Health Systems and Services in China

Case-study on Maternal and Child Health (MCH) services in west Sichuan
Scenario

- You are the leader of a township-level hospital in “Xinjie”, Sichuan.
- Data shows your county has a high maternal mortality ratio (MMR).
- You know that MMR in your township is very high.
- The county leader has just telephoned you – he was very angry!
- You need to review the MCH situation and come up with a plan.
Your task as leader of Xinjie hospital...
In your groups, discuss:

• How do different health system components interact to undermine MCH service delivery in Xinjie township?
  – Identify 3-4 health system interactions that seem to be most important

• Given your analysis, what possible system-level actions might support service-delivery improvement in the future?
  – Identify 1-2 such actions

• What issues might be important to research to understand the current situation better and/or support system improvement?
  – Identify 2-3 specific topics or issues
MCH policy and targets
MCH policy: global and national

- MDG5: reduce maternal mortality by 75% between 1990 and 2015
- In 1999, UNICEF introduced Safe Motherhood Initiative in China
- In 2000, China launched national Safe Motherhood (SM) Programme
- SM’s main aim is to promote qualified hospital-based delivery
- 3 keys to SM: health education, infrastructure, social mobilisation
- 2 key innovations: demand-side subsidies, knowledge-transfer
- Sichuan in SM programme from 2000 onwards
Other key health policies

• In 2003, government established NCMS for rural residents
• In 2009, government launched 3-year, 850 billion RMB reform:
  – Expand insurance coverage to reach universal coverage by 2011
  – Increase spending on public health to equalise services across regions
  – Establish primary care centres (e.g. township hospitals) as gatekeepers
  – Reform the pharmaceutical market
  – Pilot test public hospital reforms, especially in financing and management
• 2000-2011, state health spending rose from 56 to 554 RMB p.c.
National MCH standards

- Facility-based delivery in qualified hospitals (target is 100%)
- Establish a healthcare booklet for all infants, conduct 1 postnatal visit, and carry out systematic management for child health care
- Provide at least 5 antenatal care visits for all pregnant women and 2 postnatal care visits for all new mothers
- Offer free folic acid supplementation to all rural women before pregnancy and during early pregnancy
- According to national immunisation schedule, immunise all children with hepatitis B, BCG and polio vaccines
Xinjie township, Sichuan
**Geography**

- Xinjie is a township in the Liangshan Yi Autonomous Prefecture
- Xinjie township serves 11 villages in the surrounding area
- The nearest village is just 20 minutes away by good road
- But the furthest village is 90 minutes away by road (mostly bad, country roads) and then a further 30 minutes by foot
- The county city is 3 hours away along winding mountain roads
- Overall, the region is mountainous and transport is limited
Demography

• The population of the area around Xinjie is 12,300
• Over 80% of the local population belongs to ethnic minorities
• These include Yi (60%), but also Mong and Naxi
• Most people are subsistence farmers, with few savings
• Diet is simple: potatoes, some vegetables and pickles, a little meat
• Literacy is low (70% of people did not finish primary school)
• Literacy is especially low among women and old people
• Most local people cannot speak Putonghua
Local burden of disease

- Maternal mortality is high in Xinjie – around 220 per 100,000 live births in 2011, compared with 26 per 100,000 live births in China
- The main cause of maternal death is obstetric haemorrhage
- Under-5 mortality is also high – around 90 per 1000 live births in 2013, compared with 13 per 1000 in China
- The main causes of child death are diarrhoea and pneumonia. Malnutrition is also an issue.
- Xinjie also has to deal with significant burdens of HIV and TB
- Finally, hypertension is an emerging issue among rural farmers
MCH in Xinjie
Sources of MCH

- Xinjie township hospital offers basic MCH services
- The next township (90 minutes away by road) has a better hospital
- At county-level (3 hours away), there is an MCH hospital, a large general hospital, and a TCM hospital
- In the villages around Xinjie, there are also many traditional birth attendants (TBAs), who are mostly older Yi women, and a few men.
Facilities in Xinjie hospital

• Xinjie hospital was built in 1996
• It has 12 beds
• The hospital has an ambulance for emergencies
• For community-based outreach activities, the hospital must hire a local taxi or motorbike
• The hospital has 2 computers for storing data, but no laboratory
• The hospital has a portable ultrasound machine
MCH services provided

- Community messenger service:
  - 1 messenger in each village to identify pregnant women and contact hospital
  - Low literacy levels mean that some messengers are men

- Antenatal care:
  - Basic care e.g. checking blood pressure, doing an ultrasound scan
  - Travels to 3-4 villages per month to do check-ups
  - However, limited budget for ANC community outreach

- Delivery and post-natal:
  - Normal vaginal delivery is OK
  - Cannot do C-section, because only 1 staff member is trained
  - Emergency referral to higher-level hospitals for complications – long journey!
  - Post-natal check-ups to those who gave birth in hospital
MCH uptake

• Antenatal care:
  – Roughly 50% of women receive ANC
  – However, the majority (80%) receive 3 or fewer visits
  – Also, ANC quality is poor – sometimes just ultrasound

• Delivery:
  – Over 65% of women still do not give birth in hospital in 2013
  – Many women prefer home-based delivery
  – Some women bypass township to go directly to county hospital

• Post-natal care:
  – Roughly 25% of women who gave birth in hospital received any postnatal care
MCH outcomes

• In 2013, there were 35 births in the township hospital
• No mothers died, but 2 infants died
• Another 15 women were transferred to high-level facilities
• Referral occurred for conditions such as postpartum haemorrhage, retained placenta, abnormal foetal presentation, prolonged labour
Xinjie hospital HR
Staffing levels

- Xinjie hospital has 16 staff members
- 14 of the staff are male, partly due to low female education levels
- 14 of the staff are Yi, 1 is Mong and 1 is Han
- Most medical staff have a 3-year associate degree from nearby city
- Other staff have basic certificates in health and hygiene
- None of the staff is trained for obstetric emergencies
- One staff member is responsible for data management
Staff conditions

• Workload:
  – In MCH, pressure to promote hospital-based delivery
  – But other health problems too – TB, HIV, malnutrition – all require follow-up
  – Long working days, low pay, and stubborn patients with low education

• Training:
  – In past 5 years, 4 experienced medical staff went to county-level facilities
  – 2 new staff were recruited, but they lack experience
  – Medical staff want extra training, but opportunities are limited

• Salary:
  – Staff salaries reflect tension between public health and profit motives
  – A few staff make extra money through casual labour on the side
Staff morale

• Attitude to community:
  – Sympathetic to needs of local community
  – Aware of importance of MCH work and hospital-based delivery
  – Frustrated by challenges in overcoming doubts of local people

• Attitude to government targets:
  – Frustrated by heavy pressure from government MCH targets
  – Annoyed by inadequate financial support or training opportunities
  – Torn between wanting to help people (public health), and ensuring own income
  – Sometimes this leads to supplier-induced demand, fake results etc.

• Attitude among team:
  – Often feel exhausted and overwhelmed, also some staff tensions over “bianzhi”
  – Tempted by greater opportunities and resources at county-level
Community attitudes to MCH
Accessibility

• Long distance to township is a barrier for people in remote villages
  – Barrier is not only geographic, but also financial
• However, even some women who live close by choose home-birth
• Also, a handful of women who live far away make the journey
  – But usually these are women with better social and financial resources
Affordability

• Facility-based delivery is partly covered by NCMS and MFA
  – But many farmers do not know how to use NCMS
  – Some are also scared of the paperwork (because illiterate)
  – Some used insurance before, but disappointed by low level of reimbursement

• Hospital-based delivery is not free – many hidden costs
  – Transport to and from hospital, usually with several family members
  – Accommodation in the township before/after the birth
  – Drugs/procedures (sometimes unnecessary) that hospital uses to make money
  – Total bill can be several thousand RMB, i.e. more than NCMS + annual income
Acceptability

• Many ethnic minority women feel uncomfortable with hospital birth
  – Traditionally, women give birth in home, surrounded by other women
  – Women do not like lack of privacy in township hospital
  – Do not like being treated by male doctors, would prefer female doctors
  – Some people believe that it is bad luck for a stranger to see the birth
  – Some people believe that hospitals cause difficult births
• Certain practices in the hospital add to the level of discomfort
  – In hospital, must give birth lying down, not in traditional semi-sitting position
  – In hospital, doctors usually shave the pubic region before birth
• Lack of pain relief in hospital means it is “no better” than home birth
Service quality

• Most women do not “trust” the quality of care at the township
  – They know county level has more resources, and is more comfortable
  – They know that township hospital cannot handle difficult deliveries
  – Hospital generally not very comfortable or attractive, no privacy there
  – Relatively young staff at the hospital (vs. older traditional birth attendants)
Other relevant health beliefs

• On ANC:
  – Women like being able to see their baby via ultrasound during check-up
  – Some women also use ANC to ask questions about pregnancy or insurance
  – Women would like more ANC visits from mobile clinic
  – But most women do not think ANC is “necessary” – merely interesting

• On pregnancy:
  – Women do not see pregnancy as “dangerous” – pregnancy is “natural”
  – Women do not think they lack knowledge or support – many TBAs are available
  – Most women think hospital is only needed if there is something wrong
  – Some women avoid healthcare staff during pregnancy, because they are afraid of being forced to have an abortion
The future for MCH in Xinjie
Shift to county-level

• Chinese government wants to encourage birth at county-level
• In future, Xinjie will only provide ANC and post-natal follow-up
• Hence, its role will be to:
  – Identify pregnant women in the local community
  – Provide 5 ANC visits to them, and identify any risky pregnancies
  – Encourage all women to accept facility-based birth in the far off county hospital
  – Provide post-natal follow-up in the community
• Because of this policy, the staff will receive less MCH training
• Also, the MCH income of the township will reduce
Staff attitudes to the change

• They recognise their own capacity in Xinjie is limited
• They also recognise that the county has better MCH facilities
• But the new policy direction is extremely challenging for them:
  – Women won’t even come to Xinjie – how can we make them go to the county?
  – Women may see loss of MCH services at Xinjie as sign that MCH care is not that important – how do we respond?
  – Women may see loss of MCH services at Xinjie as further sign that our medical care at Xinjie is low quality and untrustworthy – how do we respond?
  – What about pregnant women who come to Xinjie at the last minute?
• Staff members feel abandoned by government – no future in Xinjie
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Sources for case-study

Some of the material in this presentation is drawn from:


- Challenges to maternal health care utilization among ethnic minority women in a resource-poor region of Sichuan Province, Harris et al, Health Policy and Planning 2010; 1-8

Sources for case-study

• Some of the images (links available on request) in this presentation are from:
  – UNICEF Hong Kong
  – Village China Travel
  – CBC News
  – Xinhua News
  – Deviant Art

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