A FORMATIVE EVALUATON OF NUTRITIONAL PROGRAMS IN PUBLIC HEALTH CENTERS IN DEPOK MUNICIPALITY, INDONESIA

BY
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(ID Number 51209663)
September 2011

Paper presented to the Higher Degree Committee of Ritsumeikan Asia Pasific University in partial fulfillment of the requirements for the Degree of Master of Science in International Cooperation Policy

ABSTRACT

Depok Municipality Government has launched some policies in order to reduce children malnutrition prevalence in its area. The policies rely on some nutritional programs held at the Public Health Center (PHC). The aim of this study is to do a formative evaluation on nutritional policies, programs and interventions which improve children's nutritional status in Depok Municipality. By knowing the process of formative evaluation on nutritional programs, it would propose some recommendations to local government, especially Depok local government, in strengthening the nutritional policies, programs and interventions and it is expected to contribute to the enrichment of knowledge and models of the implementation policy for improving children's nutritional status. This research is qualitative, employed by in-depth interviews with the implementers of the nutritional programs, as well as the beneficiaries, observation in Therapeutic Feeding Center (TFC), where the treatment of malnutrition children is conducted, also studied the data and documents received from Depok Health Office, PHCs, and TFCs as well. The research found that the implementation of nutritional programs in PHCs, from the criteria of appropriateness, the health workers in charge of TFCs operation are capable human resources and have got the training to conduct children malnutrition treatment based on the WHO Guideline of Management of Child Malnutrition. From the criteria of responsiveness, knowing how to extend a policy to satisfy the need, preference and value of the society, it is found that the root of the problem of children malnutrition is poverty. It makes the consequences that the policies, programs and interventions made by the local government should be comprehensively conducted by considering the condition of the malnourished children as well as the family. From the beneficiaries point of view, this research found that the majority of the mothers (81%) felt that their children got better health and growth after discharge from TFCs. 69% got the knowledge and practices in preparing better foods for the child and family. The majority appeared satisfied with TFCs performance.

Keywords: Nutritional programs, children's nutritional status, responsiveness, appropriateness, Therapeutic Feeding Centers' performance.

ACKNOWLEDGEMENTS

Alhamdulillah hirobbil 'alamien, thank for Allah SWT, by His guidance and mercy the researcher can accomplished this study entitled "A Formative Evaluation of Nutritional Programs in Public Health Centers in Depok Municipality, Indonesia". The following individuals, institutions and organizations are acknowledged for their various invaluable supports towards both completion of my studies and construction of this paper; the Indonesian Institutes of Sciences officials for the trust they invested in me to recommend me for this important course; the National Development Planning Agency for awarding me such a generous scholarship to continue my study one year in Indonesia and Japan respectively; the Depok Municipality local government, Depok Public Health Centers , and Therapeutic Feeding Centers in Sukmajaya, Cimanggis and Pancoran Mas for allowing me to collect data; scholars, publishers and organizations who gave me permission for copyright materials to be quoted or used in construction of this paper; my husband, Gunawan Witjaksono and my daughters Fasyara Rahma Abdilla and Tyara Ratriana Putri, my parents, brothers and sisters for their patience and unwavering moral, social, psychological and spiritual support; It is to them this paper is dedicated.

A very genuine gratitude is extended to Professor Nader Ghotbi and Professor Meirmanov Serik for their undying support and excellent guidance; I am deeply indebted for their guidance and assistance during the course of this research. Without their support, I would not have been able to accomplish this paper. I will always be sincerely grateful for all their kindness and understanding. May I also convey my deep gratitude to my close friends, classmates and colleagues for their encouragement along the constructing this paper.

I wish to appreciate critics, suggestion and comments in order to get more qualified research for next study. Thank you.

Danarsiwi Tri Lastiwi

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List of Abbreviations and Terminology

ADM: Administration

AIGRP: Australia Indonesia Governance Research Partnership

ASI: Air Susu Ibu: breast milk

Balita: Bawah Lima Tahun: children under 5 years old

Bayi: Infant

Bulin: Ibu Bersalin: birth mothers

Bumil: Ibu Hamil: pregnant mothers

IFPRI: International Food Policy Research Institute

Kesling: Kesehatan Lingkungan: environmental health

KB: Keluarga Berencana: birth control

KIA: Kesehatan Ibu dan Anak: maternal and child health

KMS: Kartu Menuju Sehat: growth monitoring card

Lila: Lingkar Lengan Atas: upper arm circumference

MDG: Millennium Development Goals

MENKES: Menteri Kesehatan: health minister

NGO: Non Governmental Organization

NRC: Nutrition Rehabilitation Centers

Oedema: the medical term for fluid retention in the body. It occurs when there is a build-up of fluid (mainly water) in the body's tissues, causing swelling to occur in the affected area.

P2M: Pencegahan Penyakit Menular: disease control

PHC: Public Health Center

PMT: Pemberian Makanan Tambahan: food supplement feeding

Posyandu: Pos Pelayanan Terpadu: integrated health services post

PPG: Panti Pemulihan Gizi: TFC

RW: Rukun Warga: neighborhood village

SD: Sekolah Dasar: elementary school

SD : Standard Deviasi

SMA: Sekolah Menengah Atas: senior high school

SMP: Sekolah Menengah Pertama: junior high school

SPM: Standard Pelayanan Minimal: minimum health care standard

SUSENAS: Survei Sosial Ekonomi Nasional: national social economic survey

TB: Tuberculosis

TFC: Theraupetic Feeding Center

UI: Universitas Indonesia: Unversity of Indonesia

UNESCO: United Nations Educational, Scientific and Cultural Organization

UNICEF: United Nation Children Fund

Usila: Usia Lanjut: elderly people

WHO: World Health Organization

CHAPTER I

INTRODUCTION

1.1. Research Background

1.1.1. Malnutrition in General

Malnutrition is a global problem that may always exist with us. An estimated 195 million children are affected by malnutrition worldwide. Malnutrition is the underlying cause of death for between three and five million children under five every year (Doctors Without Borders, 2008). The global awareness to overcome this problem has led to an agreement called Millennium Development Goals (MDGs) that are a set of internationally agreed goals that countries and institutions have been committed to reaching by 2015. The first Millennium Development Goal (MDG) is to eradicate extreme poverty and hunger. The second target of this MDG – halving the proportion of the population suffering from hunger between 1990 and 2015 – uses two indicators to measure the progress: the prevalence of underweight among children under 5 and the proportion of the population below a minimum level of dietary energy consumption (Gragnolati, 2006). There are 925 million hungry people in 2010 (World hunger and Poverty facts and Statistics, 2011). The statistic most frequently cited is that of the United Nations Food and Agriculture Organization, which measures 'under nutrition'. The most recent estimate, released in October 2010 by FAO, says that 925 million people are undernourished. Nearly all of the undernourished are in developing countries. Children are the most visible victims of

under nutrition. Children who are poorly nourished suffer up to 160 days of illness each year. Poor nutrition plays a role in at least half of the 10.9 million child deaths each year. Under nutrition magnifies the effect of every disease. The estimated proportions of deaths in which under nutrition is an underlying cause are roughly similar for diarrhea (61%), malaria (57%), pneumonia (52%), and measles (45%). (Black, Morris, & Bryce, 2003). Malnutrition can also be caused by diseases, such as the diseases that cause diarrhea, by reducing the body's ability to convert food into usable nutrients. According to the most recent estimate that Hunger Notes could find, malnutrition, as measured by stunting, affects 32.5 percent of children in developing countries--one of three (de Onis 2000).[1] Geographically, more than 70 percent of malnourished children live in Asia, 26 percent in Africa and 4 percent in Latin America and the Caribbean. In many cases, their plight began even before birth with a malnourished mother. Under-nutrition among pregnant women in developing countries leads to 1 out of 6 infants born with low birth weight. This is not only a risk factor for neonatal deaths, but also causes learning disabilities, mental retardation, poor health, blindness and premature death.

Further, it could be stated that the two causes of malnutrition are:

1. Direct cause, namely the child's diet and infectious disease that may affect the children. Incidence of malnutrition is not simply due to lack of food, but also

[1] de Onis, Mercedes,Edward A. Frongillo and Monika Blossner. 2000. "Is malnutrition declining? An analysis of changes in levels of child malnutrition since 1980." *Bulletin of the World Health Organization* 2000, : 1222–1233.

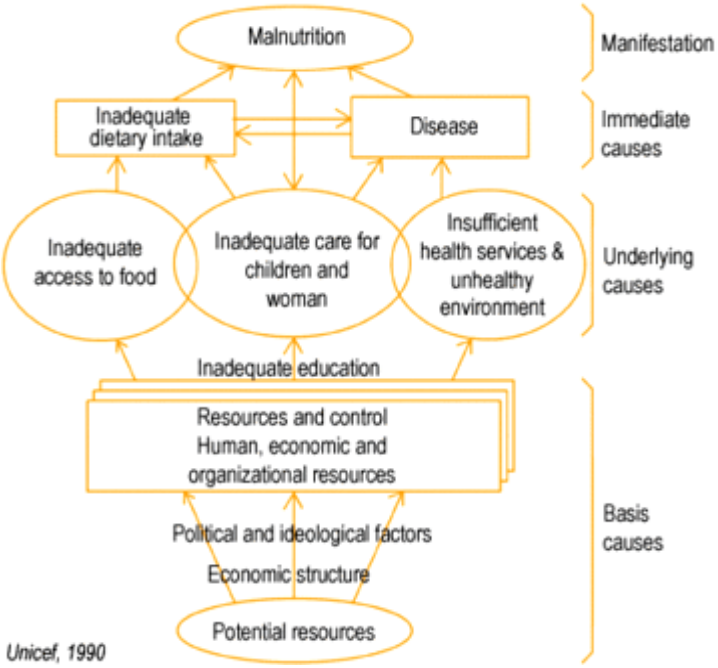
because of illness; children who get good food but are often attacked by diarrhea or fever, may eventually suffer from malnutrition, as well as children whose food is not good enough, and their immunity may be weakened. In such circumstances, they will be vulnerable to infection by diseases. In fact, both (food and diseases) together is the cause of malnutrition.

2. Indirect cause, namely food security in families, parenting patterns, as well as health care and environmental health. Food security in the family is the ability of families to meet the food needs of all family members in a sufficient quantity and quality. Patterns of parenting are the ability of families and communities to provide time, attention and support for children to grow in the best possible physical, mental and social life. Health care and environmental health are the availability of clean water and basic health care facilities within the reach of every family. These three factors are interrelated. These three indirect factors are related to the level of education, knowledge and skills. The higher level of education, knowledge and skills, the better the possibility of family food security level, the better the pattern of childcare and awareness of families to take advantage of existing health services and vice versa. Family food security is related to food availability (both from the production itself or the market or other sources), the price of food and family purchasing power, and knowledge about nutrition and health. For example, Breast milk is the major baby food that would otherwise be generated by the family, so it does not need to be purchased. However, not all families can provide milk of

mothers to their babies because of various problems experienced by mothers. As a result, babies are not breast fed or are given inadequate quantities of breast milk, and should be given additional supplementary food. If problems arise due to various reasons, such as lack of knowledge and or ability to provide supplementary food, they may not meet the requirements. In such circumstances, it can be said that food security is vulnerable because families are unable to provide good food for the baby so that risk of suffering from malnutrition is high. Patterns of parenting attitudes and behaviors of mothers or other caregivers include proximity to children, to provide food, maintain hygiene, giving love and so forth. All are related to the state capital in terms of health (physical and mental), nutrition status, general education, knowledge and skills of good parenting, role in the family or society, the nature of daily work, family and community customs. The health service provides access or affordability of child and family to the efforts of health maintenance and disease prevention such as immunization, antenatal care, delivery assistance, child weighing, health education and nutrition, and good health facilities such as integrated health services post, clinic, practice midwife / doctor, hospital, clean water supply. Lack of access to health services (due to distance and or unable to pay) and lack of education and knowledge is the constraints of society and family in making the best health care available. This can have an impact also on the nutritional status of children. Various direct and indirect

factors in the above are related to the fundamental problems that exist in society and the root of the national problem.

Figure 1. The Direct and Indirect Causes of Malnutrition



The conceptual framework that UNICEF has built as seen on the above figure identifies the causes of malnutrition by indicating their depth, which is divided into immediate, underlying and basis causes. It indicates the action to reduce the malnutrition problem among under five-children that could be taken at different levels of causes. The chart diagram confirms that an intervention system is placed over the underlying causes. An inadequate health service is related to management aspects rather than technical aspects of intervention system. Inadequate health services might influence the knowledge, attitude, and skills of the mothers on nutrition and then will lead

to poor caring capability of their child. Lack of child care capability will directly influence the dietary intake of the child.

1.1.2. Malnutrition in Indonesia (scope of the problem in Indonesia)

Indonesian people are generally more familiar with the term of malnutrition than Protein Energy Malnutrition. The word of protein and energy may seem more scientific. The writer chooses the word of malnutrition to comply with the terms used in reference books. Adequate nutrition plays a vital role in ensuring the health and well-being of citizens and the economic and social development of society. Even though there is significant progress, much remains to be done to address nutritional deficiencies within the Indonesian population and to achieve targets set by the Indonesian government and the international community.

Indonesia is a signatory to various international human rights conventions that set out states' obligations in respect of nutrition. Article 24 of the *Convention on the Rights of the Child* states that parties shall take appropriate measures to, amongst other things, "combat disease, malnutrition, and ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of child health and nutrition (OHCHR: 1989).[2]

In 2001, the national government devolved responsibility for managing health-related issues, including nutrition, to district governments. Decentralization was intended to

[2] Office of the United Nations High Commissioner for Human Rights. 1989. Convention on the Right of the Child

allow policy-makers to devise policies and programs that were more responsive to the needs of local communities. The policies and programs should take advantage of local resources and expertise as well. The national government provides guidance to the district governments through the minimum health care standards (*SPM bagi Kesehatan*)[3] and other standards to ensure, to some degree, consistency between districts across Indonesia. The SPM sets out benchmarks for district governments to achieve in relation to a number of health related indicators. The *Food National Action Plan 2005-2009* has set a national target to reduce cases of severe malnutrition in children, less than 5 years of age, to 5 percent of that population. UNICEF reports that in the period 2000-2007, 9 percent of Indonesian children, less than 5 years of age, were severely underweight and in the same period between 23 to 28 percent of Indonesian children, less than 5 years of age, were moderately or severely underweight.[4] Strengthening public health governance at the district level is seen as a strategic priority for combating malnutrition. Under the health decentralisation policy framework in Indonesia district governments have the focal role of managing health intervention especially in regard to improving the nutritional status of women and children.

Discussion on knowledge in the topic of nutrition is ripe in the realm of maternal knowledge. Indeed, maternal knowledge of nutrition is vital, since women have a vital role in maintaining the household economy and their family health (Sargent,

[3] The *Health Minister Regulation/Peraturan Menteri Kesehatan* No. 741/MENKES/PER/VII/2008.
[4] UNICEF, *At a Glance: Indonesia* <http://www.unicef.org/infobycountry/indonesia_statistics.html>.

et.al, 1996).[5] Hugh Water et.al using the Indonesia SUSENAS[6] data to measure the prevalence of underweight children 5 years of age demonstrated how mothers' education has very strong protective effects (Waters, et.al, 2004: 589-595).[7] Skoufias addressed that the level of education of the mother has a bearing in the overall child nutritional status. In urban areas, the education level of the head of household has no significant effect on the health of either boys or girls. In contrast, mothers with a senior high school (or higher) level of education have healthier boys and girls. Whilst in rural areas, mothers with the highest level of education also have healthier girls (Skoufias, 1999: 99-119).[8] Skoufias illuminate how the gender based biases are prevalent in the society. Children expected to take advantage from maternal education as identified by Reed are those from households of intermediary conditions, between the poorest and the wealthiest. In these households, formal education would facilitate the mother in making better decisions about the allocation of limited resources to the benefit of her children (Reed, 1996: 585).[9]

Block took a rather different stance by contending that maternal nutrition knowledge is critical, even more so than formal schooling, in determining child

[5] Sargent, C.F., Brettel, C. (ed.). 1996. *Gender and Health, an International Perspective*. Prentice Hall Inc, New Jersey.

[6] National Social and Economy Survey, the most comprehensive source of household socio-economic data in Indonesia.

[7] Waters, H., et al. 2004. *Weight-for-age malnutrition in Indonesian children, 1992–1999.* International Journal of Epidemiology 33: 589–595

[8] Skoufias E. 1999. *Parental education and child nutrition in Indonesia.* Bulletin of Indonesia Economics Studies 35:99–119.

[9] Reed, Barbara A., et al. 1996. *The Effects of Maternal Education on Child Nutritional Status Depend on Socio-Environmental Conditions*. International Journal of Epidemiology 25 (3): 585.

micronutrient outcomes (Block, 2002).[10] Mary J De Silva identifies how knowledge transfer may be mediated in the social connectedness thus enabling mothers to know more with regard to child nutritional status (De Silva, 2007: 341-355).[11] Indeed mothers are an excellent target group for nutrition education intervention as they are the primary decision maker in preparing food in family households (Silk, 2007).[12]

Dealing with the role of mothers in improving nutritional status of their children, the programs conducted by the government in intervening children's nutritional status should be done in a synergic way. In Indonesia, the authority of maintaining the public's health was delivered by the local government in 2004 by the issuing of minimum health care standards by the Ministry of Health (see Decree – No. 1091/MENKES/SK/X/2004 *Petunjuk Teknis Standar Pelayanan Minimal Bidang Kesehatan di Kabupaten/Kota* – Technical Guidance on Minimum Health Care Standards for Regency/Municipality). It authorizes the local government to create programs regarding the improvement of nutritional status of children. In Indonesia, every local government creates the programs to deal with the condition of children malnutrition. All of the efforts in conducting the programs aim to increase the children's nutritional status.

[10] Block, S. 2002. *Nutrition Knowledge versus Schooling in the Demand for Child Micronutrient Status*. Working Paper No. 93, Harvard University Center for International Development.
[11] De Silva, Mary J. 2007. *Maternal Social Capital and Child Nutritional Status in Four Developing Countries*, Health & Place 13: 341-355.
[12] Silk, Kami J., et.al. 2007. *Who has time to cook? How family resources influence food preparation*. http://www.ers.usda.gov/publications/ERR40/err40.pdf. [1/06/2007]

The programs, stated by the Health Minister Regulation 741/Menkes/PER/VII/2008 are intended to function as a yardstick for monitoring and evaluation by setting certain targets. The relevant ones in terms of basic services in health are specified in article 2, namely among others: coverage of baby visit of 90% in 2010, coverage of services for children below 5 years of age of 90% in 2010, coverage of additional food supplementation program /*Pemberian Makanan Tambahan* (PMT) for breastfeeding (ASI) for children 6-24 months from poor families in 2010, coverage of active birth control participants of 70% in the year of 2010, coverage of finding and managing diseases of 100% in the year of 2010, coverage of basic health services for the poor of 100%in 2015, and for health promotion and community empowerment, the coverage of active Alert Village (desa Siaga) of 80% in 2015.

The policy direction of health development in Indonesia, among others, is to improve the quality of human resources and environment mutually with a healthy paradigm approach, to improve and maintain the quality of institutions and to serve health through the empowerment of human resources in a sustainable manner. Government launched a movement of health oriented development as a general health policy development to achieve Indonesia Healthy 2010 (Ministry of Health, 2000).

The implementation of health development needs to be supported among others by developing the resources of health workers from the community and government. Health manpower development is essential for the process of developing a multidisciplinary and cross-sectoral, as well as cross-program for equality, and

improving the quality of health personnel. One of the principal health development programs is to improve nutrition and basic program management policies and health development (Ministry of Health, 2000).

In health development, government is trying to organize health efforts such as disease prevention, health restoration and health education to the public. Prevention efforts can be implemented in various ways including through implementation of public health nutrition at Public Health Care.

All officers involved in these programs both in cities and urban districts should be guided both in the issues of health knowledge and technical ability. The increased knowledge and capabilities of the nutrition program implementers are expected to make the execution of the programs happen properly and correctly.

1.1.3. Malnutrition in the Depok Municipality

The writer would like to analyze the implementation of nutritional programs held by community health centre in Depok municipality for reducing malnutrition prevalence in this area.

In strengthening public health governance at the district level, the writer is interested in the district's policy on combating malnutrition in Depok municipality by establishing Feeding Therapeutic Centre (TFC).

The writer will conduct this research in Depok municipality. The vision of Depok municipality is *Menuju Kota Depok yang Melayani dan Mensejahterakan.* Under the

leadership of Depok City Mayor Nur Mahmudi Ismail, the local government has made various efforts to improve services and prosperity for its citizens. Like other countries around the world, both developed countries and developing countries, local government performance is measured primarily through the provision of basic services, one of which is health services. However, looking at the data in table 1 below, the city government should pay more attention to their performance, especially in the field of health. At the policy level, the city government of Depok, in its mission stated the goal of improving the quality of family, education, health and welfare of the community based on the religious values. In one of their mission statements which directly relates to the public service, Depok local government will provide friendly, fast and transparent services.

Table.1. The number of malnutrition sufferers in Depok

Year	Number of malnutrition sufferers	Percentage
2002	455	0.45%
2003	602	0.57%
2004	964	1%
2005	1,133	0.99%
2006	935	0.81%
2007	937	0.84%
2009	959	0.82%
2010	439	0.35%

Source: http://www.gizi.net/ Monday, 21 April 2008 and Republika/Rabu, 16 Juni 2010.

As seen in the table, media reported that in 2009, there are 959 malnutrition sufferers equal with 0.82%, and this year (2010) the number decreases to 439 or 0.35% from the whole number of children under 5 years in Depok (170,842).

This condition worsened with the incident of the death of Wahyu Saputra (6 years old), who lived in Pancoran Mas sub district in 2008, meanwhile Depok was the first rank in Human Development Index in West Java Province that is 78,22 and the first RW (neighborhood village) Alert reached 100% in Indonesia.

Indeed these facts are opposite each other. On the one hand, Depok City has had policies and programs that were well planned through the efforts of better health services by providing funds from the local budget for the poor family in cooperation with 12 private hospitals in Depok and 4 hospitals outside of Depok, and increased PHC services by providing hospitalization facility, improving family health, increasing awareness of food and nutrition, managing infectious and non infectious disease and promoting health with the motto "Healthy and Clean Living Behavior", but on the other hand, we still see some cases of malnutrition that at the twinkling of an eye annihilate all efforts initiated by the Government of Depok. This case seems to open the eyes of all parties, especially the Depok Municipality Government, that no matter how good concepts and slogans have been planned, but without implementation and support of all parties, the concept is not necessarily going to be realized well. Depok Municipality Government also seeks strength, by performing a variety of breakthroughs in the efforts to reduce malnutrition rates.

1.2. Research Objectives

1. To evaluate the implementation of nutritional programs in Depok Municipality.
2. To elaborate nutritional policies, programs and interventions in order to increase children's nutritional status in Depok Municipality.
3. By knowing the process of formative evaluation of nutritional programs, hopefully there would be some recommendations given to local government, especially Depok local government, in strengthening the policies, programs and interventions in order to improve children nutritional status.
4. It is expected to contribute to the enrichment of knowledge and models of the implementation policy in the health sector for improving children nutritional status.

1.3. Research Questions

Based on the background of the study, the writer proposes the research question as follows:

1. What are the constraints and challenges of the implementation of nutritional programs in Public Health Care, focused in Therapeutic Feeding Center?
2. How to strengthen the nutritional policies, programs and interventions in order to increase children nutritional status in Depok Municipality?

CHAPTER II

THEORITICAL REVIEW

2.1. Prior Research

In this chapter, the writer would like to refer to several prior researches related to implementation of nutrition programs. Two researches show the technical aspect dealing with the children nutritional status. The third research emphasizes on the sustainability of services in integrated children services in the framework of improving life expectancy through international aids. The next research discusses Evidence Based Decision Making to Reform Governance at the District Level : the Case of Nutritional Policies, Programs and Interventions. The last research is conducted by IFPRI in designing nutrition and health policies and programs to accelerate progress in reducing child malnutrition. All the researches below have been the tool for observing and comparing the methods, as well as the analyses done in the writer's research.

Prior Research:

1. Title of Research/Author/Year/Location :

Mulyaningsih, Endah Sriyani/ Hubungan Antara Asupan Energi Protein dan Faktor Lain dengan Status Gizi Balita (12- 59 bulan) di Kec. Cililin Kab. Bandung tahun 2007. (Available in Bahasa).

The correlation of dietary energy consumption and other factors with the nutritional status of children (12 – 59 months) in Cililin Sub district Bandung Regency year 2007
Public Health Program UI 2007/ Indonesia.

Background :

The main health problem that has burdened the state is the high number of undernourished. The direct causes of undernourished children are insufficiency of food consumption, infectious diseases, and improper parenting. The indirect causes of undernourished children are the lack of food in the households, bad sanitation, lack of fresh water, the lack of health services, low education and basic knowledge of child health and nutrition. The scope of this research addresses the correlation of children nutritional status with the child, mother, father and family characteristics, the lack of food consumption, children health status, and parenting. Sub district Cililin has the highest undernourished prevalence in Bandung Regency, West Java. The occurrence of undernourished children increased from 17,31% in 2005 to 21,44% in 2006.

Result :

There is a significant correlation between dietary energy consumption and parenting (that consists of exclusively breast feeding and colostrum, feeding additional food, visiting integrated health services, giving immunization and vitamin A also personal hygiene of mothers) with the children nutritional status.

Relevance:

This research is relevant to the research question on how to improve the children's nutritional status. However, the research merely discusses the technique of improving children nutritional status without further discussion in health policy process.

2. Title of Research/Author/Year/Location :

Okviyanti, Rika Tri/ Faktor-faktor yang Berhubungan dengan Status Gizi Anak Usia 6-24 Bulan di Kelurahan Ratu Jaya, Kecamatan Pancoran Mas Kota Depok Jawa Barat Tahun 2007.

The affecting Factors of 6-24 Months of Children's Nutritional Status in Ratujaya Village, Pancoran Mas Sub District, Depok City Year 2007. Public Health Department UI/2007/ Indonesia.

Background :

Post-natal period through two years old is a very critical period due to the rapid growth of infants and the differentiation that occurs in every organ system. Children's growth will be relatively well until the age of less than six months, but begins to deteriorate at age 6 months - 2 years old. At the age of 6 months - 2 years old breast feeding cannot meet the need of the infants then the role will be substituted by the additional food as a complement to breast feeding. Disturbances that occurre in this tangled settling will cause disruption of the structure of anatomy, biochemistry and organ function.

This research addresses the prevalence of undernourished and malnutrition in Ratu Jaya village that reached 1.78% and 13, 5% respectively. This figure is higher than the prevalence rate of undernourished and malnutrition in Pancoran Mas Sub district, Depok City, West Java that is equal to 1% and 11.48% respectively.

Result :

There is a significant correlation between dietary energy consumption and parenting (that consists of exclusively breast feeding and colostrum, feeding additional food, visiting integrated children services, giving immunization and vitamin A also personal hygiene of mothers) with the children nutritional status.

Relevance:

This research is relevant to answer the question of what are the factors influencing children's nutritional status of 6-24 month. It enhances the writer's knowledge about children's nutritional status.

3. Title of Research/Author/Year/Location :

Nuhamara, Samuel/ Perkembangan dan Kesinambungan Pelayanan Posyandu: Kaitannya dengan Pelayanan Proyek Kelangsungan Hidup Anak di Kec. Balai dan Tayan Hilir Kab. Sanggau.

The Improvement and Sustainability of Integrated Child Health Services : the Correlation with the Program of Children Life Expectancy in Balai and Tayan Hilir Sub Districts, Sanggau Regency/ Public Health Program UI./ 2007/ Indonesia.

Background :

This research aims to study the improvement and sustainability of services in integrated child health services in correlation with the program of children life expectancy.

Methodology :

This paper reviewed the project of children life expectancy held in Balai and Tayan Hilir sub districts, Sanggau regency. The design of this research is cross sectional with the analysis unit of integrated children health services.

Result :

The result shows the sustainability of the integrated child health services after finishing of the project of children life expectancy held in Balai and Tayan Hilir sub districts, Sanggau regency.

Relevance:

This research is relevant with the question on the sustainability of the integrated child health services after the end of the project or program of children life expectancy.

4. Title of Research/Author/Year/Location :

McDonald, Yoganingrum, Purwaningrum, Ariani, Short, Stephanie, D. / *Evidence Based Decision Making to Strengthen Local Government: Nutritional Health Interventions in Bantul and Gunung Kidul*. Policy Brief/AIGRP/2009/ Australia.

Background :

Since 2001, district governments have had the main responsibility for providing public health care in Indonesia. One of the main public health challenges facing many district governments is improving nutritional standards, particularly among poorer segments of the population. Developing effective policies and strategies for improving nutrition requires a multi-sectoral approach encompassing agricultural development policy, access to markets, food security (storage) programs, provision of public health facilities, and promotion of public awareness of nutritional health. This research was done in the two districts in Indonesia—Bantul and Gunungkidul. It was clear that local government capacity to generate, obtain and integrate evidence about local conditions into the policy-making process was still limited. In both districts, decision-makers tended to rely more on intuition, anecdote, and precedent in formulating policy. The potential for evidence-based decision making was also severely constrained by a lack of coordination and communication between agencies and current arrangements related to central government fiscal transfers, which compel local governments to allocate funding to centrally determined programs and priorities.

Result :

This research makes several recommendations:

1. *Improve coordination* *with the national government to develop synergies amongst national, provincial and district programs to reduce overlaps, improve coordination and result in improved health outcomes. As much as possible national policy making should be developed in such a way as to be inclusive of the aspirations of district governments and to support long-term planning. This may include a review of the implementation of nationally led nutrition and food resilience programs to ensure they continue to be relevant at the district level and increase flexibility in budget allocations. Currently low accountability of district governments' performance in achieving the SPMs needs to be addressed.*

2. Create integrated data centres *to gather valid, accurate and real-time data and consolidate nutrition/food security data from all local bureaus within districts and between the districts and national actors. Data should be both quantitative, and qualitative that is engaging with the experiences and expertise of those who provide and use relevant services and programs. To enable such a system to work, national, provincial, district and sub-district bodies need to work together to develop a set of common indicators that create an accurate picture of local needs and facilitate data-gathering. Rigorous data evaluation mechanisms should be developed for all*

programs to ensure that data is accurate, as well as to create new data to feed into a program of continuous quality improvement to strengthen governance programs.

3. Commitment at the national and district level to increasing the development of EBDM in public health. *Leadership will be required at all levels of governance to change cultures resistant to integrating research into decision-making processes. This may require the development of incentives and/or accountabilities to encourage or require EBDM. Most of all it will require a paradigm shift by all governance actors to move from short and medium term planning to long-term planning and implementation of programs in this area. Additionally, researchers must take responsibility for making research results more accessible to policymakers.*

4. District governments should develop measures to improve coordination between bureaus to address important cross sectoral problems*. In Bantul, the use of law to require coordination to address problems that cross sectoral boundaries is reported to have been helpful, although incentive schemes can have inherent weaknesses. Bantul also holds regular coordination meetings between bureaus at policy and operational levels and with sub-district actors and service providers. Another approach, suggested in Gunungkidul, is that an existing coordination body, such as the Food Resilience Board (Dewan Ketahanan Pangan), be given greater authority to require coordination and prioritize programs.*

5. Encourage and facilitate increased participation by all stakeholder in planning processes *at the national and district level. This will foster community engagement with nutrition and public health issues, which is particularly important given the high dependence upon NGOs, communities and volunteers to deliver services. It will also facilitate the effective and efficient delivery of such services by increasing decision-makers' awareness of local issues and increasing community awareness of the broader context within which interventions are developed, funded, implemented and monitored and how their activities contribute to this broader process.*

6. Continue to develop programs to educate the public about the importance of local-food *as a source of nutrition, provide education on how to process local-food to enhance their nutritional value, and develop campaigns to promote pride in local-food diversity.*

Relevance:

This research is relevant to the question of how to strengthen the health policy in local government.

5. Title of Research/Author/Year/Location :

Joachim von Braun, Marie Ruel and Ashok Gulati (2008). *Accelerating Progress toward Reducing Child Malnutrition in India. A Concept for Action*. Jurnal IFPRI/Jan 2008/USA.

Background :

India is home to 40% of the world's malnourished children and 35% of the developing world's low-birth-weight infants; every year 2,5 million children die in India, accounting for one in five deaths in the world. More than half of these deaths could be prevented if children were well nourished. India's progress in reducing child malnutrition has been slow. The prevalence of child malnutrition in India deviates further from the expected level at the country's per capita income than in any other large developing country. India lacks a comprehensive nutrition strategy. Various choices for nutrition strategies can be considered. A review of some of the more successful country experiences suggests that all of them implemented complex, multisectoral actions with more or less emphasis on service-oriented nutrition policies (as in Indonesia), incentive-oriented nutrition policies linked to the community or household participation and performance (as in Mexico), or mobilization-oriented nutrition policies (as in Thailand). These choices are not mutually exclusive. India now has the opportunity to "leapfrog" toward innovative nutritional improvement based on the experiences of other countries and experiences within India.

Result :

To accelerate progress in reducing child malnutrition, India should focus on the following four cross cutting strategic approaches:

a. *Ensuring that economic growth and poverty reduction policies reach the poor*

b. *Redesigning nutrition and health policies and programs by drawing on science and technology for nutritional improvement, strengthening their implementation and increasing their coverage.*

c. *Increasing investments and actions in nutrition services for communities with the highest concentration of poor.*

d. *Focusing on programs for girls' and women's health and nutrition.*

Relevance:

This research is relevant to the question of how to design nutrition and health policies and programs to accelerate progress in reducing child malnutrition.

All the prior researches above help the writer in defining the research problem, identifying the criteria used in evaluating the nutritional programs, and constructing the solutions in strengthening the nutritional policies, programs and interventions that should be conducted by local government in order to reduce the number of undernourished, as well as malnutrition prevalence.

6. Title of Research/Author/Year/Location :

Nutrition Rehabilitation Centers (NRCs)- An Evaluation of Their Performance/ Micheline Beaudry-Darisme and Michael C. Latham/Africa

In this paper Cook[13] has reviewed the literature to provide data on the prognosis of malnourished children treated under hospital and non-hospital conditions. In non-hospital management he included NRC and under-five out-patient clinics, which he assumed in contrast to hospitals, would provide educational benefits. He concluded that non-hospital treatment of malnutrition would provide a cure in 30 to 60 % of cases compared with a cure of 0- 10 % as a result of hospitalization. He suggested a higher mortality for hospitalized children. The data he presented from the two types of regimes were not always comparable, and there was the unsupported assumption that NRC and under-five clinics were having a continuing educational effect on those mothers who had contact with them. Unfortunately these assumptions have not been adequately tested. Nevertheless his review is a most important one and his hypotheses deserve the most careful assessment. A recent publication[14] provide details of a conference held in Bogota in 1969 on NRC. It provides very useful information on the organization and functioning of NRC and recommendations steps for their evaluation. It too takes a generally optimistic view of these centers as offering at relatively low cost a new approach to the combating of protein-calorie malnutrition in non-industrialized communities.

[13] Cook, R. (1971). J. trop. Pediat.,17,15
[14] Research Corporation (1970) " A practical guide to combating malnutrition in the pre-school child" Meredith Corp., N.Y.

2.2. Applied Theories

2.2.1. Evaluation

According to the American Public Health Assessment in the book Glossary Term in Public Health Administration, *evaluation is a process to determine the value of the amount of business success in achieving a predetermined goal. The process includes activities to formulate objectives, identification of appropriate criteria to use in measuring the success of determining and explaining the success and recommendations for sustainability of the program.* Evaluation of public health programs should focus on measuring the effectiveness of program activities associated with achieving a goal (WHO in Evaluasi Program Kesehatan (Translation), 1990: 2).

The results of evaluation are divided into:

1. Summative evaluation which has two implications :

    a. Summative evaluation is the evaluation of the final result.

    b. Summative evaluation is the overall evaluation to determine the final decisions.

2. Formative evaluation has two implications namely:

    a. The result of evaluation will be used for program development.

    b. The result is a collection of decisions that is closely related to the program.

Formative evaluation is an evaluation conducted when the program is running (going) with the goal to provide feedback for program managers about the results achieved and constraints encountered in the implementation.

The purpose of the health evaluation program is to improve the health programs and services, to deliver the allocation of funds, manpower and services in the programs, in ongoing and future time. Evaluation should be used constructively and not merely to look for the mistakes. When the evaluation is complete if there is a deviation, it needs re-planning based on the decision analysis. Input evaluation shows the structure of program planning decisions. Process evaluation is used in administration and supervision (WHO in Evaluasi Program Kesehatan, 1990:33). During the implementation of the program, the analysis process will identify procedures and record what happened and the stage until reaching the final stages namely product evaluation. Product evaluation is focused on output and is used to make new decisions and give the next reaction. Principally, evaluation is a tool to collect data in order to improve a program. Waiss, 1972 identified six specific uses of evaluation:

1. To continue / discontinue an program.
2. To improve practices and procedures of a program.
3. To add / provide specific strategies and techniques of a program.
4. To institutionalize the program.

5. To allocate resources between the operation and program

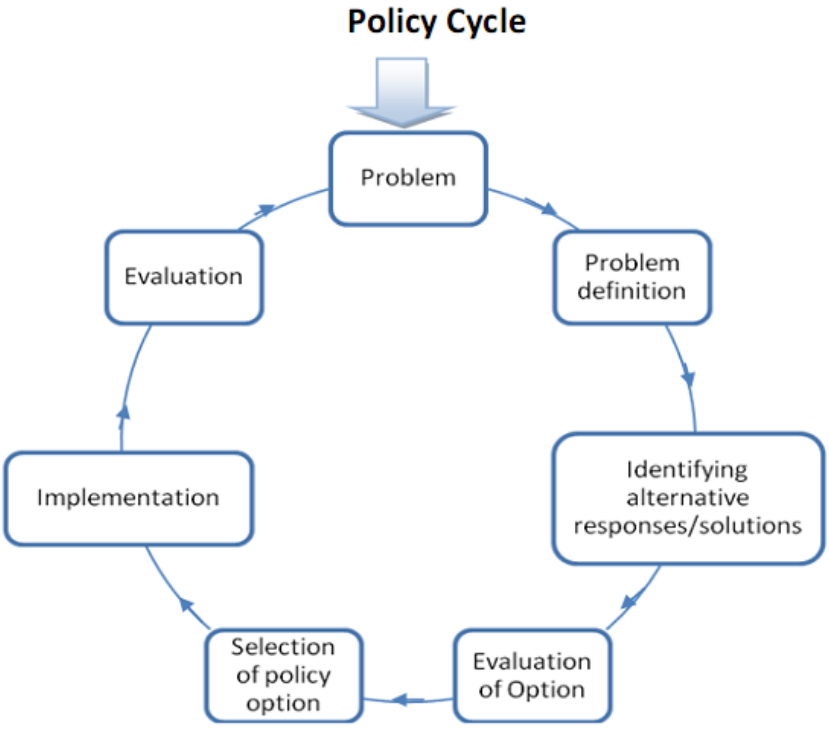
6. To reject and accept a program approach / theory

2.2.2 Policy Cycle

Social problems are unavoidable and they are side by side with us all over. Dealing with the differences, policy makers try to neutralize them by using their policy to solve the problem. However, creating good policy is not a simple thing.

Policy cycle is the process which depicts the policy process. This cycle starts from the problem and continues with problem definition until evaluation; there are several stages which policy makers should pass through. According to Parsons (1995) there are seven stages for public policy cycle which start from problem – problem definition – identifying alternative response/solution, until evaluation and continue to solve the problem. Parsons (1995) depicted the policy cycle with the following figure.

Figure. 2.



Adopted from: Public Policy: An introduction to the theory and practice of policy analysis (Parsons, 1995)

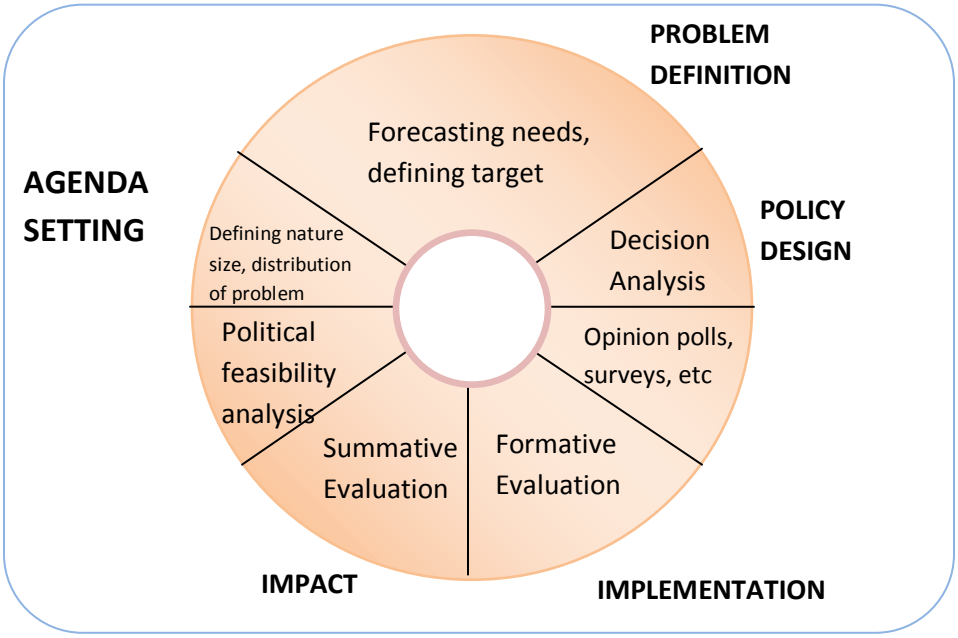
In sum, the policy cycle contains three main stages. There are formulation, implementation and assessment. Policy analysis aims to evaluate the policy implementation and the impact from the policy so that analysis can be used as the guidance for the next policies or as the problem solution for the impact from the policy implementation.

2.2.3 Public Policy Analysis

In order to assess both public policy making process and public policy implementation, we need an approach called public policy analysis. Parsons (1996) argued the kinds of policy analysis as comprising a range of activity on a spectrum of knowledge in the policy process; knowledge for the policy process; and knowledge about the policy process. By using policy analysis we can face many perspectives from the policy. Policy analysis is used to define the problems of the policy, evaluating the policy is based on the policy goals that refer to some criteria which have been defined in policy making process. Parson argued that policy analysis is concerned with improving the methods by which problems are identified and defined. Goals are specified, alternatives evaluated and performance measured. Furthermore, by using policy analysis, we can evaluate the impact of the policy process and implementation as well. D.J. Palumbo (1987) also suggested a public policy analysis model which can be divided to seven steps, namely: (1) Agenda setting: defining nature, size, and distribution of problem; (2) Problem definition: forecasting needs, defining targets; (3) Policy design: decision analysis; (4) Policy legitimation: opinion polls, survey, etc; (5) Implementation (formative evaluation); (6) Impact (summative evaluation); (7) Termination (political feasibility analysis). Dunn (2004) argued that Policy Analysis is a means of synthesizing information including research results to produce a format for policy decisions (The laying out of alternative choices) and determination of future needs for policy relevant information.

Figure. 3.

Public Policy Analysis Model



Source: Policy Cycle and the Information Cycle by Palumbo.

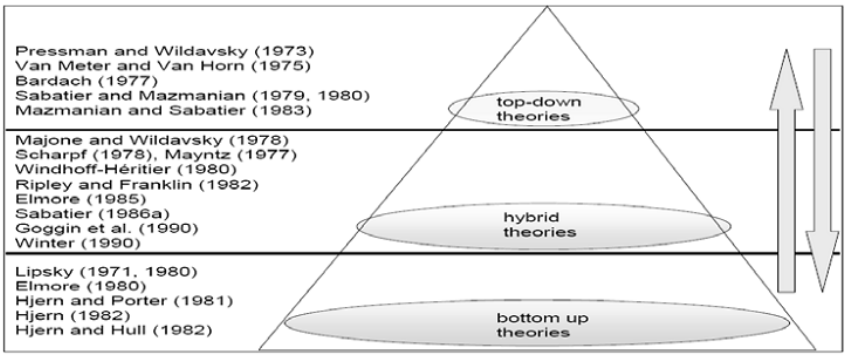
Based on Palumbo's theory, the writer would like to analyze the fifth step that is dealing with the implementation (formative evaluation) program conducted by the local government especially the operational implementer (Public Health Care) and use the criteria from William Dunn covers of appropriateness and responsiveness. According to Dunn (1991: 93) appropriateness criteria ask whether the goal of a kind of policy, in this case nutritional policy, is fitted for the society. The appropriateness will be examined from the aspect of input, process and output. Another criteria namely responsiveness is how to extend a policy to satisfy the need, preference and value of the society.

2.2.4. Policy Implementation Theories

Pülzl, Helga & Treib, Oliver (2006) identified three generations of research implementation which can be subdivided into three distinct theoretical approaches to the study of implementation of top-down theories, bottom-up theories, and hybrid theories.

Figure. 4.

Top-down, Bottom-up and Hybrid theories



Source: *Pülzl, Helga & Treib, Oliver .2006. Policy Implementation.*

Top-down, bottom-up and hybrid theories

- Top-down Theories.

It starts from the assumption that policy implementation starts with a decision made by the central government. DeLeon (2001: 2) described top-down approaches as a "governing elite phenomenon". Pressman and Wildavsky's have the assumption that policy objectives are set out by central policy makers. In this view, implementation research was left with the task of analyzing the difficulties

in achieving these objectives. They saw implementation as an "interaction between the setting of goals and actions geared to achieve them" (Pressman and Wildavsky 1973: xv).

- *Bottom-up Theories.*

  It emerged as a critical response to the top-down school. Lipsky (1971, 1980) argued that policy analysts needed to consider the direct interactions between social workers and citizens. Besides, Hjern, with Porter and Hull, (Hjern 1982, Hjern and Porter 1981, Hjern and Hull, 1982) suggested that implementation analysis should start with the identification of networks of actors from all relevant agencies collaborating in implementation and then examine the way they try to solve their problems. According to Sabatier (1986a), this approach offers a useful tool to describe the "implementation structures" (Hjern and Porter 1981) within which policy execution takes place. However, he also criticizes the lack of causal hypotheses on the relationship between legal and economic factors and individual behavior.

- *Hybrid Theories.*

  It was developed by Elmore (1985), Sabatier (1986a) or Goggin et al. (1990) as new models by combining elements of both sides in order to avoid the conceptual weaknesses of top-down and bottom-up approaches. Policy makers should start with the consideration of policy instruments and available resources for policy

change. They should also identify the incentive structure of implementers and target groups. In a similar position, Wildavsky, together with Majone (Majone and Wildavsky 1978) argue that implementation is an evolutionary process in which programs are constantly re-shaped and re-defined. The conception thus started from policy inputs defined by central policy makers. At the same time, it also embraced the idea that these inputs will almost inevitably be changed in the course of their execution.

2.2.5. Research Evaluation

Evaluation is a process that assesses the objectives in the light of a predetermined standard value with the intent to make an appropriate decision (Panelson, 1967). According to Julian C. Staanley (1996) evaluation is a process of decision making where the decision has a major role, while Numez (1992) pointed out that evaluation is a comparison between the objectives with the results achieved and how that goal is achieved. Evaluation is a form of research, because the evaluation uses the same methods with research in general. The difference is only on the goal and the implementation, as a form of research, evaluation is defined as a study using scientific methods to describe a phenomenon to determine the relationships among the various phenomena (Rossi and Williams, 1973). Besides, research evaluation is also a way to improve the policy (Carol, 1972) and evaluation research also means determining the effectiveness of the programs (UNESCO, 1976). According to Wollmann *evaluation in the field of public policy may be defined, in general terms, as*

an analytical tool and procedure meant to do two things. First, evaluation research, as an analytical tool involves investigating a policy program to obtain all information pertinent to the assessment of its performance, both process and result; second evaluation as a phase of the policy cycle more generally refers to the reporting of such information back to the policy-making process (Wollmann 2003: 1-11)

2.2.6. Nutritional Programs

Public Health Center (PHC) is a leading health care activity to provide health services including nutrition to people that exist in every areas of the entire country. The efforts to improve nutritional status through PHC aims to address the problem of nutrition and improve the nutritional status of the community. At the PHC level, nutrition improvement is carried out by some kind of power such as the nutritionist expert in PHC, Assistant Nutritionist, Midwives, Nurses and other health professionals. The efforts to improve nutrition through the PHC cannot be implemented effectively because not all PHC has nutritionists, and also there is limited ability for overcoming nutritional problems (Ministry of Health, 1995).

2.2.7. Integrated Health Services Post

Pos Pelayanan Terpadu (integrated health services post) is one form of power sourced community health efforts which is managed and operated from, by, for and with society in the implementation of health development, in order to empower communities and provide convenience to the public in obtaining basic health services

to accelerate the decline in maternal and infants mortality. To enhance the active role of integrated health services post, in 2001, the Minister of Home Affairs issued a letter of the general guidelines for the revitalization of integrated health services post, and subsequently issued regulations No. 54 of 2007 on Guidelines for Establishment of integrated health services post.

Integrated health services post consist of 4 levels of development, namely:

1. Pratama

Integrated health services post which does not conduct routine monthly activities and only has a very limited number of cadres[15] that is less than 5 people.

2. Madya

Integrated health services post which has to carry out the activities of more than 8 times per year by the average number of cadres as many as five people or more, but the scope of the *five main activity*[16] at less than 50%.

3. Purnama

Integrated health services post which can perform activities more than 8 times per year, with the average number of cadres as many as five people or more, coverage of 5 main activities is more than 50%, is able to organize additional programs, and has obtained financing from the health funds managed by participants limited to society that is less than 50% of family heads in the working area.

[15] Cadre is member of society who voluntary conduct the activities regarding with simple health practices in integrated health services post.

[16] 5 main activities of integrated health services post are : promoting mother and children health, family planning, immunization, nutrition, the preventive of diarrhea.

4. Mandiri

Integrated health services post which carries out the activities of more than 8 times per year by the average number of cadres as many as five people or more, the coverage of the five main activities are more than 50%, is able to organize additional programs, and has obtained financing from the health funds managed by community participants more than 50% of family heads who live in the working area.

Lack of energy and protein in children is still a public health problem for Indonesia. Based on Basic Health Research (2010), as many as 13% have less weight, of whom 4.9% had very poor weight gain. The same data shows 13.3% of children underweight, of which 6.0% of children are very thin and 17.1% of children are short. This situation affected the infant mortality rate which is still high because, according to the WHO more than 50% of infant and child mortality is linked to malnutrition, and therefore nutrition problems need to be handled quickly and appropriately.

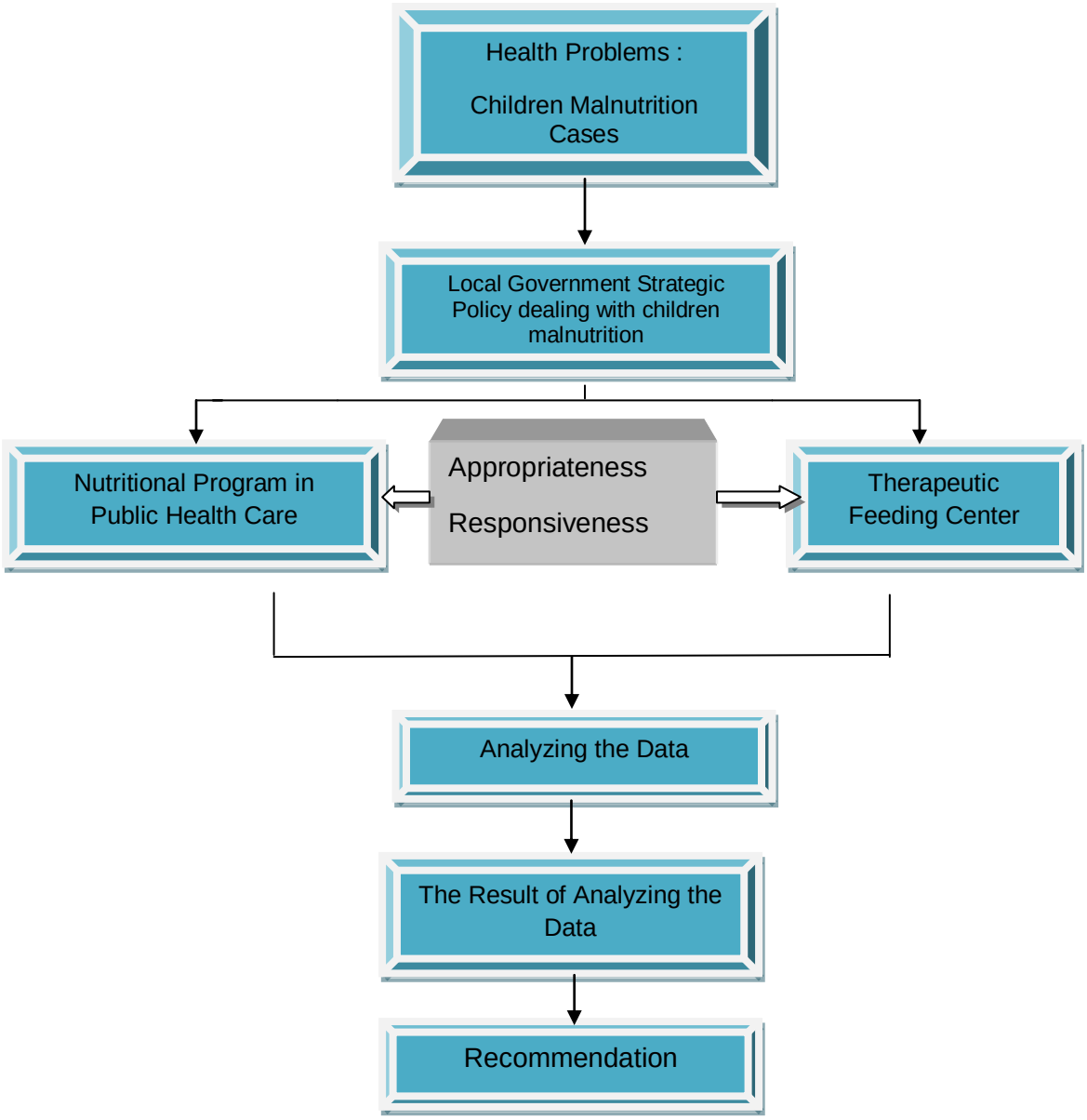
One way to address the problem of undernourishment is make the treat severe malnutrition in an attempt to handle each case found. At this time along with the development of science and technology, treatment of malnutrition show that this case can be handled by two approaches. Malnutrition with complications (anorexia, severe pneumonia, severe anemia, severe dehydration, high fever and decreased consciousness) must be treated in hospital, health center care, Nutrition Recovery Center (PPG) or Therapeutic Feeding Center (TFC).

While severe malnutrition without complications can be performed on an outpatient basis. Treatment of malnutrition on an outpatient basis and hospitalization is the answer to the implementation of Minimum Service Standards (MSS) Division of Nutrition Improvement, in each child's malnutrition should receive standard treatment. The basic principle implemented in the handling of this malnutrition is to increase the reach / coverage of nutritional recovery, the discovery of cases of malnutrition at an early stage so that treatment can be done early and be comprehensive, the handling of child malnutrition are tailored to the child's condition to determine whether the child needs hospitalization or outpatient care. The handling of child malnutrition is an activity that is integrated with the existing health care system; the handling of child malnutrition involves the role of inter-related sectors, NGOs, professional organizations and community leaders. Monitoring the implementation of child malnutrition needs to be done continuously to ensure service performance appropriately and effectively.

2.2.7. Conceptual Framework

The conceptual framework on performing this research, can be described in the following figure.

Figure. 5. Conceptual Framework



Source: William Dunn's theories employed by the writer.

CHAPTER III

SOCIAL SETTING

This research is conducted in Depok Municipality, West Java Province, Indonesia. This chapter describes Depok Municipality including its the geographical location, the government, the population and society.

3.1. General Description of Depok Muncipality

3.1.1. Depok Municipality

Depok Municipality is one area in West Java Province, Indonesia on the western border of Jakarta. Depok municipality is geographically located at 6°23′24″S 106°49′48″E and has an area of 200.29 km^2 and 1,374,903 people in 2005, with a density of 6,865 people/km^2. For 2007,the populations were 1,412,772 and in 2010, the population in Depok becomes 1,751,696. Depok is divided into 6 subdistricts: Beji, Cimanggis, Limo, Pancoran Mas, Sawangan, and Sukmajaya.

Figure. 6. Depok Municipality Location

Source : www.depok.go.id.

The Therapeutic Feeding Center is located in 2 health centers. They are Cimanggis and Sukmajaya health center.

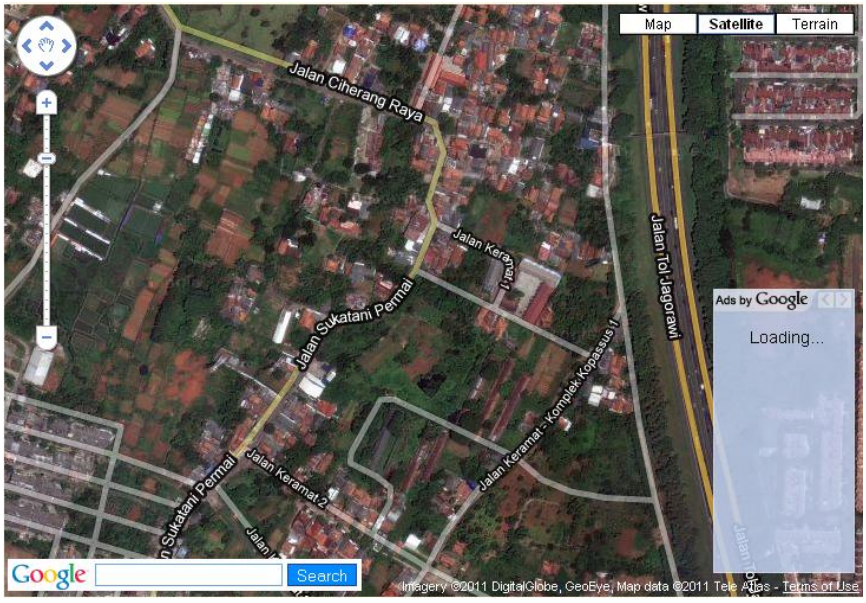
3.1.2. Cimanggis Village

3.1.2.1. Location and Geography

Cimanggis Health center is located in Curug village, Cimanggis sub district with these following borders:

- North: Mekarsari Village
- West: Sukmajaya Subdistrict
- South: Sukamaju Baru village
- East: Sukatani village and Harjamukti village.

Figure. 7. Cimanggis Area Closer



Source: Google earth modified.

The area of Cimanggis health center is 350 km². The population is 93/km². The authority area covers two villages that is, Cisalak Pasar and Curug.

The visit from the village to the health center is done by public transportation. The condition of the villages can be seen in the table below.

Table 2. The Condition of the Villages

No.	Village	The farther distance from the health center	The average time needed	Level of dependent condition
1.	Cisalak Pasar	2.5	20 minutes	Medium
2.	Curug	2	15 minutes	Medium

Source : Cimanggis PHC.

Table 3.The Authority Area of Cimanggis Health Center

No.	Village	Neighborhood Village	Integrated Health Service	Cadre	Area (km2)
1.	Cisalak Pasar	9	16	80	165
2.	Curug	11	14	87	185
Total		20	30	167	350

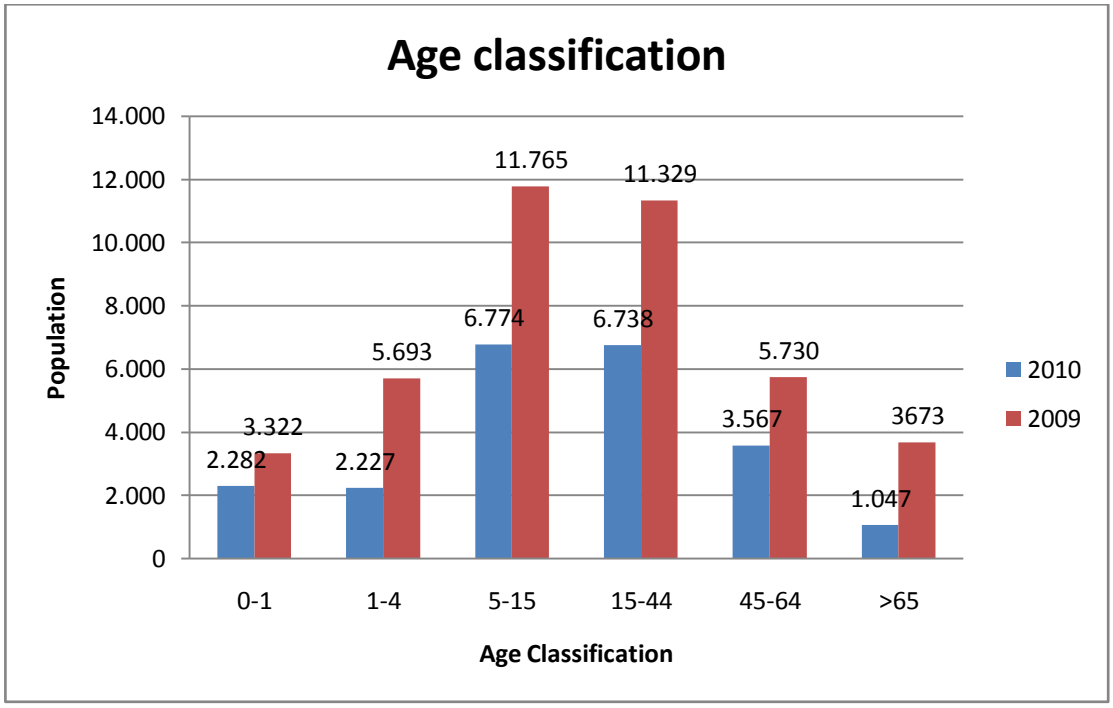
Source: Cimanggis PHC.

3.1.2.2. Demography

Based on data from Cimanggis subdistrict 2010 the population of authority area of the health center is 32,414 persons. Based on sex classification, from the total of 32,414 population, 49% (16,091 person) is male and 51% (16,323 Person) is female.

We can see the age classification of the population from the table below.

Table 4. The Age Classification of the Population

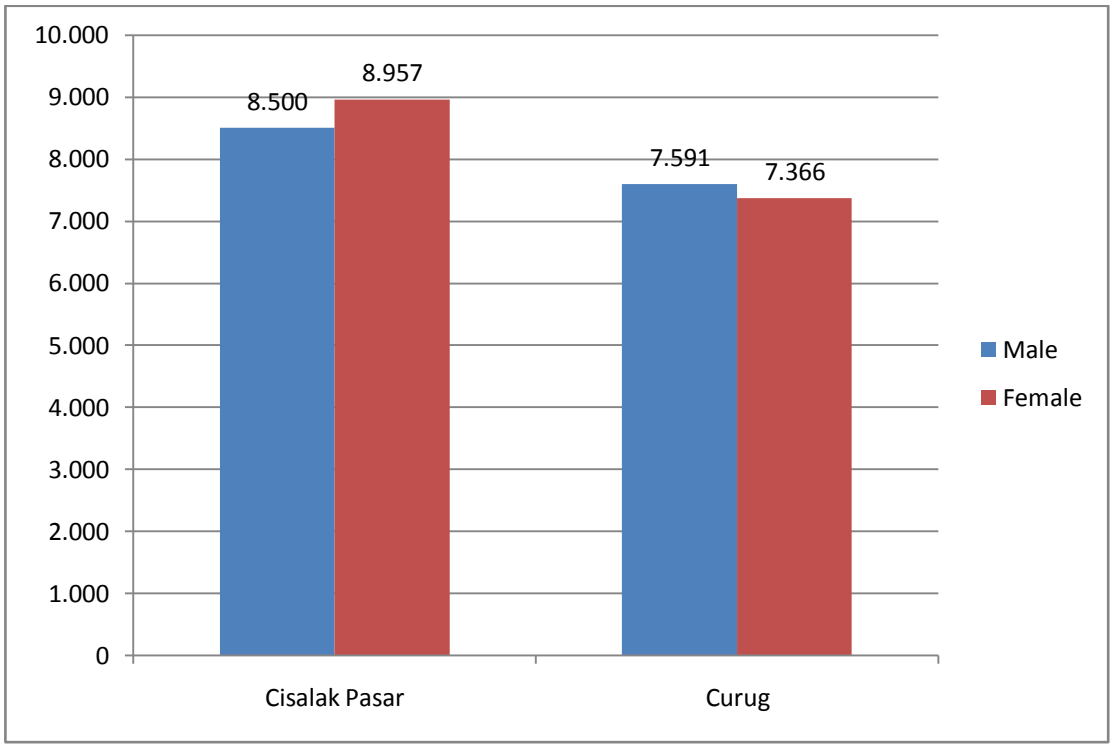


Source: Cimanggis PHC.

In 2010, the number of the population based on the age, the most dominant is the age between 5-14 years old that is 6,774 person or 20% from the whole population. Further, there are 11, 283 person or 34% population that includes the unproductive age (0-14 year). Productive age (15-64 year) in 2010 is 21,131 person or 65 % from the total of the population in Cimanggis. It means the number of productive age is more than a half of the entire population. While the number of old people (>65 year) in 2010 is 1,047 / 3%. Different from 0-14 year and 15-64 year, the population for 65 year, the ratio of male and female is 98.6% this data is same with data in 2009 which

shows that the number of male is lesser than female in the classification of more than 65 year old. This shows that male's life expectation is lower than female.

Table 5. The Number of the Population Based on Sex



Source: Cimanggis PHC.

3.1.2.3. Population density and population growing

The highest level of population density is in Cisalak Pasar Village that is 106 person/km^2. In Curug village it is 81 person/km^2. As we can see in the table below.

Table 6. Population Density 2010

No.	Village	Area (km^2)	The number of population	The density of population/km^2
1.	Cisalak Pasar	165	17,457	106
2.	Curug	185	14,957	81
Total		350	32,414	93

Source: Cimanggis PHC.

3.1.2.4. The Population Based on Education

Based on data in 2010, the population of people 10 year above who do not get education is 13,096/40%; graduate from elementary education is 4,387 people/20%; graduate from junior high school is 5,142 people/24%; graduate from senior high school is 5,492 people/25%; and 4,177 people/19% are university graduates.

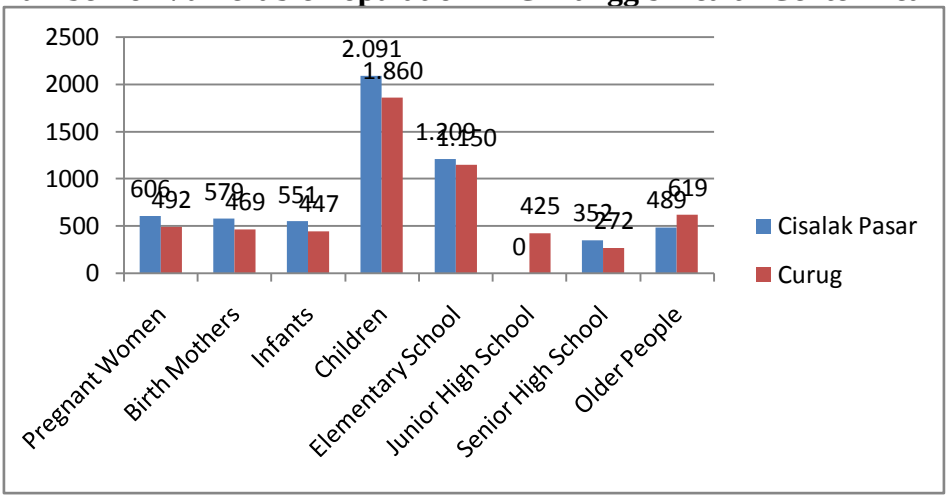
It can be concluded that Cimanggis population is low in education, whereas education level affects people health behavior.

3.1.2.5. Vulnerable Population

The number of vulnerable population in Cimanggis based on maternal, infant, children and older people are 32,318 people/39.46%. The highest of then stayed in Cisalak Pasar village.

Table 7.

The Number of Vulnerable Population in Cimanggis Health Center Year 2010



Source: Cimanggis PHC.

3.1.2.6. The Number of Poor People

Although Cimanggis is a prospect area with fast development, it has negative impacts of poverty. Poor alleviating is a development priority in Depok.

Table 8.

The Number of Poor People

In Cimanggis Health Center in 2010

Village	Number of population	Poor population			
		Number of poor people	%	Number of poor families	%
Cisalak Pasar	17,457	2,594	15	503	8.67
Curug	14,957	3,829	25	318	6.68
Total	32,414	6,423	19	821	7.77

Source: Cimanggis PHC.

Table 9.

Children's Nutritional Status in Cimanggis Health Center in 2009-2010

Nutritional Status	Year 2009		Year 2010	
	Number	%	Number	%
Malnutrition	12	0.39	20	1
Undernutrition	175	5.63	99	3
Good nutrition Status	2,856	91.95	2.854	93
Over Nutrition Status	63	2.06	90	3

Source: Cimanggis PHC.

Poverty is the root of the problem of children malnutrition, as parents busy with earning money often neglect their children, in nutritional as well as parenting aspect.

3.1.2.7. General Description of Cimanggis Health Center

Cimanggis Health Center was built in 1968, and at that time it was the only health center in Cimanggis sub district and must serve all of the people from the villages. Health center building has been renovated for several times. The most prominent renovation is on 17 April 2002. The health center built an inpatient room equipped with 15 beds. The last renovation was done in 2007, the beds are added to be: 12 for general treatment, 8 beds for TFC and 6 beds for maternal care.

The location of Cimanggis Health Center is at a strategic point, namely at Jalan Raya Jakarta-Bogor km. 33 and traversed by various types of public transport making it very easy to be reached by needy people. The area covers the three villages i.e. villages waterfall, Cisalak Market and Mekarsari with the population of 41,512 inhabitants. Fostering 30 Posyandu (Integrated Health Services) spread evenly in each RW (neighborhood). Since June 2008, the working area is reduced because of establishing of new health center in Mekarsari village. Cimanggis Health Center is implementing Quality Management System ISO 9001-2008; it began with the implementation of ISO in November 2009. It requires a shared commitment to improve the quality of health services in accordance with service standards.

Figure. 8. Cimanggis Health Center

A. Organizational Structure

Until now, the existing structures could perform basic tasks in a good clinic, but for the future, further development is necessary due to some activities that have not been accommodated, such as marketing activities and supervision.

B. Health Worker

Table 10 describes health workers in Cimanggis health center based on the level of education in 2010.

No.	Level of Education	Amount	Additional Information
1.	Physicians		
	- Doctors	5	
	- Dentists	2	1 Head of Health Center
2,	Nursing		
	3 year Diploma of Nurse	3	
	3 year Diploma of Midwives	2	
	3 year Diploma of Tooth cares	0	
	Nursing School Graduates	7	
	One year Diploma midwives	5	
	Tooth care School Graduates	1	
3.	Pharmacy		
	- Pharmacist	0	
	- SMF / SAA	1	
4.	Public Health	1	
	Bachelor of Public Health	1	
	3-year diploma of Sanitarian	0	
	One-year school of Nutrionist	1	
	One year diploma of Sanitarian	1	
5.	Laboratory Analist	1	
	3-year Diploma of Fisiotherapi	1	
6.	Non-medical worker resources		
	- Non-health bachelor degree	0	
	- Senior High school	6	5 Non Gov. Officer
	- Yunior High School	2	2 Non Gov.Officer
	- Elementary school	3	2 Non Gov.Officer
Total		42	
Health Workers		31	
Non-health Care Workers		11	

Source: Sukmajaya PHC.

Most of health workers in Cimanggis health center are from health care background namely 73%, while non-health care background is only 35%.

C. Health Facilities

There are three buildings built in 1968 and have been renovated for several times. The last renovation was conducted in 2007.

C.1. Main building

It was built in 2007 and consists of: Floor 1, Registration room, Unit emergency, General clinics, Isolation room, Medicine Room, Hospitalized room with 9 beds, Nurse room and kitchen. Second floor consists of Administration room, Head of health center room, meeting room, children policlinics room, nutrition room, secretariat room, Isolation room and hall.

C.2. Vehicles

Table 11. Vehicles and Their Condition

No.	Kind of Vehicles	Condition	Additional Information
1.	Ambulance Toyota F.420 F Year 1986	Damaged	Propose to be eliminated
2.	Ambulance Toyota Dyna B1268 UQ Year 2003	Damaged	
3	Ambulance Siaga Suzuki B 1191 UQ Year 2007	Damaged	

Source : Sukmajaya PHC.

No.	Kind of Vehicles	Condition	Additional Information
1.	Motorcycle Yamaha YT 115 F 26884 F Year 1986	Damaged	Propose to be eliminated
2.	Motorcycle Yamaha RX K135 B 3862 UQ Year 2006	Damaged	
3.	Motorcycle Suzuki EN 125 B 3895 UQ Year 2006	Damaged	

Source: Sukmajaya PHC.

Figure. 9. One of the Vehicle Owned by Cimanggis Health Center

3.1.3. General Description of Sukmajaya Health Center

Sukmajaya health center was built in 1981, with the authority of 55,14 km^2 or 27,53% of Depok area, Sukmajaya subdistrict itself borders with:

- North borders with Pondok Cina
- South borders with Kalimulya, Ciledug & Sukmajaya
- West borders with Kemiri Mutia & Depok
- East borders with Abadijaya & Baktijaya

The working area of Sukmajaya hearth center covers 2 villages, namely Mekarjaya & Tirtajaya.

Table. 12. The Working Area of Sukmajaya Health Center

No.	Village	Area (km^2)	The amount of Neighborhood	The amount of Integrated Health Services
1	Mekarjaya	26,60	31	28
2	Tirtajaya	28,54	8	9
Jumlah		55,14	39	37

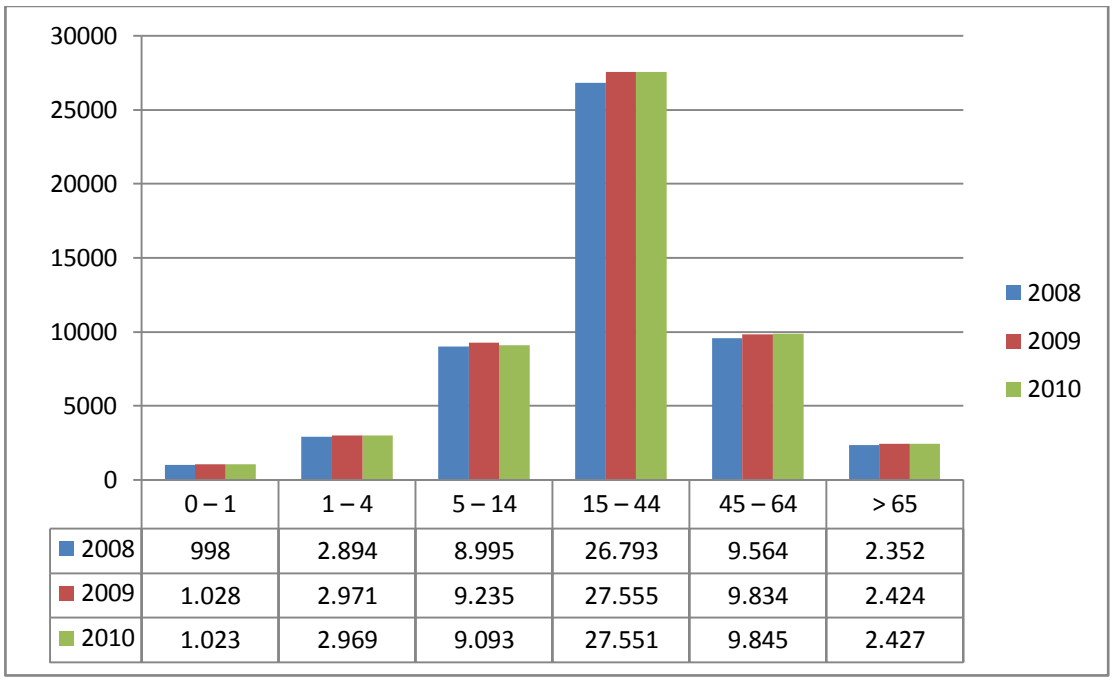
Source: Sukmajaya PHC.

3.1.3.1.The Population Based on Sex and Age

Based on Sukmajaya sub district data, the population of Sukmajaya is 52,858 persons. It decreased as 0.35% from the previous year. The population based on age classification can be seen in table 13.

Based on sex, there are 25,400 people/48.05% are male and 27,458/51.95% are female, as we can see on table 13.

Table 13. The Population Based on Age Classification



	0 – 1	1 – 4	5 – 14	15 – 44	45 – 64	> 65
2008	998	2.894	8.995	26.793	9.564	2.352
2009	1.028	2.971	9.235	27.555	9.834	2.424
2010	1.023	2.969	9.093	27.551	9.845	2.427

Source: Sukmajaya PHC.

The detail number including sex classification can be seen in the following table.

Table 14. The Population Based on Age and Sex Classification

No.	Age Classification	Year 2008			Year 2009			Year 2010		
		M	F	Total	M	F	Total	M	F	Total
1	0 – 1	513	485	998	507	521	1,028	507	516	1,023
2	1 – 4	1,486	1,408	2,894	1,468	1,503	2,971	1,456	1,513	2,969
3	5 – 14	4,699	4,296	8,995	4,612	4,623	9,235	4,484	4,559	9,093
4	15 – 44	13,482	13,311	26,793	13,231	14,324	27,555	13,228	14,323	27,551
5	45 – 64	4,713	4,851	9,564	4,614	5,220	9,834	4,624	5,221	9,845
6	> 65	1,120	1,232	2,352	1,094	1,330	2,424	1,101	1,326	2,427
Total		26,013	25,576	51,589	25,526	27,521	53,047	25,400	27,458	52,858

Source: Sukmajaya PHC.

Thera were two villages in Sukamajaya Subdistrict in year 2010

Table. 15. The Population in Sukmajaya Subdistrict

No.	Village	The number of population		
		M	F	Total
1	Mekarjaya	21,720	23,985	45,705
2	Tirtajaya	3,680	3,473	7,153
Sukmajaya Subdistrict		**25,400**	**27,458**	**52,858**

Source: Sukmajaya PHC.

The highest density of Sukmajaya area is Mekarjaya village that is 1,718 people/km^2 while Tirtajaya village is 251 people/km^2. It means that the population of Sukmajaya health center working area is 959/km^2,

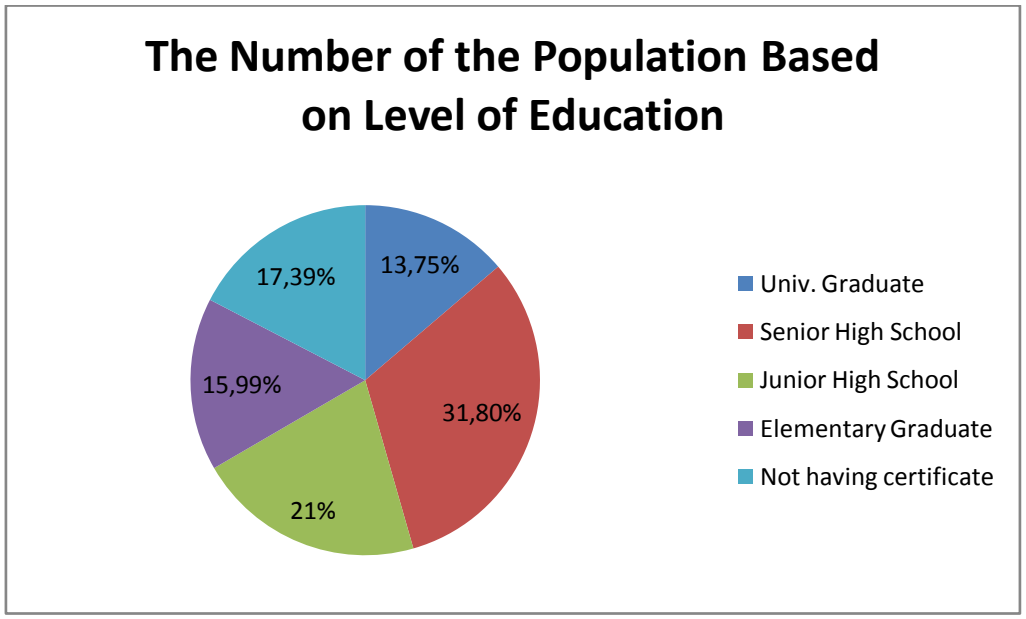
Table. 16.

The Population Density

No.	Village	Area (km^2)	The number of population	Population Density (Km^2)
1.	Mekarjaya	26.60	45,705	1,718
2.	Tirtajaya	28.54	7,153	251
Sukmajaya PHC		**55.14**	**52,858**	**959**

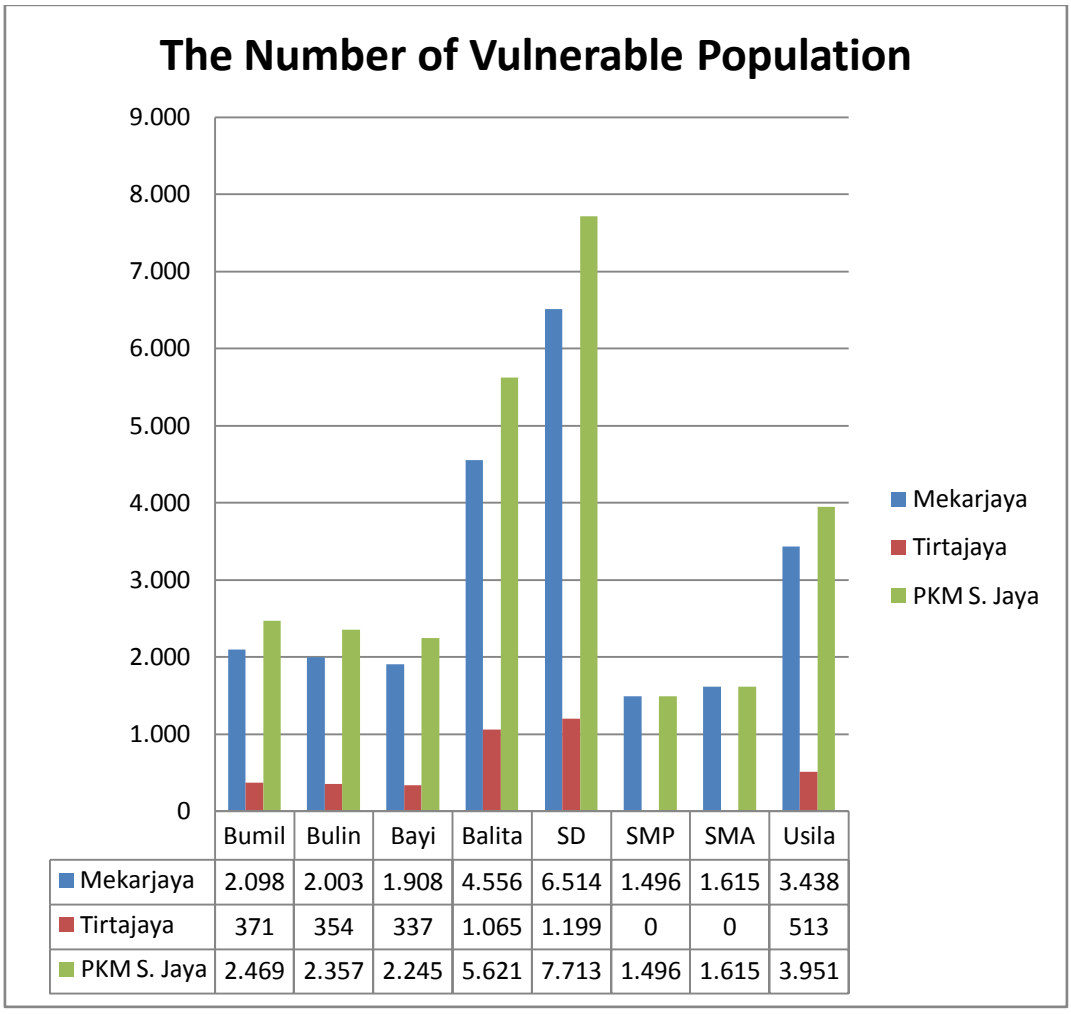
Source : Sukmajaya PHC.

Table. 17. The Number of the Population Based on Level of Education



Source: Sukmajaya PHC.

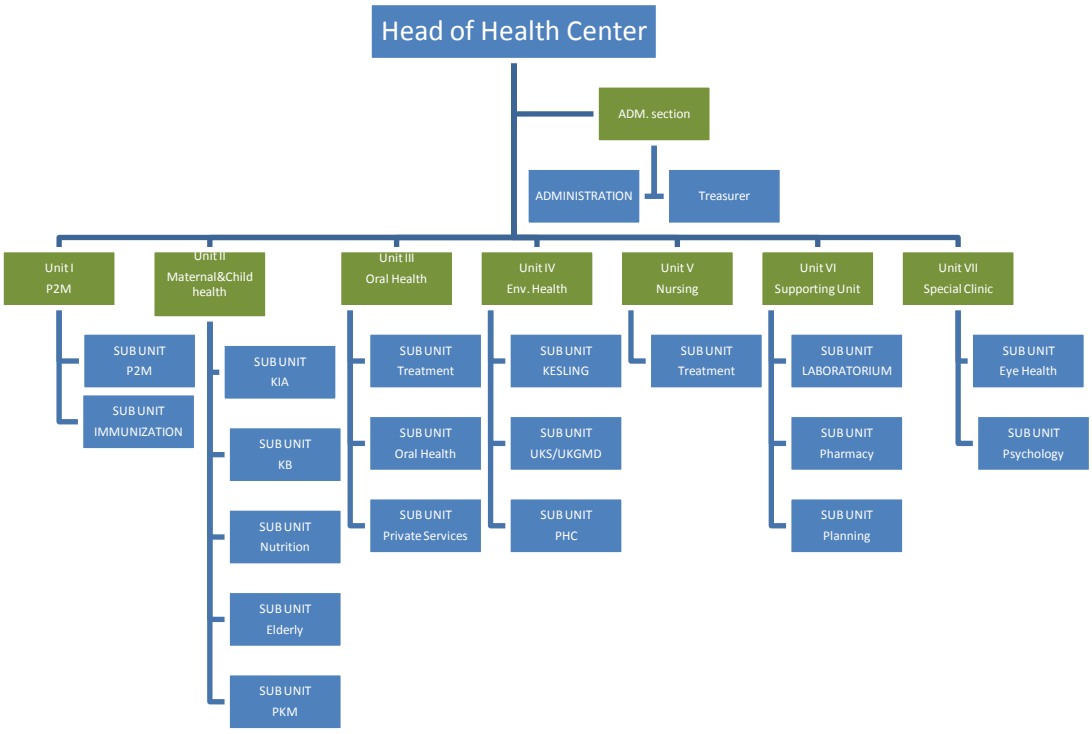
Table 18. The Number of Vulnerable Population



	Bumil	Bulin	Bayi	Balita	SD	SMP	SMA	Usila
Mekarjaya	2.098	2.003	1.908	4.556	6.514	1.496	1.615	3.438
Tirtajaya	371	354	337	1.065	1.199	0	0	513
PKM S. Jaya	2.469	2.357	2.245	5.621	7.713	1.496	1.615	3.951

Source: Sukmajaya PHC.

Figure 10. The Organizational Structure of Sukmajaya Health Center



Source: Sukmajaya PHC.

Table. 19. Health Worker in Sukmajaya Health Center in 2010

No.	Level of Education	Total	%
1	Medis		
	- Doctors	5	15.15
	- Dentists	3	9.09
2	Nursing		
	3 year-diploma of Nurse	1	3.03
	3 year-diploma of Midwife	5	15.15
	3 year-diploma of tooth care	1	3.03
	School of Nurse	5	15.15
	1 year of Midwife	2	6.06
	School of tooth care	0	0
3	Pharmacy		
	- Pharmacist	0	0
	- School of Pharmacist	1	3.03
4	Public Health		
	Bachelor of Public Health	2	6.06
	3 year-diploma of Sanitarian	0	0
	3 year-diploma of Nutritionist	0	0
	1 year-diploma of Sanitarian	0	0
	1 year-diploma of Nutritionist	0	0
5	Health Analyst	1	3.03
6	Non-health care educational background		
	- Bachelor of Non-health	1	3.03
	- Senior High School	5	15.15
	- Junior High School	1	3.03
	- Elementary school	0	0
	Total	33	100
	% Health workers	26	78.79
	% Non-health care workers	7	21.21

Source: Sukmajaya PHC.

Figure 11. Ambulances Owned by Sukmajaya Health Center

CHAPTER IV

RESEARCH METHOD

4.1. Type of the Research

Based on the problem statement and research purposes, this research focuses on analyzing of the implementation of nutritional programs held by Public Health Care in Depok municipality in reducing of malnutrition prevalence in this area. The objective of this research is giving a description on the implementation of nutritional programs, describing the constraints and challenges faced by the implementers and evaluating the on-going implementation by using appropriateness and responsiveness criteria of the programs. Accordingly, this research is conducted to describe situations and events. According to Schwandt (1997) in McNabb (2002) the descriptive research is a kind of strategy in Qualitative Research. Creswell (1994) in McNabb (2002) defined Qualitative Research as an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting.

However, both quantitative and qualitative research strategies are considered legitimate designs for research in public administration and all other social and administrative sciences. Researchers in the social and administrative sciences are no longer required to follow a single design for their investigation. Instead, many different approaches are possible.

4.2. Source of Data

Source of data is one of the most vital aspects in the research. If there is error in using or understanding the source of data, then the data obtained will also be missed. Therefore, researchers should be able to understand which sources of data are used in the research.

According to the research focus and problems, the sources of data in this research are:

1. Informants

   Choosing the informant is based on the subject matter related to the title, research focus and research problems, person owning some data and ready to give them to the researcher. The researcher uses interview and observation to get the data from the informants.

   In this case the information was obtained from: local government officers (Head of Depok Municipality Health Department, Head of Section of Family Health and Nutrition Depok Municipality, Head of Public Health Care Depok Municipality, Nutrition Section staff in Health Centers, as well as parents and relative of malnutrition children.

2. Documents

Documents used in this research are local government rules, Mayor Decree of TFC, other relevant regulation, Health center documents, performance report of nutritional program, literatures and relevant studies and media publications related to the issues of malnutrition.

4.3. Focus of Research

Because there are vast problem, then in qualitative research, researchers will restrict research in one or more variables. Thus, in qualitative research there is so-called problem definition. Limitation of the problem in qualitative research is called focus, which contains the principal problems that are still common.

Focus of the research is very important for it limits the study and source of data. Without the research focus, the researcher will be trapped by abundance of obtained data. Through the instruction and tuition focus, the researcher may know what is required to be collected and which irrelevant data need not be entered into the thesis.

Moleong (1998) argued that research focus plays an important role as a means to direct research in order to ensure that relevant and useful data/ evidence is collected.

This thesis focuses the research in:

1. The implementation of the Nutritional Programs in Public Health Center.
2. Explaining the constraint and challenges faced by the health workers in implementing the Nutritional Programs in Public Health Care.

3. Explaining the aspect on strengthening the policies, programs and interventions regarding with reduction of malnutrition prevalence in Depok municipality.

4.4. Location

This research takes place in Depok municipality, considering that Depok has two Therapeutic Feeding Centers namely in Cimanggis and Sukmajaya health centers as the leading institution in improving children nutritional status.

4.5. Data Collecting Process

Data collecting process covers the research and question problems. The data collection can be done with:

a. Interview

Interviews are used as one of data collection techniques, if researchers want to conduct a preliminary study to find problems which must be investigated, and also, when researchers want to know things from more in-depth respondents with small number of respondents[17].

Interviews can be conducted in a structured and unstructured method, and also can be done face to face or using the phone.

1. Structured Interview

   Structured interviews used as data collection techniques, when the researcher or data collector already know for sure what information will be obtained. In an interview, besides bringing the interview

[17] Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta, Bandung, 2008, p. 137.

instruments as a guidance, the researcher can also use other tools like a tape recorder, pictures, brochures and other materials that can assist the process of interview.

In this research, the interview involves : local government officers (Head of Depok Municipality Health Department, Head of Section of Family Health and Nutrition of Depok Municipality, Head of Public Health Care of Depok Municipality, Nutrition Section staff in Health Centers, as well as parents (16 mothers were asked several open-ended questions about how the program was received by them) and relatives of malnutrition children.

2. Unstructured Interview

   Unstructured interview is a free interview where the researcher does not use the interview guidelines that have been arranged in a systematic and comprehensive data collection. Interview guidance is used only in the form of broad outline issues to be questioned.

   Unstructured interviews or open interviews are often used in preliminary studies or even for a more in-depth research about the respondents. In a preliminary study, researchers try to obtain preliminary information about various issues or problems that exist in the object, so the researchers can determine exactly what the problem or variables that must be investigated. To obtain a more complete picture of the problem, the researchers need to conduct an interview to the parties that represent different levels in the object.

In unstructured interviews, researchers do not know exactly what data will be obtained, therefore researchers listen more to what the respondents report.

In this research, the unstructured interview involved community members (some cadres in integrated health services post).

b. Observation

Observation as data collection techniques has specific characteristics compared with other techniques, namely interviews and questionnaires. If interviews and questionnaires deal with people, then the observation is not limited only to people but also other natural objects.

Sutrisno Hadi (1986) suggested that observation is a complex process, a process that is composed of various psychological and biological processes. Two of the most important are the processes of observation and memory.

In terms of the implementation process of data collection, observation can be identified as non-participant observation and participant observation. Furthermore, in terms of instrumentation used, the observations could be classified into structured and unstructured observation.

c. Documentary Method

Documentary method is one method of data collection used in social research methodology. Documentary method is a method used to browse historical data. Most of the available data are: letters, diaries, reports, official documents etc. Official

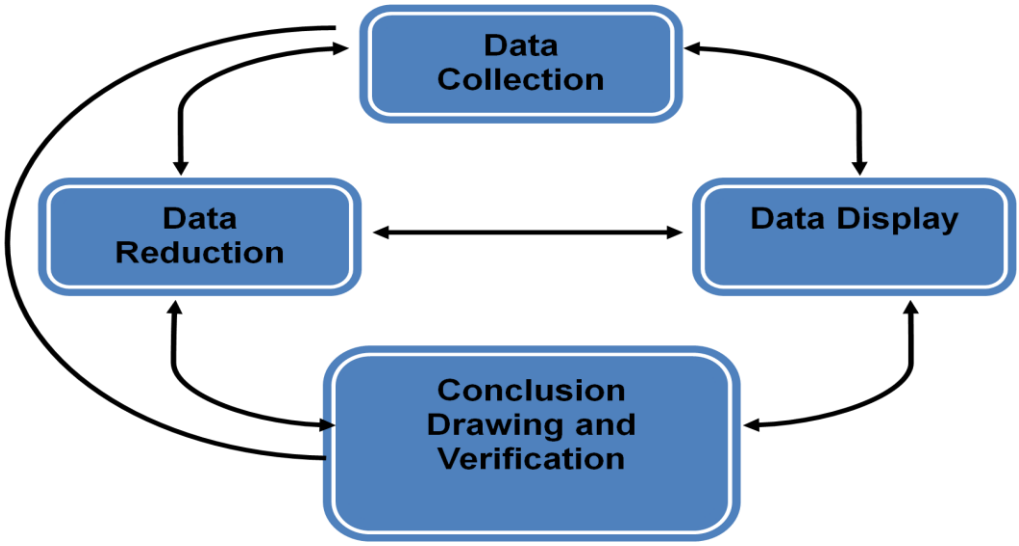
documents can be memos, notices, instructions, rules of the institution. Other forms of data available consist of magazines, newsletters, announcements etc.

The documentary data consists of : Health center data, TFC data, and Annual reports.

4.6. Design of Data Analysis

The data analysis used in this research is interactive analysis taken from Miles and Hubberman (1992) that describes the qualitative data analysis in three activities lines: data collecting, reporting and reducing.

Figure. 12. Design of Data Analysis



a. ***Data Reduction.*** *In qualitative research, data reduction does not necessarily refer to quantifying nominal data. Qualitative data need to be reduced and transformed in order to make them more readily accessible, understandable, and to draw out various themes and patterns.*

b. ***Data Display****. The notion of data display is intended to convey the idea that data are presented as an organized, compressed assembly of information that permits conclusions to be analytically drawn. These displays assist the researcher in understanding and observing certain patterns in data or determining what additional analysis or actions must be taken*

.

c. Conclusions and Verification. *After the data have been collected, reduced, and displayed, analytic conclusions may begin to emerge and define themselves more clearly and definitely* (Miles and Hubberman, 1992).

CHAPTER V

RESEARCH FINDINGS

5.1. General Description of 2 TFCs

5.1.1. TFC in Sukmajaya

TFC in Sukmajaya uses one room of children ward that has been established before. This is a large room 15x5m with 8 beds and 1 bathroom. In front of that ward is the health workers room who are on duty with one bedroom for the health workers staying overnight and one bathroom. Some toys are placed in this room. Here, also the nurse and the nutritionist prepare the medicine for the children. And also there are 2 rooms for doctor and nutritionist, one kitchen for preparing and cooking the food for the children. All these rooms are in the second floor of Sukmajaya PHC. In the first floor of Sukmajaya PHC there are some clinics for examining patients.

Using z score standard of WHO-NHCS, the nutritional status of children under five is shown in the following table. **Table 20. Children's Nutritional Status.**

No.	Nutritional Status	Year 2007		Year 2008		Year 2009	
		Amount	%	Amount	%	Amount	%
1.	Malnourished	21	0.40	5	0.09	13	0.23
2.	Moderately Malnourished	273	5.24	219	3.97	94	1.68
3.	Good Nutrition Status	4.768	91.53	5.118	92.89	5.457	97.32
4.	Over Malnutrition	113	2.17	162	2.94	43	0.77

Source: Weigh measurement in integrated health services post year 2007-2009.

In 2009, the number of under-five malnourished children were 13 or 0.23% . It increased compared to year 2008 when there were five children or 0.09%. But, there is a decrease in moderately malnourished children, who consisted of 94 children or 1.68% in 2009 when compared to 2008 amounting to 219 children or 3.19%, this was

caused by an increase in nutritional status after done diverse intervention. One of which is Supplementary Feeding recovery and it is expected to be done in the coming year.

In Sukmajaya Health Center, I met a doctor, who is in charge as TFC coordinator, a nutritionist who is as a civil servant, a nurse (civil servant) and 6 health workers who are hired annually, and two chefs who cook the food. In depth interview that I conducted both with health worker also with the parents of the undernourished children, I found the constraints faced by the health workers in taking care undernourished children. From the parents' view, I found why the cases of not continuing the treatment happened. It is because the mothers must accompany the children hospitalized in TFC, while they should work or take care other children they have, that is why they choose to go home rather than continue the treatment until their children have good nutritional status. Most of the children who were hospitalized in this TFC work as housekeeper, construction worker and minivan driver or other informal labor, who can be categorized as poor people[18]. A majority of children attending the TFC come from families who because of economic constraints, cannot improve the nutrition and health status of their children. As stated by the TFC coordinator:

[18] According to World Bank poor people are those who live below US$ 1.25 Purchasing Power Parity (PPP) per day. In Indonesia, the national poverty line is those who earn US$ 1.55 PPP per day (Rp 166,697 person/ month in 2007)

“Poverty is another factor that causes children malnutrition, besides parenting, in average from 2008 when TFC established until now, 85% patients come from poor family. After discharge from TFC, they usually come back asking for therapeutic milk. So the main problem is poverty, in these cases a rise in income or an increase in food supply is necessary if children are to have optimal growth.” (Interview 13 April 2011).

In 2010 the results of examination of malnutrition children found from the clinic examination is seen in the following table.

Table 21. DATA of Children Malnutrition found in PHC
PERIODE JANUARI - 4 NOVEMBER 2010

NO	Name	Age (Months)	W/L-H	Z-SCORE	Date of coming	Information	
1	Dimas Ramadani	17	7.5/73.2	-2.6 SD	1-Feb-10		
2	Anisa Salsabila	14	7.3/96	-2.87 SD	6-Feb-10		
3	Marlidia	11	5.75/69.3	-2.9 SD	19-Mar-10		
4	Bagas	48	9.8/96	-3.65 SD	09 Apr 2010		
5	Wardah Husniah	10	5.3/68.3	-3.5 SD	29-Apr-10		
6	Aisah	20	7.7/78	-2.7 SD	29-Apr-10		
7	Muslimah	13	7.7/78	-2.8 SD	22-May-10		
8	Dzakky. Z	19	7.4/76.2	-3.25 SD	24-May-10		
9	Anggi Mahdania	17	8.0/81	-3.5 SD	8-Jun-10		
10	Zaka Bagus	21	8.1/79	-3.25 SD	18-Jun-10	No identity as Depok citizen	
11	Zaura	8	6.0/67.8	-2.8 SD	22-Jun-10		
12	Sibly	24	8.1/85	-3.7 SD	26-Jun-10		
13	Aisyah	50	9.9/92.5	-3.7 SD	7-Jul-10		
14	Nurahman	12	6.0/74.4	-3.7 SD	24-Jul-10		
15	M. Rafi	24	8.0/84.4	-4.2 SD	24-Jul-10		
16	Dwiki Rizki. A	20	6.9/78.3	-3.8 SD	26-Jul-10		
17	Alfin Hafis	54	11.0/91	-2.6 SD	29-Jul-10		
18	Rido Alfiansyah	2	3.25/54.3	-3.5 SD	5-Aug-10		
19	Yuri	6	4.9/61.5	-2.8 SD	14-Oct-10	First visit tgl5-8-10 W/L: 3.6/59.3	Second visit tgl24-8-10 W/L: 3.9/59.8

20	Risma Ramadani	23	8.5/83.0	-3.1 SD	30-Aug-10	First visit tgl6-8-10	
21	Khaerunisa	12	6.9/75.0	-3.3 SD	10-Aug-10		
22	Fani	16	7.5/77.0	-2.8 SD	13-Aug-10		
23	Azizah	11	6.7/69.0	-2.6 SD	16-Aug-10		
24	Taufik	20	8.8/80.7	-2.6 SD	20-Aug-10		
25	Fahri	24	9.5/85.3	-2.7 SD	20-Aug-10		
26	Fikri	18	7.9/77.4	-2.6 SD	15-Sep-10		
27	Marvel	22	8.5/79.5	-2.6 SD	16-Sep-10		
28	Pandu	24	8.6/82.8	-3 SD	20-Sep-10		
29	Elgi	15	7.1/74.0	-3.3 SD	24-Sep-10		
30	Fardhan	26	9.9/87.0	-2.6 SD	29-Sep-10	Haven't had identity card as Depok citizen	
31	Muhammad Exsa	9	6.2/70	-3.66 SD	29-Sep-10		
32	Nazwa	8	5.3/63.5	-2.8 SD	6-Oct-10	Haven't had identity card as Depok citizen	
33	Gifari	21	8.1/78.5	-2.86 SD	12-Oct-10		
34	Fadlan Sabil	11	7.3/74.0	-2.8 SD	25-Oct-10		
35	Amelia Lulu. Z	21	7.1/74.8	2.8 SD	25-Oct-10	Will hospitalized in TFC	
						Tgl 28 Okt'2010	
36	Dian Sofi	18	7.6/78.6	-2.8 SD	25-Oct-10	Parents refuse to their child hospitalized	Make a refusing letter
37	Rafli	15	7.2/73.9	-3.1 SD	27-Oct-10		
38	M. Akbar. K	10	7.0/73.0	-3.3 SD	4 November -10		

To explain the results of the implementation of public health care activities at TFC the writer has compiled the data and information from Sukmajaya and Cimanggis TFC.

I. According to Guidance of Children Malnutrition Services (2011) , The finding of children malnutrition through:

1. The routine children weighing in integrated health services
2. The examination of the children in PHC, Hospitals or private doctors or mid-wives.
3. The society report (mass media, NGO or others)
4. Active screening

   It is suitable for what has been done in Sukmajaya TFC as the TFC coordinator said :

"There are 4 places which send malnourished children to TFC, the first is from the public health centers in Depok area, the second can be directly from cadres, neighborhood village, even also happened that a local parliament member took a malnourished child here, he knew there is TFC, which taking care malnutrition sufferers, it means it is directly from society, the third is from the examination in our clinics through *Integrated Management of Childhood Illness* (*IMCI*), the fourth is from hospitals in Depok (dr. Toni Hermawan, Sukmajaya TFC coordinator, interviewed April 13-2011)."

Based on the results of the year 2007 in Sukmajaya subdistrict, the number of infants weighing under five categorized as "underweight" was as many as 10.78%, and the number of malnourished children under five are as many as 70 children.

Sukmajaya has one room of treatment with 8 beds as we can see in the following picture:

Figure. 13. Sukmajaya Therapeutic Feeding Center

The facilities are the infant measurement and playing properties that can be seen in this photo below :

Figure. 14. Children Measurement and Playing Props

Based on interview with TFC coordinator the writer knows that Therapeutic Feeding Centre is a nutrition recovery focused on malnourished children by giving them treatment, intensive and adequate feeding based on their age and condition. The treatment is carried out in 3 aspects, namely:

medical treatment, nutritional treatment and nursing treatment. Medical treatment covers diagnosis of patients, therapy and daily check-up. Nutritional treatment covers providing the children diet based on their condition (stabilization, transition, or rehabilitation phase), training mothers to prepare formula food, preparing menu, providing food for the mothers, nutrition consultation post-treatment, monitoring and evaluating patients feeding. Nursing treatment covers observation of general condition of patients per 24 hours, measure vital symptoms per 24 hours, educate mothers during the treatment, collaborate with the nutritionist about the nutrition provided, collaborate with doctors about the medicine during the treatment.

Table 22. Data of Patients in 2009 in Sukmajaya TFC.

Data of patients	Amount
Total of patients in 2009	**30 children**
Patent with TB	**22 children**
Patient with cardiovascular	**1 children**
Patients who refer to Depok Hospital	**4 children**
Patients who suffer only malnutrition	**1 children**
Patients who left TFC without medical authorization	**4 children**

Source: Sukmajaya TFC.

From the data above, the writer concluded that the constraints faced by the health workers in TFC for most patients is the long time to recover from the disease first, as commonly known that TB needs at least 6 months for treatment, only one patient who suffers malnutrition, as the doctor said –in the interview, malnutrition recovery could be shorter in time (about 3 months) if the patient suffers primary malnutrition. From

the interview with the nutritionist and her staff, the researcher finds other constraints faced by them, based on:

1. Nutritional treatment aspect
    - The children who do not like milk
    - Unfinished meal given by the therapist
    - Impatient mothers making their babies cry who do not want to continue eating.
    - Mothers who are reluctant to have the training for making formula food.
2. Nursing treatment
    - The case of leaving TFC without medical authorization.
    - Uneducated parents in the personal and environment hygiene.
    - Parents' low knowledge of health education.

Table. 23. Patients Status in Sukmajaya TFC

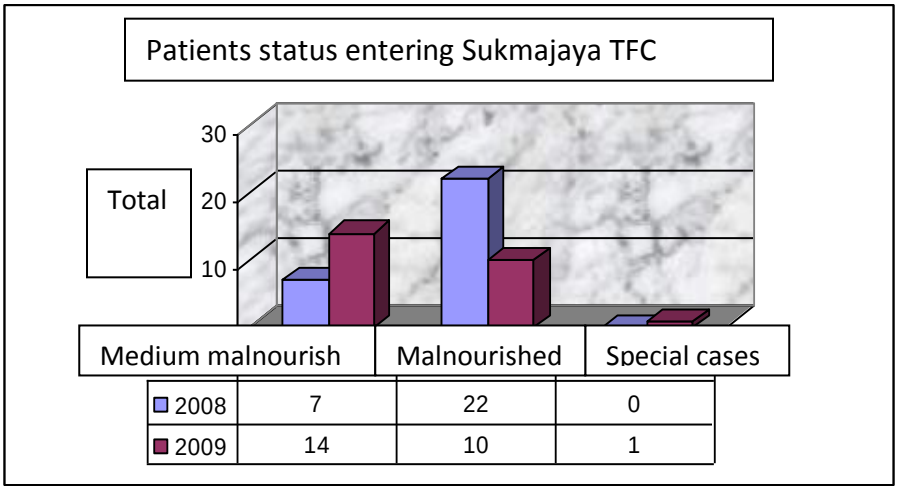
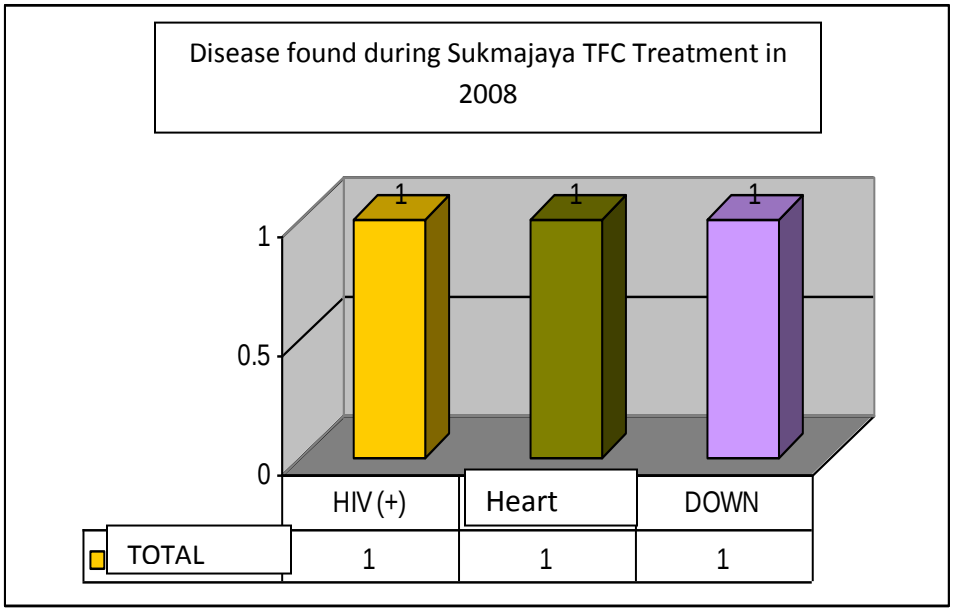


Table 24. Disease found during Sukmajaya TFC Treatment



From the patient data from 2008-2011 (see appendix 5.1), it is clear that most children under care in TFC had improved their nutritional status between the times of admission and discharge. Almost all the children have underlying complicating pathology. It makes the length of the treatment longer than the children who only suffer from primary malnutrition.

The activities of mothers' participation can be seen in the following pictures:

Figure.15. Mothers Involving

When evaluating such a program, it is important not only to evaluate its effectiveness but also how it is received by the clients. The mothers (16 mothers) were asked several open-ended questions about this and the responses were analyzed.

To the question : "What did TFC do for your child?", the majority of the mothers (13 mothers (81%)) in 2 TFCs answered in terms of better health or better growth of the child. When asked if TFC did anything for them, The majority of the mothers again responded in terms of their child having better health or receiving foods and medication. Other 11 mothers said TFC had taught them about better foods for the child and the family. When asked if TFC was doing what was expected or if there was something else they wanted to do, the majority appeared satisfied with TFC. The presence of the mother is a golden opportunity to make her aware of good child feeding and hygiene practices, and to learn by doing. Mothers of children staying in TFC are required to assist with the running of TFC. The participation of mothers would be especially important in providing an active learning experience for them. It

would help teach improved child feeding practices using local foods[19], and to instruct the mothers in other aspects of health and hygiene.

Table 25. The curriculum for Mother in TFC

Material	Facilitator	Equipment
Knowing the nutritional content of food	Nutritionist	Food model 
Preparing meals	Nutritionist	Food model 
Personal Hygiene	Nurse	Hygiene kit
Sanitation	Nurse	Cleaning tools
Hygiene for Kids	Nurse	Hygiene kit
Child Growth	Nurse and Nutritionist	KMS: *Kartu Menuju Sehat*: Growth monitoring card
Children development	Nurse and nutritionist	Check list of growth and development stimulation
Integrated health services	All health workers	Integrated health services guidance, cadre guidance book
Health Issues	Nurse and Nutritionist	Leaflets, posters, flip charts
Nutritious snacks	Nutritionist	Food model, leaflets

Another factor which may influence the effectiveness of the education process may be the degree of concern for fathers. Until now the mother has been assumed to be responsible for child-feeding and caring practices, and it is her whom the program

[19] collaborative effort to build more locally based, self-reliant food economies - one in which sustainable food production, processing, distribution, and consumption is integrated to enhance the economic, environmental and social health of a particular place. (Freenstra G, 2002)

tries to reach. The father may however have an important role to play. He could be a general supervisor of the behavior of the mother and may be the only one who can initiate change. In order for the mother to value the teachings of TFC and to be motivated to change her behavior, it may be necessary to start by motivating the father or at least by recognizing his role.

5.1.2. TFC in Cimanggis

Health workers working in TFC Cimanggis include 1 doctor, 5 nutritionists and 4 nurses. In the in-depth interviews I did, I focused on the policy and implementation of nutrition programs conducted at the PHC. According to the head of Cimanggis health center, Depok city, dr. Sri Suliswati, government policies were in line with local conditions in Depok. She said that the Mayor of Depok city has high attention to the prevalence of children malnutrition, as stated in her following remarks :

> "The concent of Depok city about children malnutrition is very good, in Depok we have sub district meeting every month, every Tuesday second week regularly. In the meeting, all the public health problems are discussed. Even the Mayor of Depok city direcly ask to the head village, how many malnutrition children in their area, what their names are. The Mayor really care about the mother and children health." (interview with Head of Cimanggis PHC, 13 April 2009).

As a buffer zone of the capital country, apparently in Depok、 the prevalence of children malnutrition are still high, In the year 2010, 439 under five malnourished children were found. Not all under five malnourished children can be handled in the TFC, the policies adopted in TFC are that the children were treated for recovery,

increase body weight with supplementary feeding and formula WHO[20].There is no medical treatment like intravenous infusions. Child's condition is monitored daily. Weight loss is monitored to see the development of nutritional status. The picture describes one of malnutrition child with his mother, and the activity done by health worker in Cimanggis TFC.

Figure 16. Cimanggis TFC Situation

Field research in Pancoran Mas Health Clinic

In Pancoran Mas, I met the head of Pancoran Mas PHC and 3 health workers. From them, I learned that the implementation of nutritional recovery centers in the working area was done by assigning the weekly WHO formula to parents of patients with malnutrition. They were not hospitalized, they are required to be examined weekly in order to know the improvement of the patients' nutritional status. In this PHC, the

[20] There are 3 kinds of formula WHO: 75, 100 and 135, consist of milk, sugar, vegetable oil and electrolytes with different composition.

implementation of the reducing malnutrition cases is done in three ways : counseling, Supplementary feeding food for three months, if it doesn't work, the malnutrition children will be referred to TFC. It was stated by the nutritionist (Mrs. Popy Sopiati) in Pancoran Mas PHC :

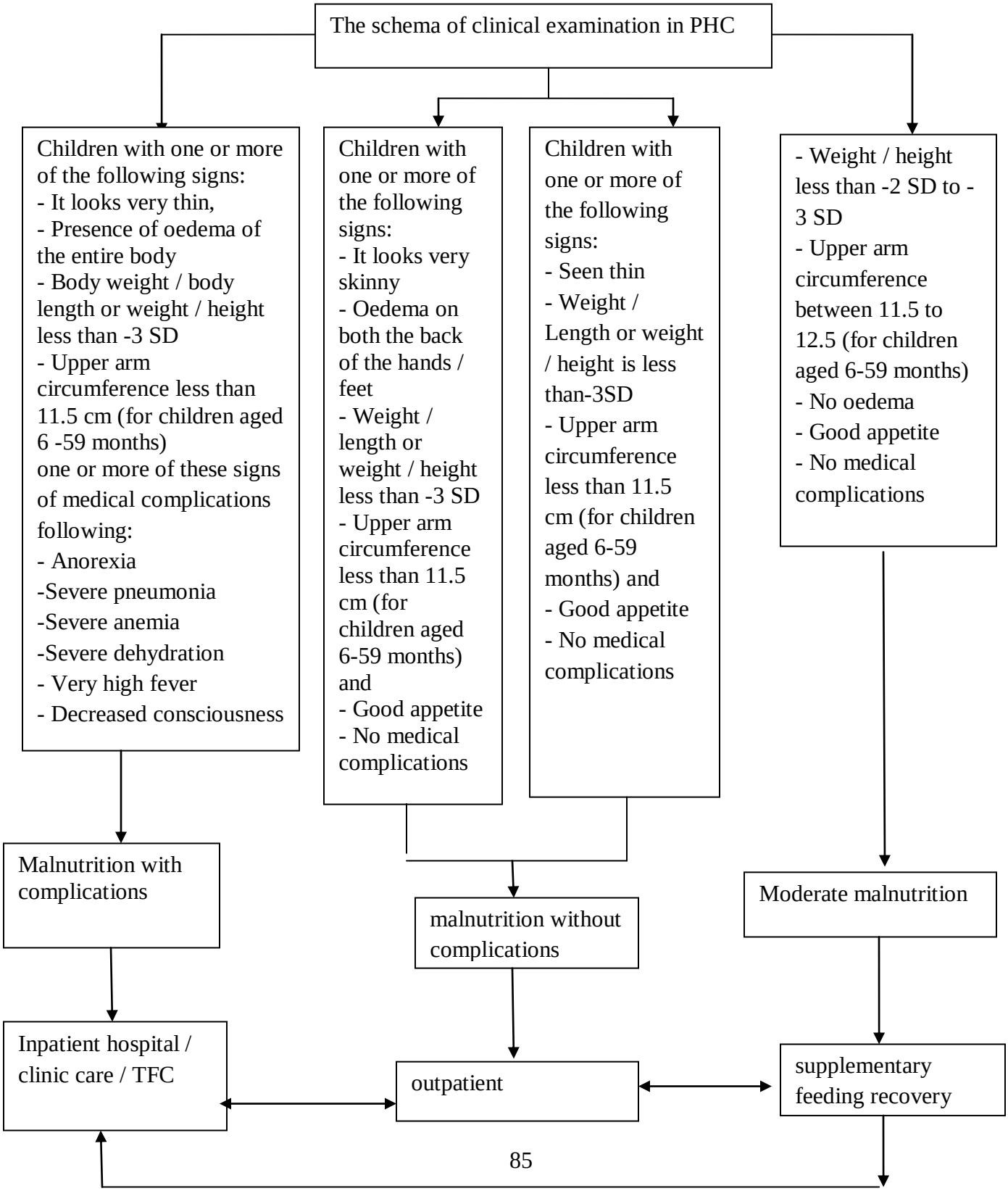
"At first, if we find malnutrition children, we would intervene through counseling, if they are categorized as poor people with difficulty to fulfill the necessities of nutritious food for their children, they will be given supplementary feeding within 3 months. If it doesn't work, and doesn't lift up the children nutritional status, we refer them to TFC Cimanggis or Sukmajaya. The criterion that the children are still in poor nutritional status is if W/L or W/H less than -3SD, or less than -2.5 with bad general clinical assessment." (interview transcript, August 2, 2010).

Field research in Depok Department of Health, in this office I met 3 informants from nutrition section to find out the nutrition program implementation in the upper reaches.

Cases of malnutrition are still found in Indonesia, including in Depok municipality. This problem is very serious, because if it is not handled quickly and carefully, it will lead to the death of the sufferer (as has been happened in Depok municipality). In 2002, cases of malnutrition in Depok municipality included 455 children under five (0.45%); in 2003 as many as 602 children under five (0.57%), and in 2004 rose to 964 children (1%). In 2005, there was an increasing prevalence to 1133 children (0.99%); in 2006 to 935 children under five (0.81%) and in 2007 to 937 children under five (0.84%). This indicates an increase in cases of malnutrition from year to year. Monitoring children's nutritional status performance is done in August every year. The children's weight is measured and malnourished children conditions are

monitored through a "cohort" every month. All the efforts done by local government are to reach the agenda namely "Healthy Depok City 2010". This agenda requires the improvement of the quality of human resources which is healthy, smart, productive and independent. Improving the nutritional status of the population is the basis for increasing the quality of human resources. However children malnutrition still happens in Depok municipality as has been shown by data, therefore Depok municipality government makes efforts to combat malnutrition, through: routine counseling on integrated health services and health centers, training of cadres in the neighborhood of health center, the empowerment of families through the Family Nutrition Awareness (Kadarzi), Supplementary Feeding food (PMT) for 90 days , sending the patient to hospital for further treatment, Clinical Nutrition at the Health Center, approaches through Positive Deviance (PD), tracking and surveillance. However, the conditions of the prevalence of malnutrition in Depok municipality shows the trend is increasing from year to year and there are some places as an enclave of malnutrition area, that is why Depok Municipal Government has developed a comprehensive malnourished children care places called the Therapeutic Feeding Centre (TFC) or Children Recovery Nutrition in Sukmajaya Health Center and Cimanggis Health Center, managed by health workers and involving community participation. That two of TFC are a step of intervention in treatment and prevention of children malnutrition, in which appropriate malnutrition management standards of treatment and educating parents is done, especially for mothers, about nutrition and health. The following scheme describes clinical examination in PHC.

Figure 17. The schema of clinical examination in PHC



While from the interview with the Head of Cimanggis Health Center, the writer knows that on April 2008 training for health personnel, who will manage the TFC is held. The purpose of the training is to improve knowledge and skills of health personnel referrals to the Guidelines for Management of Child Malnutrition.

The target of participants of TFC is malnourished children under five in the area of 6 districts in Depok municipality. TFC Activities Funding comes from the budgets of Depok municipality local government and KDP HDI – Funding Program Competition Human Development Index in 2008.

In making the explanation clearer, the writer will describe the condition, constraint and challenges of conducting TFC.

5.2. Analyses of Research Findings

As has been stated in chapter II based on Palumbo's theory, the writer would like to analyze the fifth step that is dealing with the implementation (formative evaluation) of program conducted by the local government especially the operational implementers (Public Health Care as well as TFC) and using the criteria from William Dunn covers of appropriateness and responsiveness. Appropriateness criteria ask the goal of a kind of policy, in this case nutritional policy, fit for the society. The appropriateness will evaluate the aspect of input, process and output. Another criteria is responsiveness that is how to extend a policy to satisfy the need, preference and value of the society.

From the aspect of input, focusing in appropriateness criteria, the writer finds that the health workers in charge of TFC operation are capable human resources and have got the training to conduct children malnutrition treatment based on the WHO Guideline of Management of Child Malnutrition. The budget derived from local government based on Local Government Rule No. 2 Year 2006 about RPJMD (Local Development Planning in Medium Term) stated that malnutrition handling is one of the development priority in Depok. Further, Depok City Major appointed Cimanggis and Sukmajaya Health Center as TFC in Depok Municipality, with Decision Letter of the Head of Depok Municipality Health Department No. 444/71.1/KPTS-Umum/2008 the two of Health Centers officially has responsibility as well as authority in conducting TFC. Based on the interview with the head of health center, the implementer (Public Health Center) can accept funding from other parties to improve the activities in TFC.

Planning by the health center begins with the analysis of the situation and has been arranged through either technical operation or managerial activities. All the planning is stated in the Annual Plan of Action of the Health Center. To facilitate the activities to be implemented, health center already has a quite complete Organizational Structure (figure 10). The action conducted by the head of health center will affect the whole activities in health center itself. The head of health center is respected by her/his partners as well as by the society thus the implementation of Nutritional Program and Management Health Center is trusted and accountable. The head of

health center cannot handle the duties alone, she/he needs staff for roles such as a nutritionist. With sufficient capability, the head of health center is able to manage a good nutritional program.

From the aspect of responsiveness, a policy can satisfy the need, preference and value of the society. Although the policies have been planned well, but constraints and challenges still exist. All the malnutrition children come from poor family. There is the case of forcedly going home by parents, because most of the mothers must earn money (most of them are as a housekeeper). Moreover they should take care of other children they have at home (mothers spend days in TFC during their children treatment).

5.3. Conclusion and Recommendation

Children malnutrition has not been considered as a disease of Depok society, therefore the cross sectoral role are badly needed in finding the cases. Although the children have been diagnosed as malnutrition, it is difficult to obtain a permit, in many cases from fathers, for the children to get treatment in TFC. It has also happened that the patients who absconded, left TFC without medical authorization. There is no child psychologist with a fixed schedule in TFC as well as no tactical funds for certain conditions (i.e. certain medicine, laboratory check up and X-rays examination). Supporting devices are limited (are still in proposal step) for example cabinets, lockers and kitchen equipment, food ordering system is less flexible.

With some constraints above, some recommendation could be proposed as follows: It is necessary to strength coordination among sector in Depok municipality in finding malnutrition cases and the treatment post-hospitalization. The administrative apparatus, in this case neighborhood, and integrated health services cadre, should be tactful in monitoring the malnutrition prevalence. It could be considered to establish mobile TFC that could reach undernourished children effectively, as well as, to propose promotion and prevention rather than curative action in the health sector.

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APPENDIX 5.1.
PATIENT DATA
YEAR
2008 - 2011

DATA OF PATIENT
TFC SUKMAJAYA DEPOK CITY
APRIL 2008 - DECEMBER 2008

No.	NAME	Age (Months)	Date Of Admission	Date Of Discharge	Admission		Discharge		Nut St (Adms)	Nut St (Dis)	LENGTH OF TREAT (DAYS)	Underlying Complicating Pathology
					W(kg)	L(cm)	W(kg)	L(cm)				
1	Abdul Aziz	18	30-04-2008	21-05-2008	8,2	79,0	8,7	79,0	- 3,1 SD	- 2.5 SD	22 Days	TB
2	Tatia Ariani	23	30-04-2008	21-05-2008	7,9	79,0	8,8	79,0	- 2,8 SD	- 1.77 SD	22 Days	TB
3	Najwa Haifa	18	30-04-2008	14-05-2008	6,8	71,0	7,0	71,0	- 2.25 SD	- 2.0 SD	15 Days	TB
4	Rani Julianti	10	30-04-2008	21-05-2008	5,5	68,0	7,0	68,0	- 3.2 SD	- 1.1 SD	22 Days	TB
5	Aziz Febrianto	14	13-05-2008	31-05-2008	7,0	72,0	7,3	72,0	- 2.6 SD	- 2.2 SD	19 Days	TB
6	Rizki	26	14-05-2008	29-05-2008	8,2	79,0	10,0	79,0	- 3,1 SD	- 0.87 SD	16 Days	HIV,TB
7	Nurul Komariah	15	16-05-2008	18-06-2008	5,7	71,0	7,0	71,2	- 3.6 SD	- 2 SD	34 Days	TB
8	Amelia Putri	22	10-06-2008	05-07-2008	7,3	79,0	8,7	79,0	- 3,0 SD	- 2 SD	26 Days	TB
9	Diyana Ashyla	11	16-06-2008	28-06-2008	6,2	71,5	6,5	71,5	- 3,0 SD	- 2 SD	13 Days	-
10	Ahmad Lutfi Sauki	52	19-06-2008	11-07-2008	7,3	80,0	8,1	80,0	- 3,0 SD	- 2 SD	18 Days	TB

No.	NAME	Age (Months)	Date Of Admission	Date Of Discharge	Admission		Discharge		Nut St (Adms)	Nut St (Dis)	LENGTH OF TREAT (DAYS)	Underlying Complicating Pathology
					W(kg)	L(cm)	W(kg)	L(cm)				
11	M. Edi Gunawan	27	01-07-2008	21-07-2008	8,4	84,0	9,9	84,0	- 3,0 SD	- 2 SD	21 Days	TB
12	Allya Fairus	40	31-07-2008	31-08-2008	8,9	84,0	10,1	84,0	- 3,0 SD	- 1.4 SD	15 Days	TB
13	Nur Aisyah	41	02-08-2008	15-08-2008	8,1	78,0	9,2	78,0	- 3,0 SD	- 1.1 SD	16 Days	TB
14	Naila Aulia	19	08-08-2008	21-08-2008	7,1	74,0	7,8	74,0	- 3,0 SD	- 2 SD	13 Days	TB
15	Tamara C.	11	27-08-2008	14-09-2008	5,2	67.0	5.8	67.0	- 3,0 SD	- 2.1 SD	15 Days	TB
16	Farel	17	08-09-2008	16-09-2008	8,1	78,5	8,2	78,5	- 3,0 SD	- 2 SD	9 Days	TB
17	Rizal	22	18-09-2008	15-10-2008	7,5	74,0	8,2	74,0	- 3,0 SD	- 1.75 SD	28 Days	TB
18	Rohana Putri	11	15-10-2008	22-10-2008	5,2	66,0	5,7	66,0	- 3,0 SD	- 2 SD	7 Days	TB
19	Kumala	12	24-10-2008	07-11-2008	5,4	66,0	6,5	66,0	- 3,0 SD	- 1.0 SD	15 Days	-
20	Kikan	17	24-10-2008	07-11-2008	7,2	74,	8,15	74,0	- 3,0 SD	- 1.3 SD	15 Days	TB

No.	NAME	Age (Months)	Date Of Admission	Date Of Discharge	Admission		Discharge		Nut St (Adms)	Nut St (Dis)	LENGTH OF TREAT (DAYS)	Underlying Complicating Pathology
					W(kg)	L(cm)	W(kg)	L(cm)				
21	Muhammad Fathoni	43	25-10-2008	21-11-2008	9,3	87,5	10,7	87,8	- 3,0 SD	- 1.9 SD	28 Days	TB
22	Ilham Saputra	17	27-10-2008	12-11-2008	8,6	80,0	9,2	80,0	- 3,0 SD	- 2 SD	27 Days	TB
23	M. Rafli	17	30-10-2008	06-12-2008	6,5	74,0	8,0	74,1	- 3,0 SD	- 2 SD	37 Days	TB
24	Septian Ramadani	13	10-11-2008	01-12-2008	6,0	69,0	7,2	71,0	- 3,0 SD	- 1.8 SD	21 Days	TB
25	Riska Mariani	26	11-11-2008	11/11/2008	8,5	87,3	8,5	87,3	- 3.7 SD	- 3.7 SD	1 Days	TB
26	Heny Zahra	21	24-11-2008	12-12-2008	6,5	78,0	6,85	78,0	- 3,0 SD	-3 SD	19 Days	TB
27	Fadila Evan	53	27-11-2008	12-12-2008	11,0	92,0	11.5	92,0	- 3,0 SD	- 1.8 SD	15 Days	TB
28	Ananda	24	10-12-2008	19-12-2008	7,5	74,0	8,5	74,0	- 3,0 SD	- 1.0 SD	9 Days	TB
29	Elsa Setiawan 25-01-2008	11	24-12-2008	14-01-2009	5,2	67,0	8,0	74,1	- 3,0 SD	- 1.5 SD	22 Days	TB

DATA OF PATIENT
TFC SUKMAJAYA DEPOK CITY
2009

No.	NAME	Age (Months)	Date Of Admission	Date Of Discharge	Admission		Discharge		Nut St (Adms)	Nut St (Dis)	LENGTH OF TREAT (DAYS)	Underlying Complicating Pathology
					W(kg)	L(cm)	W(kg)	L(cm)				
1	Alif Iskandar Fauzi 02-07-2002	65	05-01-2009	30-01-2009	11,2	97,0	13.3	71,0	- 3,0 SD	- 2 SD	13 Days	TB
2	Rista Apriyanty 19-02-2007	23	12-01-2009	30-01-2009	7,4	74,9	8,0	74,9	-2.4 SD	- 1.8 SD	18 Days	TB
3	Fathan 05-01-2006	36	02-02-2009	3/3/2009	8,8	83,0	10.0	83.0	- 4,0 SD	-1.7 SD	Typhoid	TB
4	Levi Al asyar Maulana 27-11-2008	20	10-02-2009	06-03-2009	6,6	75,0	8.2	75.0	- 3,0 SD	-2.0 SD	25 Days	TB
5	Desca Rianni 10-12-2008	14	12-02-2009	3/3/2009	6,4	70,0	6.6	70.0	- 2,5 SD	-2.25 SD	Pneumonia	TB
6	Aulia Putri Rizkiah	21	13-03-2009	25-03-2009	8	79.5	9.0	79.5	- 2.7 SD	- 1.5 SD	12 Days	--
7	Dwi Ramandanti	6	13-03-2009	13-0302209	4.0	60.5	4.0	60.5			Refer to Hospital	--
8	Alfianti Ramadani 6-9-2008	7	22-04-2009	19-05-2009	4,30	61,6	4.8	62.0	-2.6 SD	- 1.8 Sd	28 Days	TB , Cardiovascular
9	Muhammad Arif 10-5-2008	11	24-04-2009	23-05-2009	5,2	66,2	5.0	66.2	-3.1 SD	- 3.4 SD	27 Days	TB Susp HIV
10	Yurike 24-4-2008	12	25-04-2009	11/5/2009	6,3	69.0	6,6	69.0	- 2.3 SD	'- 1.8 SD	17 Days	TB

No.	NAME	Age (Months)	Date Of Admission	Date Of Discharge	Admission		Discharge		Nut St (Adms)	Nut St (Dis)	LENGTH OF TREAT (DAYS)	Underlying Complicating Pathology
					W(kg)	L(cm)	W(kg)	L(cm)				
11	Erfan Ramadan 10-12-2001	7	30-04-2009	2-05-2009	13,5	110.0	13.6	110.0	-3.25 Sd	-3.25 SD	3 Days (out pt)	--
12	Nuni Indrianti 28-10-2007	18	1-05-2009	9/5/2009	5.5	66.3	5.5	66.3	-2.25 SD	2.25 SD	6 Days (out pp)	TB
13	Raihana Nurgitania 13-5-2008	12	7-05-2009	1/6/2009	5,8	68,3	6.5	68.3	-2.8 SD	0.3 SD	26 Days	TB
14	Zahra Dwi Rohimah 4-9-2008	8	16-05-2009	25-5-2009	4.6	63.0	4.2	63.0	- 2.6 SD	-2 0 SD	14 Days	TB
15	Hafid Maulana 7-3-2008	14	18-05-2009	1/6/2009	6,5	69,2	7,2	69,2	-2.25 SD	-1.6 SD	15 Days	TB
16	Virgiawan 1-8-2006	33	26-05-2009	12/6/2009	8,3	79,5	9,1	79.5	-3.0 SD	-2.0 SD	13 Days	--
17	Indra Wahyu 11-4-2005	49	29-05-2009	01-6-2009	10,5	87,5	9.8	87.5	-2.1 SD	- 2.0 SD	Refer to Hospital (01/06/2009)	--
18	Safina 11-4-2007	27	06-07-2009	23/7/2009	9.0	82.6	10.0	82.6	- 2.7 SD	-1.3 SD	17 Days	TB
19	Anggraeni Novianti 1-11-2008	8	11/7/2009	29-08-2009	4.8	66.7	6.2	66.7	-3.85 SD	- 1.85 SD	45 Days	TB
20	Aldiansyah 9-3-2008	16	14/7/2009	21/10/2009	6.0	74.9	8.3	74.9	-4.75 SD	-0.875 SD	73 Days	TB

No.	NAME	Age (Months)	Date Of Admission	Date Of Discharge	Admission		Discharge		Nut St (Adms)	Nut St (Dis)	LENGTH OF TREAT (DAYS)	Underlying Complicating Pathology
					W(kg)	L(cm)	W(kg)	L(cm)				
21	M. Andra Aditia	15	21/7/2009	26-7-2009	6.2	71.2	6.7	71.2	-3.71 SD	- 3.0 SD	6 Days (Unfinish Treatment)	--
22	Annisa Fauziah '05-01-2009	7	18-08-2009	4/9/2009	4.3	61.0	4.4	61.0	- 2.6 SD	-2.3 SD	Refer to Hospital (04/08/2009)	TB
23	Adilah 22-11-2006	30	21-08-2009	6/9/2009	7.2	77.0	7.3	77.7	- 3.4 SD	-4 SD	17 Days (Unfinish Treatment)	TB
24	Nabila Safitri 09-06-2009	3	30-09-2009	9/10/2009	3.5	55.0	4.0	55.0	-1.6 SD	-0.6 SD	Refer to Hospital (09/10/2009)	TB
25	Ahmad Ibrohim 16-12-2007	21	2/10/2009	17/10/2009	7.7	76.6	8.6	77.0	-2.8 SD	-1.8 SD	16 Days	TB
26	Slamet 23-06-1996	13 thn	22/10/2009	11/11/2009	12.0	101.0	13.9	101.0	-3.2 SD	-1.5 SD	21 Days	--
27	M. Raihan	9	22/10/2009	11/11/2009	4.7	62.5	5.6	62.5	-2.3 SD	-1 SD	21 Days	TB
28	Nazwa Hanifa 19-04-08	18	24/10/2009	7/11/2009	8.4	80.0	9.1	80.0	.-2.4 SD	-1.6 SD	15 Days	TB
29	Norma Maulidia 11/03/2008	20	16/11/2009	26/11/2009	6.7	72.5	7.6	72.0	.2.75 SD	1.6 SD	11 Days	--
30	Fairuz Ramadani	18	24/11/2009	9/12/2009	6.8	72.0	8.2	72.0	-2.62 SD	- 0.87 SD	16 Days	TB

DATA OF PATIENT
TFC SUKMAJAYA DEPOK CITY
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No.	NAME	Age (Months)	Date Of Admission	Date Of Discharge	Admission		Discharge		Nut St (Adms)	Nut St (Dis)	LENGTH OF TREAT (DAYS)	Underlying Complicating Pathology
					W(kg)	L(cm)	W(kg)	L(cm)				
1	Alfianti Ramadani 06-09-2008	16	11-01-2010	26-03-10	5.7	70.5	6.9	71.5	- 3,3 SD	- 2.1 SD	60 Days	TB
2	M. Akbar 06-03-2009	10	14-01-2010	29-01-2010	6.4	69	7.1	69	-2.4 SD	- 1.5 SD	16 Days	TB
3	Adelia 12-08-2006	41	22-01-2010	8/2/2010	10.1	89	11.2	89.0	- 2.3 SD	- 1.36 SD	17 Days	TB
4	Dea Intan 03-12-2008	14	25-02-2010	22/03/2010	5.5	68.7	6.5	68.7	-3.25 SD	- 2 SD	26 Days	TB
5	M.Fitra Rafianto 02-10-2008	17	13-03-10	2/4/2010	7.8	78	9.1	78.0	-3.3 SD	-1.7 SD	21 Days	TB
6	Aditia Riski 9-1-2009	14	26-03-10	7/5/2010	6.9	73.5	8.0	73.5	-3.42 SD	-1.7 SD	43 Days	Hernia,Hall palato,TB
7	Ariska 21-08-2007	31	30-03-10	19/4/2010	8.3	84.0	10.3	84.0	-3.25 SD	-1.5 SD	21 Days	TB
8	Rafiansyah 01-03-2007	37	1/4/2010	Refer to Hospital	7.7	87.0	8.1	87.0	-4 SD	-4 SD	7 Days	TB
9	Riska 17-07-2009	9	8/4/2010	Refer to Hospital	5.5	69.5	5.5	69.5	-3.25 SD	-3.25 SD	1 Days	Hydro - cephalus
10	Nuroktafia 10-10-2008	18	6/5/2010	26/5/2010	6.7	70.9	7.1	70.9	-2.4 SD	- 1.9 SD	20 Days	TB Paru, hydrocephalus Post shunting

No.	NAME	Age (Months)	Date Of Admission	Date Of Discharge	Admission		Discharge		Nut St (Adms)	Nut St (Dis)	LENGTH OF TREAT (DAYS)	Underlying Complicating Pathology
					W(kg)	L(cm)	W(kg)	L(cm)				
11	M. Nabil 14-03-2008	16	12/5/2010	5/13/2010	8.0	77.5	8.9	77.6	-3.2 SD	-1.8 SD	19 Days	TB
12	Sutan Zakariah 20-12-2005	48	12/5/2010	27/5/2010	10.7	91.0	12.0	91.0	-2.3 SD	- 1.25 SD	16 Days	TB
13	Aisyah Nuraeni 02-06-2008	23	19-05-2010	6/21/2010	6.0	73.4	7.8	73.4	-3.90 SD	-1.6 SD	31 Days	TB
14	Indra Wahyu 11-4-2005	49	03-06-2010	6/15/2010	10.1	88.7	11.2	88.7	- 2.6 SD	-1.6 SD	12 Days	TB
15	Humairah Fitra H 8-10-2008	22	6/29/2010	7/14/2010	7.3	77.0	8.2	77.0	-2.75 SD	-1.8 SD	16 Days	TB
16	Rasya Aulia 5/16/2009	13	7/2/2010	7/19/2010	5.5	66.9	5.8	66.9	-3.3 SD	-2.8 SD	17 Days	TB
17	Siti dilla 12/25/2008	19	7/14/2010	7/26/2010	7,1	74,4	8,0	74,4	-2,71 SD	-1.4 SD	15 Days	TB
18	Cristal 11/5/2009	8	7/31/2010	8/14/2010	5,7	66,2	6.2	66.2	-2,8 SD	-1,6 SD	15 Days	TB
19	Aisyah Nuraeni 02-06-2008	27	22-09-2010	10/7/2010	6,9	76,2	8,5	76,2	-3.70 SD	-1.25 SD	15 Days	TB
20	Rahmat Zaini 10/12/2006	46	02-10-2010	15-10-2010	11,6	95.0	13.2	95.0	- 2.5 SD	- 0,8 SD	14 Days	TB

No.	NAME	Age (Months)	Date Of Admission	Date Of Discharge	Admission		Discharge		Nut St (Adms)	Nut St (Dis)	LENGTH OF TREAT (DAYS)	Underlying Complicating Pathology
					W(kg)	L(cm)	W(kg)	L(cm)				
21	Khairul Azam 02-0	12	25-10-2010	04-11-2010	7,1	74,3	8,5	74,3	-3.30 SD	- 1,2 SD	11 Days	TB
22	Amelia Lulu 02-06-	18	08-11-010	01-12-2010	7,1	75,5	7,8	75,5	-3.0 SD	- 2,0 SD	24 Days	TB
23	M. Akbar 06-03-2009	10	18-11-2010	30-11-2010	7,2	73.0	7,85	73.0	-3.0 SD	- 1,9 SD	13 Days	TB
24	Fadlan Sabil 02-06-2008	12	19-11-2010	30-11-2010	6,9	73.9	7,8	73.9	-2.70 SD	- 2,1 SD	12 Days	TB

DATA OF PATIENT
TFC SUKMAJAYA DEPOK CITY
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No.	NAME	Age (Months)	Date Of Admission	Date Of Discharge	Admission		Discharge		Nut St (Adms)	Nut St (Dis)	LENGTH OF TREAT (DAYS)	Underlying Complicating Pathology
					W(kg)	L(cm)	W(kg)	L(cm)				
1	Vidi Prayuningtias 31-01-2010	11	10/1/2011	31-01-2011	6,5	72,5	7,3	72,5	- 3,1 SD	- 2.0 SD	24 Days	TB
2	Azizah Putri 16-09-2009	16	15-01-2011	31-01-2011	7,65	76,0	7,85	76,0	-2,25 SD	-2,0 SD	17 Days	TB
3	Puji Astuti 2-08-2009	17	7/2/2011	21-02-2011	4,85	66,5	5,4	66,5	-4,25 SD	-4,0 SD	15 Days	TB
4	Andita 10-Apr-10	11	28-03-2011		5,5	65,0			-3,0 SD			
5	Novi Diyanti	40	31-03-2011		9,5	88,0			-2,6 SD			