GREY HOUSES IDENTIFICATION AND ENGAGEMENT STRATEGY TO REACH MISSED CHILDREN: A CASE STUDY ON PISHIN DISTRICT

(Grey house = A house where a child is present during a campaign, but that the team reports as a refusal or not available)

In the past few years, Pakistan has made considerable progress in reducing the transmission of wild poliovirus type 1 (WPV1). Following an explosive outbreak in 2014, the Pakistan Polio Eradication Initiative (PEI) shifted to a government-led, 'one team' approach, aligning partner support within the multidisciplinary initiative to transform it into a truly data-driven programme. The approach succeeded in steadily reducing the number of children paralysed by polio – from 306 in 2014 to just 12 in 2018. However, in 2019 the programme witnessed a significant spread of the virus, with 147 polio cases reported across all provinces that year. Cases fell to 83 in 2020.

In response to persistent virus transmission in several high-risk Union Councils in Peshawar (KPK), Karachi (Sindh) and Quetta Block (Baluchistan), the programme has developed strategies to prioritize those Union Councils at greatest risk because they are home to dense, underserved population groups with low levels of immunization against polio. These 40 Union Councils are categorized as Super High-Risk Union Councils or SHRUCs and received a 'laser focus' in terms of eradication interventions and strategies implemented by the programme. Out of the 40 Union Councils, 14 are in Quetta Block (block of three high-risk districts in Baluchistan).

Table 1: List of Super High Risk Union Councils in Pakistan

His Province	District	Number of SHRUCs
Khyber Pakhtunkhwa (KPK)	Peshawar	18
Sindh	Karachi	8
Baluchistan	Killa Abdullah	5
	Pishin	3
	Quetta	6

This focused strategy has helped to decrease the circulation of the virus and in 2021 Pakistan reported only one WPV1 case. The country is once again facing an upsurge in polio cases: in total 14 cases have been reported in Khyber Pakhtunkhwa Province so far in 2022.

At this stage, the programme is not only focusing on containing the virus, but also on working efficiently to reach vulnerable communities in SHRUCs to ensure that all children are registered and vaccinated. At the grassroots level, vaccination hesitancy exists among families and communities in high-risk areas, many of which are underserved.

Quetta Block in Baluchistan

The provincial polio programme in Baluchistan has been working to improve the quality of the campaign since 2020, enabling the programme to continue to run effective campaigns during COVID-19. A new communication strategy and a revamped training programme has contributed to increased coverage and a decrease in the number of "still refusals" (children who missed out on vaccination because their parents refused vaccination due to some misconception or other reason) in the March 2021 campaign.

In Baluchistan, Quetta Block has long been a hotspot of wild poliovirus transmission. Quetta Block, comprising Quetta City, Chaman Tehsil, Killa Abdullah district and Pishin district, is a major contributor to the southern cross-border poliovirus corridor, which connects with southern Afghanistan. Due to its shared border with Sindh, it always remains at high risk. In 2020 Quetta Block reported 14WPV1 cases out of a total of 26 cases in the Province, while the most recent case of WPV1 in Baluchistan was reported in January 2021 in Killa Abdullah district. Quetta Block is seen as a conveyor belt between Karachi and southern Afghanistan due to its history of virus circulation. Quetta Block reports the highest number of missed children in the Province. The most chronic refusal clusters are also present in Quetta Block.

Quetta Block Still MC analysis 9.67 4.61 8.05 8.37 4.20 200000 7.80 6.94 4.28 3.36 1009 180000 90% 160000 78594 183003 184384 80% 175653 168785 169341 155668 163178 140000 70% 120000 60% 137734 100000 50% 119634 80000 40% 60000 30% 40000 66834 20% 58872 61636 58949 55931 50028 20000 10% 36779 36129 32419 28889 0% NID Jan NID Mar SNID Jun SNID SNID NID Sep NID DEC SNID NID NID May 21 21 21 Aug 21 21 21 IAN 22 MAR 22 2022 lune 2022 R-Missed S-Missed SM%/Target

Figure 1: Missed children in Quetta Block, Jan 2021 - Jun 2022

The importance of Pishin district

Pishin district has long been one of the three very high-risk districts in Quetta Block and has three SHRUCs. It not only shares a border with the two other very high-risk districts (Killa Abdullah and Quetta district), but it also has a large border with southern Afghanistan (Mahroof) and is connected to central Afghanistan via Killa Saifullah district in Balochistan via many informal routes.

The main tribes in Pishin are the Kakar, Syed, Tareen, Achakzai and Khilji, while the urban Union Councils also have residents from Afghanistan. The target population of children under5 in Pishin is 141,000. Most socio-economic resources are generated from agriculture and businesses in other provinces. The vast majority of the population is Pashtun (99 per cent) and has rigid traditional beliefs, like the prohibition of inter-caste marriages, compound households (multidwelling, multi-family system), boys are treated differently from girls and less importance is placed on girls' education.

In 2020, Pishin district reported six WPV cases, of which three confirmed cases were found in undocumented/unregistered children (not registered for vaccination in the registration books by community health workers (frontline workers)). This clearly indicates a trend of households hiding children; the polio teams had no idea about some children's existence, especially newborn male children. On learning of this phenomenon and after further investigation, the provincial and district programme management determined that vaccination teams needed to be aware of these houses with limited or partial access and unknown targets to inform risk communication and a potential refusal house coverage strategy. The programme agreed to label them "grey houses" and sought social intelligence on and local verification of such houses.



Engagement Session held with influencers and elected members of local Governement, UC Yaro © UNICEF Pakistan/2022



Sensitization session held for female influencers (Mubariza), UC Khanozai © UNICEF Pakistan/2022

The grey houses phenomenon

Grey houses are houses where children under 5 are assumed to have been missed from the polio vaccination target group for multiple reasons. In most cases a house where a child is consistently recorded as either not available or a refusal, the child, in fact, is likely to be present in the house for each round. The following evidence-based reasons for children being missed informed the grey house identification and engagement strategy:

- **Hiding**: Parents hesitant to vaccinate a child may hide the child(ren) from the teams on the day of their visit. This phenomenon is seen especially in compound houses, where identifying additional children is difficult in the presence of high numbers of registered children.
- **Golden child phenomenon** (to be the prize descendant): Where a male child is given more importance and hence is hidden from the vaccination teams due to misconceptions.
- **Cultural practices** (Pashtun communities): Where newborn children are not brought out in public (fear of evil eye) and aren't given any medicine/vaccinations for their first 40 days.
- **Poor record keeping:** Whether a household has been vaccinated is unclear, based on the vaccination status in the registration book/tally sheet/chalking as not available or refusal.
- Consistently missed children: When parents fail to mention a child repeatedly in campaigns in multi-dwelling houses.

Table 2: Indicators and achievement of grey house engagement

Indicators	Achievement
# of houses identified as grey houses	1,718
# of houses accessed	1,710
# of new children registered	1,419

Communication interventions

Grey houses are a multi-layered problem where the number of missed children and possible reasons for refusal are unknown. Accessing and mapping these houses is the starting point. The communication team worked with front-line polio vaccinators to identify grey houses through micro-plans and tally sheets. In total, 1,718 grey houses where children were thought to be hidden were listed in January 2021. Most were compound households where multi-dwelling family units reside. A comprehensive communication strategy to approach these households and engage with caregivers began in January 2021.

Grey House Engagement Strategy

Since no reliable data was available about grey houses in terms of the size of the target population and possible reasons for missing those children, accessing the houses and identifying the target population was the most important step. This would lead to the next step of engagement and vaccination. The following strategy was developed to ensure effective engagement:



The strategy is multi-layered and engages different types of influencers to approach households. These influencers are trained to answer a full range of questions about vaccination. The plan was to engage with family elders, male household members and women over a given timeframe to influence the thinking and decisions of all family members.

Repeated engagement was planned in expectation of resistance from family members. The activity was led by COMNet (Communication Network) comprised of frontline communication workers. It consists of communication staff at district, town and Union Council level along with social mobilizers who work at area level. These frontline communication workers are employed through a third party by UNICEF.

- Mubariza strategy (female influencers from the area) alongside female staff approached the female caregivers.
- The grey house owners were approached through Masjid Imam and religious support people.
- Government employees' households were approached through their respective government department heads.
- Individual meetings through social mobilizers and influencers were conducted to identify and register children. Community engagement sessions were also organized to identify and register hidden children.
- Various video testimonials supported and reinforced caregivers' positive perceptions of the importance of vaccination.
- **District administrations** were involved in engagement with families with persistent negative views on vaccination, through calls and individual meetings with deputy commissioners.

Intervention outcomes

By systematically implementing the above-mentioned activities, COMNet was able to access 99 per cent of the grey households identified and vaccinate 85 per cent of the unregistered children found. Since August 2021, there has been a 77 per cent drop in children recorded as missed and a 56 per cent decline in still missed children when compared with the July 2022 subnational immunization drive.

Figure 2: Number of missed children declined in Pishin thanks to the Grey House

22617 22527 25000 80% 19620 19184 70% 20000 60% 15000 50% 40% 10000 5887 6367 30% 3844 4447 3629 3308 3474 20% 5000 10% 0% SNID Aug 21 NID SEP 21 NID DEC 21 SNID Jan 22 SNID Mar 22 NID May 22 SNID June Rec MC ____Still MC _____ % SMC /Target

Key findings

The Grey House Engagement Strategy is an effective intervention that has enabled the programme to identify hidden children. It has also reinforced the importance of needs-based planning through communication interventions. The key findings of the intervention are:

- 1. Parents are willing to engage through appropriate influencers
- 2. Cultural values and context are strong drivers of decision-making; to achieve programmatic goals, every strategy must be designed with local cultures in mind
- 3. Consistent engagement with all caregivers in families is important



CE meeting held with Nomadic settlement, UC Tora Shah- Picture Courtesy Syed Kaleem Agha © UNICEF Pakistan/2022/Syed Kaleem Agha



Visit of Saranan (Afghan) Refugee camp, where 22 hidden children are identified, registered and vaccinated
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Female ALSM negotiating with females of suspected house hold (compound) in UC Balozai
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Female ALSM meeting with head of grey house, UC Khanozai 1 © UNICEF Pakistan/2022

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