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Factors Related to Completeness of Basic Immunization for Children at Tamalanrea Makassar Health Center

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Abstract

Completeness of basic immunization for children at the Tamalanrea Makassar Community Health Center. This research is non-experimental research with a descriptive analytical approach using a cross-sectional design, where factors related to providing basic immunization to children are observed at one time (point time approach), meaning that each research subject/sample is observed only once. The results of this research can be seen from 2 analyses, namely univariate and bivariate analysis where more children have complete immunization status. The results of this study show that maternal activity is closely related to the completeness of basic immunization in children.

Keywords: Immunization Complete, Basic Immunization

Introduction

The vaccine was first introduced by Edward Jenner, a doctor from England. In 1796, he studied a case of smallpox in a journeyman. Jenner decided to immunize the workers with a mild form of cowpox immunization. Then Jenner took some fluid from a smallpox sufferer's wound and deliberately rubbed it onto the surface of an 8-year-old child's arm. Forty-eight days later he named his discovery "vaccine", which means cow in Latin (Atikah, Citra Setyo, 2010).

The next development in immunization was the development of a rabies vaccine by Louis Pasteur. At the end of the 19th century, a French chemist developed chemical techniques to isolate viruses and weaken them.

Immunization is an effort to prevent disease, especially infectious diseases aimed at humans as hosts, (Noor, 2006). The immunization program aims to reduce morbidity and mortality from diseases that can be prevented by immunization (Notoatmodjo, 2003).

Various diseases today can be prevented through immunization efforts, namely Diphtheria, Pertussis and Tetanus, Tuberculosis, Measles and Poliomyelitis and Hepatitis B. Immunization against these diseases is basic immunization (Noor, 2006). Basic immunization is part of the health development program as well as the most important part of the public health activity program (Noor, 2006).

Until now, immunization is still a mainstay in controlling the spread of various infectious diseases, especially those that mostly affect children. According to immunization experts, at least 10 million lives could be saved by immunization in 2006. More than 10 million children under five die each year and an estimated 2.5 million die from diseases that can be prevented by vaccines (Indonesian Ministry of Health, 2006).

The history of immunization in Indonesia began in 1956 with smallpox immunization. In 1972, Indonesia succeeded in eradicating smallpox. Next, vaccination between smallpox and BCG began to be developed to treat tuberculosis. The implementation of this vaccination was established nationally in 1973. In April 1974, Indonesia was officially declared

smallpox-free by WHO. In 1972, a prevention study was also carried out on Tetanus Neonatorum by giving Tetanus Toxoid (TT) injections to adult women in Central Java and East Java. In 1976, DPT immunization began to be developed in several sub-districts, preceded by Bangka Island in South Sumatra. In 1977, the World Health Organization (WHO) began implementing an immunization program as a global effort with the Expanded Program on Immunization (EPI) which was resolved by the World Health Assembly (WHA). In 1981 polio immunization began, in 1982 measles immunization, in 1997 hepatitis immunization began (Atikah, Citra Setyo, 2010).

According to the Ministry of Health, Siti Fadilah Supari, in her speech at the national event on child immunization, the health development program in Indonesia translated into the National Medium Term Development Plan (RPJMN) 2005-2009 has a vision of an independent society for healthy living, where one of the targets is to reduce the death rate in babies due to VPD in 2007 included 141 cases of neonatal tetanus and 74 deaths, measles, the frequency of Extraordinary Events (KLB) was 114 of 2408 cases, 183 cases of diptheria and 11 deaths, and polio was 1 in 4 cases. This is in line with the world agreement in the Millennium Development Goals (MDG's), where to achieve a reduction in infant mortality rates, it is characterized by increasing immunization coverage for BCG, DPT, Polio, Measles, Hepatitis B must reach 80% at the national, provincial and regional levels. districts and even in every village (Ministry of Health of the Republic of Indonesia, 2009).

Important things related to the completeness of immunization in children are the child's health status at the time of immunization, past experience with immunization, parents' understanding of immunization and contraindications for immunization if any (Supartini, 2004).

This research formulates the problem, namely what factors are related to the completeness of basic immunization for children at the Tamalanrea Makassar Community Health Center. The aim is to determine the factors related to the completeness of basic immunization for children at the Tamalanrea Makassar Community Health Center.

Methods

This research is non-experimental research with a descriptive analytical approach using a cross-sectional design, where factors related to providing basic immunization to children are observed at one time (point time approach), meaning that each research subject/sample is observed only once. This research will be carried out at the Tamalanrea Makassar Community Health Center. The sample used in this study was divided into 2, namely inclusion with the criteria (1) Mothers who have children aged 1-3 years at the Tamalanrea Makassar Community Health Center; (2) Children aged 1 – 3 years with good health status; (3) The child's parents are willing to be researched; (4) Respondents are able to read and communicate well; (5) Not in a critical or life threatening condition, as well as exclusion based on the criteria (1) Existence of ethical obstacles; (2) Refuse to be a respondent; (3) There are circumstances that make it impossible to carry out research; (4) There is a condition or disease that interferes with the measurement and interpretation of research results.

Results and Discussion

Univariate analysis

This analysis was carried out on each research variable where there was demographic data on respondents (mother's education and employment level), independent variables (mother's

knowledge, attitudes and activeness in posyandu activities), and dependent variables (completeness of basic immunization for children).

Completeness of Basic Immunization for Children

Table 1. Frequency Distribution of Respondents Based on Completeness of Basic Immunization for Children at Tamalanrea Makassar Community Health Center

Immunization Equipment	Frequency	Percent
Incomplete	10	13,2
Complete	66	86,8
Amount	76	100,0

Source: Primary Data, 2013

Based on table 1, it shows that children with incomplete immunization status = 10 people (13.2%), and complete immunization = 66 people (86.8%).

Bivariate Analysis

Bivariate analysis was carried out on two variables that were thought to be related or correlated. The results of the bivariate analysis test can be seen as follows:

The Relationship between Mother's Knowledge About Immunization and Completeness of Basic Immunization in Children

Table 2. Relationship between Mother's Knowledge About Immunization and Completeness of Basic Immunization for Children at the Tamalanrea Makassar Community Health Center for the Period January 2013-April 2013.

Mother's Knowledge	Immunization Equipment				Total		Statistical Test or p-Value
	Incomplete		Complete				
	F	%	f	%	f	%	
Not enough	7	41,2	10	58,8	17	100,0	p = 0,001 (α = 0,05)
Enough	3	5,1	56	94,9	59	100,0	
Amount	10	13,2	66	86,8	76	100,0	

Source: Primary Data, 2013

Based on table 2, it shows that the level of knowledge of mothers in the poor category is 17 people (100.0%), of which 7 people (41.2%) have incomplete immunization status and 10 people (58.8%) have complete immunization status. Meanwhile, the level of maternal knowledge in the sufficient category was 59 people (100.0%), of which 3 people (5.1%) had incomplete immunization status and 56 people (94.9%) had complete immunization status.

After carrying out statistical tests using the Fisher's Exact Test, the value of $p = 0.001 < 0.05$ was obtained, which means that there is a relationship between mother's knowledge about immunization and the completeness of basic immunization in children.

The Relationship between Mother's Attitude and Completeness of Basic Immunization in Children

Table 3. The Relationship between Mother's Attitude and Completeness of Basic Immunization in Children At the Tamalanrea Makassar Community Health Center

Mother's	Immunization Equipment	Total	Statistical

Attitude	Incomplete		Complete				Test orp Value
	F	%	f	%	f	%	
Negative	5	83,3	1	16,7	6	100,0	p = 0,000 (α = 0,05)
Positive	5	7,1	65	92,9	70	100,0	
Amount	10	13,2	66	86,8	76	100,0	

Source: Primary Data, 2013

Based on table 3, it shows that the attitude of mothers in the negative category was 6 people (100.0%), of which 5 people (83.3%) had incomplete immunization status and 1 person (16.7%) had complete immunization status. Meanwhile, the attitude of mothers in the positive category was 70 people (100.0%), of which 5 people (7.1%) had incomplete immunization status and 65 people (92.9%) had complete immunization status.

After carrying out a statistical test using the Fisher's Exact Test, the value of p = 0.000 < 0.05 was obtained, which means that there is a relationship between the mother's attitude and the completeness of basic immunization in children.

The Relationship between Mother's Activeness in Posyandu Activities and Completeness of Basic Immunization in Children

Table 4. The Relationship between Mother's Activeness in Posyandu Activities and Completeness of Basic Immunization in Children at the Tamalanrea Makassar Community Health Center

Mother's Activeness	Immunization Equipment				Total		Statistical Test or pValue
	Incomplete		Complete				
	F	%	f	%	f	%	
Not active	6	54,5	5	45,5	11	100,0	p = 0,000 (α = 0,05)
Active	4	6,2	61	93,8	65	100,0	
Amount	10	13,2	66	86,8	76	100,0	

Source: Primary Data, 2013

Based on table 4, it shows that the activeness of mothers in posyandu activities in the inactive category was 11 people (100.0%), of which 6 people (54.5%) had incomplete immunization status and 5 people (45.5%) others. with complete immunization status. Meanwhile, mothers' activeness in posyandu activities in the active category was 65 people (100.0%), of which 4 people (6.2%) had incomplete immunization status and 61 people (93.8%) had complete immunization status.

After carrying out a statistical test using the Fisher's Exact Test, the value of p = 0.000 < 0.05 was obtained, which means that there is a relationship between the mother's activeness in posyandu activities and the completeness of basic immunization in children.

Based on the results of data processing which is directed in accordance with the aim of this research, namely to determine the factors related to the completeness of basic immunization in children, it can be seen as follows:

Respondent Demographic Data

Based on demographic data, it shows that the majority of respondents had a high school education with a total of 37 people (48.7%), this is possible because in general women marry faster than men which results in them not being able to continue their education to college because of their responsibilities as housewives who have to serve their families every

day. Meanwhile, in the occupational group, the majority of respondents work as housewives with a total of 36 people (47.4%), this is possible because of the enormous responsibility and role of a mother in the family, especially regarding child development, so mothers prefer not to work so that you can focus more on carrying out your duties as a housewife.

Univariate Analysis

Based on the results of research regarding the level of knowledge of mothers, it shows that the majority of respondents have a sufficient level of knowledge, namely 59 people (77.6%), this greatly influences the completeness of basic immunization for children, where mothers who have sufficient knowledge already know the purpose and the benefits of immunization, so that mothers will always pay attention to the completeness of basic immunization for their children. Theoretically, it is explained that knowledge or cognitive is a very important domain in shaping a person's actions (overt behavior). From experience and research, it has been proven that behavior that is based on knowledge will be more lasting than behavior that is not based on knowledge (Notoatmodjo, 2003).

Based on the mother's attitude, it shows that the majority of mothers have a positive attitude, namely 70 people (92.1%), a mother's positive attitude is very important for the status of complete immunization in children because a positive attitude and sufficient knowledge will provide more motivation to the child. Mothers should always take their children to the community health center/posyandu for immunization so that the child can receive complete immunization. Theoretically, it is explained that attitude is an individual's mental predisposition to evaluate a certain thing in some degree of favor or dislike. In general, every individual has an attitude that is focused on objects, people or institutions and even events. Thus, attitudes also indicate mental categories, that mental orientation towards concepts in general can refer to certain values (Liliweri, 2007).

Meanwhile, based on mothers' activeness in posyandu activities, it shows that the majority of respondents were active with a total of 65 people (85.5%), the more active the mother was in participating in every posyandu activity, the more active the mother would be in bringing her children to be immunized, because by participating Posyandu activities such as health education will improve mothers' knowledge and attitudes, especially regarding the goals and benefits of immunization. Theoretically, it is explained that the mother's activeness in posyandu activities is an example of practice or action in the behavioral domain. To turn an attitude into a real action, supporting factors or enabling conditions are needed, including facilities. A mother's positive attitude towards immunization must be confirmed by her husband, and there are immunization facilities that are easily accessible, so that the mother can immunize her child. Apart from the facility factor, support is also needed from other parties, for example from husband or wife, parents or in-laws and others, (Notoatmodjo, 2003)

Based on the results of observations regarding the completeness of immunization, it shows that the majority of children have complete immunization status with a total of 66 people (86.8%), the completeness of basic immunization in children is greatly influenced by the mother's knowledge, mother's attitude and mother's activity in every posyandu activity. Posyandu activities will provide mothers with sufficient experience and knowledge regarding the importance of basic immunization for children, so that mothers will always have a positive.

Bivariate Analysis

The Relationship between Mother's Knowledge About Immunization and Completeness of Basic Immunization in Children

Based on statistical tests using the Fisher's Exact Test, the relationship between maternal knowledge and completeness of basic immunization in children obtained a value of $p = 0.001$ where the value of $\alpha < 0.05$ so the hypothesis was accepted, which means that there is a relationship between maternal knowledge and completeness of basic immunization in children. This theoretically explains that good knowledge can influence behavior change. Knowledge is a necessary but generally not sufficient factor in changing individual or group behavior. Knowledge can be defined as a collection of information that can be understood and obtained from the learning process throughout life and can be used at any time as a tool for self-adjustment. Knowledge is an introduction to reality, truth, principles and rules of an object and is the result of information stimulation for behavior change. Maternal knowledge influences the mother's beliefs and attitudes in her compliance with immunization.

The results of this study are in accordance with the results of research conducted by Hajriani (2006) which stated that the better/sufficient a mother's level of knowledge, the more complete the immunizations provided by the child. Where it was found that mothers with sufficient/good knowledge had a 11.25% greater chance than mothers with insufficient knowledge of obtaining complete immunization status for their children.

Knowledge is the result of knowing and occurs after people sense (sight, hearing, touch, taste and smell) of a particular object. Knowledge or cognitive is a very important domain in shaping a person's actions (overt behavior). From experience and research, it has been proven that behavior that is based on knowledge will be more lasting than behavior that is not based on knowledge (Notoatmodjo, 2003).

High knowledge will have an effect on accepting new things and being able to adapt to new things. Knowledge is also influenced by experience factors related to the individual's age (Tarwoto, 2003).

The Relationship between Mother's Attitude and Completeness of Basic Immunization in Children

Based on statistical tests using the Fisher's Exact Test, the relationship between the mother's attitude and the completeness of basic immunization in children obtained a value of $p = 0.000$ where the α value <0.05 so the hypothesis was accepted, which means that there is a relationship between the mother's attitude and the completeness of basic immunization in children. It is theoretically explained that behavior can be changed by changing knowledge and attitudes. Attitude is a form of evaluation or feeling reaction. A person's attitude towards an object is a feeling of support or a feeling of not supporting the object. A positive maternal attitude can be a predisposing or triggering factor that causes mothers to take their babies for immunization. Attitude formation does not occur by itself, but attitude formation always takes place in interaction and is related to certain objects. Interactions within groups and outside groups can change attitudes or form new attitudes.

The results of this study are in accordance with the results of research conducted by Agus (2000) which stated that mothers' attitudes have a strong relationship in immunizing their children, mothers who have unfavorable/negative attitudes towards immunizations have a 9.92% risk of not providing immunizations to children. his son.

Attitudes influence a person's behavior and play an important role in determining behavior. An attitude is not automatically realized in an action, for an attitude to become a

real action, supporting factors or enabling conditions are needed, including facilities and support from other parties such as husbands, parents or in-laws (Notoatmodjo, 2005).

Attitude is a closed reaction or response to a stimulus or object. From various limitations regarding attitudes, it can be concluded that the manifestation of attitudes cannot be seen directly, but can only be interpreted first from closed behavior. Attitude clearly shows the connotation of appropriate reactions to certain stimuli, which in everyday life is an emotional reaction to social stimuli. Newcomb, a social psychologist, stated that attitude is a readiness or willingness to act and is not the implementation of certain motives. Attitude is not yet an action or activity, but is a predisposition to a behavior. These attitudes are still closed reactions, and not open reactions or overt behavior (Notoatmodjo, 2003).

Attitude measurement can be done directly and indirectly, you can directly ask what the respondent's opinion or statement is regarding an object. For example, what do you think about the importance of immunization? Indirectly, this can be done with hypothesis statements, then asking the respondent's opinion (Notoatmodjo, 2003).

The Relationship between Mother's Activeness in Posyandu Activities and Completeness of Basic Immunization in Children

Based on statistical tests using the Fisher's Exact Test, the relationship between maternal activity in posyandu activities and completeness of basic immunization in children obtained a value of $p = 0.000$ where the α value <0.05 so the hypothesis was accepted which means that there is a relationship between maternal activity in posyandu activities and completeness. basic immunization in children. This theoretically explains that the existence of a relationship between mothers' activity in posyandu activities can be understood because mothers who have good activity can take action, namely taking their babies to health facilities to get basic to complete immunizations.

The results of this research are in accordance with the results of research conducted by Kamaruddin (2007) which states that maternal activity is closely related to the completeness of basic immunization in children, where from the research results there were 43 respondents who had good activity, totaling 33 respondents (76.7%) who had children. with complete basic immunization status.

According to Notoatmodjo (2003) that activeness or practice in the behavioral domain has several levels, namely; perception, guided response, mechanisms and adoption. Perception shows that the subject has recognized and selected various objects in connection with the action to be taken. Guided response refers to the subject's ability to do things in the correct order. Mechanism is that someone can do something correctly automatically.

Perception as an experience produced through the five senses, each person has differences in observing the same object. In line with this, mothers' perceptions of posyandu activities also vary so that their activeness in providing basic immunizations also varies. Mother's activity is influenced by supporting factors or support system. This support system can be in the form of support from a husband, parents or in-laws. And there is also sufficient time to take part in posyandu activities.

Apart from the mother's activeness which influences the completeness of the baby's immunization, the activeness of the officers also determines it. Immunization officers must be proactive in achieving coverage targets. Activities that can be carried out include, for example, sweeping immunization targets.

In this study, the activeness of officers in immunization services is not a problem because it can be controlled in the sense that all respondents receive the same treatment or respondents are served by the same officers, namely Tamalanrea Community Health Center officers. Likewise, the affordability of immunization service facilities. Affordability in question is affordability in terms of distance and cost. With the existence of posyandu, these two things are no longer an excuse for people not to immunize their children because immunization is free and takes place in the community.e attitude in fulfilling basic immunization requirements for children.

Conclusion

Based on the research results, it can be concluded that (1) There is a relationship between maternal knowledge about immunization and the completeness of basic immunization for children at the Tamalanrea Makassar Community Health Center with a value of p = 0.001; (2) There is a relationship between maternal knowledge about immunization and the completeness of basic immunization for children at the Tamalanrea Makassar Health Center with a value of p = 0.000; (3) There is a relationship between maternal knowledge about immunization and the completeness of basic immunization for children at the Tamalanrea Makassar Community Health Center with a value of p = 0.001

References

Ahmad, Rizanil., (2009). *Berita Kedokteran Masyarakat,* Vol. 25, No. 1, Banjarmasin, *(online),* http://jurnalilmukeperawatan.html/, (Diakses 6 Maret 2013).

Ali, Muhammad, (2002). *Pengetahuan, Sikap dan Perilaku Ibu Tentang Imunisasi,* Medan, *(online),* http://library.usu.ac.id/modules.php.op=modload/, (Diakses 6 Maret 2013).

Atikah, P & Citra, Setyo, D. A, (2010). *Imunisasi dan Vaksinasi,* Cetakan Pertama, Nuha Medika, Yogyakarta.

Atikah, P & Citra, Setyo, D. A, (2010). *Imunisasi dan Vaksinasi,* Cetakan Pertama, Nuha Medika, Yogyakarta.

Departemen Kesehatan RI, (2006). *70 Juta Anak Dapat Diselamatkan Melalui Imunisasi, (Online)*, http://www.depkes.go.id/, (Diakses 17 February 2013).

Departemen Kesehatan RI, (2009). "*Visi Pembangunan Kesehatan: Indonesia Sehat 2010*." *(online),* http://www.depkes.go.id/indonesiasehat.html/, (Diakses 17 February 2013).

Departemen Kesehatan RI, (2000). *Pedoman Operasional Pelayanan Imunisasi*, Jakarta, *(Online)*, http://www.depkes.go.id/, (Diakses 6 Maret 2013).

Dinas Kesehatan Prov.Sul-sel, (2008). *Cakupan Imunisasi di SulSel, (Online),* http://www.dinkes-sulsel.go.id.html/, (Diakses 28 February 2013).

Esse, Puji., (2013). *Panduan Penulisan Skripsi,* Edisi 9, Sekolah Tinggi Ilmu Kesehatan Makassar, Makassar

Hanum, Marimbi, (2010). *Tumbuh Kembang, Status Gizi & Imunisasi Dasar Pada Balita,* Cetakan Pertama, Nuha Medika, Yogyakarta.

Hidayat, A, (2007). *Metode Penelitian Keperawatan dan Tehnik Analisa Data,* Salemba Medika, Jakarta.

Liliweri, A, (2007). *Dasar-Dasar Komunikasi Kesehatan*, Pustaka Pelajar, Yogyakarta.

Maidin, M.A, (2007). *Mengenal Dan Peduli Tuberkolosis*, Tribun Timur, Edisi 24 Maret

2007, *(Online),* http://tribun-timur.com/, (Diakses 17 February 2013).

Noor, N.N, (2006). *Pengantar Epidemiologi Penyakit Menular*, PT Rineka Cipta, Jakarta.

Noor, N.N, 2006, *Pengantar Epidemiologi Penyakit Menular*, PT Rineka Cipta, Jakarta.

Notoatmodjo, S, (2002). *Metodologi Penelitian Kesehatan*, Rineka Cipta, Jakarta.

Notoatmodjo, S, (2003). *Ilmu Kesehatan Masyarakat (Prinsip-Prinsip Dasar)*, PT Rineka Cipta, Jakarta.

Notoatmodjo, S, (2003). *Ilmu Kesehatan Masyarakat (Prinsip-Prinsip Dasar)*, PT Rineka Cipta, Jakarta.

Notoatmodjo, S, (2003). *Pendidikan Dan Perilaku Kesehatan*, PT Rineka Cipta. Jakarta.

Nursalam & Siti, Pariani, (2001). *Metodologi Riset Keperawatan*, CV Sagung Seto, Jakarta.

Nursalam, 2000, *Pendekatan Praktis Metodologi Riset Keperawatan*, Penerbit CV. Infomedika, Jakarta

Ramli, R.M, (1988). *Faktor-faktor Yang Mempengaruhi Drop Out/Tidak Lengkap Hasil Imunisasi di Desa Kesongo Semarang Iawa Tengah,* Skripsi-1988*, (online),* http://www.jurnal.unair.ac.id/, (Diakses 6 Maret 2013).

Setiadi, (2007). *Konsep Dan Penulisan Riset Keperawatan*, Graha Ilmu.

Singarimbun, M, (1986). *Metode Penelitian Survey*, LP3ES, Jakarta, *(online),* http://jurnalilmukedokteran.html/, (Diakses 6 Maret 2013).

Slamet, (1999). *Sosiologi Kesehatan*, Universitas Gajah Mada Press, Yogyakarta, *(online),* http://jurnalilmukeperawatan.html/, (Diakses 6 Maret 2013).

Sugiyono, (2004). Statistik Nonparametris Untuk Penelitian, Cetakan kedua, CV. Alfabeta, Bandung.

Supartini, Y, (2004). *Buku Ajar Konsep Keperawatan Anak*, EGC, Jakarta.

Syahrul, Fariani., (2002) *Faktor-faktor yang Berhubungan dengan Status Imunisasi Ibu Hamil di Kabupaten Lumajang.* Jurnal Penelitian Medika Eksakta Vol. 3 No. 1 April 2002: 80-88, Jakarta, *(online),* http://www.pdpersi.co.id.html/, (Diakses 6 Maret 2013).

Syakira, Husada, (2011). *Keaktifan Ibu Dalam Posyandu*, *(online),* http://kesehatananakdankomunitas.com.html/, (Diakses 6 Maret 2013).