to improve public-sector services in many areas. For example, a third-party partnership enabled timely and effective procurement and delivery of commodities in the Democratic Republic of Congo, while an innovative delivery system had a similar effect in Zimbabwe (see Box 4). International partnerships, such as the Global Alliance for Vaccines and Immunisation, have played an important role in improving immunization coverage in developing countries by increasing supplies and strengthening delivery systems. Joint programming between the African, Caribbean and Pacific states, UNFPA and the European Commission has helped to maintain supplies in conflict and post-conflict countries.[11]

Conclusion

The global RMNCH community must come together to advocate and support the implementation of more informed and collaborative procurement strategies and systems – not only to provide regular supplies of commodities already known to be essential, but also to develop and roll-out new and improved products.

Useful resources

- UNFPA: Tools to Help Countries Assess their Needs and Manage their Supplies www.unfpa.org/public/site/global/lang/en/pid/3592
- WHO: Rethinking the vaccine supply chain – the right vaccine, in the right place at the right time www.who.int/immunization_delivery/systems_policy/optimize/en/index.html
- PATH and WHO: Optimizing Vaccine Supply Chains www.path.org/vaccineresources/details.php?i=921
- CDC: Global Reproductive Health: Contraceptive Logistics www.cdc.gov/reproductivehealth/Global/ContraceptiveLogistics.htm

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1 Cambridge Economic Policy Associates Ltd. (2009). Scoping Study: MNCH commodity security. Discussion paper presented at the October 2009 meeting of PMNCH Priority Action 3 partners.

2 WHO. "Rethinking the vaccine supply chain – the right vaccine, in the right place at the right time."

3 Facts about USAID/DELIVER Project. http://deliver.jsi.com/dhome/about/facts

4 Leahy E (2009). "Reproductive health supplies in six countries." Report from Population Action International. www.populationaction.org/Publications/Reports/Reproductive_Health_Supplies_in_Six_Countries/Summary.shtml

5 WHO / UNFPA. (2008). Joint UNFPA/WHO mission in collaboration with the Ministry of Health Departments MCHC, Curative and FDD: current status of access to a core set of critical, lifesaving, maternal/reproductive health medicines in the Lao PDR. 22 September - 04 October 2008: Final report.

6 USAID DELIVER Project (2010). "Continuous Financing Helps Advance Contraceptive Security in Burkina Faso." Policy brief. http://deliver.jsi.com/dlvr_content/resources/allpubs/policypapers/ContFinaHelpAdvCS_BF.pdf

7 Indacochea C M (2009). "A case study of reproductive health supplies in Mexico." (PDF). www.populationaction.org/Publications/Reports/Reproductive_Health_Supplies_in_Six_Countries/Mexico.pdf

8 WHO / UNFPA. (2009). Joint UNFPA/WHO mission in collaboration with the ministry of health to review the current status of access to a core set of critical, lifesaving, maternal/reproductive health medicines in Mongolia 18 June- 03 July 2009: Final report.

9 WHO / UNFPA. (2009). Joint UNFPA/WHO mission in collaboration with the department of health to review the current status of access to a core set of critical, lifesaving, maternal/reproductive health medicines in the Philippines 18- 30 May 2009: Final report.

10 Druce N (2006). "Reproductive health commodity security: country case study synthesis." DFID Health Systems Resource Centre report. www.dfidhealthrc.org/publications/srh/RHCS%20synthesis_Mar06_final.pdf

11 UNFPA (2009). "Ensuring Access to Reproductive Health Supplies." Joint ACP/UNFPA/EC Programme in Conflict and Post-Conflict Countries. (PDF). www.unfpa.org/webdav/site/global/shared/documents/publications/2009/acp_unfpa_ec_advocacy2009.pdf

12 USAID DELIVER Project (2009). "A Strong Supply Chain Responds to Increased Demand for Contraceptives in Rwanda." www.usaid.gov/our_work/global_health/pop/techareas/contrasecurity/success_rwanda.pdf

13 Leahy E, et al (2009). "Maternal health supplies in Uganda, Report from Population Action International." (PDF). www.populationaction.org/Publications/Reports/Maternal_Health_Supplies_in_Uganda/maternal-health-uganda.pdf