



CHLORHEXIDINE INITIATIVE IN PAKISTAN:

A game changer in saving new born lives



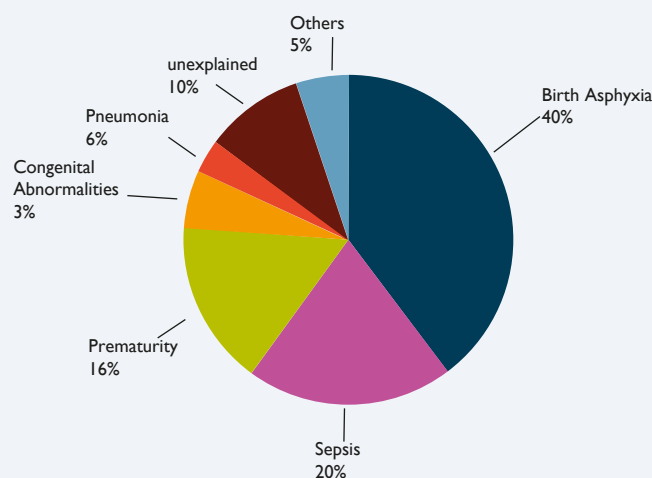
In Pakistan, neonatal mortality continue to account for more than 60% of total under-five deaths (55/1000 live births) as indicated in Pakistan Demographic Health Survey (PDHS) 2012-2013. Among the chief causes of neonatal mortality are birth asphyxia, sepsis and prematurity. PDHS Survey 2006-2007 shows that sepsis including infections & neonatal pneumonia actually account for more than 1/3rd of these neonatal deaths. Sepsis from infected umbilical stump which is 20 percent of neonatal deaths is one of the main routes for infection leading to death.

In 2014 WHO recommended the use of Chlorhexidine for cord care in areas where neonatal mortality rate is above 30/1000 live births. Since then the drug has been included in the WHO List of Essential Medicines for Children.

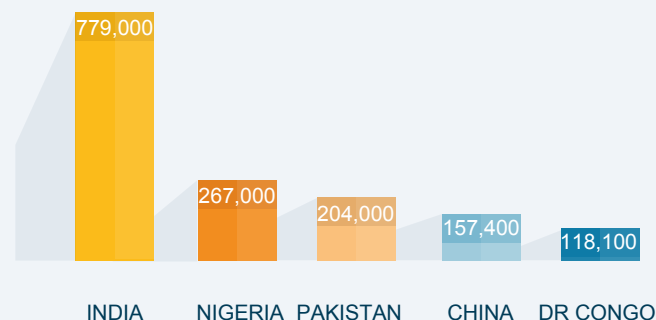
"Daily Chlorhexidine (7.1% Chlorhexidine digluconate aqueous solution or gel, delivering 4% Chlorhexidine) application to the umbilical cord stump during the first week of life is recommended for newborns who are born at home in settings with high neonatal mortality (30 or more neonatal deaths per 1000 live births). Clean, dry cord care is recommended for newborns born in health facilities and at home in low neonatal mortality settings. Use of chlorhexidine in these situations may be considered only to replace application of a harmful traditional substance, such as cow dung, to the cord stump"

(WHO recommendation on postnatal care of the mother and newborn 2014)

CAUSES OF NEONATAL DEATHS IN PAKISTAN



COUNTRIES WITH THE HIGHEST NUMBER OF NEONATAL DEATHS



*Source: Liu et al. Global, regional, and national cause of child mortality in 2000-13 with projections to inform post-2015 priorities: an updated systematic analysis. The Lancet. 2014 oct. [http://dx.doi.org/10.1018/S0140-6736\(14\)61698-6](http://dx.doi.org/10.1018/S0140-6736(14)61698-6) National Institute of Population Studies (NIPS) [Pakistan], and Macro International Inc. 2008. Pakistan Demographic and Health Survey 2006-07. Islamabad, Pakistan: National Institute of Population Studies and Macro International Inc.

CHLORHEXIDINE IMPLEMENTATION IN PAKISTAN

Since Pakistan ranks third among the countries having highest neonatal mortality rate in the world, the Ministry of National Health Services Regulations and Coordination (MNHSR&C) gleaned experiences from other countries, reviewed output of local clinical trials published in Lancet that were conducted in Nepal, Bangladesh and Pakistan and the pooled analysis of these studies which showed that 4% Chlorhexidine can reduce neonatal deaths from all causes by 23% and prevent severe infection by 68%.

In 2014, advocacy efforts at provincial and national level involved all provincial health departments and public private stakeholders which succeeded in Chlorhexidine inclusion in the essential drug list of all provinces and regions. Subsequently in 2015 MNHSR&C notified national guidelines for umbilical cord infection prevention by using 7.1% Chlorhexidine Digluconate gel for seven days.

ACCOMPLISHMENTS 2015 TILL DATE:

- ▷ Inclusion of CHX in Essential Medicine List of all provincial Health Departments
- ▷ National policy guidelines notified to standardize uniform CHX application regimen for seven days or till the cord separates, whichever comes first.
- ▷ Convening of national consultative workshop, in August 2015, to develop national action plan for CHX implementation and scale up across Pakistan which lead to the formation of four technical working groups with the following outcomes:
 - CHX training manual standardized.
 - CHX indicators and their inclusion in the existing DHIS tools finalised.



National Policy Guidelines for 7.1 % Chlorhexidine Digluconate in Pakistan

All newborn babies should receive Chlorhexidine Digluconate in gel form for application on the umbilical cord within 24 hours of birth irrespective of the mode and place of delivery (preferably within one hour). Once-a day application of Chlorhexidine Digluconate gel should be continued for up to seven days after birth or till separation of cord, whichever comes first.

Notified by the MNHSR&C on CHX Use (July1, 2015).

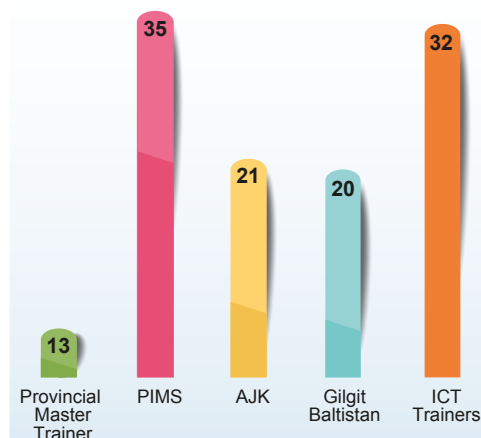


² Soofi S, Cousens S, Imdad A, et al. Topical application of chlorhexidine to neonatal umbilical cords for prevention of omphalitis and neonatal mortality in a rural district of Pakistan: a community-based, cluster-randomised trial. Lancet. 2012;379(9820):1029-1036

³ <http://www.jsi.com/JSIInternet/Results/article/display.cfm?txtGeoArea=INTL&id=1945&thisSection=Results&ctid=1030&cid=249&tid=20>

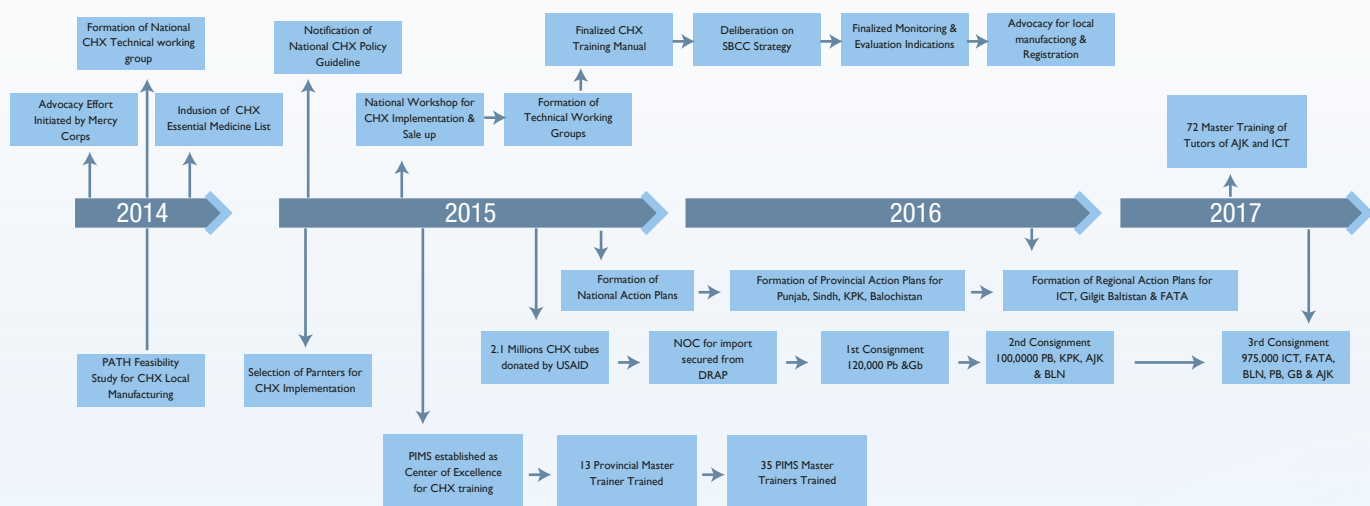
- The initials of CHX social and behavior change communication strategy finalized.
- Local pharmaceuticals companies and Drug Regulatory Authority of Pakistan (DRAP) were mobilized to streamline and expedite the process of local production and registration of CHX in collaboration with United States Pharmacopeia.

TOTAL NUMBER OF MASTER TRAINERS TRAINED ON CHX APPLICATION 2015-16



- Provincial action plans for Chlorhexidine scale up developed for Punjab, Sindh, Balochistan, KPK, AJK, Gilgit Baltistan, FATA and ICT followed by the provision of CHX tubes. The product was distributed after estimating CHX needs for the jump start districts of these provinces and regions.
- A total of 121 master trainers trained across Pakistan, on Chlorhexidine gel application. These trainings were held in Pakistan Institute of Medical Sciences (PIMS).

WALK THROUGH CHLORHEXIDINE SCALE UP IN PAKISTAN



² Soofi S, Cousens S, Imdad A, et al. Topical application of chlorhexidine to neonatal umbilical cords for prevention of omphalitis and neonatal mortality in a rural district of Pakistan: a community-based, cluster-randomised trial. Lancet. 2012;379(9820):1029-1036

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- ▷ The CHX tubes are imported from LOMUS Pharmaceuticals Nepal after fulfilling the pre requisites of DRAP which included pictographs on the primary and secondary casing for mitigating risk of its misuse due to lookalike issue along with the descriptive and application inserts.
- ▷ To fulfill the Government of Pakistan's commitment on nationwide CHX scale up, USAID has donated 2.1 million CHX tubes to MNHSR&C for distribution across all provincial health departments for one year gap period till the start of local production.



WAY FORWARD:

- ▷ Expedite the process of local manufacturing and registration in Pakistan in close collaboration with the Pakistan Drug Regulatory Authority.
- ▷ Ensure its over the counter availability and promotion throughout pharmaceuticals retailers.
- ▷ Place CHX on the procurement list of medicine at district health offices.
- ▷ Involve private sector for expanding access of CHX to clients through private provider.
- ▷ Include Chlorhexidine into the delivery kit of Lady Health Workers and Community midwives (CMWs).
- ▷ Use print and electronic media to raise community awareness and prepare information education and communication material for cord care