

Proceedings of the International Conference of Community Health and Medical Sciences, Vol. ,1 Issue. 1, 2023, pp. 175-181

Copyright © authors ISSN 3021-677X online

DOI: https://doi.org/10.17501/3021677X.2023.1121

# IMPORTANT FACTORS IN ACHIEVING BASIC IMMUNIZATION COVERAGE: IN-DEPTH INTERVIEW OF INFANT AND CHILD'S FAMILIES

Aras DU<sup>1\*</sup>, Faradiana S<sup>2</sup>, Asmasary AA<sup>2</sup>, Ibrahim J<sup>3</sup>, Sudirman DA<sup>3</sup>, Fananie YA<sup>3</sup> and Ashari I<sup>3</sup>

<sup>1</sup>Department Of Pharmacology, Faculty of Medicine & Health Sciences, University of Muhammadiyah Makassar, Indonesia

<sup>2</sup>Department of Pediatric, , Faculty of Medicine & Health Sciences, University of Muhammadiyah Makassar, Indonesia

<sup>3</sup>Department of Public Health, , Faculty of Medicine & Health Sciences, University of Muhammadiyah Makassar, Indonesia

\*daraugi@med.unismuh.ac.id

**Abstract:** "Protect yourself, your family, and society with complete immunization" is the national motto of World Immunization Week 2023. This subject is meant to serve as a reminder and inspiration for everyone in society to get immunized in order to protect themselves, their families, as well as the local community. Immunization coverage increased once more to 94.9% in 2022 after falling to 84% during the COVID-19 epidemic. Although this is excellent, more work must be done to achieve the WHO goals of 99% (Ministry of Health 2023). As a result, a faster immunization program is required, especially in regions with low coverage levels. This study intends to examine the factors that affect immunization coverage, specifically in the Toddopuli Public Health Facility's (Pusat Kesehatan Masyarakat - Puskesmas) region, Makassar. Descriptive analytic methodology is applied by conducting in-depth interviews with informants. Choosing informants with the purposive sampling technique. The important informants are the immunization coordinators at the puskesmas, whereas the major informants are five families with infants or young children who provide vaccinations. According to the findings, the success of the immunization program is significantly influenced by family involvement and the work of immunization officers. Both of these variables are more significant than other factors including parental education level, income, and the distance from the home to immunization services. In order to expand immunization coverage in the upcoming years, it is desired that these two items can be further enhanced in the future.

Keywords: basic immunization, immunization coverage, in-depth interview

# Introduction

From the first vaccine created to protect humans against smallpox to COVID-19 vaccines, vaccines have helped keep people healthy for more than two centuries. Since then, communities and families have relied on vaccinations to safeguard their loved ones. One of the most crucial medical procedures

\*Corresponding Author's Email: daraugi@med.unismuh.ac.id



and one of the most effective public health procedures is immunization. It has aided in preventing millions of us from contracting some of the deadliest and most destructive diseases to ever strike mankind (UNICEF, 2018; WHO, 2021, 2023b).

In fact, it has been so effective that numerous once-feared diseases are now extinct or easily treatable. However, Yet, in the recent past many unheard-of diseases have also emerged. This increases the importance of vaccination. There are 5 reasons why every child should get immunizations. First off, vaccinations save lives. Children have been shielded from a wide range of harmful and fatal diseases thanks to modern immunizations and oral drops. Second, it protects the following generation. Third, vaccination can help families save money by lowering treatment-related costs. Fourth, preventing illness-related impairments in children. Fifth, prevent your loved ones from contagious diseases (Moini, 2022).

Health systems are under strain in 2020 as a result of the Covid-19 epidemic and related disruptions, which has led to the biggest number of unvaccinated children (22.7 million) since 2008 and 3.7 million more than in 2019. Furthermore, the number of children missing out on any vaccination to "zero-dose children" rose from 13.6 to 17.1 million. The World Health Organization (WHO), UNICEF, additional foundations, Immunization Agenda 2030, and numerous other international and national health partners are uniting today to call for "The Big Catch-up," a focused global initiative to increase childhood immunization coverage in response to decreases caused by the COVID-19 pandemic (UNICEF, 2021; WHO, 2023a)

Following the COVID-19 pandemic, complete regular immunization coverage is gradually rising again globally. From 94.9 percent in 2022 compared to 84% in 2019. Currently, 94.9% of Indonesian youngsters have received their vaccinations. This number falls short of the WHO aim of 99%, nevertheless. Around 240,000 Indonesian children, or 5% of all children, still lack the full set of basic immunizations. This indicates that they continue to have a high risk of catching illnesses that can be warded off with vaccinations (Kemenkes RI, 2023).

The existence of gap in coverage numbers becomes the basis of this study. If this difference may be increased by examining the contributing aspects, the number may rise in following situations. The study was conducted to determine immunization coverage at one of the Public Health Center or Pusat Kesehatan Masyarakat (Puskesmas) in Makassar City.

## **Methods**

This study is descriptive analytical, which means that it generates descriptive information about people and observed behavior in the form of written or spoken words. The general technique applied is in-depth interviews, which require face-to-face interaction between the interviewer and the interviewee to gather information for research goals. Interview guides may or may not be used, and interviewers and informants may be involved in social activities to uncover issues more honestly. The researcher is the research instrument, therefore in order for him to be effective, he must have a broad theoretical understanding and depth of insight. This will enable him to formulate questions, conduct analyses, take photographs, and build models that will make the item under study more understandable and significant. Data collection in qualitative research is influenced by the realities discovered during field research rather than theory. Facts on the parameters influencing immunization

coverage at the puskesmas collected by associated researchers with individual memory and afterwards processed into a collective memory are examined in this study. Purposive sampling method is more frequently utilized in sampling, which means the data sources collected with specific concerns.

The interview used is semistructured interview. It is a mix of interviews that are both structured and unstructured. Although the interviewer has a rough idea of what they want to ask, the questions do not necessarily need to be asked in the same order or with the same sentence structure (Mashuri, Sarib, Rasak, & Alhabsyi, 2022).

Although the researchers have conducted interviews before, this one was planned before the interview. In the heat of the moment, it's simpler to unintentionally ask a leading question. In general, spontaneous queries are significantly harder to answer than they would first appear. In order to substantively build the theory, the informants were chosen using theoretical sampling or theory. In this study, the technique of selecting informants with presumptions (A priori sampling) is utilized to identify the characteristics of informants based on the challenges and aims of the research (Heryana, A., & Unggul, 2018). Two types of informants were used in this investigation. The Puskesmas' immunization coordinators are the key sources of information. Five families with infants or young children who have received vaccines serve as the main informants.

Qualitative interviewing demands a specific set of competencies. If the interviewer has good skills, he or she will probably have no trouble planning what to ask, how to ask the interviewee, and simultaneously how to deal with the information provided by the interviewee. To do this, the interviewer will need to understand verbal and nonverbal cues, remember and absorb what has been discussed, keep an eye out for opportunities to probe and follow up, and take notes whenever practical. Drever (2003) recommends planning as opposed to improvisation. This suggests that someone who wants to conduct an interview only needs to utilize a tape recorder, naturally word questions, and a simple timetable. They do not need to rely substantially on interviewing abilities.

## **Results and Discussion**

Families with children or infants aged 30 to 39 make up all of the main informants. Parents, either the mother or the father, have a bachelor's degree. They typically have 1 child or more and earn a combined family income of more than 3 million rupiah, because father and mother each have income.

The informants provided their thoughts on a few elements that facilitate vaccinations for their kids. The interviewer inquires to the main informants "Does the level of education of parents influence their desire to go for their child's immunization?". They claim that it is not that significant because parents can find information on immunizations almost anywhere, particularly on social media, yet this influences their choice regarding their child's immunization.

Several studies oppose these results. According to Vivi (2006) and Izhar et al. (2023) stated the same thing that the education level of the baby's or child's parents did affect immunization status. This immunization status then leads to immunization coverage (Sigita, Simanjuntak, & Rajagukguk, 2023). The same was said by Noh et al. who noted that one of the major factors influencing complete immunization was the educational attainment of parents (Noh et al., 2018). Parents' lack of education may affect their general health literacy, making it more difficult for them to comprehend the

advantages of timely and comprehensive immunization and to have a better understanding of diseases that are preventable by vaccination (Bondy, Thind, Koval, & Speechley, 2009; Morrone, Napolitano, Albano, & Di Giuseppe, 2017; Noh et al., 2018).

The parents stated that education about immunization can be obtained not only through education at school or college, but also from other resources. Even if there is still a lot of inaccurate information about immunizations circulated on social media, there is also a lot of accurate data there as well. Especially material released by the WHO, the government via the Ministry of Health, and others. Further research is necessary to confirm the accuracy of the information provided through radio, television, phones, and the internet. It is also necessary to create the proper television and online programs to disseminate accurate information about immunization and to advance the entire range of basic immunizations (Noh et al., 2018).

All main informants have salary according to Regional Minimum Wage. Yet the parents do not consider the family's finances to be important because immunization is provided for free at the Puskesmas. This is in line with Friede et al.'s findings that it had no impact on achieving higher immunization coverage in a rural Philippine region (Friede, Waternaux, Guyer, De Jesus, & Filipp, 1985). While other studies state otherwise, that there is a significant relationship between parental financial status and completeness of immunization (Sigita et al., 2023). The cost of immunization is simply one aspect of the financial consideration; another is the amount of money spent by families traveling to health facilities for immunizations. Costs (including the expense of the visit to an immunization provider) was the barriers mentioned the most by all respondents (Bondy et al., 2009; Danis, Georgakopoulou, Stavrou, Laggas, & Panagiotopoulos, 2010; Sigita et al., 2023).

The parents claimed that family support had a greater impact than friends or collegues. A mother who received assistance from her family is more likely to give her children all of the recommended basic immunizations. The findings of this study support the theory advanced by Soekidjo Notoatmodjo (2003), which contends that conditions, such as support from other parties like husbands, parents, inlaws, and siblings, are necessary for an attitude to be manifested into a real action (Qomarudin & Husada, 2018; Sari, Sayuti, & Andri, 2022). Compared to other forms of support, such as appreciating, instrumental, and informative support, emotional support is more crucial (Ilhami & Afif, 2020).

Other study that support this study were found by Handinis (2018). The study more focused on family member which is husband. Husband support was a main support for the mothers in providing basic immunization in her baby. It could be a permit for the mothers to immunize their babies. A strong family support could help mothers easily making decisions about the attitude in providing basic immunization in the baby (Sakau, 2018; Setyowati, Rasni, & Dewi, 2013). Fathers play an active role in their families as decision-makers, risk-takers' protectors and sources of motivation for their wives. Family plays a significant role in immunizations since they offer to take the parents to the Puskesmas on immunization day and constantly remind the parents about the immunization schedule.

The Immunization officers have a variety of roles in child's immunization regimen, such as calculating the number of immunization targets, determining immunization targets, calculating vaccine needs (PemKab, 2022). According to parents, the officers have important role to succeeded

the program. They are routinely explained and reinforced by the officers, about the next schedule. According to (Al-Khlaiwi et al., 2022) "health professionals" is a person who is in charge of providing individuals, their families, and communities with health care. In order for the community to increase its awareness, willingness, and capacity to live healthily as an investment in the development of socially and economically productive human capital, health workers also play a significant role in ensuring that the highest quality of health services are provided to the community. Health professionals for guiding the development of future campaigns to enhance immunization rates and strengthen family support for the immunization (Nurdiyan & Susanti, 2023).

What was conveyed by the main informant illustrates the importance of the role of immunization officers. This study supports Puspita Sari's (2022), which found a correlation between immunization rates among health workers (Sari et al., 2022). The officers always describe the adverse effects of the vaccination and how to treat them after administering it. This is consistent with the immunization program's Standar Operating Procedure (SOP) at the puskesmas. The vaccination officer will offer Counseling, Information and Education (IEC) regarding the type of vaccination given, its advantages and disadvantages (Kab, Dinas, Kabupaten, Uptd, & Prosedur, 2023).

The vaccination coordinator at the puskesmas explained that they frequently remind families when the time for immunization has come. Communications that take place over the phone or through WhatsApp messages. Additionally, families consider this as a sort of support in ensuring that their children receive the basic immunizations.

This study uses in-depth interview techniques so that what is obtained is really a picture that is felt by parents. The weakness is due to the limited number of informants involved so that the characteristics are less diverse.

### Conclusion

Family support and the tasks and responsibilities of vaccination officers are two variables that parents believe are crucial for a child's immunization status.

# Acknowledgements

We are extremely appreciative of all the parents and guardians who participated in the study for their time and effort. We also acknowledge the Toddopuli Public Health Center's Head of Public Health Center and immunization officer for their contributions to this study, notably for providing accurate information regarding the government program. Last but not least, we would like to thank Faculty of Medicine and Health Sciences, University of Muhammadiyah Makassar, Indonesia.

### References

Al-Khlaiwi, T., Meo, S. A., Almousa, H. A., Almebki, A. A., Albawardy, M. K., Alshurafa, H. H., ... Alsayyari, M. S. (2022). National COVID-19 Vaccine Program and Parent's Perception to Vaccinate Their Children: A Cross-Sectional Study. Vaccines, 10(2). https://doi.org/10.3390/vaccines10020168

- Bondy, J. N., Thind, A., Koval, J. J., & Speechley, K. N. (2009). Identifying the determinants of childhood immunization in the Philippines. Vaccine, 27(1), 169–175. https://doi.org/10.1016/j.vaccine.2008.08.042
- Danis, K., Georgakopoulou, T., Stavrou, T., Laggas, D., & Panagiotopoulos, T. (2010). Socioeconomic factors play a more important role in childhood vaccination coverage than parental perceptions: a cross-sectional study in Greece. Vaccine, 28(7), 1861–1869. https://doi.org/10.1016/j.vaccine.2009.11.078
- Friede, A. M., Waternaux, C., Guyer, B., De Jesus, A., & Filipp, L. C. (1985). An epidemiological assessment of immunization programme participation in the Philippines. International Journal of Epidemiology, 14(1), 135–142. https://doi.org/10.1093/ije/14.1.135
- Heryana, A., & Unggul, U. E. (2018). Informan Dan Pemilihan Informan Dalam Penelitian Kualitatif. Sistem Informasi Akuntansi: Esensi Dan Aplikasi, (December), 14. Retrieved from eprints.polsri.ac.id
- Ilhami, I., & Afif, M. (2020). The Influence of Family Support on Providing Complete Primary Immunizations. Jurnal PROMKES, 8(2), 198. https://doi.org/10.20473/jpk.v8.i2.2020.198-205
- Kab, P., Dinas, B., Kabupaten, K., Uptd, B., & Prosedur, M. (2023). Pelayanan Imunisasi.
- Kemenkes RI. (2023). Pada Momentum PID 2023, Cakupan Imunisasi Rutin Lengkap Capai 94,9 Persen. Dirjen P2pP. Retrieved from http://p2p.kemkes.go.id/pada-momentum-pid-2023-cakupan-imunisasi-rutin-lengkap-capai-949-persen/
- Mashuri, S., Sarib, M., Rasak, A., & Alhabsyi, F. (2022). Semi-structured Interview: A Methodological Reflection on the Development of a Qualitative Research Instrument in Educational Studies Ruslin. Journal of Research and Method in Education, 12(1), 22–29. https://doi.org/10.9790/7388-1201052229
- Moini, M. (2022). Top five reasons why immunization is important | UNICEF India. Retrieved from https://www.unicef.org/india/stories/top-five-reasons-why-immunization-important
- Morrone, T., Napolitano, F., Albano, L., & Di Giuseppe, G. (2017). Meningococcal serogroup B vaccine: Knowledge and acceptability among parents in Italy. Human Vaccines and Immunotherapeutics, 13(8), 1921–1927. https://doi.org/10.1080/21645515.2017.1313940
- Noh, J. W., Kim, Y. M., Akram, N., Yoo, K. B., Park, J., Cheon, J., ... Stekelenburg, J. (2018). Factors affecting complete and timely childhood immunization coverage in Sindh, Pakistan; A secondary analysis of crosssectional survey data. PLoS ONE, 13(10), 1–15. https://doi.org/10.1371/journal.pone.0206766
- Nurdiyan, A., & Susanti, E. (2023). Family Support and The Role of Health Professionals on Parent's Perspectives of Covid-19 Vaccination in Child. Women, Midwives and Midwifery, 3(1), 24–34. https://doi.org/10.36749/wmm.3.1.24-34.2023
- PemKab. (2022). Tanggung jawab Pelayanan Puskesmas.
- Qomarudin, H. S. R. M. B., & Husada, D. (2018). the Effect of Family Support and Immunization. 5(6), 253–261. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6008886/
- Sakau, N. (2018). THE CORRELATION BETWEEN FATHER'S SUPPORT AND IMMUNIZATION STATUS CHILDREN UNDER FIVE VILLAGE, IN PUSKESMAS OESAO KABUPATEN KUPANG. CHMK MIDWIFERY SCIENTIFIC JOURNAL, 2(April).

- Sari, P., Sayuti, S., & Andri, A. (2022). Faktor yang Berhubungan dengan Pemberian Imunisasi Dasar pada Bayi di Wilayah Kerja Puskesmas PAAL X Kota Jambi. Jurnal Kesmas Jambi, 6(1), 42–49. https://doi.org/10.22437/jkmj.v6i1.16514
- Setyowati, N. P., Rasni, H., & Dewi, E. I. (2013). Hubungan peran ayah di keluarga dengan keikutsertaan balita usia 2-24 bulan dalam pelaksanaan imunisasi dpt di desa pace kecamatan silo kabupaten Jember. Artikel Ilmiah Hasil Penelitian Mahasiswa Universitas Jember. Retrieved from https://repository.unej.ac.id/bitstream/handle/123456789/60661/Nanik Putri Setyowati.pdf?sequence=1
- Sigita, I. A., Simanjuntak, M. B. U., & Rajagukguk, M. (2023). Hubungan Antara Tingkat Pengetahuan, Usia, Pendidikan, Pekerjaan, Penghasilan Orang Tua Terhadap Kelengkapan Imunisasi Dasar Pada Bayi. Ibnu Sina: Jurnal Kedokteran Dan Kesehatan-Fakultas Kedokteran Universitas Islam Sumatera Utara, 22(2), 132–139.
- UNICEF. (2018). World Immunization Week 2018. Unicef, p. 2022. Retrieved from https://www.unicef.org/world-immunization-week-2018
- UNICEF. (2021). Impact of COVID-19 on Routine Immunization services in low and middle income countries. Vaccine Industry Consultation, 1(1), 1–10. Retrieved from https://www.bbc.com/mundo/noticias-america-latina-54718771
- WHO. (2021). Immunization coverage. Fact Sheet, p. 1. Retrieved from https://www.who.int/news-room/fact-sheets/detail/immunization-coverage
- WHO. (2023a). Global partners announce a new effort "The Big Catch-up" to vaccinate millions of children and restore immunization progress lost during the pandemic. Joint News Release. Retrieved from https://www.who.int/news/item/24-04-2023-global-partners-announce-a-new-effort-the-big-catch-up-to-vaccinate-millions-of-children-and-restore-immunization-progress-lost-during-the-pandemic
- WHO. (2023b). World Immunization Week 2023 24 to 30 April. The Big Catch-Up. World Health Organisation. Retrieved from https://www.who.int/campaigns/world-immunization-week/2023