Landscape Analysis to Provide Insight on Barriers and Facilitators to Policy Translation and Commodity Access in the Public and Private Sector for Child Survival in Pakistan

Analytical Report & Accountability Framework

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ABSTRACT

BMGF partnered with UNICEF in Pakistan to implement a project for increasing child survival through improving prevention, diagnosis and treatment of Pneumonia and Diarrhea commodities. Main focus of this research was to update and put in place relevant policies that guarantee quality treatment and availability of essential commodities for management of these illnesses; including dispersible tablets of Amoxicillin and Zinc, Low-Osmolarity ORS, ARI-Timers, Pulse-Oximeters, and Oxygen.

Accomplishment of this policy translation necessitated the study of associated barriers and facilitators of this change pathway, while analyzing gaps in existing policies in context of public procurement, prescribing behaviors and treatment approaches, and culminating this research into an accountability framework for all the patrons of child survival in Pakistan. This landscape analysis – a cross-sectional study – consisted of desk review of literature and qualitative assessment conducted through key-informant interviews (national and provincial policy makers and planners, health managers, public and private sector service providers, donors, development partners, pharmaceutical manufacturers, and service users) and focus group discussions with community workers.

The landscape analysis effectively identified areas for policy translation that will improve the management of children suffering from Pneumonia and Diarrhea. Challenges of accountability deficit were addressed through re-assigning roles and responsibilities of primary stakeholders while identifying pathways of change for 1) building political will and commitment towards childhood illness, exhibited through updated policies and health sector strategic papers; 2) enhancing competencies of healthcare providers at health facilities and community level to take up the use of updated commodities and cutting-edge technologies for diagnosis and treatment of childhood illnesses; 3) local production of these commodities to make them cost-effective for public procurement; 4) strengthening managerial capacities for logistics and supply chain management to ensure uninterrupted supply; and 5) provision of finances for procurement of these commodities to treat every sick child in Pakistan.

INTRODUCTION

Pneumonia and diarrhea have long been regarded as diseases of poverty and have been closely related to living conditions with poor hygiene and sanitation, malnutrition as well as limited access to other basic necessities. Therefore, there is a dire need to move beyond more obvious medical concerns at micro level, to a more complex macro level strategy focusing on economic, social and political issues. This requires a revision of policy decision making, including capacity building of healthcare providers and strengthening the training competencies; supporting production and procurement of relevant commodities; and improving the supply chain mechanism and logistics to track stock-outs and utilization.

This report presents findings of a landscape analysis on pneumonia and diarrhea among children of Pakistan. It encompasses all levels from policy to the end user at community level by assessing the factors influencing policy translation and commodity access that will lead to reduction in the disease burden. The study further aimed at exploring the opportunities for engaging pharmaceutical companies and other relevant stakeholders for manufacturing and provision of updated pneumonia and diarrhea related commodities in Pakistan.

BACKGROUND

Over the past 25 years, the rate of mortality in children under the age of five years has been cut by more than half worldwide (from 91 deaths per 1,000 live births in 1990 to 43 deaths per 1,000 live births in 2015) (UN Inter-agency Group for Child Mortality Estimation, 2015). Since late 90s', there had been emphasis on child health, either through global goals (MDGs and SDGs), IMCI and iCCM programs or pneumonia and diarrhea programs (Taylor, Schumacher & Davis, 2016). However, many children still fail to reach their fifth birthday, especially in the poorest regions of the world. In late 1990s integrated approach to child health known as Integrated Management of Childhood Illness (IMCI) was launched by WHO and UNICEF. It included preventive and curative elements that are implemented by families and communities as well as by health facilities (WHO, 2017). However, diarrhea case management moving under IMCI caused its executed at a smaller scale, with shifting the focus on other priorities such as malaria and HIV/AIDs. Pneumonia and diarrhea's contribution to under-five child deaths, in particular, has remained stubbornly high. Together, these diseases account for 29% of all deaths amongst children less than 5 years of age and results in a loss of 2 million young lives each year. In 2015, these two diseases together were responsible for one in four deaths that occurred in children under five years of age (UN Inter-agency Group for Child Mortality Estimation, 2015).

Fifteen developing countries, including Pakistan constitute majority of the global burden of pneumonia and diarrhea, as 72% of the children who lost their lives to pneumonia and diarrhea before the age of five, are from these high-burden countries (IVAC). As of 2015, the mortality rate of children under five (U5) is 81 deaths per 1,000 live births (UN Inter-agency Group for Child Mortality Estimation, 2015), with 1 in every 11 Pakistani children not surviving till their fifth birthday (ICF). Acute Respiratory Infections (ARIs), malaria, and dehydration caused by severe diarrhea are the major causes of childhood mortality in Pakistan; each year, approximately 91,000 children die from pneumonia and 53,300 children die from diarrhea (ICF).

**Causes of under-five mortality in Pakistan during year 2015
(UNICEF and WHO in 2015)**
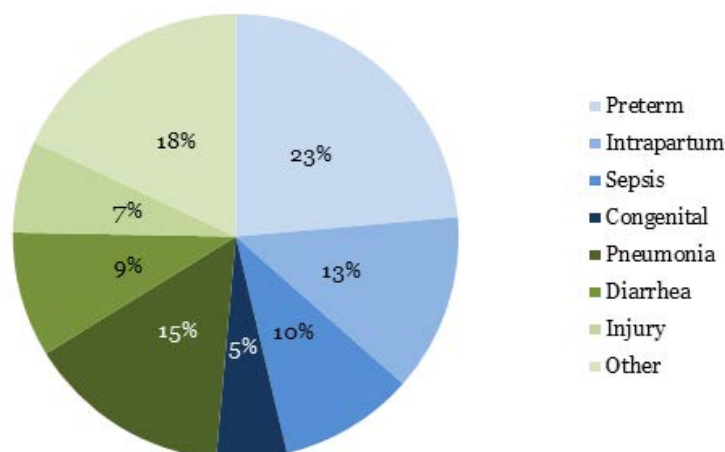
Moreover, the Global Action Plan for the Prevention and Control of Pneumonia and Diarrhea (GAPPD) ranks Pakistan as third highest (with the score of 46), due to constantly high number of under-five deaths mainly caused by pneumonia and diarrhea (Ibid). Health professionals identified a need for an integrated approach towards pneumonia and diarrhea which has resulted in launching of GAPPD, a framework with emphasis on integrated approach to protect, prevent and treat both the diseases (WHO & UNICEF, 2013). It has an ambitious goal of ending preventable childhood deaths by 2025, and to achieve that, it provides a set of priorities and interventions to scale-up progress at country level (Yao & Yang, 2014).

Protect Prevent and Treat framework of GAPPD
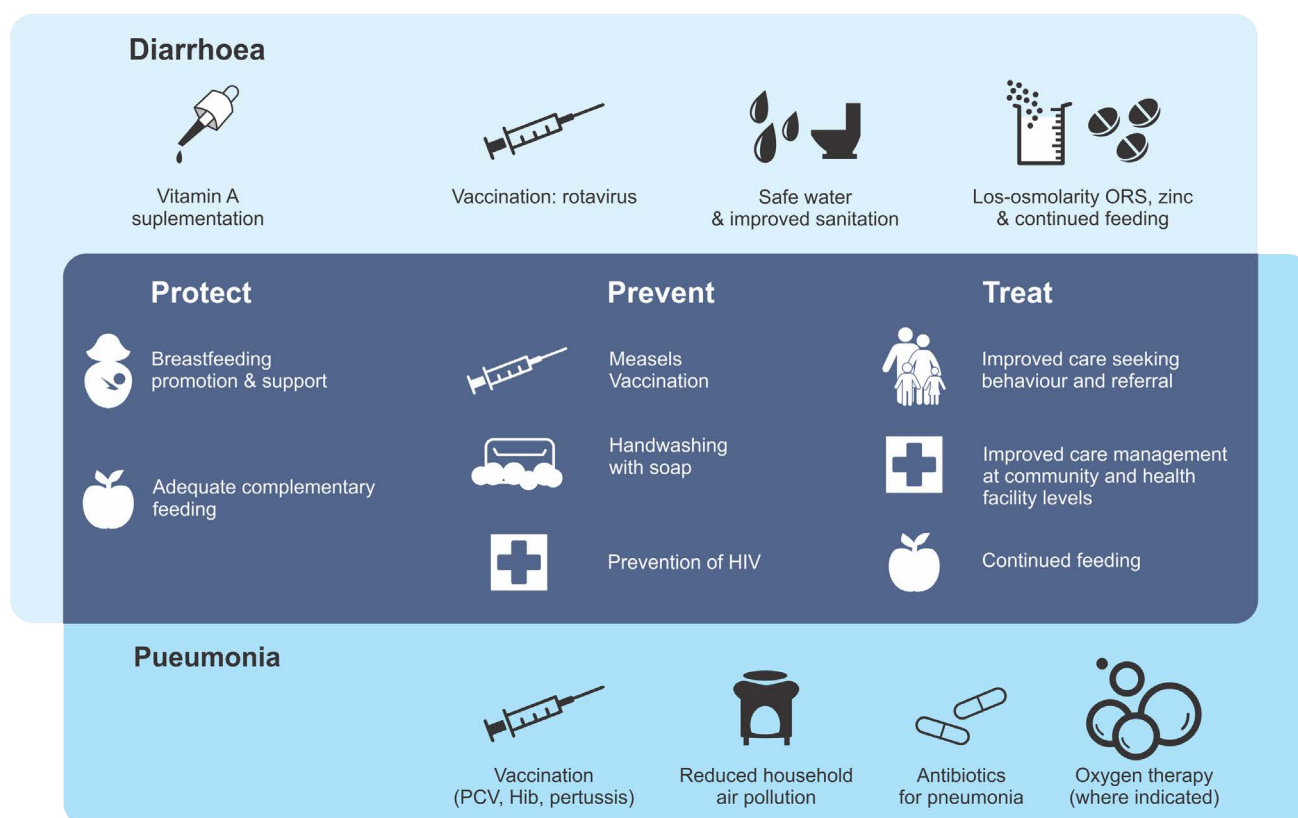
Source: Ending Preventable Child Deaths from Pneumonia and Diarrhea by 2025:
The integrated Global Action Plan for Pneumonia and Diarrhea (GAPPD), 2013

In continuation, UNICEF and WHO has recommended updated commodities to tackle the challenges of prevention and control of pneumonia and diarrhea including low-osmolarity ORS for treatment of diarrhea, as the earlier composition of ORS did not reduce stool output or duration of diarrhea. WHO and UNICEF also recommended a daily dosage of 20 mg of zinc supplements for 10 days for children suffering with diarrhea and 10 mg for infants less than six months (Bhutta et al, 2000). As Zinc also plays a critical role in overall health and development of infants and young children and during diarrheal episodes zinc further depletes, therefore replacing this important micronutrient is essential for child recovery and thus has also been recommended for use.

According to Pakistan Demographic and Health Survey (PDHS) 2012-2013, among children suffering from diarrhea, only 38% were effectively treated with Oral Rehydration Solution (ORS) whereas only 1.5% received zinc treatment effectively. Likewise, only half of the children suffering from pneumonia received appropriate antibiotics. There is a dearth of essential medicines required for treatment in Pakistan therefore NEML 2016 is a list of 416 core drugs provided by government at primary and secondary healthcare facilities. NEML 2016 published by DRAP, is an adaptation of 19th WHO Model List of essential Medicines of 2015. With reference to UNICEF and WHO recommended commodities for pneumonia and diarrhea, NEML includes low-osmolarity ORS, Zinc Sulfate (20 mg) and Amoxicillin in solid oral dosage form (250mg & 500mg as trihydrate) (DRAP, 2016).

The divide between industrialised and developing countries is greater on child mortality than on any other issue as no other mortality is as unequal. Improving child health and survival remains at the center of global health initiatives. In Pakistan, child health services are under-developed and under-resourced, access to commodities to manage childhood pneumonia and diarrhea remains a serious and major concern, with expected outcomes not predictably achieved with wide variations existing within healthcare systems. Dimensions of these inequities are complex and can

include economic status, geographic location, parents' education level, urban and rural residence, ethnic group and gender. This also indicates that there is limited knowledge regarding the access to the commodities for management of childhood pneumonia and diarrhea, leading to rationale of this research for devising a practical, feasible and workable accountability framework to ensure commodities access in both public and private sectors of Pakistan.

RATIONALE

UNICEF and Bill and Melinda Gates Foundation (BMGF) established a partnership to contribute to increased child survival in Pakistan, through improving prevention, diagnosis and treatment of pneumonia and diarrhea in children under-five years of age. The Project "Accelerating Policy Change, Translation and Implementation for Pneumonia and Diarrhea Commodities in Pakistan", is being implemented in close coordination with the Government of Pakistan and relevant stakeholders to ensure sustainable changes. The overarching objective of this project is to improve management of childhood diarrhea and pneumonia and increase child survival by the end of 2019. This has to be done through ensuring that the relevant national policies are revised, understood and adhered to in order to guarantee quality treatment and availability of essential commodities. These commodities include Amoxicillin DT, Zinc DT, Low osmolarity ORS (LoORS), ARI timers, Pulse Oximeters and Oxygen.

A landscape analysis study was further conducted to identify the barriers and facilitators for the availability of the updated essential commodities for pneumonia and diarrhea. This analysis intended to bridge the gaps in bringing about specific policy change, its translation and implementation for the pneumonia and diarrhea commodities, while keeping in view the political economy context of Pakistan. The findings of baseline landscape analysis aimed to assign specific roles and responsibilities to the relevant stakeholders in the form of a joint accountability framework. A key component of this study was to conduct a pharmaceutical manufacturing feasibility for the local production of updated commodities, while taking into consideration market forces and the potential demand.

This study report aims to:

- Review and provide insights for barriers and facilitators in policy translation and commodity access in public and private sector.
- Identify gaps in existing policies relevant to Child Survival Strategies in the context of GAPPD.
- Assess the prescribing behaviours and treatment approaches among public and private sector service providers and the LHW program.
- Recommend steps for inclusion of pneumonia and diarrhea commodities into essential medicine lists, procurement lists based on evidence-based briefing papers and policy notes including GAPPD on the benefits of Amoxicillin-DT, Zinc-DT, co-packaged ORS and Zinc, Pulse Oximeters, and Oxygen.
- Map key stakeholders and activist at all levels.
- Draft a framework to define the roles and responsibilities of key implementing stakeholders for child survival woring groups.

METHODOLOGY

This was a cross-sectional study that mainly utilized primary qualitative research techniques as well as desk review. Primary data was collected through key informant interviews, focus group discussions, policy dialogues, facility readiness assessment for diarrhea and pneumonia treatment, consultations and consensus building with relevant stakeholders in order to meet the research objectives. Secondary data was based on existing national and international child survival policies and strategies related to pneumonia and diarrhea.

Research Objectives

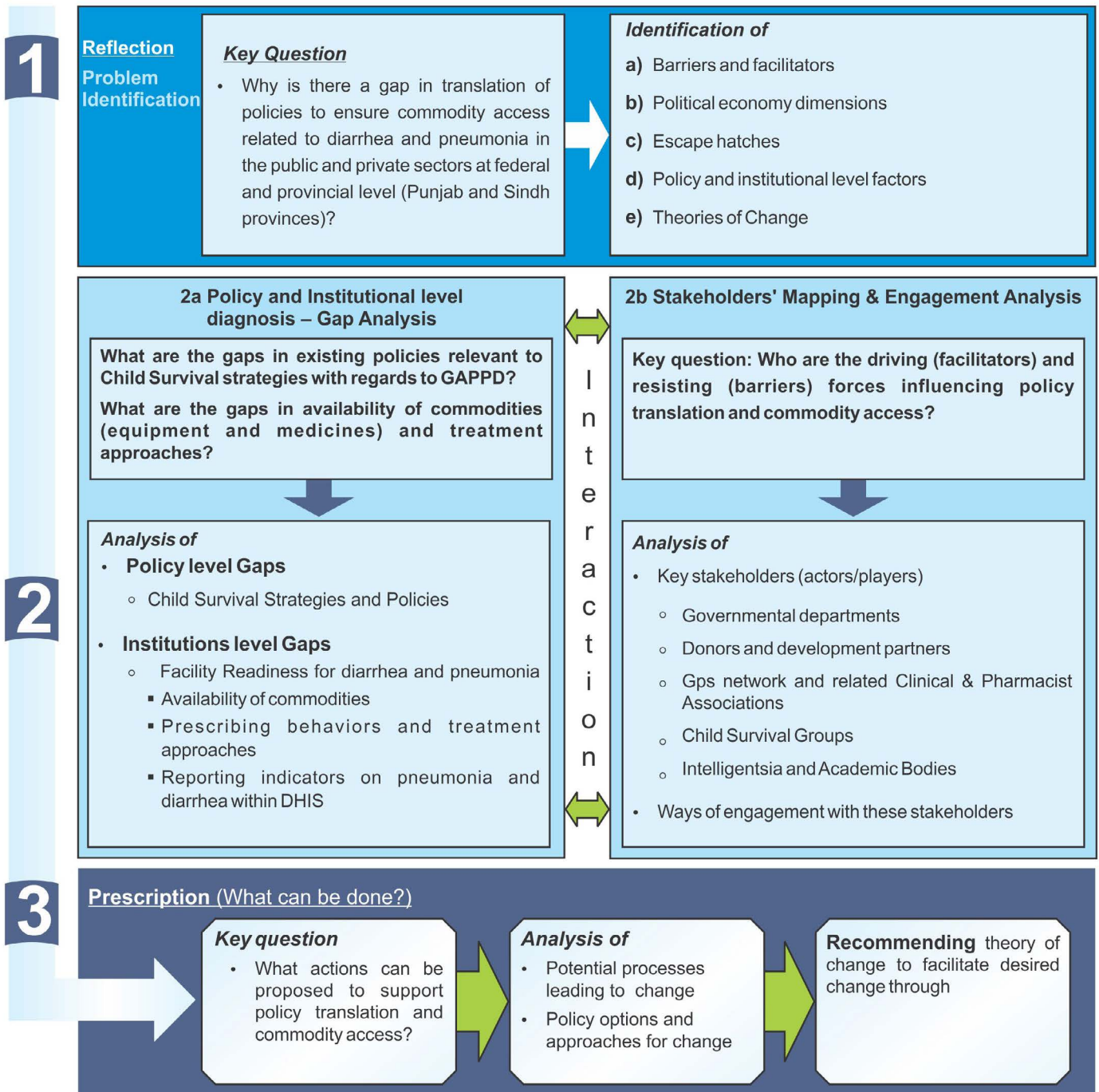**The purpose of the research was to assess the treatment of pneumonia and diarrhea through:**

a) Availability of commodities (equipment and medicines)

b) Prescribing behaviours and treatment approaches among public and private sector service providers and vertical programs (LHW program).

c) Availability of treatment medicines in public sector facilities and medical stores in the surrounding areas of private providers' facilities.

d) Reporting indicators within DHIS and perspective of the clients exiting the healthcare facility.

The purpose of research was translated into the following basic research questions which were incorporated in the research tools:

a) What are the gaps in existing policies relevant to child survival strategies with regard to GAPPD?

b) Why is there a gap in translation of policies to ensure commodity access related to diarrhoea and pneumonia?

c) What are the gaps in availability of commodities (equipment and medicines) and treatment approaches?

d) What is the existing availability and production status of updated formation of commodities for management of childhood pneumonia and diarrhoea as per GAPPD?

e) What are the driving (facilitators) and resisting (barriers) forces influencing policy translation and commodity access?

f) What action can be proposed to support policy translation and commodity access?

The landscape analysis encompassed all levels from policy to the end user at community level by assessing the factors influencing policy translation and commodity access, ultimately leading to reduction in the disease burden. The study further aimed at exploring the opportunities for engaging pharmaceutical companies and other relevant stakeholders for manufacturing and provision of updated pneumonia and diarrhea related commodities in Pakistan. The landscape analysis was based on following comprehensive conceptual framework, adapted from problem-driven frameworks of World Bank and Overseas Development Institute:

Research Framework

1 **Reflection**
Problem Identification

Key Question
- Why is there a gap in translation of policies to ensure commodity access related to diarrhea and pneumonia in the public and private sectors at federal and provincial level (Punjab and Sindh provinces)?

Identification of
a) Barriers and facilitators
b) Political economy dimensions
c) Escape hatches
d) Policy and institutional level factors
e) Theories of Change

2 **2a Policy and Institutional level diagnosis – Gap Analysis**

What are the gaps in existing policies relevant to Child Survival strategies with regards to GAPPD?

What are the gaps in availability of commodities (equipment and medicines) and treatment approaches?

Analysis of
- **Policy level Gaps**
  ○ Child Survival Strategies and Policies
- **Institutions level Gaps**
  ○ Facility Readiness for diarrhea and pneumonia
    ▪ Availability of commodities
    ▪ Prescribing behaviors and treatment approaches
    ▪ Reporting indicators on pneumonia and diarrhea within DHIS

Interaction

2b Stakeholders' Mapping & Engagement Analysis

Key question: Who are the driving (facilitators) and resisting (barriers) forces influencing policy translation and commodity access?

Analysis of
- Key stakeholders (actors/players)
  ○ Governmental departments
  ○ Donors and development partners
  ○ Gps network and related Clinical & Pharmacist Associations
  ○ Child Survival Groups
  ○ Intelligentsia and Academic Bodies
- Ways of engagement with these stakeholders

3 **Prescription** (What can be done?)

Key question
- What actions can be proposed to support policy translation and commodity access?

Analysis of
- Potential processes leading to change
- Policy options and approaches for change

Recommending theory of change to facilitate desired change through

Sample

The geographic scope of this study included the provinces of Punjab and Sindh at district level and Baluchistan and KP at provincial level. Qualitative assessment was conducted in national and provincial capitals. Tharparkar, Shikarpur, and Tando Muhammad Khan were the three priority districts Sindh while Pakpattan and Bahawalnagar were the chosen ones in Punjab. A purposive sampling technique was adopted which facilitated in making sampling choices that assisted in deepening understanding of the topic of research under consideration.

The study sample involved officials at policy and strategy development level (representatives from federal ministry, provincial health departments; health sector reform units; IRMNCH/MNCH and LHW programmes; donors and development partners); district managers (EDO/DHO, DHIS Coordinator); health-service providers (health providers

at both public and private facilities, outreach field staff, in-charges of medical stores); service-users (parents/ guardians of children receiving services for pneumonia and diarrhea at both public and private health facilities). A total of 5 focus group discussions (FGDs) and 112 Key Informant Interviews (KIIs) were conducted. Description of respondents for sampling matrix along with research techniques employed is provided in the table below:

Sampling Matrix		
Research Technique	Respondent	No.
Key Informant Interviews	Federal Ministry, Associations and DRAP	4
	Representatives from Provincial Health Departments	10
	Development Partners and Donor Agencies	3
	Officials from Pharmaceutical Manufacturing Companies	10
	Managers at District Health Departments	10
	In-charges of Health Facilities	10
	General Practitioners	15
	In-charges of Pharmacies	15
	Parents/Guardian for Exit Interviews	35
Focus Group Discussions	Community-based/Outreach Service Providers	5
	Total Number of Sessions	117

Research Process

This research was led by a health policy expert, who delegated tasks to experts in the field of public health, research, procurement and public policy. Research expert supervised field teams who further supervised data collectors. Rigorous fieldwork training was provided to achieve uniform standards and quality control. This was ensured through central level training workshops and orientation sessions in August 2017. NOC was obtained from the Home Department before the fieldwork began in the districts. Recruitment of interviewers for the fieldwork was done from relevant geographic locations to overcome cultural and language barriers. Field teams for conducting in-depth interviews comprised of 2 interviewers while for FGDs the team constituted of 3 members, with at least one supervisor.

The gender of the interviewee was matched with that of the primary interviewer in order to address gender specific sensitivities. Interviews of officials at policy level were conducted by a research team of two from Contech's head office. Informed consents were obtained before the beginning of each interview session and anonymity of the respondents was maintained. Total duration of fieldwork and data collection was 30 days, including travel time. All transcripts (in local language) and audio recordings for the study were submitted to Contech's operations office in Lahore. They were then reviewed and translated into English and transferred into analytical matrix form. Data was later on analysed in the context of study objectives as stipulated in the research proposal and a comprehensive coding framework was developed. Coding was guided by grounded theory and was followed by thematic analysis, categorizing and classifying of overarching themes from the emergent data. This facilitated in identifying gaps for improving the management of diarrhea and pneumonia and for making the requisite policy changes from

the developed themes and categories. This provided foundation for theory of change and also facilitated in conceptualizing a prospective for accountability framework. Conscious effort was made to ensure that the quality of data was not compromised at any stage of the research.

There was continuous liaison with UNICEF team to ensure requirements were met at every step of the research process. The report was internally peer reviewed by Contech Technical Review Committee comprising of senior experienced public health experts and was also externally peer reviewed.

RSEARCH FINDINGS

The research findings have been arranged into policy environment, clinical management, pharmaceutical feasibility and accountability framework.

Policy Environment

Studying the policy environment in treating fatal diseases like pneumonia and diarrhea led to many revelations. In the post devolution scenario, the provincial health sector strategies have a main guiding role for the areas related to service delivery. Most of the provincial health sector strategies are on the verge of completing the terms for which they were drafted and will be reviewed in the next year. This provides an opportunity to incorporate the necessary changes required to enhance the focus on morbidity and mortality in children due to pneumonia and diarrhea. Data is currently not analyzed at the district level and at the same time, validity and reliability of data gathered from districts is questionable. Provincial Health Sector Strategy of Punjab lacks an emphatic focus on child survival whereas Government of Sindh has drafted first Child Health Strategy which focuses on necessary interventions at the strategic level. No child survival groups were found to be in existence at the federal level.

Sindh has evidence-based medicine cost estimation while Punjab does not have any such procedure. Sindh has already included the Amoxicillin and Zinc in the EML with the word "preferred." On the contrary EML at the federal level and in the province of Punjab contain Amoxicillin and Zinc in the "Solid Oral Dosage Form." Sindh and Punjab have already incorporated the dispersible tablets (DTs) in the provincial essential medicine lists and the process of updating the IMNCI guidelines has also been initiated. USAID USP-PQM is assisting in promoting the quality of medicines in Pakistan. Sindh and Punjab have already made progress in updating the health information systems which reflect the global recommendations and also LHW MIS. However, some issues like the mention of pneumonia in the health information systems, still needs to be added.

Updated Clinical Management Practices

It was crucial to understand the perspectives of different stakeholders at the service delivery as well as community level for this research. Several interviews and discussions were held with facility in-charges (public sector health facilities), general practitioners (private sector), pharmacy in-charges, parents and caretakers of the patients and the lady health workers (LHWs). A general understanding among almost all stakeholders prevailed that lack of hygiene, poor sanitation and unclean drinking water were the root causes of pneumonia and diarrhea. Concept of dispersible tablet was not popular amid stakeholders, especially among facility and pharmacy in-charges. "Tablet" was instantly perceived as a substance hard for children to swallow, hence unsuitable for their consumption.

Facility in-charges underscored the importance of the LHWs in managing diarrhea and pneumonia and highlighted the need for motivating and incentivizing them. Issues like the lack of funds and logistical support for training, inadequate budget for medicines and their undersupply, poor ambulance service etc. were also emphasized. General practitioners expressed concern over lack of access to clean drinking as it is a major cause of childhood illnesses. They were extremely enthusiastic about training sessions on pneumonia and diarrhea in near future. Pharmacy in-charges believed that placing orders for medicines was dependent upon demand, price, quality, side effects it had and seasonal diseases. They were also of the opinion that free sampling is an effective tool for penetrating

the market. They wanted government to play its role in quality control and logistics of the medicines. Parents and caretakers of the patients urged the government to show more commitment and voiced their demand for clean drinking water, hygienic environment, free medication, better transport facilities to the hospitals, availability of doctors and lesser waiting time, better infrastructures and support facilities at the hospitals etc. LHWs expressed a need for a consistent training regimen and an IT based case documentation system. They mentioned that they were not adequately equipped with the required medical supplies, tools or guidelines. They were also concerned about their safety and security while going out in the field.

Feasibility Analysis

Role of the pharmaceutical manufacturers was deemed to be vital in changing the prescribing behavior in the private sector. Hence a feasibility analysis was conducted to explore the opportunities for local production of desired commodities in Pakistan and to assess the market potential of pharmaceutical industry in meeting the need of updated pneumonia and diarrhea commodities. It was found that, presently the local industry is meeting 70% demand of all the finished products and the sector is expanding in the international market. The quality of locally manufactured drugs is regulated by the Drug Regulatory Authority of Pakistan (DRAP), which on average takes 15-18 months to process registration of a new product. This process however can be expedited if the public interest demands so. Although DRAP's rules currently do not allow marketing of co-packaged Zinc and ORS but has no restriction on co-packaging of the same after purchase. While one local company was found to be licensed to manufacture Amoxicillin DT, over 15 large to medium sized local pharmaceutical companies were identified which were known to produce Zinc DT and Low Osmolarity ORS. Five key companies have expressed willingness to enhance production after agreeing on promotion strategy jointly prepared with UNICEF. Factors that may influence supply include capability and capacity to use technology, profitability, presence of substitute, site of manufacturing plant and sustenance of demand. Factors which may influence demand include; affordability, availability/accessibility, operational and marketing strategies. Furthermore, they also demonstrated a readiness to cooperate with UN agencies in launching advocacy campaigns to enhance demand.

Theory of Change and Accountability Framework

Based on the findings and recommendations, a joint accountability framework was prepared that identified the interventions with the allocation of responsibility. This framework assigns indicators to every intervention for measuring their progress, taking into consideration the formal and informal factors that might facilitate or hinder the processes mapped out for our desired outcomes.

Pathway of Change and Strategic Areas

a) Policy Change

b) Updated Clinical Management Practices

c) Local manufacturing of the proposed commodities

d) Strengthened Logistics and Procurement System (Separate study)

e) Budgeting for the Updated Commodities (Separate study)

Policy Change

Existing national and provincial policies and guidelines are updated in line with the global recommendations (WHO/GAPPD) for management of diarrhea and pneumonia among under five children in Pakistan by 2019. The following are assumptions and preconditions for the necessary policy change:

- Evidence based advocacy efforts are conducted with the relevant decision makers and these efforts bring about the necessary changes in the attitude of the decision makers

- Child Survival groups are empowered, committed and capable of implementing the interventions

- A joint accountability framework and annual work plan is formed under the stewardship of child survival groups

- Policy makers and professionals have improved knowledge about the effectiveness of the new global recommendations and are fully on board for the changes required

- The essential medicine lists and procurement lists have been updated to incorporate the new recommendations

- The Health Information Systems are updated to reflect the new commodities

- Governments make the pneumonia and diarrhea a priority by including the indicators in their Prioritized Monitoring systems

Clinical Management Practices

Revised and updated pneumonia and diarrhea treatment guidelines are translated into relevant action plans by all provincial/areas health departments in Pakistan by the end of 2019. The following are assumptions and preconditions for the outcome:

- Medical schools are ready to put additional focus on the Pneumonia and diarrhea

- Government provides enough funding and administrative attention for the training programs required to change the prescribing behaviour

- Professional bodies like PPA and organizations like healthcare commissions are fully on-board for playing a role in changing the prescribing behaviour of the private sector

- Updated Training programs are in place and these programs change the prescribing behaviours of the healthcare providers

- Health care providers and all the relevant stakeholders have the improved knowledge, skills and capacities to effectively treat the children in line with the global recommendations

- Relevant decision makers are sensitized about the steps involved and for the effective resource allocation according to the new guidelines

- Community has the acceptability for these updated commodities

- Pharmaceutical companies acknowledge the business case of these commodities and play an active role in changing the prescribing behaviour of the healthcare providers in the private sector

Local Production of Proposed Commodities

Essential commodities (amoxicillin DT, zinc DT, co-packaged ORS and zinc, oxygen, ARI timers, and pulse oximeters) are available for treatment of childhood pneumonia and diarrhoea in Pakistan by the end of 2019. Following are preconditions and assumptions are proposed for local production:

- Feasibility analysis points out to a strong business case for these commodities

- Government supports and encourages the local manufacturing of these commodities through Production Promotion Working Group (MNHSR&C, DRAP, Pharmaceuticals, PPA, UNICEF)

- Demand is generated by changing the prescribing behaviours of the healthcare providers

- Pharmaceutical companies acknowledge the business case of these commodities and play an active role in changing the prescribing behaviour of the healthcare providers in the private sector

CONCLUSION AND RECOMMENDATIONS

Policy Environment

- There is a critical need for advocacy at policy level to raise priority of pneumonia and diarrhea as diseases causing high mortality and morbidity at the national level
- The office of DGHS should have a dedicated focal person for pneumonia and diarrhea for monitoring purposes
- Forums like Chief Minister Special Monitoring Unit can be utilized to provide a great opportunity for enhancing priority of pneumonia and diarrhea and for monitoring of its implementation
- Recommendation of establishing Child Survival Groups should be made mandatory upon the government
- The crucial role of community health workers should be recognized and harnessed in reducing mortality and morbidity caused by pneumonia and diarrhea, hence programs like LHWs program should be further strengthened

Updated Clinical Management Practices

- There is a need for consistent training regimen and an IT based case documentation system at community level
- Free sampling can be an effective tool for penetrating the market, especially for new forms of medicines like DT
- Field and community level testing prior to scale up is required to enhance acceptability of DT
- Dispersible Tablets needs to be named and branded differently to deal with the preconceived notion of Tablets as difficult to swallow substance

Feasibility Analysis

- Advocacy campaigns should be planned to enhance demand for commodities in collaboration with UN agencies and pharmaceuticals companies, seeking support through their Corporate Social Responsibility mechanism.

  - Based on assumption that 23% under five children (7,072,644) suffer from diarrhea each year in Pakistan, it is estimated that 100 million dosages of zinc sulphate are required for 14 days treatment of under-five diarrhea patients. Two companies geographically located in Northern and Southern regions of the country, can jointly meet this requirement in 36 days.

  - At At present, the only known local manufacturer of Amoxicillin DT in Pakistan with a prodution capacity of 1.4 million tablets per day can alone can meet the requirement of Amoxicillin DT in just 53 work days if manufactured in full capacity.

  - Approximately 42.4 million sachets of 20.5 g/l or 21.2 Million sachets of 10.2 g/l of low osmolarity ORS will be needed to meet the requirement according to the burden of disease. Two companies, ATCO and FEROZSONS, having production capacity to manufacture 120,000 sachets per day, can meet this requirement in less than 27 weeks.

Advocacy efforts and focus

Four key stakeholder audiences who need to be tapped for efficient policy translation:

1) Politicians & Policy Makers: linkages should be drawn between lives lost due pneumonia and diarrhea and their effect on infant mortality and morbidity. Government's needs to play a proactive role to coordinate child survival policy with health, and education policies, facilitating effective management of pneumonia and diarrhea.

   a. Politicians should be reached out during this upcoming electoral process to put the emphatic focus on pneumonia and diarrhea in their manifestos

    b. Advocacy must be aimed at the government to increase evidence-based budget allocation and long-term monitoring mechanisms in place to monitor and strategize effective management of both diseases

    c. Ministers should be focused to encourage communicating this spirit to the line departments

2) Local Managers and Service Providers: Advocacy at this tier ensures emphasis on the importance of adopting revised and updated pneumonia and diarrhoea treatment guidelines and the efficient use of essential commodities.

    a. Advocate with local managers and service providers (GPs, medical stores/Pharmacies) at district level. Managers can play critical role in ensuring availability of recommended essential commodities and the providers' role in raising need through counselling

    b. Advocate with PMDC and medical universities to encourage the required prescribing behaviour as well as making treatment guidelines, a part of education and training of the curriculum

    c. CME activities to be arranged for providers to enhance their capacities to manage pneumonia and diarrhea

3) Community: A large share of the population still needs to be convinced about the ease of use and convenience of dispersible tablets; however this can be achieved through involvement of local GPs and medical stores/pharmacies in prescribing recommended commodities.

    a. Positive awareness should be raised about the use of essential commodities, and transmit messages that highlight the benefits. Collaborate with local pharmaceuticals to produce and manufacture recommended pneumonia and diarrhea commodities and to ensure availability and widespread access through effective marketing to rural and other communities using their own network

4) Influencers: This set of stakeholders (media, intelligentsia, donors, development partners etc.) can act as ambassadors for effective management of diarrhoea and pneumonia to the aforementioned audiences.

    a. Media plays a critical initial role in sensitizing politicians and government on these issues through their 'privileged accesses' Major national media groups can highlight the issue among political actors and masses. Use local media to highlight the issue among communities and families e.g. report stories about the positive effects of effective pneumonia and diarrhea management

    b. Intelligentsia should collaborate with relevant politicians and assembly members working on health and finance to convince policymakers and planners to make pneumonia and diarrhea a top agenda item

    c. Donors can use their influence to keep sustained focus on services provision and commodity access to reinforce this message in their interactions with policy makers and politicians

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