

IMPROVING MMR-2 IMMUNISATION RATE IN KLINIK KESIHATAN JALAN OYA



Kementerian Kesihatan Malaysia

PP-34

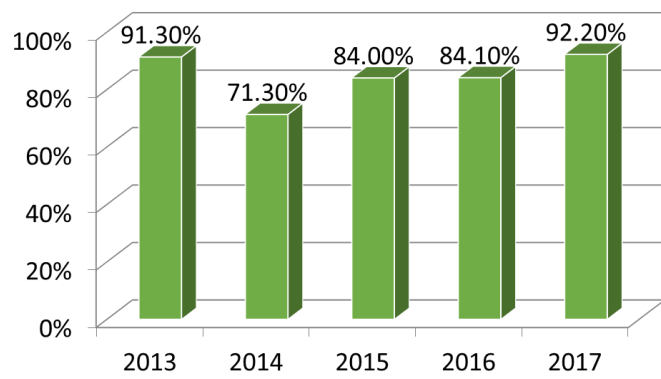
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Selection of Opportunities for Improvement

- The MMR-2 Immunisation rate achieved based on the clinic registry was always below the MOH standard of 95%.
- Low immunisation rate poses public health danger as it leaves children and community vulnerable to vaccine-preventable diseases and outbreaks

Graph 1: MMR2 Immunisation rate KKJO 2013 – 2017



Key Measures for Improvement

MMR-2 immunisation rate :-

Number of infants who received 2nd dose of MMR vaccine at 12 moths

Total number of children aged 12-23 months registered in clinic

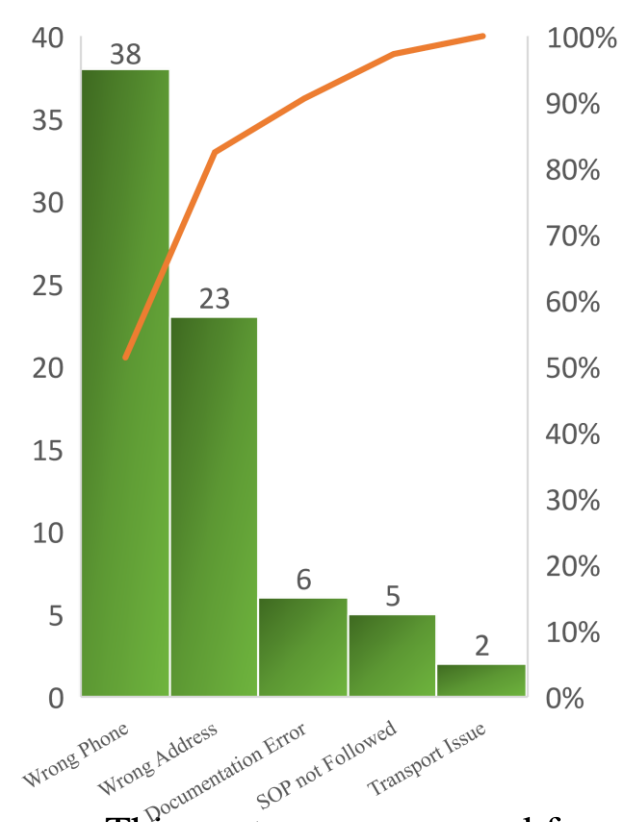
× 100%

The standard of this study is to achieve MMR-2 immunisation rate of more than 95%.

Analysis and Interpretation

Pre remedial MMR-2 immunisation rate was 84.1% (2016) and 92.2% (2017). Parental factors, delay in defaulter tracing and lack of health promotion are among the contributing factors identified. Out of 100 parents, 82% showed good knowledge and 65% have good attitude and practice of vaccination. Most of the defaulters face transportation problem (60%), while 25% cited time constraint and 15% forgot appointment. Only 60% of defaulters were successfully contacted and 40% of home visits were achieved within 3 days.

Graph 2 : Reason for delay in defaulter tracing



Process of Gathering Information

Graph 3: Cause Effect Analysis

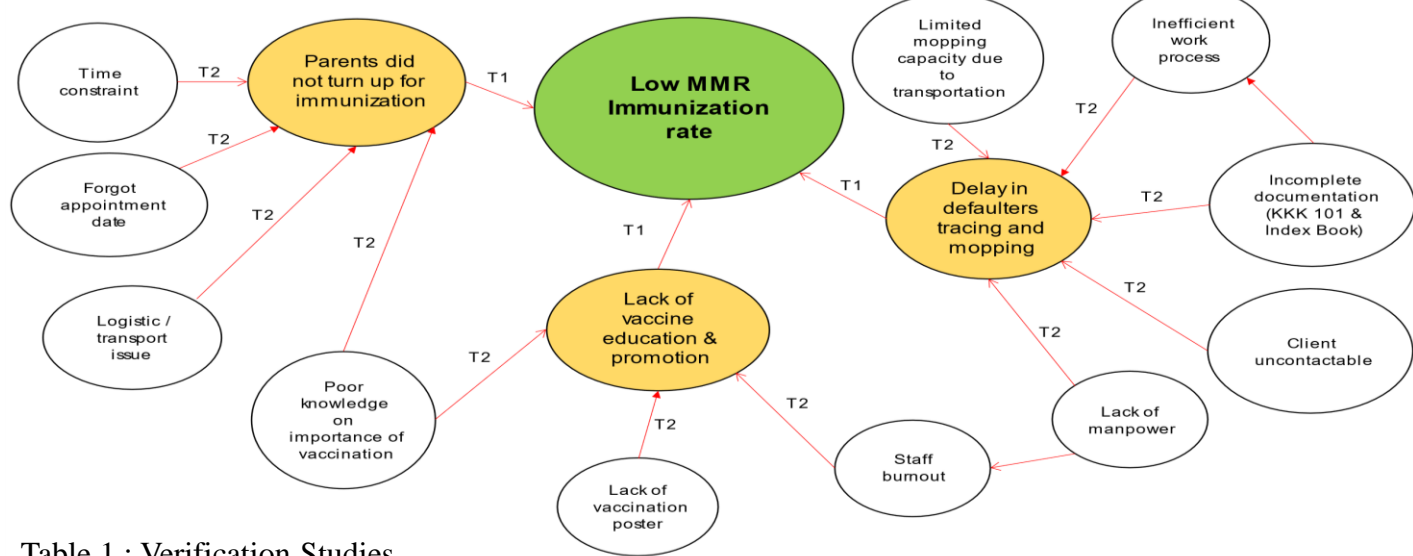


Table 1 : Verification Studies

No.	Title	Study Design	Sampling period	Sampling size	Sampling method	Variable
1.	Verification of MMR-2 immunisation rate	Retrospective	January 2016 to December 2017	All infants recorded in registry	Auditing KKK 101	Defaulter of immunisation rate
2.	Study on work process and documentation in contact tracing	Retrospective	January 2016 to December 2017	All infants recorded in registry	Auditing KKK 101	Timeliness of defaulter tracing & mopping
3.	Verification of issues faced by parents/ guardians	Descriptive	February to June 2018	All patients who missed scheduled appointment	Interview	Reason for defaulting vaccination appointment (time constraint, transportation issues or forgot appointment date).
4.	KAP study for parents/ guardians on importance of immunisation	Descriptive	March to April 2018	100 persons	Questionnaire	Knowledge, attitude and practice of parent/ guardians on immunisation
5.	Health promotion on vaccination in MCH KKJO	Descriptive	April 2018	11 posters	By observation	Availability of promotional material

Strategy of change / Innovation

Factor analysis and verification study shows that the main reason for low immunisation rate in KK Jalan Oya are due to delay in defaulter tracing caused by incomplete documentation of patients' particulars. Moreover, majority of the defaulters are those without transport and staying in suburban areas. Therefore, enhancing contact tracing and home visits are our key strategy for our purposed target to increase MMR2 vaccination rate.

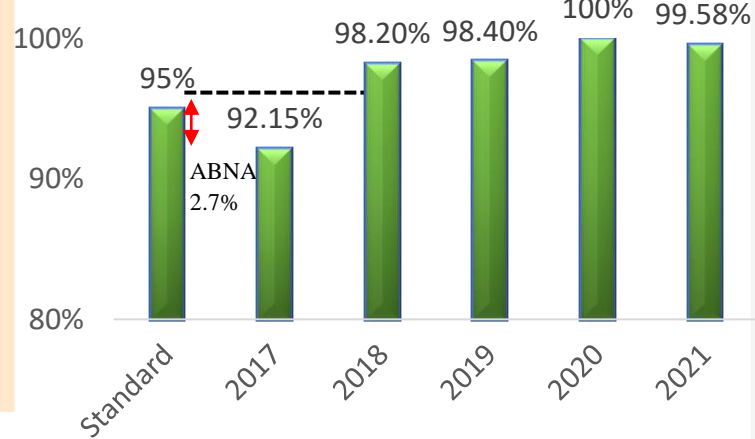
Table 2: Remedial Measures

No.	Problems identified	Remedial Measures
1.	Delay and failure in tracing defaulters	“Borang QAP” is used in addition to standard data input in KKK101 to document complete patient information and progress of defaulter tracing
2.	Incomplete documentation (Wrong phone number/ address, documentation error)	Notification slip is left at client's home as a safety net for the patients that are missed during home visit.

Table 3: Model of Good Care For Immunisation Defaulter

S t e p	Process Care	Of	Criteria	Stand	Pre-remedial	Post-remedial (2018)	Post-remedial (2021)
1	Record Checking (KKK101 & Index card)		All records are updated regularly	100%	100%	100%	100%
2	Contacting Parents/ Guardians		In 3 days time	100%	60%	84.8%	100%
3	Giving new appointment		Parents informed regarding new appointment date	100%	100%	100%	100%
4	Immunisation given		Immunisation given according to schedule	100%	100%	100%	100%
5	Home visit		In 3 days time	100%	40%	80%	100%

Graph 4: MMR2 Immunisation rate KKJO 2017 – 2021



Effects of Change

In 2018, 84.8% of defaulters were successfully contacted and 80% of home visits were completed within 3 days. Number of untraceable defaulters reduced from 48 (2017) to 10 (2018) and total home visits reduced from 496 to 234. The rate of MMR-2 immunisation increased from 92.2% (2017) to 98.2% (2018).

The Next Step

Defaulter tracing using “Borang QAP” are in the process of being adopted for infants registered in all health clinics in Sibu division. Local community leaders such as Tuai rumah and wakil ketua kampung need to be engaged in vaccination programme in order to reach out to mobile and remote populations in Sibu division.