SAVING LIVES OF WOMEN AND CHILDREN: PHARMACEUTICAL SYSTEMS STRENGTHENING APPROACHES TO IMPROVE ACCESS TO CONTRACEPTIVES IN BANGLADESH

BACKGROUND

Access to family planning (FP) commodities saves women’s and children’s lives by allowing women to delay and limit pregnancies in a healthy manner. The Government of Bangladesh, with support from donors and development partners, has undertaken targeted interventions to increase access to and availability of contraceptives over the years. These interventions, coupled with the increased public demand for FP services, have helped make some noteworthy progress. From 2001 to 2014, the total fertility rate (TFR) decreased from 3.0 to 2.3 births per woman and the maternal mortality ratio decreased from 322 to 194 maternal deaths per 100,000 live births. These results are consistent with the increased use of contraception among married women, from 61% in 2011 to 62% in 2014. As part of the FP2020 global partnership, Bangladesh has committed to further reduce the TFR to 2.0 by 2021. However, to sustain the reduction in fertility rate, it is essential to ensure that women and their partners have access to a range of safe and high-quality contraceptives at the point of need.

Over the last 25 years, USAID has been providing support to the Directorate General of Family Planning (DGFP), which is responsible for contraceptive security for the whole country, to strengthen its FP program. This support has included assistance to improve systems for supply chain management of contraceptives and ensuring their availability at each tier, including the service delivery point (SDP) level. Although improvements were made, ensuring a continuous supply of contraceptives down to the SDP level remained a challenge for the DGFP even a few years ago. The DGFP had an inadequate tracking system that caused delays in procurement of contraceptives and contributed to chronic stock-outs at SDPs. Procurement managers did not have access to the list of in-country registered medicines. This, coupled with inaccurate forecasting, led to the procurement of incorrect products and, ultimately, the unavailability of required products. A lack of accurate and real-time logistics data from the SDP, limited access to data, and poor feedback mechanisms only added to the DGFP’s challenges. This increased the risk of unwanted pregnancies and endangered the lives of women and children.

IMPLEMENTATION

Since 2011, the USAID-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program has built on the work of its predecessor, the Strengthening Pharmaceutical Systems (SPS) Program, by collaborating with the Ministry of Health and Family Welfare (MOHFW) and the DGFP to conduct thematic assessments to identify the root causes of the prevalent challenges and explore ways to enhance the resiliency and efficiency of supply chain management systems. This is critical for adequate planning and maintenance of contraceptive availability. To address the identified challenges, SIAPS used system strengthening approaches through a system thinking framework that focused on improving the governance and coordination mechanisms, reforming procurement processes, establishing systems to capture regular and quality data, and building the DGFP’s institutional and human capacity.
CASE STUDY

Strengthening Governance of Supply Chain Functions within the DGFP

SIAPS assisted the DGFP to form a Forecasting Working Group (FWG) in 2012 that meets annually to review annual need and facilitate data-informed procurement decisions. The FWG, represented by multiple stakeholders, uses data collected through information management platforms and conducts quantification exercises based on the consumption of contraceptives. The FWG also plays an instrumental role in assisting the DGFP to secure guaranteed funding or additional donor support to bridge any shortfall and ensure the timely release of funds by advocating at the highest levels. SIAPS also helped the MOHFW and DGFP produce standard operating procedures, guidelines, and tools to promote good governance practices.

Reforming Procurement Systems and Streamlining Procurement Processes

SPS experience had shown that a web-based procurement tracking system can help DGFP officials track the status of procurement packages at every step of the way and ensure the packages’ smooth progress. SIAPS helped the DGFP to extend the online procurement tracking system, developed in the SPS era, by incorporating more sophisticated features, such as the World Bank approval process, and hosted it on the MOHFW’s Supply Chain Management Portal (SCMP) (https://scmpbd.org/index.php/tracker/tracker-dashboard). It was deployed within the government for user acceptance testing by DGFP officials and launched on February 15, 2011.

Increasing the Availability of Data for Decision Making

With SIAPS’ support, the DGFP introduced an electronic logistics management information system (eLMIS) in 2011 to collect aggregated data on FP commodities. Although the system helped reduce subdistrict-level stock-outs, it did not provide disaggregated facility and provider information to link with national-level program policies and plans. Therefore, sporadic stock-outs of contraceptives were occurring at SDPs. SIAPS helped the DGFP enhance the existing eLMIS and implement a nationwide, web-enabled SDP dashboard module (https://scmpbd.org/index.php/lmis-dashboard) with simplified charts, maps, and tables to monitor and track the contraceptive stock situation at more than 29,000 SDPs. SIAPS also integrated a Short Messaging Service (SMS) within the eLMIS to send reminders about and track report submissions and to alert managers about stock imbalances and impending stock-outs. This module also allows the DGFP to map out potential vacant positions and develop necessary human resource planning.

Building the Capacity of Supply Chain Managers, Storekeepers, and SDP Staff

When the eLMIS was ready for use and scale up, SIAPS undertook a cascade training approach to build the capacity of the actual users and management teams for the changing process of logistics information management (from manual to electronic system). SIAPS and the DGFP identified champion users from eLMIS pilot sites and government managers and created a pool of master trainers and troubleshooters. SIAPS oriented staff at 72 subdistrict SDPs on the eLMIS to increase their awareness about the importance of contraceptive availability. SIAPS also conducted a nationwide training program on basic logistics management for DGFP officials and introduced a post-training action plan (PTAP). Each trainee completed the PTAP and committed to using the training knowledge to improve logistics management for reproductive health commodities, including contraceptives. SIAPS built the technical capacity of DGFP officials to manage the forecasting processes and analyze the FP2020 indicators relevant to stock availability.

RESULTS

Improved Coordination in Forecasting and Supply Planning Leads to Cost Savings

With SIAPS support, a five-year (2012–2016) forecast and a two-year supply plan for FP commodities were developed in 2012. Due to this exercise and coordination between the FWG and other stakeholders, the DGFP decided not to procure 65,000 implants in FY 2012–13 and 410,000 implants in FY 2014–15. This saved approximately USD 5.48 million.

Streamlined Procurement Processes Reduce Procurement Lead Time

Using the procurement portal, the DGFP was able to reduce procurement lead time by 57% (32.8 weeks in 2014 compared to the targeted 58 weeks in 2012–13)
for any package procured by the directorate. Using the SIAPS-developed procurement procedures manual, supply manual, framework agreement bidding document, and subnational procurement manual, DGFP procuring entities are now more capable of efficiently performing their procurement and supply chain management responsibilities.

**Improved Logistics Information Systems Contribute to a Responsive Supply Chain**

To ensure data transparency and increased accountability, the eLMIS is open to all. Using eLMIS data, managers now respond more quickly to avoid stock-outs and overstock of FP commodities. This tool is allowing local-level managers to transition from being data producers to data users and has improved decentralized decision making. The reporting rate for contraceptives (any method) increased from 90% in 2014 to 99% in 2016, which has supported national-level, supply chain-related decision making. The SDP-level stock-out rate for contraceptives has remained at <1% since December 2016.

**Enhanced Human and Institutional Capacity of the DGFP**

To date, 5,028 DGFP officials, including district- and subdistrict-level managers, storekeepers, and SDP staff, have received eLMIS and basic logistics management training from SIAPS.

SIAPS and the DGFP conducted an evaluation in 2015 to assess the effectiveness of the logistics training based on the PTAP. Primary data were collected through in-depth interviews with storekeepers and health managers from 72 randomly selected subdistricts. Secondary data were collected from the SCMP and other sources on stock status and lives saved due to contraceptive use. It was found that 62% of subdistricts fully implemented PTAP commitment-related activities. Of these, 34 successfully improved their record keeping systems and uploaded monthly logistics reports to the eLMIS on time.

SIAPS helped the DGFP develop its first-ever master facility and SDP list with eligibility mapping for dispensing items. SIAPS also developed terms of reference for the DGFP Tool Management Committee and provided specialized training for DGFP IT technical staff on backend language, troubleshooting, and site support to ensure the smooth management and operation of the eLMIS. SIAPS advocacy resulted in the formation of a national steering committee to ensure data transparency, increase accountability, and promote a culture for data use to make informed decisions.

**Successful Transitioning to Country Ownership**

From the outset, SIAPS targeted sustainability and country ownership by handing over the management of the SCMP/eLMIS to the MOHFW. In 2014, SIAPS worked with the MOHFW to develop a sustainability and advocacy plan for the seamless transfer of the operation, maintenance, and oversight of the system tools. SIAPS also conducted an assessment to determine the MOHFW’s technical and financial readiness to take over full responsibility of maintaining all logistics management tools and developed guidelines covering the SCMP’s technical, technological, organizational, and financial aspects, as well as user manuals. On March 4, 2017, the entire transfer and installation process of the SCMP was successfully completed. This handover was accelerated because of government and donor commitments to ensuring contraceptive security and has been regarded as a significant step in terms of the country’s commitment to pharmaceutical system strengthening.

**Functional eLMIS Helps Strengthen Partnerships with Other Government Entities and Implementing Partners**

Acknowledging the success of the DGFP’s eLMIS, the Directorate General of Health Services engaged SIAPS to create a similar system to improve logistics management of essential health commodities, particularly life-saving maternal, neonatal, and child health medicines. eLMIS data are now being used by other implementing partners, such as UNFPA and Save the Children, to achieve common development objectives.
CONCLUSION

Because of the overall pharmaceutical supply chain system performance in terms of data availability and informed decision making, the availability of modern contraceptives has increased significantly, which helped avert an estimated 4.99 million unintended pregnancies in 2016 and prevented 5,000 maternal deaths.

SIAPS’ system strengthening approaches build local capacity, create stronger partnerships among stakeholders, rationalize investments, and lead to a resilient supply chain system that is needed to achieve the FP2020 and country’s sector program targets. To ensure the system’s optimum use, the DGFP needs to further improve the analytical capacity of its staff, provide sufficient decision making authority to local-level managers, and foster a data-use culture.

A systematic and functional national supply chain ensures the availability of affordable, safe, effective FP commodities, including contraceptives, when and where they are needed. This begins with appropriate forecasting exercises using scientific methods and tools; sustainable, effective LMISs that make data accessible to decision makers and serve as an advocacy tool for evidence-based supply planning of essential commodities; and efficient and timely procurement processes. It is also crucial to analyze and share available information across systems and stakeholders for improved decision making. This mechanism ensures good governance and accountability and fosters stronger partnerships among stakeholders, ultimately saving the lives of women and children.

REFERENCES


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