

**STUDY ON THE SOCIO-ECONOMICS, CHANGES IN
THE STRUCTURE AND FUNCTION OF FAMILY,
FAMILY'S STRENGTH, GROWTH AND DEVELOPMENT
OF CHILDREN AMONG WOMEN MIGRANT WORKERS
(WMW) HOUSEHOLD**

**Ikeu Tanziha
Megawati Simanjuntak
Alfiasari
Tien Herawati**



**Department of Community Nutrition,
Faculty of Human Ecology,
Bogor Agricultural University
And
NEYS-VAN HOOGSTADEN FOUNDATION**



**STUDY ON THE SOCIO-ECONOMICS, CHANGES IN THE
STRUCTURE AND FUNCTION OF FAMILY, FAMILY'S STRENGTH,
GROWTH AND DEVELOPMENT OF CHILDREN AMONG WOMEN
MIGRANT WORKERS (WMW) HOUSEHOLD**

Researchers:

Dr. Ir. Ikeu Tanziha, M.S

Alfiasari, SP, MSI

Tin Herawati, SP, MSi

Megawati Simanjuntak, SP



**Department of Community Nutrition
Faculty of Human Ecology
Bogor Agricultural University
and
Neys-Van Hoogstraten Foundation**



DESCRIPTION

Title : Study On The Socio-Economics, Changes In
The Structure And Function Of Family,
Family's Strength, Growth And
Development Of Children Among Women
Migrant Workers (WMW) Household

Researchers : Dr. Ir. Ikeu Tanziha, M.S
Alfiasari, SP
Tin Herawati, SP, M.Si
Megawati Simanjuntak, SP

Institution Address Department of Community Nutrition
Faculty of Human Ecology
Bogor Agricultural University
Darmaga, Bogor 16680, Indonesia

Phone : 62-251-621258

Fax : 62-251-622276

Email : ikeu_jamilah@yahoo.com

Principal Investigator

Dr. Ir. Ikeu Tanziha, MS

PREFACE

Praise to Alloh, the Almighty God, upon His will, this research could proceed smoothly. Entitled "Study On The Socio-Economics, Changes In The Structure And Function Of Family, Family's Strength, Growth And Development Of Children Among Women Migrant Workers (WMW) Household" this research was conducted in Sukabumi District, West Java Province. Indonesia.

The research team would like to extend its gratitude and appreciation to :

1. Neys-Van Hoogstraten Foundation (NHF), The Netherlands for funding this project. Besides, the Advisory Board has provided some suggestions on the developing of project proposal. It is a good opportunity to collaborate with the NHF, since it will enable us to improve our skills and capabilities as lecturers and researchers at Bogor Agricultural University (IPB).
2. The chairman of the Department of Community Nutrition-IPB who always supports the research team to do the best in conducting this research.
3. The Government of Sukabumi District in West Java Province, Indonesia, which gave permits to the researchers to collect data in the study areas.
4. The enumerators (data collectors) who had worked with an extraordinary patience on fields and research assistant who showed dedications during the research. They are IPB graduates who have applied the knowledge learned in university.

Until now the studies on the Women Migrant Workers families have been limited. This research would like to uncover the family strength and child growth and development.

Bogor, November 2009

SUMMARY

Poverty, dissatisfaction over the husband's income and lack of job opportunities has encouraged a wife to migrate and work as a Women Migrant Workers (WMW). Remittance being sent is expected to be able to improve the household economic. However, there have been a number of problems to face, such as unpaid wage and family conflict, all of which have prevented the families of WMW from achieving what they expect.

The objectives of the study were: (1) to identify socio-economics aspects and the pattern in using remittance of WMW's families, (2) to analyze the family structure and function changed among WMW's families, (3) to analyze family strength of WMW's family, (4) to analyze child care pattern among WMW's families, (5) to analyze child growth and development of WMW's family, and (6) to find out the protection programs are provided by the government for WMWs in the destination countries and their families.

This research uses a cross sectional design. The data required to meet the research objectives (social, economy, the changes in family structure and function, family's strength, child care patterns, food consumption, child health status, and child growth and development) were collected through a direct interview with respondents and anthropometry assessment.

A sample size of 500 households was drawn from population. Sample from 19 villages in six sub-districts: namely 10 villages in the Nyalindung Sub-District, 3 villages in Purabaya Sub-District, 2 villages in Cisaat Sub-District, 2 villages in Gunung Guruh, 1 village in Kebon Pedes Sub-District, and 1 village in Sukaraja District. To obtain the qualitative data on the legal basis for the protection and placement of Indonesian workers, efforts made by the local governments in the protection and placement of Indonesian

workers, mechanism of sending WMWs, opinions of key persons about women migrant workers, family strength or survival as well as growth and development of children, in depth interviews was conducted with 14 key persons.

Then the data analyzed in accordance with the objectives of the research. The *paired-t* test provided a hypothesis test of the difference between pre and post BMP. Furthermore, Pearson and Spearman's rank correlation test was taken also in order to understand the strength of correlation between two variables. Linear regression was taken to analyze determinants family strength and child growth and development. The SEM analysis or Structural Equation Model was conducted in order to know the good influence directly or indirectly on latent variables both endogenous and exogenous.

Result of research shows that in selecting the country of destination, WMWs are usually influenced by the majority of those around who have worked as WMWs. Saudi Arabia is favored by some WMW (95.6%) because, in addition to the high salary there is another hope of the WMWs that they can perform *Umroh* or Hajj (Islamic rituals). There are several purpose of wife to be a WMW, various things among them were to pay the debt (4.8%), wanted to build the house (34.0%), to pay the debt and build the house (37.6), and want to go on a pilgrimage to Mecca (0.2%). Some of WMW (22%) sent remittance regularly, 50.6% irregularly, and 27.4% never sent remittance. The remittance ranged between Rp 100,000 and 70,000,000 with the average remittance of Rp 6,559,850 \pm 9,032,828. The pattern of remittance uses was for consumptive purposes, investment, to pay debt, and for helping family.

Most head of household's age (52, 6%) were in age-range 41-60 years, 94,2% education of the head of household was \leq 9 year years, and 53.2 percent head of household worked as a manual laborer. The WMW's

family were extended family, 46.8% of WMW's family have family size 5-7 persons.

There are significant-difference household income between pre and post wife became WMW. Average pre WMW family income was Rp 234,763.62/capita/month and post WMW Rp 313,426.25/capita/month, that meant there are a significant increase by Rp 78,662.63/capita/month which also marked by the significant-difference between pre and post ($p=0.000$). Being seen from the income contribution of the family member (wife, husband and the other member), the biggest contribution was from the wife income which increased of 26.60 percent after wife has become WMW. There are a significant decline of poor-family percentage on pre and post WMW. Before wife became WMW, 55.6 percent of family classified as poor-family, and after wife became WMW, the poor-family decreased to 37.6 percent. Generally, percentage of assets ownership tended to increase post WMW like ownership of the motorcycle and bicycle, ownership of livestock, electronic like mobile phone, television, and radio-tape, the household equipment like washing machine, rice-cooker and the gas stove as well as ownership of furniture.

There were changes of structural and function on WMW's family such as : changes in breadwinner roles, changes in head of household's role, changes in the role of economics, changes in the role of children's caretaker, and changes in the role of decision-maker. Before wife became WMW, 83.6% husband played a role as the breadwinner, 4.2% wife as single family breadwinner, and 1.8% wife together with husband as breadwinner. After wife became WMW, the role of wife as breadwinner rose to 24.6% while wife together with husband as breadwinner rose to 61.8%.

WMW Parent's role as head of household increase from 30.0% pre WMW to 48.4% post WMW. Old children (0.6%) also played a role as head

of the household post WMW. However there was declined on husband role as head of household from 67.4% pre WMW became 49.0% post WMW.

The husband's economic contribution towards the family's economics descended from 85.0% pre WMW to 77.0% post WMW. In other side, wife's contribution towards family economics had increased from 14.4% pre WMW to 71.3% post WMW.

The role of extended family as a children's caregiver had increased, after wife became WMW, role of extended family had increased to 43.4%, and role of husband or nuclear family had descended.

Before wife became WMW, role of husband and wife in decision making for the interests of the children was very high (79.4%), and role of extended family was very small only 1%. After wife became WMW, role of nuclear family like husband and older children still quite high, but the role of extended family like the grandmother increased sharply to 37.6%. This was happened because many of WMW's children were looked after by their grandmother.

Most of WMW family (87.6%) classified on good social environment. The role of the social environment helped the WMW family since sometime WMW who actually work outside were late on money transferring to their family, so that the neighbor and relatives support were felt most helped.

There are many family financial problems, among them was debt. There are 74.4 percent of WMW family who had a debt on pre-WMW, and 37.1 % of WMW family had a debt ratio and asset \geq 50%. But, after wives became WMW, percentage of WMW family who had a debt decline to 60.4 percent, and also percentage of WMW family who had a debt and asset ratio more than 50% decline to 27.6 %.

On Average, most of families have a good physical strength pre and post WMW. High physical strength indicated by family's statement which 94.8% pre WMW and 96.0% post WMW that the family member supported

each other in increasing the family income.

Family social strength on average tended high both pre WMW and post WMW. The highest social strength indicated by sample respondents statement that family had a goals to be achieved, family member co-operated on resolving problems and appreciate each other among the family member at pre WMW (99.6%; 98.0%; 97.6%) and post WMW (99.8%; 95.4%; 97.0%) respectively. However, there were a several causes that decrease family social strength post WMW, which is less on role distribution among family member, decline on co-operation among family member in problem resolve, as well as decline on communication among family member.

Most of family psychological strength tends to decline on post WMW compared to pre WMW. Although there is increasing on good self-concept from 42.2% pre WMW and 51.4% post WMW, but there is increasing on guilty feel of mother on children care that is from 21.0% pre WMW and 52.4% post WMW.

There is an increase on family physical strength post WMW, and statistically significant ($p=0.000$). As wife became WMW, there is an increase on high family physical strength from 63.2% pre WMW to 67.2% post WMW. This increase resulted by remittance received every month from mother as WMW. Correlation analysis showed there is a positive relations ($r = 0.127$) between remittance and physical strength of family, which means as increasingly remittance received as higher the physical strength of family. However, there is declining trend on family social strength post WMW, and statistically significant ($p=0.000$). As mother became WMW, there is a declining trend on social strength from 97.4% pre WMW to 95.6% post WMW. This condition more caused by lack of communication among family member as their mother became WMW. Moreover, after wife become a WMW, there is also declining on family psychological strength, with

statistically significant ($p=0.045$). As wife became WMW there is reducing on psychological strength from 70.4% pre WMW to 68.0% post WMW. Declining on social strength is more caused by increase on guilty fell of wife on children care.

Generally, there is declining on total **family strength** score from 66.81 ± 6.69 pre WMW to 64.49 ± 7.04 post WMW with statistically significant ($p=0.000$). This situation impacted to total high family strength from 55.8 % pre WMW to 38.4% post WMW. Based on multiple linear regressions analysis, WMW family strength was influenced positively by family Social environment, Household head Education level and the fluent of remittance. In contrast, WMW family strength was influenced negatively by Social problem and Economic problem.

Most **eating care pattern** on children (63.4%) categorized on good level, 31.6% on moderate level and 5% on less level. Almost mother (84.6 %) gave colostrum when first time suckling her children, 92.6 percent mothers gave her breast milk, but only 29.0 percent mothers gave her breast milk in an exclusive manner (giving breast milk simultaneously until children reach 6 months, without interrupted by other food). Most caregivers (84.6 percent) introduced on consuming vegetables, made their children accustomed to consume fruits, legume, animal based-food, and 51.4 percent caregivers paid attention on children eating-time schedule, .

WMW children have a good eating habit. Most children (72.2%) ate 3 times a day, 76.6% of children ate together with other family members, and children were given opportunity to choose their food personally.

The other family member (grandmother, father and older brother or sister) often played a role on eating care pattern. Grandmother (63.2%), father (11.6%), older brother (15.6%) played a role to prepare eating for children.

Most of caregivers (79.8%) had the **health care pattern** in the medium category. About 82.2 percent caregivers always weighed their children routine every month. When caregivers realized their children's weight descended, mostly 48.7 percent they will give their children with vitamins. About 96.0 percent of caregivers bring their children to health care community centre to be immunized. Overall over 90.0 percent hygiene practice was implemented by caregiver, there are 75.4 percent of the each family member had their own towel personally, 81.2 percent of children accustomed to cut off the nail 1 time a week, 90.8 percent of children accustomed to wash hand before eating, 99.4 percent accustomed to Use the soap every take a bath, 72.0 percent of children accustomed to Change the clothes Post play outside the home, 77.8 percent of children accustomed tooth brushing 2 times a day, and only 31.4 percent children accustomed tooth brushing before sleeping.

Sex distribution of children spread on percentage of male 48.8% and female 51.2%. Age distribution spread totaling 44,2% was in the age 49-60 months, 29,0% was in the age 37-48 months, 18,6% was in the age 25-36 months, 6,4% was in the age 13-24 months and only 1,8% was in the age 6-12 months.

The average children energy and protein intake is 1107.64 kcal and 28.30 g per capita per day. This energy and protein intake has fulfilled the energy and protein sufficiency level (Recommended Dietary Allowances, RDA). The energy and protein intake has reached > 90% RDA. The energy intake mostly comes from rice, while the protein intake, besides come from rice, is also from grains/legumes. The calcium, phosphor, seng, iron and vitamin A intake per capita are 322.28 mg, 403.09 mg, 2.93 mg, 8.85 mg, and 324.99 RE respectively. The phosphor and iron -intake have exceeded the RDA, but the calcium, seng and vitamin A only meet 65.15 %, 33.09%, and 77.39% of the RDA requirement respectively. The estimated results of

nutrient and energy intake in the household show that food availability in the WMW household has been meet, although, some of nutrients were not fulfill the RDA requirements. There are 27% children are in the group with food insecurity. The energy intake had significant ($p = 0.008$) positive relationship ($r = 0.120$) with eating care pattern, caregiver nutrition knowledge ($r = 0.205$), and with family strength ($r = 0.125$)

Around 76.2 percent of children had suffered illnesses during the last six months. Type of illness that was suffered including fever, influenza, cough, diarrhea, smallpox, worms illness, toothache, eczema, asthma and lungs infection. The number of children who suffered on illnesses during last six months was the implications of less on environmental hygiene and sanitation of WMW children's living-environment. Further, about 86.0% sample of children stated that they suffered from illnesses 1-2 times for the last one month, and 5.1% of children suffered from illnesses > 4 times for the last one month. There are significant ($p = 0.000$) positive relationship ($r = 1.00$) between health status with child health care pattern.

The nutritional status (child growth) in this report is based on the results of measuring body weight and body height. Therefore, the nutritional status is analyzed using three kinds of index, namely weight for age (W/A), height for Age (H/A), and weight for height (W/H). So from the results of this study it is found that the prevalence of underweight is 14.2 % (Z-score < -2), and 2.2 % were in severe underweight (Z-score < -3), 29.8 % are stunted, and 7 % are wasted. The underweight prevalence of WMW's children is higher than that of both West Java province and Sukabumi District Children in general according to the result of The Basic Health Research (Riskesdas) 2007, that is 11.3% (Depkes 2008). The prevalence of stunted WMW children (7%) is much higher than that of West Java Province children in general based on the result of Riskesdas 2007, which is only about 15.7% (Depkes 2008). This means that the welfare condition among

the WMW families in is still low. Based on multiple regression analysis, determinants of nutritional status are the family strength, child health status and the level of energy consumption

Most of WMW families are in a poor category for almost all psychosocial stimulation components. They are poor in the learning stimulation, Physic environment, Warmth and acceptance, Modeling, and Variety of Experience.

The average child development in the age group of 0-12 months was a good category. The highest score (84.13) of child development is for the component of intelligence, and the lowest score (66.67) of child development is for the component of hard motoric skill.

The children in the age group of 13-24 months show a little better development for the component of hard and soft motoric skill. Whereas, Passive communication, helping one's self, active communication, intelligence and social behaviors are still poor category . The average child development in the age group of 13-24 months was a poor category.

Children in the age group of 25-36 months had better scores of development than the previous age groups. Three development components have the high score, namely, hard motoric skills, helping one's self and active communication. The lowest child development is found in the component of soft motoric skill. The average child development in the age group of 25-36 months was a good category.

Children in the age group of 37-48 months were inadequate child development. Only two components of child development have the high score, i.e. social behavior and helping one's self, while others have the low score.

Children in the age group of 49-60 months achieve the highest score of development compared to the other age groups. Only two components have the low scores, namely: soft motoric skill and helping one's self. The

other components have the high scores. On average, child development in the age group of 49-60 months was a good category.

Based on Pearson analysis, there is a significant positive relationship ($p = 0.000$) between the energy intake and child development ($r = 0.215$). Also, there is a positive direct relationship ($r = 0.940$) between nutritional status and child development.

Based on **Structural Equation Model (SEM) analysis**, the Chi-Square value (289.00 (0.28)), GFI / Goodness of Fit Index (0.78), and RMSE / Root Mean Square Error (4) were fit with data collected according to Bollen (1989). Based on **SEM analysis** a good nutritional status was influenced directly by height of health status, good sufficient energy consumption, height on remittance and better on family strength. Indirectly, it influenced by remittance (through its influence on energy consumption). The family's strength was influenced directly by increasingly the height remittance. Further good development of children was influenced directly by house living environment and nutrition status. However, children development was indirectly influenced by children health status (through its influence on nutritional status, high on energy consumption of energy, and high on remittance. Therefore, based on SEM analysis, it could conclude that children development was influenced by remittance, health status, and energy consumption in indirectly manner. Those three variables influenced on children nutritional status which further will affect on long way children development process. In other side, a children nutritional status was a direct influential variable.

In order to increase the WMW family protection, there are several agreements and programs that will be conducted and financed by the regional government which resulted from the seminar on August 27th, 2009, followings are:

1. Establishing Community Based Educating Groups or Kelompok Pengajaran Berbasis Masyarakat (KPBK), that will help WMW preparing their skills and expertise before departing for destination country. Several skills and expertise that will be taught are: communicating skills, language ability and understanding of destination country, understanding of working contract, skills for using electronics portable, finance management, etc.
2. Improvement of data and information to be accessible for other related department or body in charge. This program will be carried out by the Office of Employment and Transmigration (Disnakertrans) cooperate with the Office of Civil Service in Regency of Sukabumi.
3. Set up of WMW minimal standard of education in Junior High School that will be put into effect next four years through the regional government regulation of Sukabumi Regency.
4. Establishing families' economics empowerment through training on management of finance and entrepreneurship to increase the value of remittance, so as the aims of WMW to increase family economics welfare could be reached. This program will be carried out by the Office of Social, Sukabumi Regency.
5. Establishing WMW family's assistance by the Office of Social, Regency Sukabumi. This program aimed to maintain cohesiveness of the marriage and mutual understanding between the husband and wife in order to avoid misunderstandings which lead divorcing.
6. Establishing WMW family's assistance which concern on children developing and care pattern through the family assistance training (Bina Keluarga Balita) for children's caregiver as well as monthly monitoring on children growth and development by social staff of Health Centre Community (Posyandu). This program will be carried out by Office of Health Service of Sukabumi Regency.

7. Establishing of comprehensive problems assistance program which will be carried out problem-solving post WMW both for WMW personally and for their family member.
8. Strengthening of the law for PPTKIS (non-government Indonesian worker providers) by closing permit for PPTKIS which had proved on violation and deviation.

LIST OF CONTENTS

| | Page |
|---|-------------|
| GOALS AND OBJECTIVES | 1 |
| Summary | ii |
| LIST OF CONTENT | xiv |
| LIST OF TABLES | xvi |
| LIST OF PICTURES | xxii |
| 1. INTRODUCTION | 1 |
| 1.1 Background | 1 |
| 1.2 Objectives | 5 |
| 2. STUDY OF LITERATURE | 7 |
| 2.1 Women Migrant Workers (WMW) | 7 |
| 2.2 Definition and Theory of Family | 8 |
| 2.3 Family Strength | 13 |
| 2.4 Family Economical Pressure | 16 |
| 2.5 Family Resources Management..... | 17 |
| 2.6 Child Parenting | 19 |
| 2.7 Food Consumption | 22 |
| 2.8 Child Growth | 23 |
| 2.9 Child Development | 29 |
| 3. CONCEPTUAL FRAMEWORK | 37 |
| 4. METHOD | 42 |
| 4.1 Research Design | 42 |
| 4.2 Data collection | 42 |
| 4.3 Sampling Technique | 47 |
| 4.4 Instrument reliability | 50 |
| 4.5 Data Analysis and Management | 51 |
| 4.6 Quality control of data | 55 |

| | |
|---|-----|
| 4.7 Data Limitation | 56 |
| 4.8 Relevance of Research | 56 |
| 5. RESULTS AND DISCUSSION | 58 |
| 5.1 General Description of Management and Placement Indonesian Workers (IW)/ Women Migrant Workers (WMW) | 58 |
| 5.1.1 Country of Destination of WMWs | 58 |
| 5.1.2 Officers who Take Care of WMW Candidates | 59 |
| 5.1.3 Mechanism in the Departure and Returning of WMWs as well as Management of WMWs having Problems | 60 |
| 5.2 Socio-Economic and Demographic Condition | 65 |
| 5.2.1 Characteristic of Women Migrant Worker (WMW) | 65 |
| 5.2.2 Age, Education and occupation of Household Head | 68 |
| 5.2.3 Family Size | 71 |
| 5.2.4 Remittance and Household Income | 72 |
| 5.2.5 Assets Ownership | 76 |
| 5.2.6 Housing | 77 |
| 5.3 Changes in Family Structure and Function | 78 |
| 5.3.1 Changes in Breadwinner Roles | 78 |
| 5.3.2 Changes in Head of Household's Role | 79 |
| 5.3.3 Changes in the Role of Economics Allocation | 79 |
| 5.3.4 Communication of WMW with their Family | 81 |
| 5.3.5 Changes in the Role of Children's Caregiver | 82 |
| 5.3.6 Changes in the Role of Decision-maker | 83 |
| 5.4 Family Strength | 85 |
| 5.4.1 General Overview of the WMW's Family Strength | 85 |
| 5.4.2 Family Physical Strength | 95 |
| 5.4.3 Family social strength | 97 |
| 5.4.4 Family psychological strength | 99 |
| 5.4.5 Level of family strength | 100 |

| | |
|---|-----|
| 5.4.6 Socioeconomic factors that connected with family strength.. | 101 |
| 5.5 Child Care Pattern | 104 |
| 5.5.1 Nutrition Knowledge..... | 104 |
| 5.5.2 Eating Care Patterns | 104 |
| 5.5.3 Health Care Patterns | 113 |
| 5.5.3 Relations between Variable..... | 121 |
| 5.6 Child Growth | 122 |
| 5.6.1 Child Characteristics..... | 122 |
| 5.6.2 Child Food Consumption..... | 123 |
| 5.6.3 Health Status | 125 |
| 5.6.4 Nutritional Status | 128 |
| 5.7 Child Development | 137 |
| 5.7.1 Psycho-social stimulation | 138 |
| 5.7.2 Child Development in the Age Group of 0-12 months | 141 |
| 5.7.3 Child Development in the Age Group of 13 – 24 Months | 142 |
| 5.7.4 Child Development in the Age Group of 25 – 36 Months | 143 |
| 5.7.5 Child Development in the Age Group of 36 – 48 Months | 143 |
| 5.7.6 Child Development in the Age Group of 48-60 Months..... | 144 |
| 5.7.7 Child Development category | 145 |
| 5.7.8 Relationship between Variables | 149 |
| 5.7.9 Analysis of Structural Equation Model on Factors that Affect a Child's Growth and Development | 150 |
| 5.8 The protection programs are provided by the government for WMWs in the destination countries and their families..... | 153 |
| 5.8.1 Legal Basis for the Protection and Placement of IW/WMM ... | 153 |
| 5.8.2 Efforts in the Socialization of Policies/Programs in the District of Sukabumi on the Placement of Indonesian Worker..... | 154 |
| 6. CONCLUSSION | 158 |
| 7. BIBLIOGRAPHY | 168 |

LIST OF TABLE

| | Page |
|--|------|
| Table 1.1 Distribution of TKIs per area of origin (5 biggest provinces) from 1994-1999 | 11 |
| Table 2.1 Child's development standard Based on age | 33 |
| Table 3.1 Variables and Indicators | 40 |
| Table 4.1. Data and its Collection | 44 |
| Table 4.2. List of Key Person | 46 |
| Table 4.4 Distribution of Household Samples | 49 |
| Table 4.5 Result analysis of research instrument reliability | 51 |
| Table 5.1 The destination country of Indonesian workers from Sukabumi in 2008 | 58 |
| Table 5.2.1 Distribution of sample based on purpose as WMW | 65 |
| Table 5.2.2 Distribution of sample based on destinations country | 66 |
| Table 5.2.3 Distribution of respondent based on work contract ownership | 66 |
| Table 5.2.4 Distribution sample of respondent based on salary and compatibility of salary as stated in the contract | 67 |
| Table 5.2.5 Distribution sample of respondent based on motivation of sending money | 68 |
| Table 5.2.6 Distribution of sample based on Regularity of sending remittance from WMW | 68 |
| Table 5.2.7 The family distribution based on head of household's age. | 69 |
| Table 5.2.8 The family distribution based on head of household's education | 69 |
| Table 5.2.9 Ffamily distribution based on head of household's main occupation | 70 |
| Table 5.2.10 Distribution and average family size | 71 |

| | | |
|--------------|---|----|
| Table 5.2.11 | Range, average and standard deviation of sending remittance | 73 |
| Table 5.2.12 | Family average income and family member income contribution towards total family income | 74 |
| Table 5.2.13 | Family distribution based on the poverty category | 75 |
| Table 5.2.14 | Family distribution based on national aids received | 75 |
| Table 5.2.15 | Family distributions based on assets ownership | 76 |
| Table 5.2.16 | Family distributions based on the status and size of the house | 77 |
| Table 5.2.17 | Family distributions based on wall type of the house | 78 |
| Table 5.2.19 | Family distributions based on the house floor type | 78 |
| Table 5.3.1 | Role changes on breadwinner pre and post WMW | 78 |
| Table 5.3.2 | Role changes on head of household pre and post WMW ... | 79 |
| Table 5.3.3 | Changes in the allocation of family economics pre and post WMW | 81 |
| Table 5.3.4 | Way of communication between WMW with husband and children | 82 |
| Table 5.3.5 | Changes in children's caregiver pre and post WMW | 82 |
| Table 5.3.6 | Changes in the decision-maker of children interests' pre and post WMW | 83 |
| Table 5.3.7 | Changes on category of structural and function of the family | 84 |
| Table 5.4.1 | Distribution of Sample based on physical resources | 85 |
| Table 5.4.2 | Distribution of WMW's family social environment | 86 |
| Table 5.4.3 | Distribution of WMW family social environment | 87 |
| Table 5.4.4 | Distribution of sample based on debt condition | 88 |
| Table 5.4.5 | Statistical analysis and average level of debt and assets | 88 |
| Table 5.4.6 | Distribution of family based on economic problems | 88 |

| | | |
|--------------|--|-----|
| Table 5.4.7 | Distribution of sample based on the perception on economic pressure | 89 |
| Table 5.4.8 | Distribution of sample based on category of economic pressure perception | 90 |
| Table 5.4.9 | Distribution of sample based on category of social problem | 90 |
| Table 5.4.10 | Distribution WMW family based on social problem faced... | 91 |
| Table 5.4.11 | Distribution of sample based on finance management..... | 93 |
| Table 5.4.12 | Distribution of sample based on category of finance management of family | 95 |
| Table 5.4.13 | Distribution of sample based on component of the family's physical strength | 96 |
| Table 5.4.14 | Distribution of sample based on the component of the family social strength | 97 |
| Table 5.4.15 | Distribution of sample based on the component of family psychological strength | 99 |
| Table 5.4.16 | Distribution average score of the family strength | 101 |
| Table 5.4.17 | Variable correlation analysis of research with family strength | 102 |
| Table 5.4.18 | The Multiple linear regression analysis of the research variables that influence family's strength | 103 |
| Table 5.5.1 | Distribution of caregiver's nutrition knowledge level | 104 |
| Table 5.5.2 | Child's distributions based on the eating care pattern level | 105 |
| Table 5.5.3 | Distributions of sample based on giving breast milk | 105 |
| Table 5.5.4 | Distributions of children suckled by formula milk | 106 |
| Table 5.5.5 | Children Distribution based on introducing-time of formula milk | 106 |
| Table 5.5.6 | Distributions on age-base of weaning food introduction..... | 107 |
| Table 5.5.7 | Distribution based on type of weaning food given | 107 |

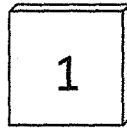
| | | |
|--------------|--|-----|
| Table 5.5.8 | Distribution based on food habit | 108 |
| Table 5.5.9 | Distribution of sample respondents based on eating-time schedule | 109 |
| Table 5.5.10 | Distribution of respondent based on the breakfast habit ... | 110 |
| Table 5.5.11 | Distribution of sample respondent based on daily eating frequency | 110 |
| Table 5.5.12 | Distribution of respondent based on eating behavior | 111 |
| Table 5.5.13 | Distributions of sample respondent based on responsible people preparing for children's food | 112 |
| Table 5.5.14 | Distribution of children sample respondent based on health care pattern | 113 |
| Table 5.5.15 | Distribution of sample respondent based on KMS ownership | 114 |
| Table 5.5.16 | Distribution of sample respondent based children weighing pattern | 114 |
| Table 5.5.17 | Distribution of sample respondent based on weighing reason | 114 |
| Table 5.5.18 | Distribution of sample based on child weighing place | 115 |
| Table 5.5.19 | Distribution of sample based on parent's behavior to compare their children body weight with other children in average age | 115 |
| Table 5.5.20 | Distribution of sample respondent based on children weight descended | 116 |
| Table 5.5.21 | Distribution of sample based on First aid's box (P3K) availability | 117 |
| Table 5.5.22 | Distribution of sample based on immunization habit | 117 |
| Table 5.5.23 | Distribution of sample based on frequency and type of immunization | 118 |
| Table 5.5.24 | Distribution of sample based immunization | 118 |
| Table 5.5.25 | Distribution of sample based on receiving vitamin A | 119 |

| | | |
|--------------|---|-----|
| Table 5.5.26 | Distribution of sample based on the children hygiene practice | 119 |
| Table 5.5.27 | Distribution of sample based on place where parents brought when children suffered from illness | 121 |
| Table 5.6.1 | Sex distributions of children | 122 |
| Table 5.6.2 | Child Age Distributions (months) | 122 |
| Table 5.6.3 | Anthropometric Characteristics of Children under Five Years | 123 |
| Table 5.6.4 | Child daily energy and nutrient intake | 124 |
| Table 5.6.5 | Percentage of children according to classification of sufficiency level of nutrient intake | 124 |
| Table 5.6.6. | Distribution of children health status during the last six months | 125 |
| Table 5.6.7. | Distribution of children health status during the last one month | 126 |
| Table 5.6.8 | Distribution of children health status during the last one month | 126 |
| Table 5.6.9. | Distribution of children base on Medical treatment method | 127 |
| Table 5.6.10 | Distribution of Children based on the Nutritional index of W/A | 131 |
| Table 5.6.11 | Distribution of Children under Five Years based on the Nutritional Index of H/A | 132 |
| Table 5.6.12 | Distribution of Children based on the index of W/A | 135 |
| Table 5.6.13 | Nutritional status Coefficient correlation | 135 |
| Table 5.7.1 | Distribution of The psycho-social stimulation scores based on the Group Age of 0-3 Years | 139 |
| Table 5.7.2 | Distribution of psycho-social stimulation score based on | 139 |

| | | |
|--------------|--|-----|
| | the Development Category of Children aged 0-3 years | |
| Table 5.7.3 | Distribution of psycho-social stimulation Scores based on the Age Group of 4-5 Years | 140 |
| Table 5.7.4 | Distribution of HOME scores based on Development Category at the Age of 4-5 Years | 141 |
| Table 5.7.5 | Average Scores of Child Development in the Age Group of 0-12 Months | 141 |
| Table 5.7.6 | Average Score of Child Development in the age group of 13-24 months | 142 |
| Table 5.7.7 | Average Scores of Child Development in the Age Group of 25-36 Months | 143 |
| Table 5.7.8 | Average Score of Child Development in the Age Group of 36-48 months | 144 |
| Table 5.7.9 | Average Score of Child Development in the Age Group of 48-60 months | 144 |
| Table 5.7.10 | Distribution of children based on the child Development Category | 145 |
| Table 5.7.11 | Cross Tabulation of Energy Intake Category and child development Category | 149 |
| Table 5.7.12 | Cross Tabulation of Nutritional Status (W/A) and child development category | 150 |
| Table 5.7.13 | Decomposition Effect on the Models Analysis of Factors those were influential against Development of Children WMW Family | 152 |

LIST OF FIGURE

| | Page |
|---|------|
| Figure 1.1 Number of TKIs from West Java (5 biggest regencies) from 1994 – 1999 | 19 |
| Figure 1.2 Percentage of WMW based on the types of problems faced and handled by the Consulate General, the Republic of Indonesia, 2002-2003 | 33 |
| Figure 3.1 Conceptual Framework | 36 |
| Figure 4.1 Framework of factors which influence to children's growth and development on WMW's family | 55 |
| Figure 5.1 The flow chart of departure and return of WMWs to and from the country of destination as a system | 64 |
| Figure 5.2.1 The pattern of remittance uses | 73 |
| Figure 5.6.1 The average z-score of W/A by children age..... | 129 |
| Figure 5.6.2 Distribution of Children Five Years based on z-Scores of BW/A..... | 130 |
| Figure 5.6.3 The average z-scores of H/A by children age | 131 |
| Figure 5.6.4 Distribution of Children based on z-scores of H/A..... | 132 |
| Figure 5.6.5 The average z-scores of W/H by children age | 133 |
| Figure 5.6.6 Distribution of Children based on the z-Scores of W/A..... | 134 |
| Figure 5.7.1 Structural Equation Model on Factors that Affect a Child's Growth and Development | 151 |



INTRODUCTION

1.1 Background

For the last three decades, the migration between countries has become the world issue, which has a strong effect on both countries receiving or sending migrants. Indonesia can be categorized as a country which sends to and accepts from other countries, although in terms of quantity, Indonesian migrants who work abroad are greater than foreign workers who come to Indonesia (Tjiptoherijanto, 1997). *Tenaga Kerja Indonesia* (TKI) is the term referring to those Indonesian people who work abroad to earn wages for a certain period of time. The number of Indonesians going abroad as TKIs continues to increase from one year to another. In 2003 there were around 293694 Indonesian people working abroad, and it increased to 380690 people in 2004; 474310 people in 2005; and 680075 people in 2006. From 2003 to 2006 there were a total of 1,828,769 Indonesian people legally working as TKIs, excluding those who work illegally (Dept. of Labor and Transmigration 2007).

There were 14 official countries of job destinations for TKIs, involving the Middle East and Asia-Pacific countries, namely, Saudi Arabia, Abu Dhabi, Kuwait, Bahrain, Qatar, Yordania, Oman, Malaysia, Singapore, Brunei, Hong Kong, Taiwan, South Korea and Japan. Ranked from the biggest, there are five big countries of work destination: Saudi Arabia (47.4%), Malaysia (41.6%), Abu Dhabi (2.4%), Kuwait (2.3%) and Hong Kong (2.1%).

The origins of TKIs involve almost all islands in Indonesia, such as Java-Madura, Sumatra, Kalimantan, Sulawesi and Nusa Tenggara. The data from 1994 through 1999 indicate that West Java Province is the region that

sends the most TKIs, followed by East Java, Central Java, East Kalimantan and West Nusa Tenggara (See Table 1.1).

Table 1.1 Distribution of TKIs per area of origin (5 biggest provinces) from 1994-1999

| Year | Province | | | | | | | | | |
|-------|-----------|------|-----------|------|--------------|------|-----------------|------|--------------------|------|
| | West Java | | East Java | | Central Java | | East Kalimantan | | West Nusa Tenggara | |
| | N | % | N | % | N | % | N | % | N | % |
| 1994 | 29813 | 12.4 | 17843 | 7.7 | 36493 | 18.2 | 15152 | 11.5 | 6577 | 7.2 |
| 1995 | 27451 | 11.4 | 24608 | 10.6 | 23569 | 11.7 | 17450 | 13.3 | 7860 | 8.7 |
| 1996 | 57809 | 24.0 | 41076 | 17.7 | 39018 | 19.5 | 11876 | 9.0 | 11703 | 12.9 |
| 1997 | 55694 | 23.1 | 41026 | 17.7 | 30157 | 15.0 | 9403 | 7.2 | 8250 | 9.0 |
| 1998 | 49497 | 20.6 | 65285 | 28.1 | 37196 | 18.6 | 28839 | 22.0 | 30017 | 33.0 |
| 1999 | 20447 | 8.5 | 42319 | 18.2 | 33859 | 17.0 | 48764 | 37.0 | 26546 | 29.2 |
| Total | 240711 | 100 | 232157 | 100 | 200292 | 100 | 131484 | 100 | 90953 | 100 |

Source: Dept. of Employment RI 2000

In the same period (1994 – 1999), in the Province of West Java, the largest number of TKIs were from Regency of Sukabumi, numbering to 119.900 people (50%), followed by other regencies: Purwakarta 54.028 people (22%), Cianjur 15.523 people (6%), Indramayu 10.824 people (4%), and Subang 6.071 people (3%) and other 15 Districts (15%) (See Figure 1.1).

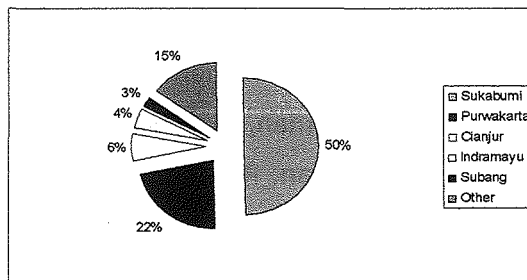


Figure 1.1 Number of TKIs from West Java (5 biggest regencies) from 1994 - 1999

TKIs have a role in the process of development, i.e. apart from the reduction of unemployment, they contribute a large amount of foreign exchange (Teviana 2007). The foreign exchange from TKIs recorded for the year of 2002 accounted for US \$ 2,198,019,604. With such a big contribution of foreign exchange, TKIs are considered as the hero of foreign exchange (Dept. of Labor and Transmigration 2007).

However, many TKIs face problems, particularly women migrant workers, henceforth, the abbreviated 'WMW' is used for the purpose of this study. Lack of understanding of legal matters and protection as well as poor skill to understand the language in the work place has given them a low bargaining power and made them easily exploited (Poerwaningsih 2004; Wirawan 2007). The major problems faced by WMWs are violence, unpaid salaries, sexual harassment, work unrelated to contracts, harsh treatment by employers and poor food. For example, of all problems handled by the Consulate General, the Republic of Indonesia in Saudi Arabia, the biggest problem is unpaid salaries (46%) (see Figure 1.2).

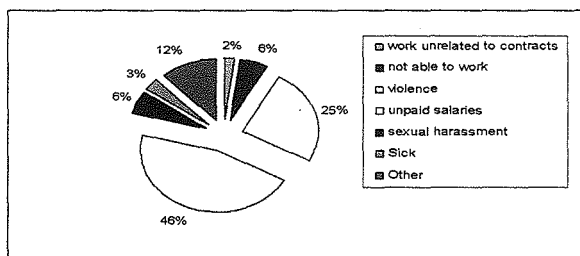


Figure 1.2 Percentage of WMW based on the types of problems faced and handled by the Consulate General, the Republic of Indonesia, 2002-2003.

Of all TKIs, 70 % are women workers (Kustini 2002). Due to a low level of education and skills, 95% WMWs who work in the Middle East and 59% who work in Asia-Pacific regions are in the informal sector working as

household servants or hard laborer in hospitals (Dept. of Labor and Transmigration 2007). The household economic pressure as a result of the husband's small income, inadequate job opportunity, and a relatively bigger income or wages in the destination countries have encouraged WMWs (wives) to take a role in supporting their family's economy by working abroad (Kolopaking 2004; Tjiptoherijanto 2000). In line with the theory of Todaro (1978), the major cause of migration is a rational economic reason concerning the benefit and cost in both financial and psychological aspects.

The departure of a wife to become a migrant worker can, on one hand, increase her family's economy, but on the other hand, cause family social problem. In Indonesia, the success of a WMW is usually reflected from the good house she has built from the remittance sent to her family in the home country. On the other hand, there is a social cost the migrant workers have to pay while they stay in the countries of job destinations, for example, temporary separation from beloved husbands and children, husbands marrying other women, change in power relation between men and women, tension in migrant's family, or even a divorce.

The departure of WMWs with the status of wives to work abroad can improve the economic function of family, but because it is commonly for a long period of time (two or three years at least) it can cause some family dysfunctions in sexual function, reproduction, and affection. A relatively rapid change in the structure and function of family without the readiness of other family members is likely to create a husband-wife conflict, and a divorce is often the solution to such problem. This is the high social cost the WMWs have to pay.

A long conflict in the family can threaten the family strength (both social and psychological). A long conflict and unsatisfaction in the husband-wife relationship, husband's decreased commitment can result in the rejection against children (Karyadi 1988). Children will grow in

uncomfortable environment, lacking in affection and attention. This will have a negative impact on the growth and development of children. Some of them suffer under nutrition (Kusharto 2000).

A family conflict, inappropriate use of remittance and inadequate protection from the government for WMWs can make some families of WMWs unable to improve their economic and social status in the community. However, this has not been yet the main concern of the government.

Given the important role of WMWs in the process of development and the importance of family unity to the growth of children as the foundation of human resource development, it is important to make efforts to improve the capacity of WMW's families in the management of family and child care problems and other resources (E.g. remittance) for the welfare of all family's members.

For the reasons described above, it is important to conduct a research to analyze the socio-economic status, changes in the structure and function of family, family strength, child care, and growth and development of children among WMW's households. The research is expected to be able to answer some questions: How is the socio-economic status of WMW's family? How has the family structure and function changed among WMW's families? How is the family strength of WMW's family? What is the pattern in using remittance? How is the child care pattern of children? How is the growth and development of children among WMW's families? What protection programs are provided by the government for WMWs in the destination countries and their families?

1.2 Objectives

1. To identify socio-economics aspects and the pattern in using remittance of WMW's families

2. To analyze the family structure and function changed among WMW's families
3. To analyze family strength of WMW's family
4. To analyze child care pattern among WMW's families
5. To analyze child growth and development of WMW's family
6. To find out the protection programs are provided by the government for WMWs in the destination countries and their families.

2

STUDY OF LITERATURE

2.1 Women Migrant Workers (WMW)

The definition For Women Migrant Workers (WMW) has three main elements: Gender, labor and foreigner. Specific named for WMW are indicate to gender refraction on women whose profession as labor. This can be compared on men labors that are not specifically called as men labor. Generally WMW works as housekeeper which is always parallel with labor. WMW identically as foreigner because of the abroad place they work for. (Kompas, 5 June 2004)

According to Sukesu et al (2002), the word labor is always connected to hard work, low education, and has low income. This condition cannot be separated from the past history, on colonial era, the word labor only used to show person who work hand work/hard work.

There are two acts that strictly give limitation which are: Act number 33 year 1947 article 6 point 1 and Act number 22 year 1957 article 1 point 1. Based on Act no.33 year 1947 article 6 point 1, labor is a person who works for their master or company that's obligated to have supporting aid and salary. Act no. 22 year 1957 article 1 point 1 reviled: labor is a person who works for their master and get salary.

Muchtar (2004) reviled: on villagers who have economical difficulties tend to find their living abroad well known as foreigner labor. Generally the villagers whom work as foreigner labor are women, known as Women migrant labor. WMW are Indonesian Labor (IL) women who work abroad and get salary according to the time limit based on the working agreement through IL placement procedure. Family of WMW are family who had or have been left its member as a WMW the family of WMW are the first basic

consideration on the decision of the Minister of Labor and Transmigration Republic of Indonesia no. 104 year 2002 on Indonesian Labor Placement up abroad. The decision declared that: " Indonesian Labor Placement up abroad is national program on the effort to rise up labor and its family welfare and so as the uphold the quality of human recourses."

2.2 Definition and Theory of Family

The family definition is needed because its relativity to the application on variety aspect of live such as law, health, religion, politics, and economic. The review and the difference on the opinion about the definition of family generally related to the time and space, structure, and family composition (Hunter 1991)

Settles in Sussman and Steinmetz (1987) stated that there are some closure on the family definition exploration, some are: 1) family viewed as the ideology abstraction, 2) position of a family has romantic image, 3) family as the unity on intervention treatment, 4) family as a process, 5) family as the last resort, and 6) family viewed as network.

Indonesia has formulated a definition of a family as mark on the Act no.10/1992 about society development and family welfare increase. Based on the Act, family is the smallest unit in society consisting of husband-wife, or husband- wife and child, or the father and his child, or the mother and her child (BKKBN 1992). The definition is emphasizing on family composition, meanwhile the comprehensive definition given by the functionalist people (the structural-functionalist believer) that's seen family as a structure that can fulfill physical and physiology needed of its member, and also to obtain wider society. (Pitts 1964 *knotted* Kingsburry & Scanzoni, on Boss et al. 1993).

2.2.1 Family Theory

Overview about Family begin since year 1800, followed by the needs to fix and solve social problems. This shows the view of a family is related to many social problems. The example of it are the social problem connecting to the effect on divorce rate, effect on violent, movement or the sue on the right to choose for women, and industrialization effect. In fact the social renewer sees that family as the basic of society health. Because of that, the attention moves to the life of the family itself. family is consider as breakable institution, so it needs to be protected. The social changes that happens fastly, industrialization, and urbanization are viewed as the factors that can caused family disorganization. (Thomas & Wilcox on Sussman & Steinmetz 1987).

Family definition develop since early 1900, as the aplication on sociology theory in family institution. The series of developed family theory start with the symbolic interactionism theory since year 1946, the system theiry, the social conflict theory, the social exchange theory, and the human ecology theory since year 1960, and the social construction of gender theory since year 1980 (Boss, Doherty, LaRossa, Schumm & Steinmetz 1993).

Generally the family theories that developed can be divided into two, which are : the theory of external control and the theory of the power of people. the theory of external control has the idea that human are more influence by factors outside themselves, and the one included to this theory is family development theory, theory of structural functionalism, and the theory of social conflict. The power of people theory is emphasizing more on the power of human itselfes to create their behaviours in thinking, interacts, and give meaning to the world. Social exchange theory and symbolic interaction theory are included in this theory. (Winton 1995).

The theory of social exchange. The theory of social exchange is mainly overviewed individual as a rational creature. Every individually

activity related to the goal to maximize achievements and minimize the cost. The achievements can be phissically, such as : material and economically.and non-phissically, such as: emotion and feelings. this theory believes that every social interact had it own cost. The least cost is time and effort,the rest is money,and negative emotion like anger,frustated and depressed. Social interation also can bring achievements like joy, the positive idea on live, the feeling of usefull and worthed. This theory viewed that divorce happens because of each side felt more on the weddingexpense to the usefull of the marriage itself.

The theory of symbolic interaction. Human behavior viewed as the function of human to think critically and analytically. This theory focussed on the otonomy of an individual to build the action pattern through target and scene definition and intrepretation process. That individual otonomy even become the reason breaking the rules and social norms behaviours.

The theory of social conflict. The theory of social conflict viewed that conflict as something natural.normal and can be avoid on all social system, even conflicts are consider asthe source of motivation which is needed for changes. Conflicts are everywhere, in all kinds of social interaction, and in all level of social organization. Moreover, conflicts are considered as the basic elements in human social lives and system continuity. The size (prevalention) of individual conflict are motivated by individual interest and connected to the needs, values, goals, and resources. On limited resources , there are two possible conflicts, which are : 1) the difference on interest, needs, value, and goals, and 2) different individu at the same time wanted the same thing on a limited resources. (Winton 1995; Klein & White.1996: Farrington & Chertok on Boss *et al.* 1993).

The theory of structural functionalism. The theory of structural functionalism are based on four consepts, which are : system, social structure, functions, and balance. This theory talked on how someone's

behaviour is influenced by other people and by social institution, and how those behaviours in turn influence other people on continued action-reaction process. This theory viewed there are no individual and and system who works independently, but influenced and in turn influencing other people or other system (Winton 1995), and admitting there are variety in social lives, which are the main source society structure. (Megawangi 1999).

2.2.2 Family System

Family is a system like other system consist of connected elements. The relation among elements to create one spesific function to be happened, not only naturally, but also form by variety factors or forces exist around the family, which are the existing of values and norms and also other factors exist in the society. The family definition always translated as a household and also a household is translated as a family. (Rice & Tacher 1986 copied on Guhardja dkk 1992) stated that in the word household knotted a description of a home, the content and the arrangement of it, but it is less knotted of a relationship or togetherness among members filling that home. The central statistic biro in Indonesia copied in Guhardja dkk 1992 define household as a group of people living under one roof and eat on the same kitchen so household can be consist of member of a family or non-member of a family, like people who rent inside the house and housekeeper who lived in one unit of home (house/bulding with roof). Every household has head of household which is one of the member whose name is used for all needs like to choose where to live, rental on household appliances, household maintenance, etc.

2.2.3 Family Structure

Family structure can be the relation network or relationship pattern among members, where there are exist or attaching status and roles of each

member of a family. According to Goode (1964) family structure has developed from pathiarkhi family structure to demoratic family structure. In pathiarkhi family structure there are ways to behave (formalized) based on habit, which are: 1) husband starring as the head of a family and the main living;2) wife starring as a babysitter,house maintenanceand takes care of her husband; and 3) children and wife are expected to show subordinate to the head of the family, in giving apresiation to the head of the family.

Skolnick (1978) stated that this separation on role strictly has decrease the opportunity for intimate and spontanious relationship. In other word, the relation goes formal, and avoidable or there are mentally separation family relation. Meanwhile, on democratic family structure, the relation of husband and wife are more egalite in the meaning of a couple which's together sharing on the responsibility in fulfilling practical needs and in taking decision and also individual family member development.

2.2.4 Family Function

Family as a social system has duty or function so the system will work. The duty related on goal achievements, integrity, and solidarity, and also the continuity pattern or family maintenance (Megawangi 1999). According to Winton (1995), function is a consequence of person behaviour or group action. Profitable action consequencesto the system called functional, meanwhile the action causes losses to the system called disfunction. And according to McIntyre (1966) quited in Kingsburry and scanzony on Boss et all (1993), function define as a contribution or a donation where an item or an element takes care of all.

Family function is to be resposibleon taking care of, growing, and developing its member. Family also functionize in fulfilling the needs to keep holding, growing, and developing. The continuity of a family function depends on environment condition,the extrovert and introvert in other

system relation, and the form of interaction happens among existing components in a family. (Guhardja dkk 1992).

Kingsley Davis stated 8 family functions, which are: reproduction, maintenance, placement, socialization, economic, care of the aged, political centre, and physical protection (Sumarti, 1999).

2.2.5 Family Problem

One that is becoming problems in the family is the existing of conflicts among family members specially husband and wife. Family conflict happens because there are mismatch relationship between husband and wife marked by the existing of behaviour/idea differences, to respect or not to the difference itself, physical/abuse fighting, violent and disgrace. (Hastuti 2002 on Desmarita 2004).

According to Kammeyer 1987 copied on Desmarita 2004, conflict that happened in a family basically are about economical problem, child babysitting, job description for each member of the family (the role on family member), and sexual problem. To overcome the problems, family need to develop appropriate adaptable strategy, one of them called coping strategy. According to Friedman 1988 copied on Desmarita 2004, family coping is a behaviour/positive act used by family and their subsystem to solve or overcome a problem or to decrease stress level caused by certain events.

2.3. Family Strength

Family strength is dynamic condition on a family who have tough and strength and also have physical material ability and psychosocial-spiritual mental ability to be able to live independently and improving themselves and their family to live in harmony in the effort to raise physical welfare and mental happiness (Act no.10, Chapter I, article 1 points 15 copied on Desmarita 2004). Lasswell & Lasswell 1987 copied on Desmarita 2004, stated

that a strong family character is to respect each other, have a routine schedule of togetherness, healthy and effective way of communication, have strong commitment, have good spiritual and able to see crisis or problems that's happening positively. Therefore, that family are able to survive on any changes.

Welfare family development wisdom according to Act no. 10 year 1992 article 15 lead on the existing of endurance quality family, family strength and independently. Family strength is a dynamic condition on a family who has tough and strength, and also has material-physical ability and mentally-spiritual ability to live independently, and to develop themselves and their family to live in harmony and to improve physical and spiritual welfare (BKKBN 1992). The development on family strength become important due to the fact there are variation on family ability on fulfilling the needs, function enrollment, through the self-resources management, and family ability in managing family problems and stress. (Krysan, Moore, & Zill 1990, copied by Sunarti 2001). The sign on family independency is family mental behavior in using the ability exist in the family to improve their own welfare and to develop all of its potential to become human resource in supporting countries development.

The measure of a family strength through system closure consisting of input, process, and output. The measuring of family strength can be gain on construct validity test using exploratory and confirmatory resulting three latent measurements, which are: physical Strength, social Strength, and physically Strength. (Sunarti 2001).

Family physical Strength is economical ability own by the family which is family member component to gain economical resources outside the system to fulfill their basic needs, such as food, cloths, and housing, education and health. Family social Strength is family Strength in absorbing religious values, maintaining a good crisis solving mechanism. Meanwhile,

family psychology Strength is the ability of family member (mother) on managing emotion, so it will lead on a positive self-concept (Sunarti 2001).

2.3.1 Physical Strength

The latent factor of physical Strength raised from physical resource, the problem related on economic and household physical activity, overcome economic problem and family physical activity, and also fulfilling the family basic needs. Therefore, the latent factor of physical Strength is connecting to the family economic effort, which is the ability of the member on the family to gain economical resource outside the system, to fulfill basic needs such as foods, cloths, housing, education, and health. In Parson Theory (Hamilton 1983) copied on Sunarti 2001, it is called adaptation which is one of four function problems on social system to keep surviving and continued. The main indicator on physical Strength is if at least there's one member of a family working and gaining economical resource to fulfill family basic needs.

2.3.2 Social Strength

Social Strength is family Strength in absorbing religious values, bond and commitment maintenance, effective communication, role dividing and role acceptance, goal determination, and also the willingness to move forward which will become the power in facing family problems and having healthy social life. Family will have high social Strength if it has well non-physically resource, having a good problem handling mechanism to fulfill their social needs.

2.3.3 Physiological Strength

Physiological Strength is member of the family ability to manage their emotion, so it will have positive self-concept. That ability mainly

related to family non-physic problems. The ability to manage emotion and a good self-concept will be the key to face non-physic family problems.

2.3.4 Family Changes

Family is a dynamic system which is always has changes. Every event can cause changes in the family. To keep growing and develop, family has to change according to the life cycle or family changes. Generally, there are three things that can cause changes in the family, which are: distraction from hope (less commitment) that family member has, sudden changes on economic and social status, and disaster (Rice & Tucker 1976). Every family will have social, emotional, and economic changes (Guhardja, Puspitawati, Hartoyo and Martianto 1992).

Family immunity on changes happens are determine by two factor, which are: Strength and adapt. Family Strength form from the effect of affection (care) in the family., there's mutual cooperation, doing activity together, giving courage/motivation to each other, economic pressure and independency. Meanwhile, adaptation aspect is form from non-material philosophical component, lack of tradition, adaptable ability, responsibility and previous family experience in facing the crisis that cause changes. (Burgess & Locke 1960).

2.4 Family Economical Pressure

Economical factor is an important factor in family life because economy is one main life balancing shelter in family. Economical situation becoming one of many life welfare indicators. In the other hand, this factor can be the factor that caused its own pressure in a family life as long term crisis effect so it will cause not less families who have economy pressure. These pressure are caused by fired in work or loosing job, low income, and

also low buying effort that lead to physical or mentally pressure to the member of the family (Tati 2004 copied on Firdaus 2008)

Family economy pressure covered objektif economic pressure and perceived of economic pressurefelt by family (Sunarti 2005 copied on Firdaus 2008). These economy problems shows from the use of rare resources to satisfied limited human interest. This rare situation can be avoid and becoming the main point in economical problems (Noorhaisna 2003 copied on Firdaus 2008).

2.5 Family Resources Management

Management act is an act based on goal thats observing reliable resources and providable resources. Generally, management can be define as the use of resources and conduct it to fulfill any needs. The management system can be separated from the family system because of the system is the object from management system and becoming the place on conducting management system.

2.5.1 Management Absorption : Time Allocation And Household Work

Time management is away on using and managing time so all the planing and activity conducting for one day can be efective and efficient with dividing time wisely so the household work can be conducted well. According to Walker and Woods 1976 copied on Guhardja et all 1992, working activity concerning to time thats has been used and classified on 6 kinds of work, which are:

1. Food supply
2. Housing maintenance
3. Family member phisical maintenance
4. Loundry
5. Ironing

6. Waging kitchen appliance

Household life can be seen from its activity on two unit of works, which are household work and market work (the work conducted to gain payment in labor market). Householdwork is the work done inside a household relating to the effort on fulfilling life needs of its members (goods or service), strating from the planning process to its being conduct so the needs identified as food needs or non-food can be filled. The working burden is relied on the existing of :

1. The use of Household technology that changes,such as washing machine, rice cooker, vacuum cleaner, etc
2. The change in lifestyle
3. The use of commercial service, such as: baby sitter, housekeeper, etc
4. The changes in family role : the responsibility on household works carried together, men or women
5. Value and priority in family
6. Total number in family
7. Child age

The input from household work is how/what become the obligity on big/small family on household activity and social-culture values believed by outsider beside family member. Household work application consist of conducting the activity, watch, and fitting. Then the output is household work can be done efficiently altough in a minimum resources.

2.5.2 Financial Management

Money is one of the resources and can be the measuring tools of a resource. Much money own by family will show how much financial resource own by them. By the development raised in one community, money plays more roles. Owning financial resource in a family will be relatively limited; it depends on the total number and personal quality who

participated in finding income and other financial assets. Meanwhile, in the other hand, interest and needs of each member of a family are relatively limited to fulfill the interest and the needs of each family and their member basically is a part of goals in each family. The use of financial resource can reach optimum level; it needed a good and effective financial management.

Management is one descendant of economic science. Although management cannot make enough resources to fulfill the needs and enough interest, but also management can help to stated the use on limited resources for the choose approvable by all member of the family (Guhardja dkk 1992). Family financial management, mainly, income is an obligatory thing to be done by family (Putri 2005 copied on Firdaus 2008). Individual and family who have low income usually oriented on present time rather than for their future times in time prespective (Guhardja dkk 1992). The making on financial planning needed skills, which are : 1) predicting the changes on situation (relating to income and outcome) in the future times; 2) considering the alternatives and decision making; 3) discussing financial planning among the family members.

2.6 Child Parenting

Parenting define by Karyadi (1985) as all interaction between parents and their children, one of them are the situation and feeding, education, the way to discipline, independent process, and socialization process. These interaction covering all behaviours such as attitude, values, interest parent's thrust that is reflected to their children on the parenting and educating process for life. According to Soekirman 2000 copied on Susanti 2003, the parenting pattern is the support for children to grow and develop well in phisically, mentally, and social.

parenting, taking care of, and educating or raising children are one moral act, parent's obligity to their children and also to the society.

Nevertheless, we will face consequences if we raise children improperly, is it because the reason on bad economy condition or because of the parent's self-centered. These proppable consequences parents might face is like social problems; such as: juvenile delinquency, the use of narcotics, or criminal acts such as fighting, stealing, or sexual. They will grow as problems and wasting society resource.

Contradictly, children who are raised well not only can bring joy to their family, but also as the ground on proud and society succesfull., as a result o investation to raise children well. The society also have the same responsibility to be able for parents to serve themselves in parenting.

Koswara (2000) stated raising children improperly not only giving food, clean their body, and convince them not to walk on the street. Proper Medical and food service are not enough, even though it is important, parents have also guarantee a normal development whether in physically or psychology.

Parenting is also parent's responsibility they have to have commitment on family jobs. Children need attention and commitment from time, effort, and above all is the parent's readiness. Parenting can be conducted through phone calls, however it is very useful and lovingly the message that is being transferred, children needs parent's physical attendance.

The view on family essential psychology is a group of people living together in the same place, and each of the member felt the bond, so there will be influencing and caring to each other. Meanwhile, according to the educational side, family is one unity of life wrap by love and care, between two different kinds of human bind in marriage to fulfill each other in the role and their function as parents (Soelaeman 1994).

Hurlock 1995 stated that one of the condition to optimize children growing and development is the condition in the family. The first and the

main person who responsible on developing all children's potentials is their parents. Parent's responsibilities are to fulfill children needs whether in organic needs, such as food or physic needs. So children hopefully can grow and develop optimally like what is being wish by Gunarsa 1997.

2.6.1 Food Care Pattern

Store and Mc. Williams (1981) in Karyadi (1985) stated that food is physiologist and phisicologist needs for children and parents, so it need to create feeding situation on children who needs to fulfill phisiologist, phisicologist and social needs. For babies and children nutrition are needed not only to maintain body network, but also to able them to grow and develop actively.

Environment situation and family attitude are also an important consideration in child feeding, because on child developing moments, family can help children act normally and interest in their food without any worry. Wrong feeding on scale, kinds, composition, the way, and cooking process can caused malnutrition, whether it will be less of protein calory or overweight. The aim on children feeding are not only to full them, but also to maintain their taste and healthy feeding habit (Hawadi 2001 diacu dalam Susanti 2003).

Engle, Menon, andn Haddad 1996 copied on Yulia 2008 stated that in feeding behaviour on infant, there are few aspects needs to be notices, which are :

1. To justify feeding method with children psycomotoric ability
2. Resposive feeding, including the motivation to eat, watch children's taste, feeding time, food controlling between children and the feeder, and good relation while feeding their children
3. Feeding situation, including free of any disturbance, certain time to feed, also the attention and protection while eating.

Effective infant Food parenting will contribute the decreasing on bad nutrition case faced by Indonesia. Smith *et al* 2004 in Jalow 2006 stated that bad nutrition are less happen in cities comparing in the suburban, one of the influencing factor is parenting pattern mainly on food parenting given by mother in cities are better than the one in the suburban.

2.6.2 Health Care Pattern

Health parenting is a factor that can influence infant health status. Health parenting is the parent's/family's way and habit serve the needs of health for infant. Engle *et al* 1996 copied by Yulia 2008 stated that one of parenting way connected to health and infant's nutrition status is health parenting. This parenting covered preventive parenting like giving immunization or parenting through children's ill time.

Range *et al* 1997 copied on Yulia 2008 stated that health parenting cannot be separate to hygienic practice held by their mother. Supporting hygienic practice in health pattern are habit in pupping, habit to wash hands, food cleanness, and the access to modern health facilities.

2.7 Food Consumption

To grow and develop, and also to gain enegy so human can do daily activity, human body needed nutritions. These nutrition can be divided into six kinds, which are water, protein,fat,vitamin, mineral, and carbohydrate (Kartasapoetra & Marsetyo 2003).

Healthy human who always get enough food, whether in quality or in quantity, will have maximum ability to live. This maximum ability is called adult capacity. So, in order to gain adult capacity maximumly, human has to gain enough food to fulfill all nutritions nedeed for growing, fixing and maintenance of body network maintenance and also to generate omen

function inside body, beside to have enough energy to maximize working (Moehji 2002).

According to Suhardjo (1989), low consumption rate is caused by the use of food un-optimally, spreadly food distribution, less knowledge on food and nutrition, social-economy factors such as, education level, the total number in a family, income level, society culture.

Karyadi and Muhilal (1996) stated that food necessity is needed sufficiently, if it is less or more than its necessity, moreover if it is done in a long term, will give bad impact on health. The existing of nutrition interaction indicate it needed to make an effort on consumption nutrition balance. More variety kinds of food being consumed, the nutrition interaction balance will be accomplished.

One measure of food consumption quantity is energy and protein consumption. Generally, if the energy and protein necessity are fulfilled all kinds of food are already being consumed, so other nutrition necessity will be fulfilled, or if it is less, it will not be too hard to fulfill it. (Khumaidi 1989).

2.8 Child Growth

2.8.1 The Concept Of Growth

Growth is defined as cell adding number and size, as a result body cells duplication (Myers 1992; Williams 1996). Moreover Williams (1996) stated that in growth it also happens the changes on different functions inside our body due to the changes on physiology and anatomy and also covered the whole changes. Therefore, growth not only related to the quantitative changes which are the number and size on structural changes. The measure on size and structure is only covering on a big body, but also inside body's organ, including the brain (Satoto 1990).

According to Jahari (2000), growth has a definition of the changes in physical size from time to time. Physical measure not other than a human

body size whether in dimension side, proportion, and composition or well known as antropometri. Because of that, growth is one continuity process and followed time travel so the growth in human can be define as antropometri changes from time to time. Growth process has some criteria, which are: 1) as a quantitative changing that can be measure, 2) followed time travel, and 3) in normal condition has certain path on each child (*growth trajectory*).

Growth is the development on human physical body measure due to the adding on number and or cell size. Growth are divided into three steps, which are: 1) hiperplasia, or the adding of cell number, 2) hipertrofi and hiperplasia, the adding and the size of cell, and 3) hipertrofi, the adding on cell size (getting bigger) (Pipes 1981). Fast growth happens at infant life time, in the six first months, fast growth continue until it then decrease. For the first year, weight scale grew bigger than height scale and in the second year the opposite things happened. (Hurlock 1994).

In the first two years of a child, it experience super fast growth so they needed food in an appropriate quality and number to support their growth. New born baby needed one to four times energy, meanwhile a one year baby needed two to three times energy needed by adult for each kilograms on their weight. (Batchelor 1999).

By the time the baby turn five months, its weight will be two times birth weight. In the first year, they grow three times more, in the second year, they grow four times more. In the age two to ten years, weight growth is about 2-3 kg/ year. Height grow also happens fast, from 50 cm in birth time to 65 cm in five months, 75 cm in one year, 85 cm in two year, and after two years it will grow five times more than their age plus 80 cm. (Engle 1995).

2.8.2 Growth Measuring

Growth measuring on children and infant its better done in a continuously distance and followed by clinical check up and observation. One of the common way to measure growth is with using antropometri method which covers wweight scale, height scale, head measuring, upper arm measuring, etc. Weight is used to measure general growth or whole body growth. Height or body tal lis used to measure linier growth (Jellife & Jellife 1989). Head measuring is used as brain volume indicator.

According to WHO (1995), child phisycal growth is poited by how big is the sizes on antropometri, well known as a sensitive indicator to judge nutrition status in one society. Some kinds of antropometri which are commonly used are Body weight (BW) and Body height (BH). Weight is one of many antropometri that give view on body mass (bone, muscle, and fat). Body mass are sensitive to sudden changes, for example because of the disease infected, someone taste in food is decresing, it lead to less food consumptionso it will cause to weight decreasing. Therefore, weight is assumed as a labil antropometri. In normalcondition, weight is developt rapidly following the add in age, as the opposite in abnormal condition, weightdevelopt faster or slower comparing to normal condition. Based on this characteristic, so the weight index according to age (BW/A) is more describing current nutritional status (Jelliffe & Jelliffe 1989). The low value on (BW/A) (*Underweight*) can be used as an indicator of cronical or critical less nutrition (Gibson 1993).

Body height (BH) is an antropometri that view skeletal growth. In normal condition, height is growing following to age adding, but it is less sensitive to the short term less nutrition consumption. The effect on less nutrional consumption can only be seen in a long term. Because of that, the BH/A is indicated past past nutritional status and the low of BH/A (*stunted*) used to indicate cronical less nutrition (Gibson 1993).

Body weight has linier relation to body height. In normal condition, the add on BW is also folloed by BH. The index BW/BH can have a role as present nutritional status indicator, especially if an accurate age is hard to detect (Jelliffe & Jelliffe 1989). The low value on BW/BH (wasted) is often used as a cronic less nutritional indicator (Gibson 1993).

To monitor growth faltering on infant using Z-growth score curve. This Z- score is a standarization value on infant's body weight and height to the median on body weight and height, and the deviation standart on each age according to basic reference WHO-NCHS. This Z- score value can be use to monitor the growth based on body weight according to age (BW/A), body height according to age (BH/A), and body weight according to body height (BW/BH) (WHO 1995).

Antropometri measuring untill present time is the best global measuring to child physical growth. Growth faltering can be the indicator to the child health status in early age, like morbidity and mortality, and also can predict the size of body when they grow up in the future. The happening on growth faltering can decrease working capacity and raise up birth risk. (Martorell 1995).

Infant growth observation can be done if infant are rutin being taken to posyandu every month. Infant growth scoring can also be done by measuring body weight, then this body weight will be write down in card to healthy (kartu menuju sehat(KMS)). If infant body weight scale is raising up comparing to the previous monththen it can be conclude that the growth is running well. In the other hand, if it stays, then it need to be wary moreless if in three months on scaling it doesn't raising up, then it needed further act. (Jahari 2000).

2.8.3 Factors Influencing Growth

There are two determind that interacts each other in influencing child growth or infant, which are genetic factor or nature and environmental

factor or nurture. Genetic factor is based on static factor carried by children since fertilization, meanwhile environmental factor is more focused on nutritional necessity and infant health (Satoto 1990). A clean environment is the main factor in influencing infant's growth. The important part of infant's growth is to give food with a good quality and quantity so it will gain a normal growth (Engle 1995).

Physiologist growth is influenced by the kinds of food that is being consumed, to supply needed nutritious for body metabolism process (Williams 1996). According to Hardiansyah (2001), beside genetic factor, there are three main factors influencing child growth, which are food consumption, health status, and parenting pattern.

Growth faltering because of the lack of protein energy (LPE) and mineral deficiency, are caused by the limit on food consumption and morbidity because of gastrointestinal infection (Martorell 1995 ; Dewey 1991). For years growth faltering on lack of nutrition is believed caused by improper quantity and quality of foods followed by infection. But, since year 1970s, it was discovered that food parenting conducted by mother and other family member are tightly related to the happening of growth faltering (Engle 1995).

Energy and micro nutrition deficiency, like iron and zinc can cause growth faltering. Children with chronic lack of nutrition, are highly at risk on growth faltering (stunting and wasting). The earlier of a child's age and the long term deficiency period, can effect on a highly growth faltering (Martorell 1995).

In low income countries, the proportion on stunting children are high, especially under age three. Around 45-55% children in the village in Indonesia in that age period have stunting condition and about 10 % of it suffer from wasting, and the number do not change until it reach school age. This growth faltering usually caused by the lack of food combine so the

intics nutrition are less and it is often suffer from infection (Beckett 2000). Beside of that, it can be caused by the lack of nutritional status on pregnant women, not enough breast feed, the low on quality and quantity of food combine, the trouble on absorbing nutrients caused by intestine infection or parasite or the combination of all cause (Allen & Gillespie 2001).

The lack of energy, protein and some of nutrients such as zinc, iron, vitamin A and iodine are the first symptom to stunting in poor countries, such as Peru, stunting caused by nutrition and energy deficiency, and also the frequency in infection (Victoria, *et al.* 1998). Stunting in childhood can cause cognitive disturbance and the obstacles in mentally and motoric growth (Pollitt 2000 ; Hautvast, *et al.* 2000).

After it reach two years ,it is really hard on curing stunting children. Because of that, the prevention by giving nutritious food combine need to be conducted as early as it can (Dewey 2001). In developing countries, the age in giving food combine beside on breast feeding (MP-ASI) is stated due to the risk of diarrhea for giving MP-ASI that's contaminated with germ of disease and are really potential to growth faltering if the quality of MP-ASI are improper (Cohen, *et al.* 1994). The time and the choice on MP-ASI being introduced to infant is influence by some factors, which are: age, faith and believe, and society perception and knowledge in nutrition (Krebs 2000).

The time in giving breast feeding has positive effect to children age two to three in lineal growth in the villages in Africa. The time in giving breast feeding are proven to decrease stunting prevalence (Simondon, *et al.* 2001). Infant with breast feeding from the middle low social-economical background are better than infants given with formula milk. These things are assumed related to infection. Breastfeeding (ASI) not only proven to be able to decrease infection, but also guaranteed in giving enough energy because Breast feeding (ASI) can slow down the infection that cause anorexia on infant (Villapando & Lopez-Alarcon 2000).

2.9 Child Development

2.9.1 Concept of Child Development

The word development means progressive changes happens as a result on maturity and experience. Like Van den Daele said "development is a qualitative change. This means that development is not only the adding on some centimeters on someone's height or the adding on someone's ability, but it is a process of Strength on many complex structure and functions"

Basically, there are two process againts each other thats happens at once in life, which are growth or evolution and the backward or involution. The growth first year is rolled altough in backward changes happens in the life of wombs. In the next life, the backward rolled altough the growth never stop (Hurlock 1985). There are three condition where changes tends to happen, first, changes happens if an individual get help or assistance to make changes, for example some parents succeed in training their children in better using their risht hand instead on their left hand. Second, changes tends to happen if respected people treated other individual in a new or different way. Children thats already been trained can be push to express themselves freely. The third condition that can cayse changes is if there's strong motivation to the individual itself to make his/her own changes.

The Developing skills on infant period according to Havighurst are to learn how to eat solid food, learn how to walk, learn how to speak, learn how to control their body waste, learn the different sex and its way, to be ready to read, and to different what's wrong and right and also start to develop their sences. The factors that can caused the backward on mastering the developing skills are backward developing level, there's no opportunity to learn the developing skills and there's no guidience to master it, there's no motivation, bad health, body deformity, and low intelegentia (Hurlock 1980).

According to Ismael (1993) the word develop is briefly define as, grow or growth is connected to the total number and the size of cells inside our body, while develop or development is connected to the maturity on the fuctions of the body itself. Growth and development have to be seen as two things that influence each other and can not be separate.

The event of growth on children covers all process since from the wombs to adult. The main feature of growth is that in certain period there will be an acceleration and maturity period and also the different speed on growth inside body organ. The definition on growth covered on two different but unseparatable events, which are growth and development. Groweth is related to the chenges on size, number, measureor cell dimation level, in organs or in individual. Meanwhile, development is more concern in the form changing aspects or organ maturity function or individu, including the changes in social and emotional due to environmental changes. Therefore, growth process has an impact on phisyc aspect, meanwhile the development related to the maturity of intelectual and emotional function in organs or in individu. (Markum, *et al.* 1991).

Growth and development are a naturally process happens to every creature. For human especially in chilhood, this grwoth and development process happens rapidly. Since baby in wombs, they experiences many changes, and these are perfectly seen when they born to life. The changes happens to one person not only covers the visible things such as phisical changes (the needs) to the adding body weight and body height, but also the changes (the development) in other side, such as to think, to feel, to act, etc. Child growth that's being observe don't happent accidentally, but the changing pattern series from one step of development to the next step, for example, when a child able to walk, first he/she has to learn rolling, crawling, sitting, standing, and so on. (Pinstrup-Andersen, *et al.* 1995).

2.9.2 Child Development Measuring

According to Seifert and Hoffnung (1987), the first and automatic movement new baby born to one month baby able of is a reflects movement. Reflects movement can be differentiate into two kinds, which are, the first is reflects movement needed for survival such as breathing reflects, the reflect to move head, and breastfeeding reflect. The second is primitive reflect like the Moro Reflect which are the reflect on high tone where baby can open their arms, holding reflects, and to stand up reflects.

Papalia and olds (1986), stated that the achivements on one ability toone child can be different to the other child, but still there is age limitation on on what ability needs to be accomplish in certain age. These standarts are meant for a child that has reach certain age and not able to do this ability must be train in order to reach normal development. On of many growth development aspect that's need to be obtain in order to face child's future, is hard motoric movement and soft motoric movement development. Motoric movement is all movement that possible to be done by human body. Motoric development can be define as the development maturity factors and body movement control, and those development are tightly related to the centre motoric development in the brain.

The first motoric ability babies able to do can be separated into two, which are, hard motoric ability that needs the support from the main muscles exist in legs and arms, like when we walk or jump. The second is the soft motoric ability that needs the support from small muscles spread in all over body, like in reaching or holding a thing (Turner & Helms 1991).

Movements on children can be clearly devided into two, which are hard movements and soft movements. It is called hard movements if the movements conducted involved almost all part of body and usually need an effort beacuse it is done by bigger muscles .for example: the reverse move from lay down to lay up, and the opposite wey around, walking movements,

running movements, etc. It is called as soft movements, if it's only involved a few part of body and conducted by small muscles, therefore it doesn't need a lot of effort. This soft movements needs accurate coordination. For example : the movement to take one thing by using mother finger and pointing finger, the movement to input one small things into a hole, making a handicraft (glue and sciscoring), to dance, to draw, etc (Santrock 1997).

According to Eagle (1999) psychosocial development pointed on child's skill and competence to adapt to the environment. These skill and competence are getting complex based on the add on age and maturity. These development are covering some aspect, which are:

- 1) Cognitive development (mentally) covering: memory, solving problem, and numeric understanding
- 2) Language development, able to communicate to other people
- 3) Social-emotional development, covering : the understanding between people all around
- 4) Fine and gross development, such as the ability on child to sit, walk, run, so on

According to Soetjningsih and Ekawati (2000) the standart on child's growth divided into seven aspects, which are (1) hard movement, (2) soft movement, (3) understanding the sign/conversation (pasive communication), (4) to show with sign/word (active communication), (5) intelligence, (6) helping on his/her own, and (7) to socialize. Those seven developing aspects can be easily remember if it separate only into four developing aspects, which are : (1) hard movements: the movements involving bigger muscles, (2) soft movements: the movements involving small muscles and needed high accuracy, (3) language, the ability on understanding on what people say and talk actively (number 3,4,5), (4) socialization, the ability to socialize and and to be independent (number 6

and 7). Table 2,1 shows infant's development standart based on four developing aspects.

Table 2.1. Child's development standard Based on age

| Development | Year 0-1 | Year 1-2 | Year 2-3 | Year 3-4 | Year 4-5 |
|---------------|---|--|--------------------------------------|---|--|
| Hard movement | Law down with head up (4 months) | walking (15 months) | Ball throwing (30 months) | To stand in one leg on the count of two (42 months) | To walk backward (54 months) |
| Soft movement | Squeezing (10 months) | To order upward four boxes (23 months) | To order upward six boxes | To draw circle (42 months) | To draw person into three pieces (48 months) |
| Language | To look on the source of voice (5 months) | Say one or two words (18 months) | Calling his/her own name (24 months) | Knowing colors (42 months) | Telling simple story (54 months) |
| Socialization | Smile spontaneously (1.5 months) | Drink from a glass (15 months) | Play with other children (30 months) | Get dress without help (36 months) | Button his/her own cloth (54 months) |

Source : Soetjningsih dan Ekawati (2000)

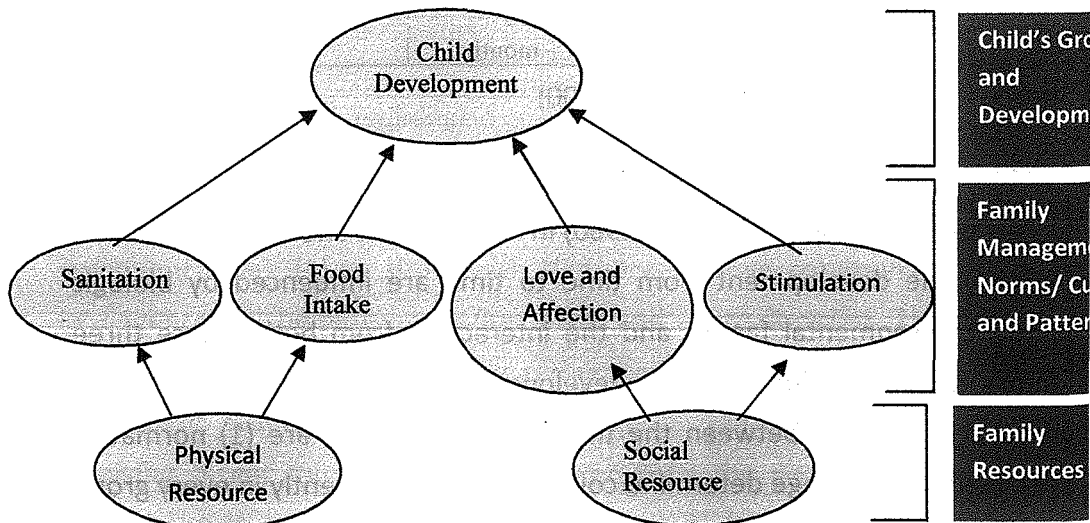
2.9.3 Factors Influencing Development

Balter, Reese, and Lipsitt (1980) in Hayslip and Panek (1989) says that basically the development from time to time are influenced by biologic factor, environmental factor, and the interaction from both. Those three factors together influencing the development through three components and the interaction between the three of them, which are (1) normative age; a chronologist age determine collectively and differently in every group of society, for example: the perfect age to start following a formal education, retirement, etc, (2) normative-historical step; related to certain time (date, month, year) or based on important events experienced by society, for example war, disaster, etc, and (3) non-normative events; is not

connected to age and history (historical), but as an event that's influencing the development on someone's mentally and emotion, for example: accident, and divorce.

Evans, Myers, and Ilfeld (2000) stated that child's development is holistically and influenced with many kinds of factors, among them are health, nutrition, social, emotional, and spiritual. Therefore, lack of nutrition, low health status, and un optimally child parenting will caused negative effect to the development of child's cognitive, motorist, social and emotional.

Zeitlin *et al.*, (1992) explain that child's development influence by family resources consist of resource on material and social. Material resource influence on hygienic food feeding practice, meanwhile social resource influence on the giving of affection and attention, and also academic stimulation. Moreover it can be seen on picture 1.



Picture 1. Factors influencing Child's Development (Zeitlin, *et al.* 1992)

On Pollit (2000) research model, is viewed that food consumption and determine morbidity child's growth and development. In turn in the future will influence on cognitive ability. In baby's age, physical growth, the development and motorist activity, and also emotional control are not stand by itself but to influence each other. For example, the ability on crawling or walking are not only influence by motorist activity, but also supported by visual perception, spatial orientation, and emotional control.

According to Satoto (2000) the most powerful external factors to child's growth and development are child parenting environmental, especially mother-child interaction (and other baby-sitter) and family stimulation. The second powerful determinant factors to child's development are child's food consumption, especially energy, protein and zinc. Food consumption is influencing child development through growth and the interaction between mother and child while feeding.

Baby's cognitive development influences by many complex factors, two of them are genetic factor and environment. The result on Meta Analysis done by *Anderson et al.*, (1999) for three decades conclude that breastfeed babies show higher cognitive ability score better than the one who only give formula milk.

Moreover Soedjiningsih and Ekawati (2000) explained that to get an optimal growth, a child needed three things, which are parenting, care and attention. Parenting refers to the needs of healthy food, decent housing and place to live, decent cloths/clean and health treatments, like to give breastfeeding, continuous scaling body weight, immunization, curing while ill, and to keep self clean. Care is to show emotional needs that can be getting by love and care and also the attention from parents and other family members. Attention is stimulation aiming to optimize child's development such as intelligence, skill, independency, manner, behavior, morally ethic, creativity and productivity.

Development delay happens if a child is unable to reach certain ability that other children already master in (milestone) like speaking disability, disability on hard motorist and soft motorist, or in socialization. Development delay can be caused by many factors of disturbances before or while giving birth, like premature born, brain development disturbance, because of lack of nutrition while pregnancy, chromosome dysfunction, and infection. A few sign on motorist development delay is unable to raise both hands in the age of four months, unable to lay down in the age of six months, unable to sit by him/herself in the age of eight months, unable to crawl in the age of 12 months, and unable to walk in the age of 15 months. Soft motorist development delay can be seen on a child that cannot able to use spoon and fork, to tie their shoes, to button their cloths, to write name, to draw shape, and coloring picture. Hard motorist ability backward can be seen in the disability to ride on three wheel or two wheel bicycle, and to walk imperfectly (Bower 1999)

Besides good nutrition, growth is also influence by psychosocial aspect. Psychosocial stimulation quality in poor family is better than in rich family so the psychosocial child's development on poor family is better that in rich family. Although the existence on nutritional food in poor family is limited and they also have malnutrition, but their child's psychosocial development is not abnormal (Zeitlin, Ghassemi, & Mansour 1990).

3

CONCEPTUAL FRAMEWORK

Poverty or an economic pressure in the family can trigger women to take a role in earning for a living. Inadequate job opportunity in the home countries and more jobs offers abroad with relatively higher wages have made many wives to work abroad as migrant workers.

The decision of a wife to become a migrant worker for a long period of time can create changes in the structure and function of family, which can be seen in the changes in the role of family and the changes in the allocation of economy, solidarity, integrity and expression, as well as politics (Levy 1949 in Sungkowo 2003). A relatively rapid change without the readiness of other family members is very potential to cause a conflict in the family, and thus influence the family strength.

The family strength includes physical/economic, social and psychological strength. The departure of a wife as a WMW can increase the family's economic status and will affect the buying power and food consumption in the family. The quantity and quality of food consumption will in turn influence the health and growth of children.

Social and psychological strength of the family is very important to the maturity of husband-wife personality. Such strength will facilitate the management of conflicts resulting from the change in the family structure and function as wives become migrants. However, a long conflict will affect the social and psychological strength of the family.

The economic, social and psychological strength will determine the child care pattern, food consumption and health status. The acceptance of children and satisfaction of self concept or actualization will create a

harmonious relationship in the family and will provide warm affection for all members of the family. Such condition will stimulate children to grow and develop optimally.

In contrast, inadequate social and psychological strength will make difficulty in the management of conflict, and in such condition a divorce is very likely to happen as the solution to the conflict. Poor social and psychological strength of family will have a bad effect on the growth and development of children. Figure 3.2 shows the operational conceptual framework of the relationship among the status of a wife as a WMW, changes in family structure and function, family's strength, child care, growth and development of children.

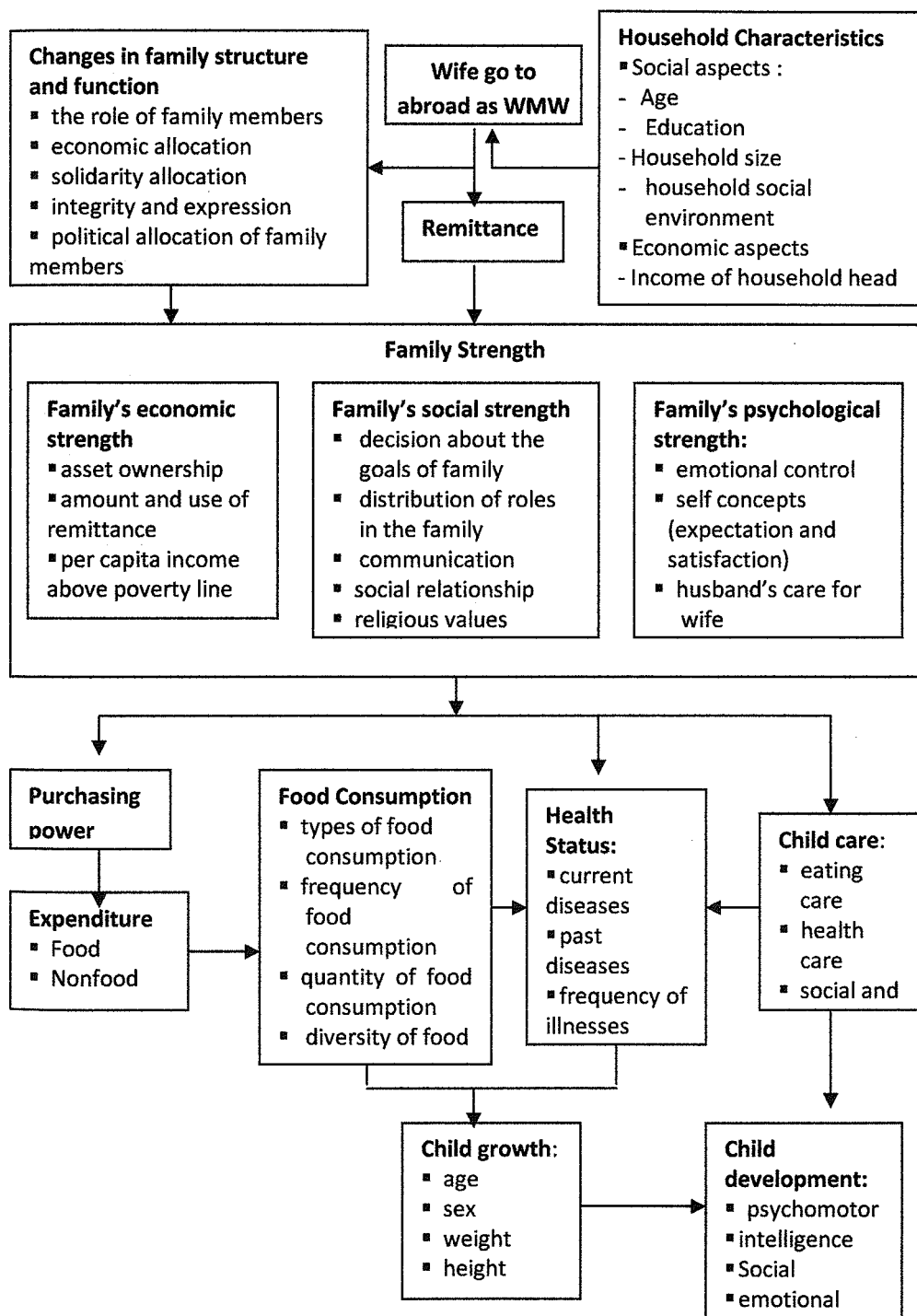
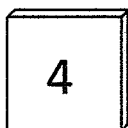


Figure 3.1. Conceptual Framework

Table 3.1 Variables and Indicators

| Variables | Indicators |
|---|---|
| 1. Social aspects | <ul style="list-style-type: none"> - age, education, and occupation of household head - wife and care giver - household size - household social environment |
| 2. Economics aspects | <ul style="list-style-type: none"> - incomes of household head - food and non-food expenditure, |
| 3. Changes in family structure and function | <ul style="list-style-type: none"> - the role of family members before and after the departure of wives as WMWs, - economic allocation of family members before and after the departure of wives as WMWs - solidarity allocation of family members before and after the departure of wives as WMWs - integrity and expression of family members before and after the departure of wives as WMWs - political allocation of family members before and after the departure of wives as WMWs |
| 4. Family's economical strength | <ul style="list-style-type: none"> - asset ownership - amount and use of remittance - per capita income above poverty line |
| 5. Family's social strength | <ul style="list-style-type: none"> - decision about the goals of family - distribution of roles in the family - communication - social relationship - religious values |
| 6. Family's psychological strength | <ul style="list-style-type: none"> - emotional control - self concepts (expectation and satisfaction) - husband's care for wife |
| 7. Child care patterns | <ul style="list-style-type: none"> - eating care - health care - social and emotional care |
| 8. Food consumption: | <ul style="list-style-type: none"> - types of food consumption - frequency of food consumption - quantity of food consumption - diversity of food consumption |
| 9. Health status | <ul style="list-style-type: none"> - current diseases - past diseases - frequency of illnesses in the last two months - Duration of illnesses in the last two months |

| Variables | Indicators |
|-----------------------|---|
| 10. Child growth | <ul style="list-style-type: none">- age- sex- weight- height |
| 11. Child development | <ul style="list-style-type: none">- psychomotor development- intelligence development- social and emotional development |



METHOD

4.1 Research Design

This research uses a cross sectional design. The design is intended to collect data on socio-economics, changes in family structure and function, family's strength, child care, and child growth and development of WMW's family at one period of time. It use primary and secondary data. The primary data was collected through interview, observation and direct measure, while the secondary data was collected through tracing the data of the past and that at the time of research.

4.2 Data collection

Data to be collected. Data to be collected include primary and secondary data as follows:

Primary data:

1. data on social aspects: age, education, occupation of household head, wife and care giver, household size and household social environment
2. Data on economics aspects: incomes of household head, food and non-food expenditure.
3. Data on the changes in family structure and function: the role of family members before and after the departure of wives as WMWs, economic allocation, solidarity allocation, integrity and expression, political allocation of family members.
4. Data on family's economical strength: asset ownership, amount and use of remittance and per capita income

5. Data on family's social strength: decision about the goals of family, distribution of roles in the family, communication, social relationship, and religious values.
6. data on family's psychological strength: emotional control, self concepts (expectation and satisfaction), husband's care for wife
7. data on child care patterns: eating care, health care, and social and emotional care
8. data on food consumption: types, frequency, quantity and diversity of food
9. data on health status: current and past diseases, frequency and duration of illnesses in the last two months
10. data on child growth: age and sex , weight and height
11. data on child development: psychomotor, intelligence and emotion.

Secondary data involve:

- Socio-economic aspects of the research location
- Governmental programs for WMWs and their families

Method of Data Collection. The data required to meet the researcher objectives are collected in several ways. The primary data were collected through to direct interview and discussion with respondents as well as direct observation at the location of respondents. The respondent for primary data were the husbands or representatives of WMWs such as fathers or mothers in law, fathers or mothers, or older/younger brothers/sisters. The secondary data was collected by tracing the data at village, district and regency government offices.

The research instrument developed include questionnaire. The data and method of collection can bee seen in table 4.1. the data collection was assisted by some enumerators with a minimum education of BS degree in community nutrition. Interviews and discussion with public figures was conducted by researchers and enumerators.

Table 4.1. Data and It's Collection

| Data | Collection Method |
|---|-------------------------------|
| A. Primary Data | |
| 1. Social aspect - age (household head, wife, and care giver) - education (household head, wife, and care giver) - occupation (household head and care giver) - household size - Social household environment | Interview using questionnaire |
| 2. Economics data - Income of household head - Food and non food Expenditure | Interview using questionnaire |
| 3. Changes in family structure and function - the role of family members before and after the departure of wives as WMWs, - economic allocation of family members before and after the departure of wives as WMWs - solidarity allocation of family members before and after the departure of wives as WMWs - integrity and expression of family members before and after the departure of wives as WMWs - political allocation of family members before and after the departure of wives as WMWs | Interview using questionnaire |
| 4. Family's economic strength - asset ownership - amount and use of remittance - per capita income above poverty line | Interview using questionnaire |
| 5. Family's social strength - decision about the goals of family - distribution of roles in the family - communication - social relationship - religious value | Interview using questionnaire |

| Data | Collection Method |
|--|---|
| A. Primary Data | |
| 6. Family's psychological strength: - emotional control - self concepts (expectation and satisfaction) - husband's care for wife | Interview using questionnaire |
| 7. Child care: - eating care - health care - social and emotional care | Interview using questionnaire |
| 8. Consumption (food and others) : - type of food consumption - frequency of food consumption - quantity of food consumption - diversity of food consumption | Interview using questionnaire, food frequency questionnaire, and 2x24 hours food recall |
| 9. Health status data: - current diseases - past diseases - frequency of illnesses in the last two months - Duration of illnesses in the last two months | Interview using questionnaire |
| 10. Child growth: -age and sex of children -weight -height | Interview using questionnaire Weighing uses digital bath scale Measuring height uses microtoise |
| 11. Child development - psychomotor development - intelligence development - social and emotional development | Interview using questionnaire |
| B. Secondary data | |
| - Socio-economic aspects of the research location - Governmental programs for WMWs and their families | Secondary data from sub district office and labor department and Ministry of Social Affairs |

In addition to a quantitative method, the data collection used a qualitative method. The combined method was expected to enrich the data to understand the social phenomena under the study. The qualitative data

was obtained from the key person through in-depth interviews involving the legal basis for the protection and placement of Indonesian workers, efforts made by the local governments in the protection and placement of Indonesian workers, mechanism of sending WMWs, opinions of key persons about women migrant workers, family strength or survival as well as growth and development of children, etc.

As many as 14 key persons were taken from different levels (national, District, village, community or cadres, and private institutions). The list of key person is presented in Table 4.2.

Table 4.2. List of Key Person

| | Occupation | Name |
|-----------------|--|---------------------|
| National Level | Deputy of Placement Indonesian Workers (in National Body of Indonesian Workers Placement and Protection) | 1. Adam Noeh |
| | Professional Staff of Coordinating Minister of Community Welfare Division of Indonesia Republic | 2 Sukawati Abubakar |
| District Level | Head of Employment Division in office of Employment and Transmigration Sukabumi District | 1. Wawan Sukarwadi |
| | Head of Employment Section in office of Employment and Transmigration Sukabumi District | 2. Ismail |
| Village Level | Head of Mekarsari village | 1. Pipih Suryadi |
| | Head of Kertaangsana village | 2. Tari |
| | Head of Cijangkar village | 3. Ibnu |
| | Head of Cisitu village | 4. Sali |
| Community Level | Head of neighborhood association in Nyalindung Village | 1. M Sukari |
| | Head of neighborhood association in Cisitu Village | 2. Aep |
| | Head of neighborhood association in Cijangkar Village | 3. Hamdan |
| | Health Cadre in Nyalindung village | 4. Mimin |

| | Occupation | Name |
|----------------------|---|-------------------|
| Private Institutions | Implementer Staff of Indonesian Workers Placement in PT Al Hijaz (Non-government) | 1. Dewi |
| | Non-government Indonesian worker providers officer (Field Officer) in PT Al Hijaz | 2. Ujang Ruswandi |

4.3 Sampling Technique

4.3.1 Selection of Villages as Research Locations

Sukabumi is the District with the highest number of women migrant workers (WMWs) in the Province of West Java. However, they do not live concentrating on one area, but separating in all villages in the District of Sukabumi. Thus, to get 500 households as the sample, the researcher selected a number of locations in different villages as the research sites. From the six sub-districts and some villages already surveyed, 19 villages were selected as they had relatively complete data of WMWs compared to other villages: namely 10 villages in the Nyalindung Sub-District, 3 villages in Purabaya Sub-District, 2 villages in Cisaat Sub-District, 2 villages in Gunung Guruh, 1 village in Kebon Pedes Sub-District, and 1 village in Sukaraja District (Table 4.3).

Table 4.3. List of Research Sites and Distance from the Village of Nyalindung

| No | Sub-Districts | Villages | Distance from Nyalindung Village (km) |
|----|---------------|------------------|---------------------------------------|
| 1 | Cisaat | 1. Babakan | 20 |
| | | 2. Pada Asih | 23 |
| 2 | Gunung Guruh | 1. Cikujang | 17 |
| | | 2. Gunung Guruh | 20 |
| 3 | Kebun Pedes | 1. Bojong Sawah | 15 |
| 4 | Nyalindung | 1. Bojong Kalong | 4.0 |
| | | 2. Bojong Sari | 4.5 |
| | | 3. Cijangkar | 3.5 |
| | | 4. Cikaret | 1.0 |

| No | Sub-Districts | Villages | Distance from Nyalindung Village (km) |
|----|---------------|----------------|---------------------------------------|
| | | 5.Cisitu | 2.5 |
| | | 6.Katuleumpa | 1.5 |
| | | 7.Kertaangsana | 1.5 |
| | | 8.Mekar sari | 1.5 |
| | | 9.Nyalindung | 0 |
| | | 10.Rancag orey | 1 |
| 5 | Purabaya | 1. Cimerang | 5 |
| | | 2. Citamiyan | 5 |
| | | 3. Margaluyu | 8 |
| 6 | Sukaraja | 1. Selawangi | 22 |

4.3.2 Household Selection and Data Collection

The research samples were the households of WMWs who have children (under five years old) and have worked at least six months as migrant workers. The reason for selecting those having children under five years old was to answer the objective of the research about their parenting patterns as well as the growth and development of children, and the reason for selecting those with at least six months of work experience was to get information on the delivery and use of remittance. Usually WMWs who have worked less than six months have not yet sent remittance, although some have returned to Sukabumi and others still worked overseas as WMWs. A lack of the complete data on WMWs' households in Sub-District and Village Offices as well as Employment and Transmigration Services for the sampling frame has made the researchers unable to take a random sampling of WMWs' households. Thus, based on the criteria of the research sample, the researchers used a purposive sampling.

The data obtained from the Office of Employment and Transmigration Services and fields officers did not provide complete information based on the research criteria. It only gives information on the

names of WMWs, addresses, ages, marital status, years and months of going overseas as WMWs, but does not contain the data on the number and age of children owned by WMWs. Therefore, to obtain a complete data according to the research criteria, the researchers visited 19 villages (research sites) and met the Heads of Neighborhoods Association in each village. The neighborhood association heads knew very well the residents who work as WMWs and have children under five years old, and from these neighborhood association heads the researchers obtained additional data of WMWs not listed in the data carried along by the researchers. Through the discussion with the neighborhood heads in each village, the researchers obtained 830 data of WMWs expected to be in line with the research criteria.

Next, the researchers verified the data and found that most data met the research criteria although some were not suitable because some children who were estimated to less than five years old turned out to be more than five years old during the visit. The verification was made until the researcher got 500 households of WMWs as the research samples based on the research criteria. The distribution of samples according to research locations are presented in Table 4.4.

Table 4.4. Distribution of Household Samples

| NO | Sub District | Village | Number of Household Sample |
|-----------|---------------------|----------------|-----------------------------------|
| 1 | Nyalindung | Bojongkalong | 58 |
| | | Bojongsari | 37 |
| | | Cijangkar | 2 |
| | | cikaret | 1 |
| | | Cisitu | 32 |
| | | katuleumpa | 1 |
| | | kertaangsana | 30 |
| | | Mekarsari | 55 |

| NO | Sub District | Village | Number of Household Sample |
|-------|--------------|--------------|----------------------------|
| | | Nyalindung | 30 |
| | | Rancag ore | 1 |
| 2 | Purabaya | Cimerang | 41 |
| | | citamiyan | 1 |
| | | Margaluyu | 9 |
| 3 | kebon pedes | bojongsawah | 76 |
| 4 | Cisaat | Babakan | 10 |
| | | Padaasih | 27 |
| 5 | Gunung guruh | Cikujang | 20 |
| | | Gunung guruh | 33 |
| 6 | sukaraja | selawangi | 36 |
| TOTAL | | | 500 |

4.4 Instrument reliability

For data management, there were several steps carried out aimed to control the data quality. Consist of questionnaire trial-test before data collected in order to evaluate and decide the questionnaire type (statement-based or question-based); the in-depth-quality of the question; the accuracy of word preference; ability of the question to be presented; the choices of the answer; as well as time needed for interview and measured reliability of the questionnaire (alpha cronbach).

Instrument reliability of the research pointed in one assumption that an instrument has a strong capacity since compiler items already valid. The assessment was carried out using the score of α -Cronbach (Cr) through the SPSS program. This assessment was carried out in order to know the capacity of reliability in each of respective variable indicator. The instrument could be said reliable and ready to used, if its Cr score ≥ 0.6 .

Results showed that instrument reliability used in this research is significant enough with the score of α -Cronbach between 0,609 - 0,906 (Table 4.5).

Tabel 4.5. Result analysis of research instrument reliability

| Variable | Item Number | Item vanished | Score Range | Score Cronbach Alpha |
|---------------------------|-------------|---|-------------|----------------------|
| Financial management | 19 | - | 0 – 5 | 0.729 |
| Family social environment | 18 | 1 (Did your family support you became BMP?) | 0-1 | 0.609 |
| Family strenght | 60 | - | 0-1 | 0.713 |
| Social problem | 6 | - | 0-1 | 0.906 |

4.5 Data Analysis and Management

Data analysis was carried out using SPSS program and Minitab for Windows. Each step of the initial data management and analysis is described below:

- (1) Compiling code-book as aids for data analysis
- (2) After data entry, then checked to ensure the data entered were correct. Reliability of data was checked by descriptive statistics included mean, the standard of deviation, the maximum and minimum value for each variable.
- (3) Scoring towards research questions.
- (4) Score transforming in the scale 0-100.
- (5) Score categorization.
- (6) Descriptive analysis and cross tabulation.
- (7) Analysis of statistics inferential covered multiple linear regression analysis.

Following are the explanation for variable measuring method, scoring system, and score categorizing from research variables. Based on research variables, following is the method used for data quantification, which further used for statistic analysis. Beforehand, all the scores that were received were converted in the form of percent (0-100). As the formula that was used as follows:

$$Y = \frac{X - \text{minimum value of } X}{\text{maximum value of } X - \text{minimum value of } X} \times 100$$

Note :

Y= score in percent

X = score obtained for each sample

Further, score which already transformed in the scale 0-100 then grouped into two category, based on the interval-class that is low (the score 0-66.7%) and high (the score 66.8-100.0%) by using the above mentioned formula.

Then the data analyzed in accordance with the aim of the research. The **paired-t** test provided a hypothesis test of the difference between pre and post BMP. Furthermore, Spearman's rank correlation test was taken also in order to understand the strength of correlation between two variables. The Spearman correlation formula that was used as follows:

$$r_s = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}$$

Note :

$$d_i^2 = (X_i - Y_i)^2$$

r_s = Spearman's rank correlation coefficient

d_i = The difference rank of X_i and Y_i

Y_i = Rank of Y_i variable

X_i = Rank of X_i variable

N = Amount of paired data

Ordinary Least Square (OLS) was carried out to analyse factors which has an influence toward the dependent variable. Therefore, a good regression model indicated by no correlation between independent's variable. If the correlation found, it means there are problems happened which is named Multicollinearity (Multico). The good regression model should be indicated by no correlation between independent variable. However, if variants from residual from one observation to other observation in steady state then was acknowledged as Homoskedastisitas, and if variants was different, was acknowledged as Heteroskedastisitas. A good regression model indicated by no Heteroskedastisitas found (Santoso 2001). The general model of linear regression is:

$$y = \alpha + \beta X_1 + \beta X_2 + \beta X_3 + \dots + \beta X_n$$

The SEM analysis or Structural Equation Model was conducted in order to know the good influence directly or indirectly on latent variables both endogenous and exogenous. The exogenous variable is assumed that its variability assumed was affected by the influence outside causal model, while endogenous variable is variable that its variability assumed was influenced by exogenous variable exogenous and variables in the system (Pedhazur 1982). The Structural Equation Model (SEM) is a unity of statistical techniques that enabled to test a series of complex-relations simultaneously. The complex-relations developed between one or several dependent variables and one or several of the independent variables. Each of dependent and independent variable could be as a factor or construct, that was built from several indicator variables. Moreover both of those variables could be as a single variable that was observed or that was measured directly in research process (Ferdinand 2005). The compatibility test and statistical test for SEM were:

1. χ^2 -CHI-SQUARE STATISTIC

As small of χ^2 score as good the model being used (this was caused in the Chi-Square test, $\chi^2=0$ means did not has the difference, which means H_0 accepted) and is accepted based on the probability with cut-off value $p>0.05$ or $p>0.10$.

2. RMSEA – The Root Mean Square Error of Approximation

The analysis indicates adequate fit of the models, when the RMSEA score less or same than 0.8 based on degrees of freedom.

3. GFI – Goodness of Fit Index

GFI is a non-statistical measurement that has a value between 0 (poor fit) up to 1,0 (perfect fit). The high value on this index shows that it has a “better fit”.

4. AGFI – Adjusted Goodness-of-Fit-Index

The value of 0.95 interpreted as the good overall model fit, whereas the value on range between 0.90 – 0.95 shows the adequate fit.

5. CMIN/DF :

The χ^2 value less than 2.0 or even sometimes less than 3.0 is indicated as acceptable fit between model used and data.

7. CFI – Comparative Fit Index :

Recommended value of CFI is $CFI \geq 0.95$.

The Structural Equation Model as follows :

$$\eta = \beta\eta + \Gamma\xi + \zeta$$

Note :

η = eta, a vector coefficient from endogenous variable

β = beta, a matrix coefficient which illustrate an effect of one endogenous variable to another endogenous variable

Γ = gamma, a matrix coefficient which illustrate an effect of one exogenous variable to another exogenous variable

ξ = xi, a vector of exogenous variable

ζ = zeta, a residual vector or error on equation

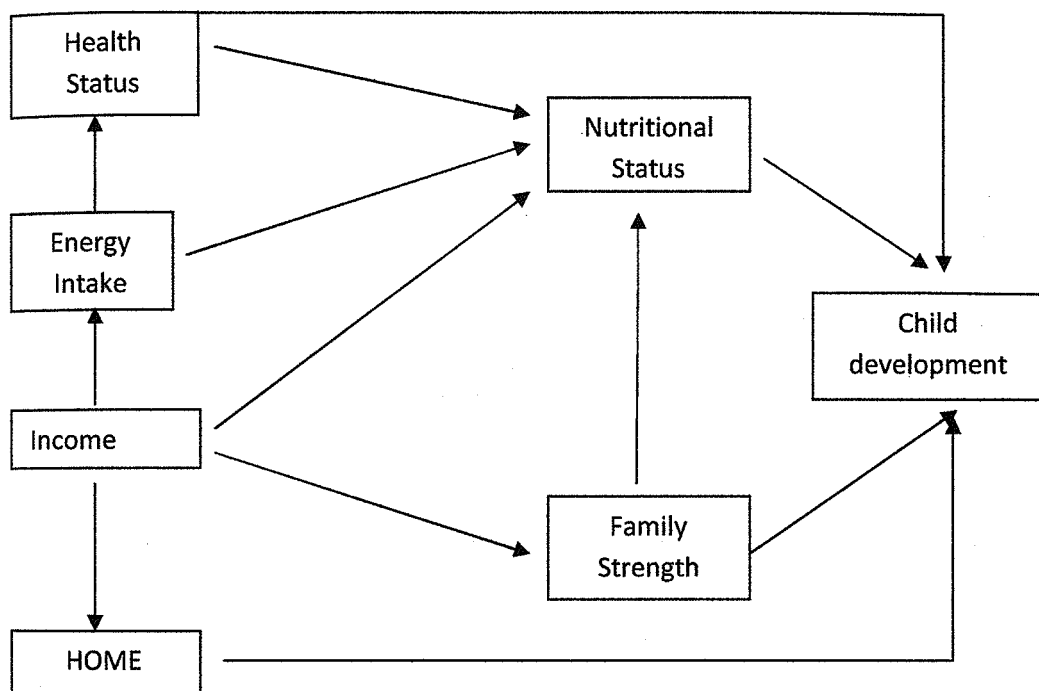


Figure 4. Framework of factors which influence to children's growth and development on BMP's family

4.6 Quality control of data

To ensure the quality of data, the following activities will be carried out:

1. Training of enumerators
2. Try-out of questionnaires before collecting data
3. Calibration of weighing scales
4. Supervision over enumerators during the data collection
5. Making a code book to guide data entry and processing

4.7 Data Limitation

Some data are collected by a recalling technique, which can be a weakness of this study because the remembering ability is relatively limited to recall all things. However, this method is the most easily operational in an on-field survey

4.8. Relevance of Research

The household as a social institution has a number of certain functions with the social structure established in the community. Several functions of a family can be identified: namely, economic function, sexual function, socialization function, affection function, status, and protection function (Horton and Hunt 1993).

In many cases, migration causes the family dysfunction of one or more such factors. The departure of a wife to work abroad for a long time causes a change in the structure and function of the family. A rapid change of such condition without the preparedness of other family members is likely to produce a family conflict, and threaten the family strength. If such conflict cannot be controlled by the couple, a divorce is very potential to be its solution. This will have a bad effect on the child care, physical and growth and development, personality, and emotional development of children. If seen from its main goal of becoming migrant workers, i.e. to improve the economic condition especially the family's welfare, the decreased family's strength such as divorce and poor growth and development of children is a deviation from the main goal.

The departure of a wife to become a WMW creates some worries around the family problems. However, the government has not until now made any policies to discontinue the migration of WMWs because, apart from WMW's big contribution to the devisa, the government is at present unable to create more job opportunities. The government program related

to WMWs is mostly focused on the protection of WMWs on the destination countries; few programs are directly addressed to deal with the life of WMW's families. Thus, the problems of WMW's households are still a dilemma requiring a solution.

5

RESULTS AND DISCUSSION

5.1

General Description of Management and Placement Indonesian Workers (IW)/ Women Migrant Workers (WMW)

5.1.1. Country of Destination of WMWs

The report on the placement of Indonesian workers in 2008 in Sukabumi indicates that the major country of destination for Indonesian workers/WMWS is Saudi Arabia, and followed by Union of Arab Emirate (UAE). The recruitment of Indonesian workers in 2008 is presented in Table 5.

Table 5.1 The destination country of Indonesian workers from Sukabumi in 2008

| Country Destination | Jan | Feb | March | April | May | June | July | Aug | Sept | Oct | Nov | Dec | Total |
|---------------------|-----|-----|-------|-------|-----|------|------|-----|------|-----|-----|-----|-------|
| Saudi Arabia | 505 | 475 | 449 | 179 | 114 | 160 | 510 | 319 | 73 | 679 | 410 | 243 | 4093 |
| Abu Dhabi | - | - | - | - | - | - | 1 | - | - | 1 | - | - | 2 |
| UAE | 41 | 70 | 23 | 12 | 7 | 9 | 7 | 10 | 3 | 6 | 5 | 12 | 205 |
| Kuwait | 12 | 11 | 18 | 14 | 6 | 2 | 4 | 8 | - | 2 | - | 3 | 78 |
| Yordan | 1 | 1 | - | 2 | - | - | - | 4 | 1 | - | - | - | 9 |
| Oman | 3 | 9 | 6 | - | 1 | 2 | - | - | - | 2 | - | 2 | 25 |
| Qatar | 3 | 1 | 1 | - | 1 | - | - | - | - | - | - | - | 6 |
| Singapore | - | - | - | - | - | - | 1 | - | - | - | - | - | 1 |
| Taiwan | 3 | - | - | 1 | - | 6 | - | - | - | - | - | 1 | 11 |
| Total | 565 | 567 | 495 | 208 | 129 | 159 | 523 | 341 | 77 | 690 | 415 | 261 | 4430 |

In selecting the country of destination, WMWs are usually influenced by the majority of those around who have worked as WMWs. Saudi Arabia is favored by some workers because, in addition to the high salary of around

800 real ~ IDR 2 800 000 (two million and eight hundred thousand rupiahs) per month compared to only IDR 900 000 (nine hundred thousand rupiahs) in other countries such as Singapore or Malaysia, there is another hope of the WMWs that they can perform *Umroh* or Hajj (Islamic rituals).

5.1.2. Officers who Take Care of WMW Candidates

In the placement of Indonesian workers from Sukabumi, the Local Government of Sukabumi District cooperates with 30 PPTKIS. All PPTKIS are located in Jakarta, but some open branches in Sukabumi. There are 20 of PPTKIS favored by many candidates of WMWs, namely, PT. Abul, PT. Alatas Ikhwan, PT. Alba, PT. Al-Hijaz, PT. Al-Waeni, PT. Amri, PT. Aprida, PT. Berkah, PT. Berkas Rahayu, PT. Boxan, PT. Gapura Duta, PT. Gasibu, PT. Gayung, PT. Insani, PT. Kemuning, PT. Marco, PT. Multi, PT. Putra Al-Irsyad Mandiri, PT. Rajana Falam Putri, and PT. Tritunggal. To facilitate the job of PPTKIS in recruiting the candidates for WMWs, all PPTKIS hire representatives called field officers. It is these officers who are actively looking for the candidates for WMWs. It is compulsory for all PPTKIS to hold a recruitment permit certificate which valid for six months and must be renewed before it expires.

The responsibilities of the field officers are:

1. To assist with the arrangement of administrative matters of WMWs (letter of approval from husbands and parents, citizen cards and birth certificates for those who do not have ones).
2. To take the WMW candidates to PPTKIS
3. As the contact persons between the families at home and the WMW candidates during the temporary accommodation and during the work overseas as WMWs.
4. To assist with the opening of saving account for sending remittance, to accompany the families of WMWs when taking remittance.

5. To assist with the pick up at the airport of WMWs who have returned to Indonesia
6. To deal with any possible dispute/misunderstanding between the families and WMWs.
7. To participate in finding the presence of WMWs in the foreign countries if they cannot be contacted by their families.

The relationship pattern between WMWs and field officers, though based on economic interest which tends to be exploitative, can lead to a reciprocal relationship when there is a family relationship. This can happen because the field officers hold the responsibility to help people who want to be WMWs and the WMWs feel obliged to return the kindness of the field officers.

5.1.3. Mechanism in the Departure and Returning of WMWs as well as Management of WMWs having Problems

5.1.3.1 Administrative matters that must be completed by WMWs candidates

1. Married women must get approval from their husbands first. If approved they must show a letter of approval signed by both spouses.
2. Unmarried candidates must get approval from their parents, shown in a letter of approval signed by the parents.
3. The letter of approval from husbands or parents must be validated by the village Chief. However, in practice many candidates of WMWs did not validate such documents by the village Chief without mentioning by the sub-district level. They only got validation from the neighborhood association heads. Therefore, there is no complete data about the number of WMWs in both village and sub-district offices.
4. Completing other required documents such as : 1) citizen cards, 2) residence, 3) birth certificates, 7) photocopies of marital certificates for married candidates.

5. Making a calling card of employment seeker issued by the local Office of Employment and Transmigration Services, and making a Letter of Job Seeker through the local Employment and Transmigration Service. However, in reality many candidates of WMWs did not do so. The candidates assisted by PPTKIS usually make a letter of job seeker through the Department of Employment and Transmigration in Jakarta when they are already at the PPTKIS. Thus, they are not registered in the Office of Employment and Transmigration in Sukabumi, causing incomplete data in Sukabumi.
6. Conducting health check-up. The candidates of WMWs who meet the health requirement are directly taken to the temporary accommodation before the departure to the country of destination. Those who cannot satisfy the health requirement return home.
7. After passing the health examination, a candidate is given a Card of Overseas Employment as the identity of an Indonesian worker during the placement in the country of destination, which is issued by the Ministry of Employment and Transmigration while waiting for the visa to arrive. Some times visa comes out quickly in one or two months, but in case of complex procedure it may arrive in three months.
8. Taking training on job skills and language to acquire a certificate of work competence as one requirement for a WMW.
9. All costs of transportation, document arrangement, and living cost during the temporary accommodation are the responsibility of candidates, but some are the responsibility of the users depending on the country of destination. If all costs are charged from the WMWs, they paid by deducting their salaries for 3- 4 months during employment.

5.1.3.2 System of Departure and Returning of WMWs as well as Management of WMWs having Problems

The candidates visit the field officers or vice versa. They are taken by the field officers to one of PPTKIS based in Jakarta for which the field officers work for and the officers get some fee from the PPTKS. The candidates who pass the health test are sent to the temporary accommodation by PPTKIS. During the stay at the accommodation they are trained on job skills and must pass to get the certificate as the requirement for working overseas. PPTKIS also makes arrangement of the work permit from the Department of Employment and Transmigration (DET). After all documents and permits are completed and visas are already issued, the WMWs leave for the country of destination. At the arrival air port in the country of destination, they are picked up by the Overseas Employment Service Companies (OESC) for immediate meeting with the candidates of employers.

In the foreign countries, WMWs work for two years based on the job contract, but it can be less or more than the contract of two years. There are some reasons why the work period is less than two years: 1) the condition of the family in the home country is not conducive, e.g. the health of husbands or children; 2) the working environment is considered poor by the WMWs; dan 3) inadequate physical condition of the workers. And the reasons for the WMWs to work for more than two years are 1) the working environment is considered very conducive; 2) the support of physical ability of the WMWs and families in the home country; and 3) the evaluation by the family of WMWs that the family's economy still needs improvement. Meanwhile those who work according to the length of contract usually did not have any constraints during the first contract, but could extend the contract because of a certain reason for example no further consent from the husbands.

WMWs generally have low education; completing elementary or secondary schools. Therefore, most WMWs from Sukabumi take informal

jobs without requiring certain skills such as housemaids. Domestic problems are often faced by WMWS such as unpaid salaries, long working hours (very short break of only 2 -3 hours daily), rude employers, sexual harassment, no communication with their family, illness resulting from exhaustion, and even death. Housemaids are closely related to the subordinate of domestic matters. Because they are women they are considered unskillful workers.

The WMWs experiencing problems or poor working condition usually request officially for returning home or escape from the employers to the Consulate General of the Republic of Indonesia or to other temporary accommodation. While they stay at the accommodation or the Consulate General of the Republic of Indonesia, the problems of WMWs with their employers are taken care of by the Consulate General of the Republic of Indonesia for a possible solution. The escaping workers can work again for the initial employer or a new employer or decide to go back to Indonesia. If the documents of WMWs (a letter of contract, passport) are lost, they can continue to work, but its status is illegal. The flow chart of departure and return of WMWs to and from the country of destination can be seen in Figure 5.1.

To reduce the burden of WMWs, one effort made by the government of Indonesia is insure the WMWs, which must be paid by the users. The amount of insurance is IDR 400,000,- (four hundred thousand rupiahs) per WMW for the period of contract, i.e. 2 years. Claims can be forwarded on the following conditions: 1) on-sided termination of work, 2) sexual violence, 3) accidents, and 4) death. The amount of claim varies from 4 – 65 million rupiahs.

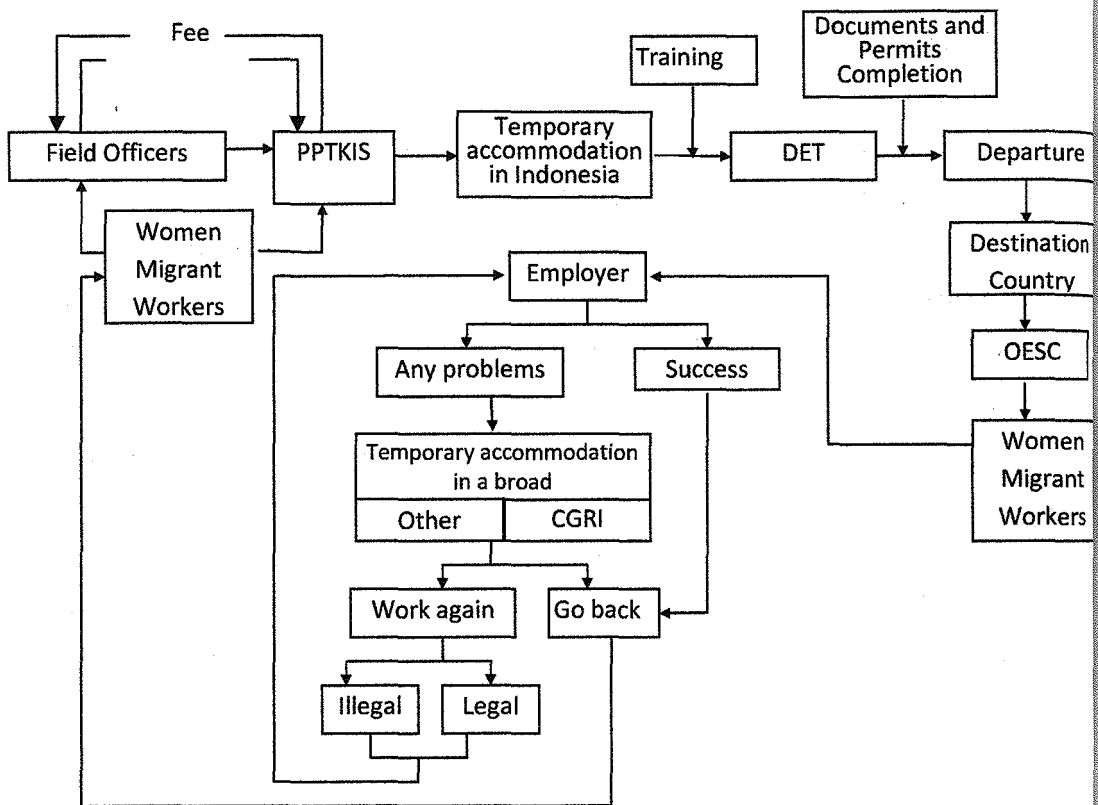


Figure 5.1 The flow chart of departure and return of WMWs to and from the country of destination as a system

Explanation:

- PPTKIS= Non Government Indonesian Workers Provider
- DET = Department of Employment and Transmigration
- OESC = Overseas Employment Service Companies
- CGRI = Consulate General of the Republic of Indonesia



Socio-Economic and Demographic Condition

5.2.1. Characteristic of Women Migrant Worker (WMW)

Age, Education, and Marital Status of Women Migrant Workers (WMW). The age-level influence overall the way of thinking, acts, and emotions, therefore it could be generalize that someone older has a good stability on emotions compared with the younger person (Hurlock 1995). Age of WMW was in age-range 23-36 years. On average, age of WMW was 29.09 ± 3.83 years. The length of education of WMW was in range 6- 9 years, and on average 6.45 ± 1.04 years or only elementary school. Based on education categories, 81.8% WMW graduated from elementary school and 18.2% graduated from junior high school. Based on marital status, 8.8% of WMW were divorced.

The purpose of wife to be a WMW. There are several purpose of wife to be a WMW, various things among them were to pay the debt (4.8%), wanted to build the house (34.0%), to pay the debt and build the house (37.6), and want to go on a pilgrimage to Mecca (0.2%). Table 5.2.1 shows that most sample (37.6%) became WMW were to the debt and build the house.

Table 5.2.1. Distribution of sample based on purpose as WMW

| The purpose as WMW | n | % |
|-------------------------------------|-----|-------|
| To pay the debt | 24 | 4.8 |
| To build the house | 170 | 34.0 |
| To pay the debt and build the house | 188 | 37.6 |
| To improve household economic | 117 | 23.4 |
| For being a pilgrim | 1 | 0.2 |
| Total | 500 | 100.0 |

Destinations country. Table 5.2.2 showed that more than half sample of respondent (95.6%) worked as WMW in Saudi Arabian. Rest of them worked as WMW in Malaysia (2.4%) also in Singapore (0.4%) and Brunei Darussalam (0.2%). The kind of work that often carried out by WMW was to become house servant.

Table 5.2.2 Distribution of sample based on destinations country

| Countries | n | % |
|--------------|-----|-------|
| Saudi Arabia | 478 | 95.6 |
| Malaysia | 12 | 2.4 |
| Brunei | 1 | 0.2 |
| Hong Kong | 1 | 0.2 |
| Singapore | 2 | 0.4 |
| Thailand | 1 | 0.2 |
| Jordanian | 5 | 1.0 |
| Total | 500 | 100.0 |

Work contract ownership. Table 5.2.3 showed that most of respondent had on-paper work contract (42.0%) and understood about content of work contract. The rest of respondent said that they did not know about the existence of the work contract and did not understand about content of work contract (58%). This illustrates a low level of awareness to have and understand the contents of work contract.

Table 5.2.3 Distribution of respondent based on work contract ownership

| Work contract's ownership | n | % |
|---------------------------|-----|-------|
| Yes | 210 | 42,0 |
| Not known | 290 | 58.0 |
| Total | 500 | 100,0 |

Table 33 showed that most of WMW (64%) had the range of salary between Rp 1,000,001.00 and Rp 2,000,000.00 per month. A small part of WMW (0.2%) had the income range between Rp 3,000,001.00 and Rp

4.000.000,00 per month, and more than Rp 4.000.000,00 per month. Moreover, still many of respondents that did not know the WMW's salary (22.2%). Table 5.2.4 also showed that 58.4 respondent said that WMW's salary is fit as stated in the contract, whereas 4.6% answered that WMW's salary was less than stated in the contract and 36.2% respondent answered did not know whether WMW's salary was fit or not as state in the contract. This showed that WMW family social strength was in low condition.

Table 5.2.4 Distribution sample of respondent based on salary and compatibility of salary as stated in the contract

| Salary of WMW | n | % |
|---------------------------|-------|-------|
| <i>Salary (Rp/month)</i> | | |
| 600.000-1.000.000 | 29 | 5.8 |
| 1.000.001-2.000.000 | 320 | 64.0 |
| 2.000.001-3.000.000 | 38 | 7.6 |
| 3.000.001-4.000.000 | 1 | 0.2 |
| >4.000.000 | 1 | 0.2 |
| Not known | 111.0 | 22.2 |
| Total | 500 | 100.0 |
| <i>Paid Salary</i> | | |
| Appropriate with contract | 292 | 58.4 |
| Less than contract | 23 | 4.6 |
| Not Known | 185 | 37.0 |
| Total | 500 | 100.0 |

Regularity of sending remittance. The decision of wife to work as WMW was to fulfill the family economic needs, so that they are hoped to send money regularly for their family in homeland. In accordance of that, there is 59.0 percent WMW had the initiative personally to send money to their family, whereas 13.6 percent WMW sent money at the request of the family, but there also 27.4 percent who did not send money to their family (Table 5.2.5).

Table 5.2.5 Distribution sample of respondent based on motivation of sending money

| Money sending motivation | n | % |
|--------------------------|-----|-------|
| Family demand | 68 | 13.6 |
| Initiative by themselves | 295 | 59.0 |
| Never sent | 137 | 27.4 |
| Total | 500 | 100.0 |

Based on regularity of sending remittance, there is 50.6 percent of WMW sent their money irregularly to their family, whereas only 22.0 percent of WMW sending their money regularly to their family (Table 5.2.6). This was an interesting phenomena, as the goals of WMW to work overseas was to meet family economic needs, however if evidently in fact a great number of WMW that was not regularly sent money or even never sent money (27.4 %), could this phenomena become the indicator of something happened on WMW. This matter was caused by several difficulties to send money to their family, such as: the wage of WMW was not paid yet.

Table 5.2.6 Distribution of sample based on Regularity of sending remittance from WMW

| Regularity of sending remittance | n | % |
|----------------------------------|-----|------|
| Regularly | 110 | 22.0 |
| Irregularly | 253 | 50.6 |
| Never sent | 137 | 27.4 |
| Total | 500 | 100 |

5.2.2 Age, Education and occupation of Household Head

Ages. Results of the research showed that most head of household's age (52,6%) were in age-range 41-60 years, followed by 36,4 % head of household's age in age-range 21-40 years, and just a few (0,2%) head of household's age were <21 years old. On average, head of household's age

was 47.4 ± 12.5 years. Refer to Hayslip and Panek (1989), this result indicated that head of household sample categorized on the middle-level maturity.

Table 5.2.7 The family distribution based on head of household's age

| The age categories (years) | n | % |
|----------------------------|-----------------|-------|
| < 21 | 1 | 0.2 |
| 21-40 | 182 | 36.4 |
| 41-60 | 263 | 52.6 |
| > 60 | 54 | 10.8 |
| Total | 500 | 100.0 |
| Mean \pm SD | 47.4 \pm 12.5 | |
| min-max | 20-85 | |

Household head education. Household's head education is one of the important factors on child's growth. Parent's better education will facilitate parents in received all information from outside especially the good method of the child's care (Soetjningsih 1998 in Meirita 2000). Mothers who had the background on higher education tend to give the big opportunity and better growth for their children (Suroto & Hamzah 1985, in Meirita 2000). Based on the length of education, head of household's education was categorized to ≤ 9 years and > 9 years (Table 5.2.8).

Table 5.2.8 The family distribution based on head of household's education

| The education categories | n | % |
|--------------------------|-----------------|-------|
| ≤ 9 year | 471 | 94.2 |
| > 9 year | 29 | 5.8 |
| Total | 500 | 100.0 |
| Mean \pm SD | 5.65 \pm 2.71 | |
| min-max | 0.00-18.00 | |

Table 5.2.8 shows that most (94,2%) education of the head of household was ≤ 9 year years, and only 5.8 percent head of household with

education > 9 years. In general head of household's education only 5.65 ± 2.71 or than 9 years. This showed that length head of household's education most did not yet fill the demand of national education system regulations (Indonesian National Policy / UU.RI No.2 in 1989) stated that each Indonesian citizen has the right to complete at least 9 years of basic education.

Household head Occupation. The term working is doing activity in order to get an income or profit with the minimum working hours at least 1 hour in a week. In this term, working should be carried out simultaneously and might not be interrupted, including a household's working without paid which carried out to help the economic activity (BPS 1998). However, Engel et al. (1995) explained that the kind of works would influence the lifestyle and was the most important basic to express prestige, honor, and respect. Family distribution based on head of household's main occupation CAN BE SEEN IN Table 5.2.9 .

Table 5.2.9 Family distribution based on head of household's main occupation.

| The main occupation | n | % |
|---------------------|-----|------|
| Manual laborer | 266 | 53.2 |
| Farmer | 62 | 12.4 |
| Entrepreneur | 58 | 11.6 |
| Driver | 34 | 6.8 |
| Employee | 10 | 2.0 |
| Teacher | 3 | 0.6 |
| Service | 3 | 0.6 |
| Civil servant | 6 | 1.2 |
| Head of Village | 1 | 0.2 |
| Unemployed | 57 | 11.4 |
| Total | 500 | 100 |

Table 5.2.9 shows that 53.2 percent head of household mostly worked as manual laborer, while a small amount 0.2 percent worked as head of village. The rest of them worked as a farmer, entrepreneur, driver, employee, teacher, service sector employment, PNS (civil servant), and about 11,4% head of households were unemployed.

5.2.3 Family Size

Tenge (1989) revealed that the size number of family will affect the structure of family which will focusing to have a work in order to meet the minimal needs of daily life. The role of each family on the working activity could be seen from the relative work contribution. Thus, there was a trend as increasingly high economics status as increasingly the work contribution of husband and wife towards family income (Aryani 1994). In other side, Bryant (1990) revealed there are two strong factors, family size and composition which distinguish toward the demands of goods and services.

We could see from Table 5.2.10, the biggest percentage of WMW's family categorized as middle and small family (46.8% and 41.4%), whereas only 11.8 percent of the family categorized as big family. On average, the number of the WMW's family members was approximately 5 people.

Table 5.2.10 Distribution and average family size

| The family size categories | n | % |
|----------------------------|-----------------|-------|
| Small (<=4 persons) | 209 | 41.8 |
| Middle (5-7 persons) | 232 | 46.4 |
| Big (> 7 persons) | 59 | 11.8 |
| Total | 500 | 100.0 |
| Mean \pm SD | 5.17 \pm 2.06 | |
| min-max | 3-14 | |

The family composition could influence the relations between mother and children, because the family composition often has a specific task on caring and educating children. So that, the family with the numbers

of children and short birth distance causes neglected or abandoned child. This condition brought a dangerous situation because the under five years child was the critical period in child development (Tjokrowinoto et al 1984, in Kumari 2001).

5.2.4 Remittance and Household Income

Households' income used to purchase and produce goods or services that could increase satisfaction and welfare. In low-income condition, the household will prioritize to fulfill daily food requirement, so as to the low-income community, most of incomes will be used for food consuming needs. As the income increase, then gradually shift decline on income portion spent for food, in other side followed by increasing income portion spent for non-food goods (BPS 2003).

A household's income is a decisive factor for quantity and quality of food consumed. It also determines purchasing power of food and other facilities (education, housing, health, etc.). A household's income is sum of all incomes contributed by family members. In low-income condition, family will prioritize income on food daily needs, so that it will be seen that on low-income community, its income mostly allocated for food consuming. Meanwhile, education and occupation also influence consumer's preference and a choice on the spending type (Fan 1997; Ghany & Sharpe 1997). Suhardjo (1989) revealed that the income was very influential on spending allocation. Moreover, unemployment or semi-unemployment was one of the causes on low-income level as it reflected by difficulty to get a job. Family income will influence on family's activity on fulfillment of daily family needs. Family income also depended on resource quantity and quality owned (Bryant 1990).

WMW's household income was influenced by remittance. Remittance can increase the household income significantly ($p=0.000$). The

remittance ranged between IDR 100,000 and 70,000,000 with the average remittance of IDR 6,559,850 \pm 9,032,828 (Table 5.2.11).

Table 5.2.11 Range, average and standard deviation of sending remittance

| Remittance | n | % |
|------------------------------------|-----------------------|------|
| ≤ 1 jt | 23 | 4.6 |
| 1.1 jt - < 10 jt | 235 | 47.0 |
| 10 jt - < 30 jt | 88 | 17.6 |
| 30 jt – 70 jt | 17 | 3.4 |
| Total of Remittance (Rp) | 3,282,525,000 | |
| Average of sending remittance (Rp) | 6559850 \pm 9032828 | |
| Range (min;max) (Rp) | 100,000 ; 70.000.000 | |

The pattern of remittance uses was for consumptive purposes, investment, to pay debt, and for helping family (Figure 5.2.1). Most of WMW's family (40.3%) used remittance for consumptive purposes (i.e. buying mobile phone, food, furniture, television, party, etc), 39.0% for investment (housing, child education, land, for capital, etc), 20.7 % to pay debts, and 8.0 % for helping family.

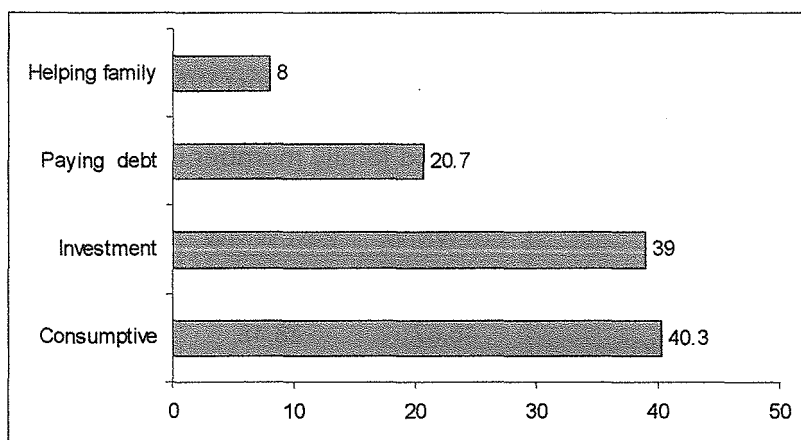


Figure 5.2.1 The pattern of remittance uses

Remittance can increase the household income significantly ($p=0.000$). The average income of the household before the wife became WMW was Rp 234,763.62/capita/month and after they became WMW it increased to Rp 313,426.25/capita/month (Table 5.2.12), that meant there are a significant increase by Rp 78,662.63/capita/month which also marked by the significant-difference between pre and post became WMW ($p=0.000$).

Being seen from the income contribution of the family member (wife, husband and the other member), the biggest contribution was from the wife income which increased of 26.60 percent after wife has became WMW. However, interesting one was the decline on the percentage of husband income of to -18.19 percent post-WMW. Before wife became WMW, the husband incomes contribution was 6 times more compare to wife incomes contribution, but then post-WMW, the incomes contribution of the wife was bigger 1.2 times towards family income compared to husband incomes contribution. Other income contribution of family member who live with WMW also experienced decline post mother became WMW. Statistically, there is a real-difference on income contribution of wife, husband and other family member pre and post WMW.

Table 5.2.12 Family average income and family member income contribution towards total family income.

| Income | Pre WMW | Post WMW | Delta | p |
|---|------------|------------|-----------|-------|
| 1. Income (Rp/capita/ month) | 234.763.62 | 313.426.25 | 78.662.63 | 0.000 |
| 2. The percentage of husband Income (%) | 46.67 | 28.48 | -18.19 | 0.000 |
| 3. The percentage of wife Income (%) | 7.41 | 34.01 | 26.60 | 0.000 |
| 4. The percentage of other family's member income (%) | 36.85 | 30.20 | -6.66 | 0.000 |

The percentage of the WMW family in poverty category by using the Indonesian poverty line 2008 (BPS 2008) of Rp 182.636 per capita/month presented on Table 5.2.13. There are a significant decline of poor-family percentage on pre and post became WMW. Before wife became WMW, 55.6 percent of family classified as poor-family, and after wife became WMW, the poor-family slightly decreased to 37.6 percent. Such an increase in income has significantly reduced the number of poor families affected ($p=0.000$). It resulted to increasing on family income which comes from remittance sent by WMW overseas. Nevertheless, percentage of poor-WMW family still positioned over 16 percent of national-poor inhabitant.

Table 5.2.13 Family distribution based on the poverty category

| The poor category | Pre WMW | | Post WMW | |
|-------------------|---------|-------|----------|-------|
| | n | % | n | % |
| Poor | 278 | 55.6 | 188 | 37.6 |
| Non poor | 222 | 44.4 | 312 | 62.4 |
| Total | 500 | 100.0 | 500 | 100.0 |

The height poverty level on WMW family was also seen from the number of family's government national aid-recipient, which increased at the time of post WMW as seen in Table 5.2.14.

Table 5.2.14. Family distribution based on national aids received

| The aids | Pre WMW (n=500) | | Post WMW (n=500) | |
|------------------------|-----------------|------|------------------|------|
| | n | % | n | % |
| 1. Raskin receipient | 242 | 48.4 | 278 | 55.6 |
| 2. Askeskin receipient | 111 | 22.2 | 149 | 29.8 |
| 3. BLT receipient | 119 | 23.8 | 152 | 30.4 |
| 4. PKH receipient | 6 | 1.2 | 8 | 1.6 |

Table 5.2.14 shows the percentage of the total family secured by several national aids named Raskin (rice for the poor family), Askeskin (health insurance for the poor family), BLT (direct money cash for poor

family) and PKH (empowerment family programs) increase post wife became WMW. Family which received Raskin post WMW increased of 7.2 percent, which received askeskin increased of 7.6 percent, which received BLT increased of 6.6 percent, and which received PKH increased of 0.4 percent.

5.2.5 Assets Ownership

Generally, percentage of assets ownership tended to increase post WMW like ownership of the motorcycle and bicycle, ownership of livestock, electronic like mobile phone, television, and radio-tape, the household equipment like washing machine, rice-cooker and the gas stove as well as ownership of furniture. Also, most families did not have gold asset pre and post WMW (Table 5.2.15).

Table 5.2.15 Family distributions based on assets ownership

| Assets | Pre WMW | | Post WMW | |
|--------------------|---------|------|----------|------|
| | no | yes | no | yes |
| Vehicles | | | | |
| 1. Car | 99.6 | 0.4 | 99.6 | 0.4 |
| 2. Motorcycle | 92.2 | 7.8 | 88.4 | 11.6 |
| 3. Bicycle | 93.2 | 6.8 | 85.6 | 14.4 |
| Livestock | | | | |
| 1. Goat/ sheep | 95.6 | 4.4 | 93.0 | 7.0 |
| 2. Chicken | 88.8 | 11.2 | 83.0 | 17.0 |
| 3. Duck | 99.4 | 0.6 | 98.8 | 1.2 |
| Electronic | | | | |
| 1. Radio/Tape | 71.6 | 28.4 | 68.6 | 31.4 |
| 2. Video/CD | 85.4 | 14.6 | 81.8 | 18.2 |
| 3. Fan | 96.6 | 3.4 | 96.2 | 3.8 |
| 4. Mobile phone | 76.4 | 23.6 | 54.8 | 45.2 |
| 5. Television | 62.2 | 37.8 | 56.0 | 44.0 |
| 6. Electrical Iron | 69.8 | 30.2 | 68.2 | 31.8 |
| 7. Refrigerator | 96.6 | 3.4 | 96.0 | 4.0 |

| Assets | Pre WMW | | Post WMW | |
|----------------------------|---------|------|----------|------|
| | no | yes | no | yes |
| 8. Computer | 100.0 | 0.0 | 99.8 | 0.2 |
| Household Equipment | | | | |
| 1. Washing machine | 99.0 | 1.0 | 98.6 | 1.4 |
| 2. Rice Cooker | 89.6 | 10.4 | 86.6 | 13.4 |
| 3. Oven | 95.6 | 4.4 | 95.0 | 5.0 |
| 4. Refrigerator | 99.6 | 0.4 | 99.0 | 1.0 |
| 5. Sewing machine | 98.2 | 1.8 | 97.8 | 2.2 |
| 6. Gas stove | 95.6 | 4.4 | 45.2 | 54.8 |
| Furniture | | | | |
| 1. Guest chair (set) | 66.8 | 33.2 | 63.6 | 36.4 |
| 2. Dining table (set) | 90.0 | 10.0 | 89.0 | 11.0 |
| 3. Bed | 29.2 | 70.8 | 26.8 | 73.2 |
| 4. Wardrobe | 37.4 | 62.6 | 35.4 | 64.6 |
| Gold | 92.0 | 8.0 | 92.0 | 8.0 |

5.2.6 Housing

Table 5.2.16 showed that most families before became WMW had the house personally (64.8 %) and property of parents (29.6 %). After became WMW, the percentage of the family that had the house personally increased to 66.0 percent. The percentage of the family that occupied the house belonging to parents decreased to 27.8 percent. Also, size of the house increased from 47.92 m² before wife became WMW to 48.14 m² after wife became WMW. This condition happened by increase of income after the wife became WMW.

Tabel 5.2.16 Family distributions based on the status and size of the house

| status | Pre WMW | | Post WMW | |
|-------------------|---------|------|----------|------|
| | n | % | n | % |
| Self-owned house | 324 | 64.8 | 330 | 66.0 |
| Parents | 148 | 29.6 | 139 | 27.8 |
| Others | 28 | 5.6 | 31 | 6.2 |
| Size of the house | 47.92 | | 48.14 | |

Table 5.2.17 showed that before became WMW, most families had the typical bamboo-made wall for their house (34.0%) and concrete brick (32.4%). This condition was not quietly differ after became WMW, which most family house wall made from bamboo (32.8%) and concrete brick (32.4%). Remittance received by family still could not help for house improvement.

Table 5.2.17 Family distributions based on wall type of the house

| Wall type | Pre WMW | | Post WMW | |
|-----------------------------|---------|-------|----------|-------|
| | n | % | n | % |
| Bamboo | 170 | 34.0 | 164 | 32.8 |
| 1/2 wall (bamboo and brick) | 85 | 17.0 | 91 | 18.2 |
| Wood | 83 | 16.6 | 83 | 16.6 |
| Wall (concrete brick) | 162 | 32.4 | 162 | 32.4 |
| Total | 500 | 100.0 | 500 | 100.0 |

The house floor type. Table 5.2.19 showed that before became WMW, most families had a ceramics for house floors (27.8%), but it hasn't been change after became WMW, which most floor type of the family's house were made from the ceramics (29%). Rest of them was made from ceramics and cement, cement, and there also some of them made from the land, bamboo or wood.

Table 5.2.19 Family distributions based on the house floor type

| Floor type | Pre WMW | | Post WMW | |
|---------------------|---------|------|----------|------|
| | n | % | n | % |
| Ceramics | 139 | 27.8 | 145 | 29 |
| Ceramics and cement | 4 | 0.8 | 3 | 0.6 |
| Cement | 124 | 24.8 | 128 | 25.6 |
| Land | 7 | 1.4 | 4 | 0.8 |
| Wood | 134 | 26.8 | 130 | 26 |
| Wood, Land | 1 | 0.2 | 1 | 0.2 |
| Wood and ceramics | 0 | 0.0 | 1 | 0.2 |
| Bamboo | 91 | 18.2 | 88 | 17.6 |
| Total | 500 | 100 | 500 | 100 |

5.3

Changes in Family Structure and Function

Family is a dynamic system that always experienced on changes. Each of incidents could be one factor cause the change in the family. To be able to grow and develop, the family must experiencing on changes in accordance with life-cycle or the change in the family itself. Generally, there are three matters causing on changes in the family, there are the deviation from hope of family member (shortage of commitment), suddenly change on economics and social status, and disaster that was experienced (Rice & Tucker 1976).

5.3.1 Changes in Breadwinner Roles

Concept of role differentiation pointed in distribution of people in different role and activity in family structure. Changes in role distribution of family member could be seen from mother roles in the family during pre WMW and post WMW.

Table 5.3.1 Role changes on breadwinner pre and post WMW

| Breadwinner | Pre WMW | | Post WMW | |
|------------------|---------|------|----------|------|
| | n | % | n | % |
| Husband | 418 | 83.6 | 23 | 4.6 |
| Wife /WMW | 21 | 4.2 | 123 | 24.6 |
| Husband and wife | 9 | 1.8 | 309 | 61.8 |
| Parent of WMW | 52 | 10.4 | 45 | 9 |
| Total | 500 | 100 | 500 | 100 |

Table 5.3.1 showed the change in breadwinner role in the WMW family. There are changes on breadwinner role before wife became WMW, 83.6% husband played a role as the breadwinner, 4.2% wife as single family breadwinner, and 1.8% wife together with husband as breadwinner. After

wife became WMW, the role of wife as breadwinner rose to 24.6% while wife together with husband as breadwinner rose to 61.8%. Likewise the role of parents as breadwinner descended from 10.4% during pre WMW became 9% during post WMW.

5.3.2 Changes in Head of Household's Role

After wife became WMW, there was a change on the existence of role as head of household (Table 5.3.2). Table 24 showed the increase on parent's role as head of household from 30.0% pre WMW to 48.4% post WMW. Old children (0.6%) also played a role as head of the household post WMW. However there was declined on husband role as head of household from 67.4% pre WMW became 49.0% post WMW.

Table 5.3.2. Role changes on head of household pre and post WMW

| Household head | Pre WMW | | Household head | Post WMW | |
|--------------------|---------|------|--------------------|----------|------|
| | n | % | | n | % |
| Husband | 337 | 67.4 | Husband | 245 | 49.0 |
| WMW | 10 | 2.0 | WMW | 0 | 0.0 |
| Husband and WMW | 2 | 0.4 | Older child | 3 | 0.6 |
| Husband and parent | 1 | 0.2 | Husband and parent | 10 | 2.0 |
| Parent of WMW | 150 | 30.0 | Parent of WMW | 242 | 48.4 |
| Total | 500 | 100 | Total | 500 | 100 |

5.3.3 Changes in the Role of Economics Allocation

There was a change in the role of economics allocation after wife became WMW (Table 5.3.3). Table 5.3.3 showed that the husband's contribution towards the family's economics descended from 85.0% pre WMW to 77.0% post WMW. In other side, wife's contribution towards family economics had increased from 14.4% pre WMW to 21.3% post WMW.

WMW. However, there was 28.3% wife post WMW who had not a contribution towards family economics, which was caused by their wage was not yet paid by their employer.

Table 5.3.3 Changes in the allocation of family economics pre and post WMW

| Change in family economic allocation | Pre | | Post | |
|---|-----|------|------|------|
| | n | % | n | % |
| The husband contribution toward family's economy | | | | |
| None | 31 | 6.2 | 70 | 14 |
| Have contributions | 425 | 85 | 386 | 77.2 |
| NA | 44 | 8.8 | 44 | 8.8 |
| Total | 500 | 100 | 500 | 100 |
| The wife contribution toward family's economy | | | | |
| None | 427 | 85.4 | 141 | 28.3 |
| Have contributions | 72 | 14.4 | 356 | 71.3 |
| NA | 1 | 0.2 | 2 | 0.4 |
| Total | 500 | 100 | 499 | 100 |

5.3.4 Communication of WMW with their Family

Communication between WMW with their husband and children which was seen on Table 5.3.4, was carried out through telephone and letter, but most communication was carried out through the telephone (45.8%). Likewise most communication between mother and children was carried out through telephone (70.1%). Post WMW, both communications of WMW and their husband and also with their children experienced not all of them in smoothly way. Table 5.3.4 revealed that 40.8% sample of respondent did not know whether WMW's husband communicating with WMW, and also 14.0% of children who had never communicated with their mother (WMW).

Table 5.3.4 Way of communication between WMW with husband and children

| Communication's tool | n | % |
|--|-----|------|
| The communication's tool of WMW with the husband | | |
| Letter | 51 | 10.2 |
| Letter, Telephone | 15 | 3 |
| Telephone | 229 | 45.8 |
| NA | 201 | 40.2 |
| Total | 500 | 100 |
| The communication's tool of WMW with the children | | |
| Letter | 50 | 12.5 |
| Letter, Telephone | 13 | 3.2 |
| Telephone | 281 | 70.1 |
| Never comunicated | 56 | 14.0 |
| Total | 401 | 100 |

5.3.5 Changes in the Role of Children's Caregiver.

There is a change in the role of children's caregiver after wife became WMW (Table 5.3.5).

Table 5.3.5. Changes in children's caregiver pre and post WMW

| Caregiver | Pre WMW | | Caregiver | Post WMW | |
|------------------------|---------|------|-----------------------------|----------|------|
| | n | % | | n | % |
| Nuclear family | | | Nuclear family | | |
| Wife | 191 | 38.2 | Husband + older child | 263 | 52.6 |
| Wife and husband | 299 | 59.8 | Husband | 5 | 1 |
| Older child | 9 | 1.8 | Older child | 15 | 3 |
| Extended family | | | Extended family | | |
| Mother in law | 1 | 0.2 | Parent /mother in law/ Aunt | 217 | 43.4 |
| Total | 500 | 100 | Total | 500 | 100 |

Table 5.3.5 shows that the role of extended family had increased, while at the time of pre WMW, the role of nuclear family both wife and

husband on children caring were high and intense, and the role of extended family was very small (0.2%). However after wife became WMW, role of extended family had increased to 43.4%, and role of husband or nuclear family had descended.

5.3.6 Changes in the Role of Decision-maker

Role of husband and wife each-personally and together in decision making for the interests of children is really important, and this was proven from Table 5.3.6, which revealed before wife became WMW, role of husband and wife in decision making for the interests of the children was very high (79.4%), and role of extended family was very small only 1%. After wife became WMW, role of nuclear family like husband and older children still quite high, but the role of extended family like the grandmother increased sharply to 37.6%. This was happened because many of WMW's children were looked after by their grandmother.

Table 5.3.6 Changes in the decision-maker of children interests' pre and post WMW

| Decision maker | Pre WMW | | Decision maker | Post WMW | |
|---------------------------------|---------|------|----------------------------|----------|------|
| | n | % | | n | % |
| Husband | 11 | 2.2 | Husband | 154 | 30.8 |
| Wife | 81 | 16.2 | Husband and older children | 24 | 4.8 |
| Husband, Wife | 397 | 79.4 | Husband, and mother in law | 121 | 24.2 |
| Husband, Wife and mother in law | 6 | 1.2 | older children | 13 | 2.6 |
| Parent/ mother in law | 5 | 1 | Parent/ mother in law | 188 | 37.6 |
| Total | 500 | 100 | Total | 500 | 100 |

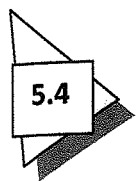
A change in family's structure and function was categorized into two categories that are low and high. Table 5.3.7 showed that mostly a change in the role of breadwinner was in low category during pre WMW (84.8%) and

still was in low category during post WMW (78.6%). Mostly, a change in the role of head of household was in low category during pre WMW (69.7%) and still was in low category during post WMW (51.1%). Mostly, a change of decision-maker for children during pre WMW was in high category (76.0%) and was in low category (51.3%) post WMW. A change of family member as main children caregiver's during pre and post WMW was in low category.

Most of changes of caretaker's outside the core family (nuclear family) during pre and post WMW were in the high category. This was assumed that as wife worked as WMW so they could not fully take care of their children, therefore family's other member played of that role. Changes in husband's contribution towards the family economics during pre and post WMW was in the high category. During pre WMW, most changes in wife's contribution towards the family economics was in low category (85.4%) whereas during post WMW, was in high category (71.1%). This was caused as wife worked as WMW so that would be increasing on family income.

Table 5.3.7 Changes on category of structural and function of the family

| The family's alteration | Pre WMW | | Post WMW | |
|---|---------|----------|----------|----------|
| | Low (%) | High (%) | Low (%) | High (%) |
| The breadwinner alteration's role | 84.8 | 11.4 | 78.6 | 10.6 |
| The head of household alteration's role | 69.7 | 22.2 | 51.1 | 34.5 |
| The contribution alteration of husband toward family's economy | 14.8 | 84.8 | 22.6 | 77.0 |
| The contribution alteration of wife toward family's economy | 85.4 | 14.4 | 28.5 | 71.1 |
| The alteration of decision taker in children | 22.6 | 76.0 | 51.3 | 34.5 |
| The alteration of children sitter from the core family | 23.6 | 1.6 | 67.5 | 26.3 |
| The alteration of children sitter from the outer of core family | 31.5 | 60.9 | 41.3 | 44.7 |



5.4 Family Strength

The family strength is a dynamic condition for family that had perseverance and strength as well as physical material and psychological-mental spiritual in order to lives independent and harmonious also increasing welfare (UU/National Policy No.10, Chapter I the Article I Item 15). The family's strength is divided into three components namely social, physical, and psychological strength.

5.4.1. General Overview of the WMW's Family Strength

5.4.1.1 Physical resources

Physical resources component covered income, house ownership, land ownership, vehicle ownership and remittance. Table 69 showed that increasing of family percentage in income over poverty line from 44.4% before wives became WMW (pre WMW) to 62.4% family after wives became WMW (post WMW). There is also increasing on vehicles ownership from 8.2% pre WMW to 12% post WMW. Increasing of income and vehicle ownership was caused by remittance received post WMW family (72.6%).

Table 5.4.1 Distribution of Sample based on physical resources

| No | Component | Pre WMW | | Post WMW | |
|----|---|---------|------|----------|------|
| | | n | % | n | % |
| 1 | Income/ capita/ month over the poverty line | 222 | 44.4 | 312 | 62.4 |
| 2 | Having the house | 324 | 64.8 | 324 | 64.8 |
| 3 | Having the vehicles | 41 | 8.2 | 60 | 12.0 |
| 4 | Receiving the remittance | - | - | 363 | 72.6 |

5.4.1.2 Non physical resources

Non physical resource is a social resource supported to WMW family on physical and non-physical needs (Table 5.4.2). Social environment included neighbor and family relatives played an important role on supporting WMW family. But most WMW family felt on getting support in suggestion and exchanged thoughts in resolving the problem that was dealt with. The role of the social environment helped the WMW family since sometime WMW who actually work outside were late on money transferring to their family, so that the neighbor and relatives support were felt most helped.

Table 5.4.2 Distribution of WMW's family social environment

| Social environment support | Yes | No |
|---|------|------|
| 1. Share the problem and mind each other with the neighbor | 35.2 | 64.8 |
| 2. Neighbor want to help in lending money/things when got the difficulties | 62.6 | 37.4 |
| 3. Get a child care help from family | 95.2 | 4.8 |
| 4. The neighbor suggestion was really help in solving the problem | 44.6 | 55.4 |
| 5. Feel whatever and anything that has done to became the part of an important group | 89.6 | 10.4 |
| 7. Safety condition of community that make feeling good when left the family and became a WMW | 96.8 | 3.2 |
| 8. Family want to hear the problems | 91.4 | 8.6 |
| 9. Having friends that appreciate anything include when became a WMW | 92.4 | 7.6 |
| 10. Always get a financial aid from the community if the family get any difficulties | 95.0 | 5.0 |
| 11. Many of the successful WMW in the society | 82.4 | 17.6 |
| 12. Friends support to became WMW | 93.0 | 7.0 |
| 13. Family support to became WMW | 88.0 | 12.0 |
| 14. Society's culture support to be a WMW | 66.8 | 33.2 |
| 15. Neighbors support to be a WMW | 96.2 | 3.8 |
| 16. Always get any helps from the community if the family get any difficulties | 91.2 | 8.8 |

Family social environment was categorized in 2 groups there are poor social environment and good social environment, then most WMW family (87.6%) classified on good social environment (Table 5.4.3). As shown on average score of family social environment 83.65 with range score from 38.89 to 100. This could be understood that social capital of Indonesian society, especially Sundanese still on good category. Indonesia society characteristic togetherness on everyday living still remain close to living society in Indonesia. Moreover in Java, most of family lives together with close proximity on their house to maintain their togetherness.

Table 5.4.3 Distribution of WMW family social environment

| Family's social environment category | n | % |
|--------------------------------------|-------------------|-------|
| Poor | 62 | 12.4 |
| Good | 438 | 87.6 |
| Total | 500 | 100.0 |
| Mean \pm SD | 83.65 \pm 11.96 | |
| min-max | 38.89 - 100.00 | |

5.4.1.3 Family problems

5.4.1.3.1 Economic problems

On this research, economic problems seen from the financial problem faced and perception felt by sample. A family economic problem was measured by the quantitative and qualitative finance problems. The qualitative finance problems was measured by the perception.

Quantitatively, there are many family financial problems, among them was debt. Table 5.4.4 shows that there are 74.4 percent of WMW family who had a debt on pre-WMW, and 37.1 % of WMW family had a debt ratio and asset \geq 50%. But, after wives became WMW, percentage of WMW family who had a debt decline to 60.4 percent, and percentage of WMW family who had a debt and asset ratio more than 50% decline to 27.6 %.

Table 5.4.4. Distribution of sample based on debt condition

| Debt condition | Pre WMW | Post WMW |
|-----------------------------------|---------|----------|
| Having a debt | | |
| Yes | 74.4 | 60.4 |
| No | 25.6 | 39.6 |
| The ratio between debt and assets | | |
| < 50% | 56.8 | 60.9 |
| >= 50% | 37.1 | 27.6 |
| NA | 6.0 | 11.5 |

WMW family debt experienced significantly declining between pre and post WMW (Table 5.4.5). This was caused remittance that was received by WMW was allocated to pay the debt. On the other hand assets and the WMW family income also experienced significantly increase seen from results of different-analysis test ($p=0.000$) between pre and post WMW.

Table 5.4.5 Statistical analysis and average level of debt and assets

| Economic problem | Pre WMW | Post WMW | Delta | p |
|--------------------------|---------------|---------------|--------------|-------|
| Debt amount | 2.495.599.97 | 1.925.655.94 | (569.944.03) | 0.001 |
| Total of family's assets | 11.864.848.00 | 14.980.330.56 | 3.115.482.56 | 0.000 |

Based on economic problems dealt with WMW family indicated that there was experienced decline from 43.0 percent to 21.6 percent (Table 5.4.6). Average score of economic problems experienced decline from 63.92 ± 12.86 pre WMW to 54.67 ± 15.58 post WMW.

Table 5.4.6 Distribution of family based on economic problems

| The economic problem category | Pre WMW | | Post WMW | | p |
|-------------------------------|-------------|-------|-------------|-------|-------|
| | n | % | N | % | |
| Low | 285 | 57.0 | 392 | 78.4 | 0.000 |
| High | 215 | 43.0 | 108 | 21.6 | |
| Total | 500 | 100.0 | 500 | 100.0 | |
| Scoe Mean + SD | 63.92+12.86 | | 54.67+15.58 | | |
| min- max | 12.50-87.50 | | 9.38-84.38 | | |

Table 5.4.6 shows that there is statistically significant score of economic problems pre WMW and post WMW ($p=0.000$). Support on additional income as WMW was able to contribute towards reduction on economics problems.

Economic problems (perception). The economic problems perception was a condition measured by person's perception the way they responds to their family economic situation. Person perception is vary against a different object so as on economic pressure felt by persons will vary and relative. Moreover this perception was someone acceptance towards their situation by their self. Perception was measured by asking family economic situation concerning on satisfaction towards financial situation, income, clothes, house, and assets owned (Table 5.4.7).

Table 5.4.7 Distribution of sample based on the perception on economic pressure

| Question | Pre WMW | | Post WMW | |
|---|-------------|-----------|-------------|-----------|
| | unsatisfied | satisfied | unsatisfied | satisfied |
| Financial condition of family | 90.4 | 9.6 | 74.0 | 26.0 |
| Salary condition | 84.8 | 15.2 | 66.4 | 33.6 |
| Food condition and availability of family | 53.4 | 46.6 | 44.4 | 55.6 |
| Housing condition of family | 66.4 | 33.6 | 57.6 | 42.4 |
| Saving condition of family | 92.6 | 7.4 | 83.6 | 16.4 |
| Clothes condition of family | 45.4 | 54.6 | 35.6 | 64.4 |
| Clothes condition of yours | 44.8 | 55.2 | 35.0 | 65.0 |
| Material/assets condition | 89.0 | 11.0 | 74.6 | 25.4 |

From Table 5.4.7 can be seen that most of samples tend to unsatisfied (90.4%) on their financial situation while 84.8 percent unsatisfied on their income, and about 92.6 percent unsatisfied on their family savings. However there is experienced to increase on their family financial from 9.6 percent pre WMW to 26.0 percent post WMW, while income satisfaction

increase from 6.4 percent pre WMW to 33.6 percent post WMW, and family savings satisfaction increase from 7.4 percent pre WMW to 16.4 percent post WMW.

The economic pressure perception divided into three categories, on low, middle, and high. As seen on Table 5.4.8, most of samples (71.6%) in pre WMW had economic pressure perception on middle category, while still on same middle category (58.0%) in post WMW (58,0%).

Table 5.4.8 Distribution of sample based on category of economic pressure perception.

| Category | Pre WMW | | Post WMW | |
|----------|---------|------|----------|------|
| | N | % | n | % |
| Low | 99 | 19.8 | 152 | 30.4 |
| Moderate | 358 | 71.6 | 290 | 58.0 |
| High | 43 | 8.6 | 58 | 11.6 |
| Total | 500 | 100 | 500 | 100 |

5.4.1.3.2 Social problems

Social problem was happened in the social environment which categorized into low category and high category based on score value each family (Table 5.4.9).

Table 5.4.9. Distribution of sample based on category of social problem

| The social problem category | Pre WMW | | Post WMW | | p |
|-----------------------------|-------------|------|-------------|------|-------|
| | n | % | n | % | |
| Low | 463 | 92.6 | 439 | 87.8 | 0.146 |
| High | 37 | 7.4 | 61 | 12.2 | |
| Total | 500 | 100 | 500 | 100 | |
| Mean <u>+</u> SD | 28.72±21.30 | | 29.85±25.10 | | |
| min- max | 0.00-100.00 | | 0.00-100.00 | | |

Table 5.4.9 showed that in general the score of social problem experienced by family increase from 28.72 pre WMW to 29.85 post WMW.

There is statistically not significant difference ($p=0.146$) between pre WMW score and post WMW. In high category, the percentage experienced increase from 7.4 percent pre WMW to 12.2 percent post WMW. This was caused by several problems, mainly divorce problems after husband left by his wife to become WMW.

From social problems perspective dealt with the family (Table 5.4.10), more than 70 percent of WMW family both pre WMW and post WMW experienced the problem with husband, husband's family, and neighbor. Increased high social problem was seen in the wife's statement that often quarrelled with their husband figured by 72.0 percent pre WMW and increasing to 77.4 percent post WMW.

Table 5.4.10 Distribution WMW family based on social problem faced

| Social problem faced | Pre WMW | | | Post WMW | | |
|--|---------|------|-----|----------|-----|------|
| | Yes | No | NA | Yes | No | NA |
| Wife/mother disappointed with husband behavior | 77.8 | 14.0 | 8.2 | 76.6 | 6.6 | 16.8 |
| Wife/mother often dispute with the husband | 72.0 | 19.8 | 8.2 | 77.4 | 5.6 | 17.0 |
| Wife/mother satisfy with the husband behavior | 77.6 | 14.2 | 8.2 | 73.4 | 9.8 | 16.8 |
| Wife/mother less harmonic with the husband | 78.0 | 14.0 | 8.0 | 76.8 | 6.4 | 16.8 |
| Wife/ mother less harmonic with the husband family | 89.2 | 4.4 | 6.4 | 85.2 | 3.6 | 11.2 |
| Wife/ mother less harmonic with the neighbor | 96.6 | 3.4 | 0.0 | 95.2 | 3.8 | 1.0 |

Agreed to research conducted by Richard (1997) that revealed the main problem of family originating from money. The research that was carried out by Markman (1997) stressed that the family will be on happiness when they had sufficient money. Money also was the main factor of became the source of dispute between husband and wife. Quarrelled which caused

by money problem tend often happened, especially on low level to middle level economics family, while on the high economic family, problem tend caused by unfairness of money management in the family. The happiness of family will be reached if the family could well organize their finance accordance with their priority requirement and the existence fairness on finance management between husband and wife.

5.4.1.4 Control of family problems

To control the family problems, especially financial problems could be carried out by implementing good management on finance. Although management did not fulfill limited resources to be fulfilled, but it could help on determining priority choices agreed by other family's member (Guhardja et al 1992), especially on family income management (Putri 2005 in Firdaus 2008). However, low level income family or person usually are oriented for recent period than for their future on time perspective (Guhardja et al 1992).

Table 5.4.11 showed that most samples pre WMW (72.4%; 57.2%; 47.6%; 84.4%; 54.0%) and post WMW (71.6%; 55.8%; 46.6%; 83.2%; 53.6%) had not made financial planning, had not planned for estimate daily cost of living, had not made the plan previously before buying something, had not recorded the expenditure and never learnt to manage good finance.

Generally, the finance management that was carried out by most WMW families still in low category (Table 81), both pre WMW and post WMW. It was reflected also from the score of finance management which only 26.44 pre WMW and 27.47 post WMW. Even there is a low difference between pre and post WMW but statistically was significant ($p=0.000$). There are several indicator namely, monthly financial planning, recording expenditure cost, evaluating expenditure routinely and comprehensively,

Table 5.4.11 Distribution of sample based on finance management

| No | Statement | Pre WMW | | | | | | Post WMW | | | | | |
|----|--|-------------|--------|-------------|-------|--------|-----|-------------|--------|-------------|-------|--------|-----|
| | | Never | Seldom | Some times | Often | Always | NA | Never | Seldom | Some times | Often | Always | NA |
| 1 | Made a financial planning every month | 72.4 | 12.4 | 5.2 | 8.4 | 1.6 | 0.0 | 71.6 | 11.2 | 6.2 | 9.0 | 2.0 | 0.0 |
| 2 | planned for estimate daily cost | 57.2 | 24.0 | 9.2 | 8.0 | 1.6 | 0.0 | 55.8 | 24.4 | 9.2 | 9.0 | 1.6 | 0.0 |
| 3 | made the plan previously before buying something | 47.6 | 26.2 | 14.8 | 9.2 | 2.2 | 0.0 | 46.6 | 27.0 | 14.6 | 9.6 | 2.2 | 0.0 |
| 4 | recorded the expenditure | 84.4 | 9.2 | 3.6 | 1.8 | 1.0 | 0.0 | 83.2 | 9.4 | 4.0 | 2.6 | 0.8 | 0.0 |
| 5 | Learned the financial management | 54.0 | 24.8 | 14.8 | 4.6 | 1.8 | 0.0 | 53.6 | 21.4 | 16.0 | 7.2 | 1.8 | 0.0 |
| 6 | Debt the money/ things to other people/company | 1.0 | 13.8 | 38.8 | 28.2 | 18.2 | 0.0 | 1.0 | 12.8 | 30.8 | 28.0 | 27.4 | 0.0 |
| 7 | Made the maximal standard cost in allocating expenditure | 76.4 | 15.2 | 5.2 | 2.2 | 1.0 | 0.0 | 76.0 | 14.0 | 5.4 | 3.0 | 1.6 | 0.0 |
| 8 | Evaluated the expenditure routinely and comprehensively | 77.0 | 15.2 | 5.0 | 1.8 | 1.0 | 0.0 | 76.0 | 15.2 | 4.8 | 3.0 | 1.0 | 0.0 |
| 9 | Compared the income and expenditure | 56.4 | 23.6 | 11.0 | 8.0 | 1.0 | 0.0 | 54.0 | 23.2 | 12.4 | 9.4 | 1.0 | 0.0 |
| 10 | Tried to save the money although in the less amount | 71.8 | 15.6 | 7.0 | 5.0 | 0.6 | 0.0 | 67.4 | 14.8 | 10.0 | 6.8 | 1.0 | 0.0 |
| 11 | Enter the money in the envelopes for type expenditure allocation | 92.0 | 4.4 | 2.0 | 1.2 | 0.4 | 0.0 | 91.2 | 4.4 | 2.2 | 1.8 | 0.4 | 0.0 |

| No | Statement | Pre WMW | | | | | | Post WMW | | | | | |
|----|--|-------------|-------------|------------|-------------|-------------|-----|-------------|-------------|------------|-------------|-------------|------|
| | | Never | Seldom | Some times | Often | Always | NA | Never | Seldom | Some times | Often | Always | NA |
| 12 | Separated between your salary and your husband's | 85.6 | 3.2 | 0.8 | 1.6 | 2.2 | 6.6 | 68.4 | 3.4 | 3.6 | 6.4 | 5.2 | 13.0 |
| 13 | Buy the self equipment (such as clothes, make up, etc) with the own salary | 65.2 | 20.0 | 5.6 | 2.0 | 7.2 | 0.0 | 14.0 | 33.0 | 13.8 | 24.8 | 14.2 | 0.2 |
| 14 | Talk the financial problem with the family (husband and child) | 4.2 | 5.4 | 9.6 | 59.4 | 17.0 | 4.4 | 12.4 | 21.0 | 17.0 | 29.4 | 12.8 | 7.4 |
| 15 | Solve the financial problem with the family (husband and child) | 4.0 | 5.0 | 9.2 | 60.2 | 17.2 | 4.4 | 12.8 | 20.2 | 16.6 | 29.4 | 13.4 | 7.6 |
| 16 | Save the money for the children future | 78.2 | 12.4 | 5.2 | 3.4 | 0.8 | 0.0 | 70.4 | 15.6 | 7.8 | 4.6 | 1.6 | 0.0 |
| 17 | Teach the financial management to the children | 65.0 | 19.0 | 9.2 | 5.8 | 1.0 | 0.0 | 65.0 | 19.8 | 9.4 | 4.8 | 1.0 | 0.0 |
| 18 | Feel less of money each month | 8.4 | 54.0 | 28.0 | 7.4 | 2.2 | 0.0 | 7.2 | 49.2 | 28.0 | 12.4 | 3.2 | 0.0 |
| 19 | Buy un important thing | 0.2 | 0.4 | 2.0 | 7.6 | 89.8 | 0.0 | 0.2 | 1.2 | 3.0 | 9.8 | 85.8 | 0.0 |

Generally, the finance management that was carried out by most WMW families still in low category (Table 5.4.12), both pre WMW and post WMW. It was reflected also from the score of finance management which only 26.44 pre WMW and 27.47 post WMW. Even there is a low difference between pre and post WMW but statistically was significant ($p=0.000$). There are several indicator namely, monthly financial planning, recording expenditure cost, evaluating expenditure routinely and comprehensively, saving for the children's future had not been done by more than 70 percent of the family.

Based on interview, finance management that was not carried out by the WMW family was caused because uncertainty on monthly or even weekly income and existence of the principle "what we get today for what we eat today". So that family believed they did not have a sufficient resources that must be managed (Guhardja, Puspitawati, Hartoyo and Hastuti 1992).

Table 5.4.12 Distribution of sample based on category of finance management of family

| Financial management category | Pre WMW | Post WMW | p |
|-------------------------------|------------|-------------|-------|
| Low | 99.8 | 99.6 | 0.000 |
| High | 0.2 | 0.4 | |
| Mean+SD | 26.44±9.73 | 27.47±11.05 | |
| min-max | 4.00-71.00 | 3.00-71.00 | |

5.4.2 Family Physical Strength

Family physical strength is an economic capacity owned by family to fulfill basic needs like food, clothing, boarding, education, and health (Sunarti 2001). On Average, most of families have a good physical strength pre and post WMW (Table 5.4.13). High physical strength indicated by family's statement which 94.8% pre WMW and 96.0% post WMW that the

family member supported each other in increasing the family income. Interesting matter was seen in the family's statement that they stated no difficulties on financial matters, both in pre WMW and post WMW.

Table 5.4.13 Distribution of sample based on component of the family's physical strength

| No | Statement | Pre WMW | | | Post WMW | | |
|----|--|---------|------|-----|----------|------|------|
| | | Yes | No | NA | Yes | No | NA |
| 1 | The family member support each other in increasing the salary | 94.8 | 5.2 | 0.0 | 96.0 | 4.0 | 0.0 |
| 2 | Husband ever lost the job | 67.0 | 26.2 | 6.8 | 69.0 | 17.0 | 14.0 |
| 3 | Family get a financial difficulties | 5.0 | 95.0 | 0.0 | 12.6 | 87.4 | 0.0 |
| 4 | Family do the solving when the financial difficulties happen | 97.2 | 2.8 | 0.0 | 97.0 | 3.0 | 0.0 |
| 5 | Big family have many roles in helping the economic difficulties | 94.2 | 5.8 | 0.0 | 94.0 | 6.0 | 0.0 |
| 6 | Big family have many roles in helping the household's job | 81.6 | 18.4 | 0.0 | 86.8 | 13.2 | 0.0 |
| 7 | Neighbor/society help if the family get an economic problem | 57.8 | 42.2 | 0.0 | 57.4 | 42.6 | 0.0 |
| 8 | Neighbor/society help in reducing household's job | 24.6 | 75.4 | 0.0 | 24.8 | 75.2 | 0.0 |
| 9 | Family 's member eat fruits everyday | 10.8 | 89.2 | 0.0 | 11.4 | 88.6 | 0.0 |
| 10 | Family 's member buy the clothes once a year | 95.8 | 4.2 | 0.0 | 96.2 | 3.8 | 0.0 |
| 11 | Family 's member will be brought to the modern medicinal if got a sick | 94.8 | 5.2 | 0.0 | 94.6 | 5.4 | 0.0 |
| 12 | Family can sending their children to the school | 77.2 | 22.8 | 0.0 | 83.2 | 16.8 | 0.0 |

5.4.3 Family social strength

Family social strength is the family's strength in applying the religion value, carried out social relations and communication, role distribution in the family, as well as decided the family goals aimed to reach the family welfare (Sunarti 2001). Family social strength on average tended high both pre WMW and post WMW (Table 5.4.14). The highest social strength indicated by sample respondents statement that family had a goals to be achieved, family member co-operated on resolving problems and appreciate each other among the family member at pre WMW (99.6%; 98.0%; 97.6%) and post WMW (99.8%; 95.4%; 97.0%). However, Table 87 explained there were a several causes that decrease family social strength post WMW, which is less on role distribution among family member, decline on co-operation among family member in problem resolve, as well as decline on communication among family member.

Table 5.4.14 Distribution of sample based on the component of the family social strength

| Statement | Pre WMW | | | Post WMW | | |
|---|---------|------|-----|----------|------|-----|
| | Yes | No | NA | Yes | No | NA |
| Family have goals for achieving | 99.6 | 0.4 | 0.0 | 99.8 | 0.2 | 0.0 |
| Family like to discuss for every decision | 96.2 | 3.8 | 0.0 | 92.6 | 7.4 | 0.0 |
| A clear job delegation in the family | 68.2 | 31.8 | 0.0 | 64.4 | 35.6 | 0.0 |
| Each of member receive the job gratefully | 80.0 | 14.8 | 5.2 | 73.8 | 21.4 | 4.8 |
| Member of family cooperate each other to solve the problems | 98.0 | 2.0 | 0.0 | 95.6 | 4.4 | 0.0 |
| According to mother, there is an appreciate behavior for each other | 97.6 | 2.4 | 0.0 | 97.0 | 3.0 | 0.0 |
| According to mother, the | 97.6 | 2.4 | 0.0 | 96.8 | 3.2 | 0.0 |

| Statement | Pre WMW | | | Post WMW | | |
|--|---------|------|-----|----------|------|------|
| | Yes | No | NA | Yes | No | NA |
| family's member can receive each other | | | | | | |
| Family often communicate each other (evening, Pre sleep, or when watched the TV) | 94.0 | 6.0 | 0.0 | 81.8 | 17.8 | 0.4 |
| Has time for family gathering everyday | 93.6 | 6.4 | 0.0 | 81.0 | 18.6 | 0.4 |
| Mother can see a good side from every moment that happen in the family | 98.2 | 1.8 | 0.0 | 98.2 | 1.8 | 0.0 |
| Has a conflict between mother/wife with husband nowadays | 70.6 | 21.8 | 7.6 | 77.2 | 6.6 | 16.2 |
| Mother is involved in the conflict of big family nowadays | 93.4 | 5.2 | 1.4 | 95.6 | 2.4 | 2.0 |
| Mother has a difficulties in nurturing the children | 64.0 | 36.0 | 0.0 | 52.8 | 47.2 | 0.0 |
| Mother often ask other people to advice her | 84.0 | 16.0 | 0.0 | 81.8 | 18.2 | 0.0 |
| Mother actives in the society activities | 94.6 | 5.4 | 0.0 | 50.2 | 37.8 | 12.0 |
| Mother believe the neighbor will help if the family get a problem | 81.8 | 18.2 | 0.0 | 81.6 | 18.4 | 0.0 |
| Mother do the prayer more than Pre | 81.8 | 18.2 | 0.0 | 87.2 | 12.0 | 0.8 |
| Big family give many advices and help the marriage problem | 82.8 | 17.2 | 0.0 | 81.8 | 17.8 | 0.4 |
| Mother/father feel the neighbor like their family | 97.6 | 2.4 | 0.0 | 97.6 | 2.4 | 0.0 |
| Father/mother family often helping others | 96.0 | 4.0 | 0.0 | 96.0 | 4.0 | 0.0 |
| Father/mother family happy in helping others | 97.0 | 3.0 | 0.0 | 96.4 | 3.6 | 0.0 |

5.4.4 Family psychological strength

Family psychological strength is the capacity of the family member (mother) in emotions control, brought on self positive concept (Sunarti 2001). Most of family psychological strength tends to decline on post WMW compared to pre WMW (Table 5.4.15). Although there is increasing on good self-concept from 42.2% pre WMW and 51.4% post WMW, but there is increasing on guilty feel of mother on children care that is from 21.0% pre WMW and 52.4% post WMW.

Table 5.4.15 Distribution of sample based on the component of family psychological strength

| Statement | Pre WMW | | | Post WMW | | |
|---|---------|------|-----|----------|------|------|
| | Yes | No | NA | Yes | No | NA |
| Wife often annoyed by her self because feel unusefull | 57.6 | 42.2 | 0.2 | 47.8 | 51.4 | 0.8 |
| Wife often feeling guilty in nurturing children | 21.0 | 79.0 | 0.0 | 52.4 | 47.2 | 0.4 |
| Wife save an anger to the husband | 24.2 | 67.8 | 8.0 | 9.6 | 74.8 | 15.6 |
| Wife often feel annoyed with the husband | 39.8 | 52.0 | 8.2 | 12.6 | 71.6 | 15.8 |
| Wife save a feeling of scary that will be divorced by the husband | 27.8 | 64.2 | 8.0 | 20.8 | 63.6 | 15.6 |
| Wife save an anger to the big family | 3.2 | 96.8 | 0.0 | 3.4 | 96.0 | 0.6 |
| Wife feel satisfy with the husband salary | 20.0 | 71.8 | 8.2 | 21.8 | 61.8 | 16.4 |
| Wife feel satisfy with the food that is eaten by mother | 48.0 | 52.0 | 0.0 | 54.2 | 45.2 | 0.6 |
| Wife feel satisfy with the clothes taht is had by mother | 54.6 | 45.4 | 0.0 | 60.2 | 39.2 | 0.6 |
| Mother believe on the important of family's intact | 99.4 | 0.6 | 0.0 | 98.6 | 1.4 | 0.0 |

5.4.5 Level of family strength

Family strength, encompassing physical strength, social strength, and psychology strength were categorized in high and low category. Level of family endurance categorized on high when a score value $\geq 80\%$ and low if $< 80\%$ of the total scores value. Table 5.4.16 revealed there is an increase on physical score value from 68.05 ± 11.69 pre WMW to 69.65 ± 12.18 post WMW, and statistically significant ($p=0.000$). As mother became WMW, there is an increase on family physical strength from 63.2% pre WMW to 67.2% post WMW. This increase resulted by remittance received every month from mother as WMW. Correlation analysis showed there is a positive relations ($r = 0.127$) between remittance and physical strength of family, which means as increasingly remittance received as higher the physical strength of family.

However, there is declining trend on family social strength from 92.75 ± 8.50 pre WMW to 88.16 ± 10.34 post WMW, and statistically significant ($p=0.000$). As mother became WMW, there is a declining trend on social strength from 97.4% pre WMW to 95.6% post WMW. This condition more caused by lack of communication among family member as their mother became WMW. Moreover, there is also declining on average score of family psychological strength from 71.50 ± 14.11 pre WMW to 70.56 ± 15.25 post WMW, with statistically significant ($p=0.045$). As mother became WMW there is reducing on psychological strength from 70.4% pre WMW to 68.0% post WMW. Declining on social strength is more caused by increase on guilty fell of wife on children care.

Generally, there is declining on total family strength score from 66.81 ± 6.69 pre WMW to 64.49 ± 7.04 post WMW with statistically significant ($p=0.000$). This situation impacted to total family strength from 55.8 % pre WMW to 38.4% post WMW. One factor that caused low level on family strength score was a divorce happened. Moreover, the family

problem had caused by difficulties on maintaining the family strength (Sunarti 2001). Increased economic capacity post WMW was not affected much to increase family strength post WMW.

Table 5.4.16 Distribution average score of the family strength

| Family's strengthen | Indicator | Pre WMW | | Post WMW | | Double Difference Test |
|---------------------|------------|---------|-------|----------|-------|------------------------|
| | | Low | High | Low | High | |
| Physic | Percentage | 36.8 | 63.2 | 32.8 | 67.2 | 0.000 |
| | Mean+SD | 68.05 | 11.69 | 69.65 | 12.18 | |
| Social | Percentage | 2.6 | 97.4 | 4.4 | 95.6 | 0.000 |
| | Mean+SD | 92.75 | 8.60 | 88.16 | 10.34 | |
| Psychology | Percentage | 29.6 | 70.4 | 32.0 | 68.0 | 0.045 |
| | Mean+SD | 71.50 | 14.11 | 70.56 | 15.25 | |
| Total | Percentage | 44.2 | 55.8 | 61.6 | 38.4 | 0.000 |
| | Mean+SD | 66.81 | 6.69 | 64.49 | 7.04 | |

5.4.6 Socioeconomic factor connected with family strength

Results of correlation analysis (Table 5.4.17) showed that there is existence of positive relations with statistically significant between the family strength, physical strength, social and psychological strength toward family social environment, management of finance, level of satisfaction, income, head of household's education, amount remittance, and regularly sending remittance. So that as better social environment, family finance management, level of family satisfaction, high of income, amount remittance, regularly sending remittance, as increasingly high the level of the family strength.

Finance management is a method for economic problem solving which will cause on family strength especially on physical strength (Sunarti 2001). An income had positive relationship with physical strength aspect and the family's psychology. Parson theory (Hamilton 1983), revealed that main

indicator of physical strength defined when at least one of family member worked and received economic resources to fulfill family basic needs. Coping strategy had negative relationship and statistically significant with social strength and family psychology strength. A good coping strategy hoped reducing on family pressure problems which had an impact on the family strength (Folkman & Lazarus 1988).

Table 5.4.17 Variable correlation analysis of research with family strength

| Variables | Social family's strengthen | Physic family's strengthen | Psychology strengthen | Total family's strengthen |
|----------------------------------|----------------------------|----------------------------|-----------------------|---------------------------|
| Social environment family | .113(*) | .411(**) | 0.068 | .206(**) |
| Social problem | -.241(**) | -.122(**) | -.699(**) | -.229(**) |
| Financial management | .239(**) | .217(**) | .289(**) | .218(**) |
| Satisfaction level | .253(**) | .210(**) | .339(**) | .218(**) |
| Economic problem | -.092(*) | -.311(**) | -.204(**) | -.207(**) |
| Salary | .057 | .192(**) | .102(*) | .147(**) |
| Husband level education | .142(*) | .058 | .067 | .095(*) |
| The amount of remittance | .016 | .088(*) | .119(**) | .141(**) |
| The fluent in sending remittance | .009 | .094(*) | .122(**) | .153(**) |

Table 5.4.17 revealed that social problem and economic problem had negative relationship with all the aspects of the family strength, and statistically significant. The height of social and economic problem had caused on descending of family strength. As increase the problems related with economics and non-physical as descend the family strength.

Based on multiple linear regressions analysis, WMW family strength was influenced positively by family Social environment, Household head Education level and the fluent of remittance. WMW family strength was

influenced negatively by Social problem and Economic problem (Table 5.4.18).

Table 5.4.18 The Multiple linear regression analysis of the research variables that influence family's strength

| Dependent variables | B | Sig |
|--------------------------------|--------|-------|
| Social problem | -0.108 | 0.000 |
| family Social environment | 0.148 | 0.000 |
| Economic problem | -0.074 | 0.000 |
| Household head Education level | 0.116 | 0.018 |
| The fluent of remittance | 0.109 | 0.004 |

5.5

Child Care Patterns

5.5.1 Nutrition Knowledge

One of factors that could affect mother's care pattern is their knowledge and belief in something that was trusted by the community around them (Engle et al 1996). Nutrition knowledge was assessed from the caregiver's knowledge on food sources and its nutrients utilizing in the body. In this research, most of caregiver's nutrition knowledge (87,4%) categorized as less on nutrition knowledge while just 12,6% had sufficient enough for nutrition knowledge (Table 5.5.1). This caused by most of caregiver had no sufficient knowledge about food sources and its nutrient function in the body.

Table 5.5.1 Distribution of caregiver's nutrition knowledge level

| Nutrition knowledge level | n | % |
|---------------------------|-----|-------|
| Less <60% | 437 | 87.4 |
| Moderate 60%-80% | 63 | 12.6 |
| Good > 80% | 0 | 0.0 |
| Total | 500 | 100.0 |

5.5.2 Eating Care Patterns

Store and Mc. Williams 1981 in Karyadi 1985 stated that food was physiological and psychological needs for both Childs and parents; therefore it is a must on creating good eating situation for child in order to meet satisfaction, physiological requirement, psychology, and social for children. As for maintaining body tissue, nutrient also needed by children both physically and mentally active and also growth. Research resulted on most eating care pattern on children (63.4%) categorized on good level (Table 5.5.2).

Table 5.5.2 Child's distributions based on the eating care pattern level

| Eating care pattern level | n | % |
|---------------------------|-----|-------|
| Less | 25 | 5.0 |
| Moderate | 158 | 31.6 |
| Good | 317 | 63.4 |
| Total | 500 | 100.0 |

Breast milk is the first and main food for the children, especially for children under 2 years old. Breast milk contained a complete nutrients needed by the children, moreover breast milk also contains antibodies for children's immunity. Lubis (2008) revealed that breast milk was proven to be beneficial in preventing occurrence of digestive infection, both acute and chronic, respiratory tract infection, as well as contained anti-virus and anti-bacteria. Colostrum, named for breast milk which comes first time from mother, a clear yellow colored, is rich in the antibodies substance. This antibodies substance functioned as children's body immunity. Giving colostrum is really suggested since avoid children from the illness.

Table 5.5.3 Distributions of sample based on giving breast milk

| Categories | Giving breast milk | | | | | |
|------------|--------------------|-------|-------------|-------|--------------------------|-------|
| | Collustrum | | Breast milk | | Exclusive of Breast milk | |
| | N | % | n | % | n | % |
| Yes | 423 | 84.6 | 463 | 92.6 | 145 | 29.0 |
| No | 75 | 15.0 | 36 | 7.2 | 351 | 70.2 |
| Forgot | 2 | 0.4 | 1 | 0.2 | 4 | 0.8 |
| Total | 500 | 100.0 | 500 | 100.0 | 500 | 100.0 |

Results of the research (Table 5.5.3) shows that almost mother (84.6 %) gave colostrum when first time suckling her children, 15 percent of the mother did not gave colostrum, and 0.4 percent did not know/forgot. Totaling 92.6 percent (463 people) mothers gave her breast milk, but only 29.0 percent (145 people) mothers gave her breast milk in an exclusive

manner (giving breast milk simultaneously until children reach 6 months, without interrupted by other food).

Formula milk is an artificial substitute for human breast milk, intended for infant consumption since mother cannot afford breast milk simultaneously caused by many factors. Results of the research (Table 5.5.4) showed that the mother who gave formula milk to her children totaling 52.0 percent and 47.4 percent did not give formula milk for her children. For working mother, formula milk is choice since its easiness. However, it should be considered on formula milk preparation with hygiene-equipment, since if not well prepared it could contribute illness since bacterial easy to spoil (Arisman 2005).

Table 5.5.4 Distributions of children suckled by formula milk

| Formula's milk giving | n | % |
|-----------------------|-----|-------|
| Yes | 260 | 52.0 |
| No | 237 | 47.4 |
| NA | 3 | 0.6 |
| Total | 500 | 100.0 |

The introducing time of formula milk by the mother was vary among children's age. As 26.4 percent received formula when children was 0-6 months old, about 15.4 percent received a formula milk when children was 7-12 months, about 9.8 percent received a formula milk when children was 13-24 months, and 0.6 percent when children over than 24 months. The rest of them were not given formula milk totaling 47,8 percent (see Table 5.5.5).

Table 5.5.5 Children Distribution based on introducing-time of formula milk.

| Age | n | % |
|-------------|-----|-------|
| 0-6 month | 132 | 26.4 |
| 7-12 month | 77 | 15.4 |
| 13-24 month | 49 | 9.8 |
| >24 month | 3 | 0.6 |
| Not Given | 239 | 47.8 |
| Total | 500 | 100.0 |

A weaning food also important for children to support child growth especially on weight gaining on their period, however but it also considered that children should be introduced by weaning food when they were 6 month-age. This carried out in order to avoid children from various negative impact possibilities for their growth and development process. Albar (2004) revealed that too early introducing on weaning food will cause children suffering from diarrhea because of contaminated food. Late introducing of weaning food will cause on un-optimal on growth, because their weight usually tend to decrease.

Table 5.5.6 Distributions on age-base of weaning food introduction

| Age | n | % |
|-----------|-----|-------|
| < 6 month | 292 | 58.4 |
| ≥ 6 month | 202 | 40.4 |
| Forgot | 6 | 1.2 |
| Total | 500 | 100.0 |

This research showed (Table 5.5.6) that most mothers (58.4%) introduced a weaning food during < 6 months of children's age, and 40.4 % mother introduced weaning food after 6 years old children age. This big percentage on too early weaning food introducing caused by mothers perception which they believe by introduce earlier a weaning food will make the children seems satisfy and not easy to cry.

Table 5.5.7 Distribution based on type of weaning food given

| Weaning food | n | % |
|----------------------------|-----|-------|
| Banana | 106 | 21.2 |
| The instant mashed formula | 348 | 69.6 |
| Red Rice | 6 | 1.2 |
| Rice mash | 7 | 1.4 |
| Marie Biscuit | 21 | 4.2 |
| Not Known | 12 | 2.4 |
| Total | 500 | 100.0 |

as 88.6 percent of caregivers made their child accustomed to consume vegetable based food, whereas 11,4 percent did not make their children accustomed to consume vegetable based food (table 5.5.8).

The animal-based food is the source of protein and fat which functionate on body growth and maintenance. Results of the research showed that 84,8 percent caregivers made their children accustomed to consume animal based-food, whereas totaling 15,2 percent did not make their children accustomed to consume animal based-food (table 5.5.8).

Regularly on eating-time schedule influenced on children's biological cycle system, as well as train their discipline on eating behavior. Started from regularly and scheduled eating-time so that will affect on regularity of children's pattern life, like sleeping time and bathing time. Results of the research showed 51.4 percent sample respondent paid attention on children eating-time schedule while 48.6 percent did not make their children accustomed to eat according to schedule (Table 5.5.9).

Table 5.5.9 Distribution of sample respondents based on eating-time schedule.

| Categories | Children's eating-time schedule | |
|-------------|---------------------------------|-------|
| | n | % |
| Regularly | 257 | 51.4 |
| Irregularly | 243 | 48.6 |
| Total | 500 | 100.0 |

Breakfast is very important for children on starting their daily activity. Although only 51.4% respondent that paid attention to their children's eating-time schedule, but especially for breakfast, this research showed that almost all respondent (93.8%) paid attention on their children's breakfast eating-time schedule. Just a few respondents (6.2%) that did not accustomed their children on breakfast. This showed that respondent realized the importance of breakfast for their children (Table 5.5.10).

Table 5.5.10 Distribution of respondent based on the breakfast habit

| Categories | Breakfast habit | |
|-------------------|------------------------|----------|
| | n | % |
| Yes | 469 | 93.8 |
| No | 31 | 6.2 |
| Total | 500 | 100.0 |

Daily eating frequency of children would influence nutrient requirement by children, where children eating 3 times daily has a possibility to fulfill the nutrient daily requirement, compared to children who only ate 2 times daily. Results of the research (Table 5.5.11) showed that most children (72.2%) ate 3 times a day and 19.8% children ate 2 times a day, and the rest of them varied.

Table 5.5.11 Distribution of sample respondent based on daily eating frequency

| Eating frequency | n | % |
|-------------------------|----------|----------|
| 1 times | 13 | 2.6 |
| 2 times | 99 | 19.8 |
| 3 times | 361 | 72.2 |
| 4 times | 25 | 5.0 |
| 5 times | 2 | 0.4 |
| Total | 500 | 100.0 |

During eating time is actually the right time for children and family to communicate. From table 5.5.12 was seen that most children (76.6%) ate together with other family members, the rest of 23.4 percent were not accustomed eating together with other family members. If the children could eat personally, then better for children to be accustomed to eat together with other family members, since it could increase interest on eating and help parents on educating their children how to eat right.

Table 5.5.12 revealed that 68.2 percent of children were given opportunity to choose their food personally, whereas the rest 31.8 percent choose their food by their parents. Hurlock (1995) proposed that childhood

was the change from baby's period to a person that was more independent, the change that happened to the children including tend to rebel, naughty, firm, need on attention and refused the order.

In other side, about 52.2 percent of the children were forced to eat by their parents, and the rest 47.8 percent were not forced. Parents should avoid forcing their children on eating since it could make the children feel not comfortable, and had a negative impact on the children's psychology.

Table 5.5.12 Distribution of respondent based on eating behavior.

| Eating behavior | Yes | | No | |
|---|-----|------|-----|------|
| | n | % | n | % |
| 1. Eating together with other family's member | 383 | 76.6 | 117 | 23.4 |
| 2. Giving the opportunity to the children for choosing the food by themselves | 341 | 68.2 | 159 | 31.8 |
| 3. Forcing the children to eat | 261 | 52.2 | 239 | 47.8 |
| 4. Anger the children when they refuse to eat | 136 | 27.2 | 364 | 72.8 |
| 5. Communicate when ate with the children | 449 | 89.8 | 51 | 10.2 |
| 6. Supporting the spirit to the children in order they want to eat | 478 | 95.6 | 22 | 4.4 |

Some mothers (27.2%) reprimanded their children when their children refused to ate, whereas 72.8 percent of mother did not reprimand their children. It had showed that more mothers understood by reprimanding their child who did not want to eat were not a good solution. It also seen on mothers' percentages who communicate during eating-time as well as giving spirit to their children to eat better, about 89.8 percent and 95.6 percent. Mother behavior during children eating time and as well as the situation and condition during that time was influential on children food consumption that in the long run would determined the children nutrition status.

In eating care pattern practice, the family support is needed. Results of the research (Table 5.5.13) showed that after mother became BMP, they left family for earning money so that the other family member (grandmother, father and older brother or sister) often played a role on eating care pattern. Grandmother (63.2%), father (11.6%), older brother (15.6%) played a role to prepare eating for children.

Table 5.5.13 Distributions of sample respondent based on responsible people preparing for children's food

| People preparing for children's food | n | % |
|---|----------|----------|
| The one that prepare the food children | | |
| Grandmother/ Mother in law | 316 | 63.2 |
| Father/husband | 58 | 11.6 |
| Older sister/brother | 78 | 15.6 |
| Family/cousin in law | 44 | 8.8 |
| Self | 4 | 0.8 |
| Total | 500 | 100 |
| The one that children given ate | | |
| Grandmother/ Mother in law | 199 | 39.8 |
| Father/husband | 49 | 9.8 |
| Older sister/brother | 148 | 29.6 |
| Grandfather | 1 | 0.2 |
| Family/cousin in law | 43 | 8.6 |
| Self | 60 | 12 |
| Total | 500 | 100 |
| The one that accompany the children to eat | | |
| Grandmother/ Mother in law | 245 | 49.0 |
| Father/husband | 55 | 11.0 |
| Older sister/brother | 118 | 23.6 |
| Grandfather | 1 | 0.2 |
| Family/cousin in law | 52 | 10.4 |
| Self | 10 | 2.0 |
| Family (eating together) | 19 | 3.8 |
| Total | 500 | 100 |

Percentage of children given ate by his grandmother of 39.8 percent, whereas 49.0 being accompanied during eating time by grandmother. However, 9.8 children given ate by their father and 11.0 percent being accompanied by their father during eating time. About 29.6 percent of children given ate by their older brother, whereas 23.6 percent being accompanied by their older brother during eating time (Table 5.5.13).

5.5.2 Health Care Patterns

Health care pattern is a factor that could influence children health status. Health care pattern is a parent's way and habit to serve children health needs. Engle et al. (1996) in Yulia (2008) revealed that one of care pattern concerning on children health and nutrition status was health care pattern. This health care pattern covered both the preventive pattern care like giving immunization and curative pattern care like the situation when the children got sick. Research resulted most of health care patterns (79.8%) was in the medium category (Table 5.5.14).

Table 5.5.14 Distribution of children sample respondent based on health care pattern

| Health care pattern | n | % |
|---------------------|-----|-------|
| Moderate | 412 | 82.4 |
| Good | 88 | 17.6 |
| Total | 500 | 100.0 |

KMS or Kartu Menuju Sehat is one of aids used on children growth monitoring by routine weighing every month. KMS ownership could become one of indicators of parents care on children's nutrition and health status. In this research, 88.4 sample respondent who had KMS, other 10.8 percent did not have KMS, and 0.8 percent didn't know about the existence of KMS (Table 5.5.15). This showed less awareness of mother to record their childreans growth.

Table 5.5.15. Distribution of sample respondent based on KMS ownership

| KMS ownership | n | % |
|---------------|-----|-------|
| Have | 442 | 88.4 |
| Don't have | 58 | 11.6 |
| Total | 500 | 100.0 |

Anthropometry measuring is one indicator on children growth monitoring. Anthropometry measurement used a physical dimension and body composition measurement and one of them considering on body weighing (Riyadi 2001). Regular or routine weighing on every month was very useful as children's growth monitoring, whether it increase or decrease on children nutritional status. Research showed that 82.2 percent sample always weighed their children routine every month, whereas 17 percent irregularly basis and 0.8 percent answered did not know when they have to weight their children (Table 5.5.16).

Table 5.5.16 Distribution of sample respondent based children weighing pattern

| Always measure the body's weight of children | n | % |
|--|-----|-------|
| Yes (routine) | 411 | 82.2 |
| No routine | 89 | 17.8 |
| Total | 500 | 100.0 |

There are several reasons why mothers did not considering their children to be weighed (Table 5.5.17), like busy with daily activities, lazy, have no cost, and no time to bring children to Posyandu (Community Health Care Centre).

Table 5.5.17 Distribution of sample respondent based on weighing reason

| The reason for not measuring the children | n | % |
|---|----|------|
| 1. The Posyandu is far | 8 | 9.0 |
| 2. Lazy | 20 | 22.5 |
| 3. Have immunized | 6 | 6.7 |
| 4. Children feel scary/fussy | 8 | 9.0 |

| The reason for not measuring the children | n | % |
|---|----|-------|
| 5. No one want to accompany | 16 | 18.0 |
| 6. Get sick Post visit the Posyandu | 3 | 3.4 |
| 7. Busy | 25 | 28.1 |
| 8. Have no cost | 2 | 2.2 |
| 9. Go to school | 1 | 1.1 |
| Total | 89 | 100.0 |

Most of caregivers weighed their children in Posyandu close to their home (Table 5.5.18). There are 97.8 % caregivers weighed their children in Posyandu near to their home, while others weighed their children in other health community centre, school, or local paramedic staff.

Table 5.5.18 Distribution of sample based on child weighing place

| Child weighing place | n | % |
|-------------------------------|-----|-------|
| Posyandu | 489 | 97.8 |
| Other health community centre | 4 | 0.8 |
| Midwife | 1 | 0.2 |
| Local government clinic | 5 | 1.0 |
| School | 1 | 0.2 |
| Total | 500 | 100.0 |

Most of mother always compared their children weight to other. There is 83.8 percent mother who always compares their children to other, since sometimes it gave information about their children's weight average compare to other. This mother behavior comparing their children weight could was a social control for parents to monitor their children (Table 5.5.19).

Table 5.5.19 Distribution of sample based on parent's behavior to compare their children body weight with other children in average age.

| Always compare the body weight children | n | % |
|---|-----|-------|
| Yes | 419 | 83.8 |
| No | 81 | 16.2 |
| Total | 500 | 100.0 |

Children weight was an indicator which influenced by children present status, for example when children suffered from illness, or less of appetite to eat. In this research, there are 68.4 children that their weight had ever descended, and 29.0 percent always increase, and 2.6 percent was not known by their weight had descended or not (Table 5.5.20). When mother realized their children's weight descended, mostly they will give their children with vitamins. The percentage of the mother who gave vitamins when their children's weight descended was 48.7 percent, another 19.8 percent of the mother gave children with addition food, 27.9 percent didn't care enough, 7.3 percent of mother gave milk, 2.8 percent of mother gave medicine, 1.4 percent of mother brought their children to community health centre, and about 11.5 percent of mother did not know what they supposed to do when their children's weight descended.

Table 5.5.20 Distribution of sample respondent based on children weight descended

| The descent of body weight children | n | % |
|---|-----|-------|
| Body weight children | | |
| Ever descended | 355 | 68.4 |
| Never descended | 132 | 29.0 |
| Not known | 13 | 2.6 |
| Total | 500 | 100.0 |
| The intervention if the body's weight decrease | | |
| 1. Let it happen | 41 | 11.5 |
| 2. Give the food | 99 | 27.9 |
| 3. Give the milk | 26 | 7.3 |
| 4. Go to community health centre | 5 | 1.4 |
| 5. Give the medicine | 10 | 2.8 |
| 6. Give the vitamin | 173 | 48.7 |
| 7. Reduce the milk's giving | 1 | 0.3 |
| Total | 355 | 100.0 |

P3K box which means a medical first aid's box is very important on family emergency situation. Research showed that only 14.8 percent of BMP family had P3K box in their home, while others (85.2%) had not P3K box. P3K box ownership was very low, in fact with the availability of P3K box in their home was hoped to give a quick handle when something emergency situation happened (Table 5.5.21). It may due to the expensive price to buy P3K box.

Table 5.5.21 Distribution of sample based on First aid's box (P3K) availability

| First aid's box availability | n | % |
|------------------------------|-----|-------|
| Have availability | 74 | 14.8 |
| Have no availability | 426 | 85.2 |
| Total | 500 | 100.0 |

Mother care on immunization to their children was very good, since 96.0 percent of mother bring their children to health care community centre to be immunized (Table 5.5.22). However, there still 4.0 percent of mother who didn't care of their children being immunized or not, it assumed by mother's low health knowledge.

Table 5.5.22 Distribution of sample based on immunization habit

| The immunization habit | n | % |
|------------------------|-----|-------|
| Always | 480 | 96.0 |
| Never | 20 | 4.0 |
| Total | 500 | 100.0 |

More than half sample (80.0%) equipped the full complete immunization for their children, but we also have to concern there are many parents who did not gave a complete immunization for their children (Table 5.5.23).

Table 5.5.23 Distribution of sample based on frequency and type of immunization

| Immunization frequency | Kind of immunization | | | | | | | | | |
|------------------------|----------------------|------|-----|------|-----|------|-----------|------|---------|------|
| | Polio | | BGC | | DPT | | Hepatitis | | Measles | |
| | n | % | n | % | n | % | n | % | n | % |
| 1 times | 7 | 1.4 | 448 | 89.6 | 10 | 2.0 | 8 | 1.6 | 421 | 84.2 |
| 2 times | 26 | 5.2 | 1 | 0.2 | 23 | 4.6 | 8 | 1.6 | 2 | 0.4 |
| 3 times | 32 | 6.4 | 15 | 3.0 | 429 | 85.8 | 434 | 86.8 | 12 | 2.4 |
| 4 times | 401 | 80.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 times | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 times | 1 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Never | 33 | 6.6 | 36 | 7.2 | 38 | 7.6 | 50 | 10.0 | 65 | 13 |

Immunization is the process of body immunity formation. Immunization is very important as children health support. Notoatmodjo (2007) proposed that children who reach 1 year necessarily got the complete BCG immunization, three times Polio immunization, three times DPT immunization, and Measles immunization. There is 84.4 percent mother who gave complete immunization. This showed that immunization became mother main concern on children health (Table 5.5.24).

Table 5.5.24 Distribution of sample based immunization

| The immunization result | n | % |
|--------------------------------|-----|-------|
| Complete with the suitable age | 422 | 84.4 |
| Unsuitable with the age | 20 | 4.0 |
| Incomplete | 38 | 7.6 |
| Never immunitated | 20 | 4.0 |
| Total | 500 | 100.0 |

Vitamin A is a fat soluble vitamin has a various benefit, among them that is for eyes, growth, and body resistance. Several years ago, national government of Indonesia proclaimed a children vitamin A program. This program became the national program that always carried out twice in a year. Research showed that about 77.4 percent of children received vitamin

A capsule, whereas 22.6 percent had not received vitamin A capsule. Percentage children from BMP family who received vitamin A capsule was high enough, this was caused by most of samples (82,2%) always go to Posyandu / Community health centre, so as the mother knew information concerning the importance of giving vitamin A capsule for their children (Table 5.5.25).

Table 5.5.25 Distribution of sample based on receiving vitamin A

| Receiving vitamin A | n | % |
|---------------------|-----|-------|
| Yes | 387 | 77.4 |
| No | 113 | 22.6 |
| Total | 500 | 100.0 |

Hygiene is various efforts to maintain or improve health (Purnawijayanti 2005). Overall over 90.0 percent hygiene practice was implemented by sample respondent, and only several hygiene practices less than 80.0 percent, there are 75.4 percent of the each family member had their own towel personally, 81.2 percent of children accustomed to cut off the nail 1 time a week, 90.8 percent of children accustomed to wash hand before eating, 99.4 percent accustomed to Use the soap every take a bath, 72.0 percent of children accustomed to Change the clothes Post play outside the home, 77.8 percent of children accustomed tooth brushing 2 times a day, and only 31.4 percent children accustomed tooth brushing before sleeping (Table 5.5.26).

Table 5.5.26 Distribution of sample based on the children hygiene practice

| Hygiene practice for children | Yes | | No | | Total | |
|--|-----|------|----|-----|-------|-------|
| | n | % | n | % | N | % |
| 1. Washing hand before eating | 454 | 90.8 | 46 | 9.2 | 500 | 100.0 |
| 2. Cover the food if it is saved | 485 | 97.0 | 15 | 3.0 | 500 | 100.0 |
| 3. Wash the eating tools with the clean water and soap | 494 | 98.8 | 6 | 1.2 | 500 | 100.0 |
| 4. Boil the drink water | 498 | 99.6 | 2 | 0.4 | 500 | 100.0 |
| 5. Wash the food materials Pre cook | 498 | 99.6 | 2 | 0.4 | 500 | 100.0 |

| Hygiene practice for children | Yes | | No | | Total | |
|---|-----|------|-----|------|-------|-------|
| | n | % | n | % | N | % |
| 6. Wash the raw vegetables before eating | 497 | 99.4 | 3 | 0.6 | 500 | 100.0 |
| 7. Cut the nail 1 times a week | 406 | 81.2 | 94 | 18.8 | 500 | 100.0 |
| 8. Use the soap every take a bath | 497 | 99.4 | 3 | 0.6 | 500 | 100.0 |
| 9. Each of family's member has their own towel | 377 | 75.4 | 123 | 24.6 | 500 | 100.0 |
| 10. Wash the hair with the shampoo | 485 | 97.0 | 15 | 3.0 | 500 | 100.0 |
| 11. Wash the hair 1 times a week minimally | 490 | 98.0 | 10 | 2.0 | 500 | 100.0 |
| 12. Brush the teeth twice a day minimally | 389 | 77.8 | 111 | 22.2 | 500 | 100.0 |
| 13. Brush the teeth using the tooth paste | 452 | 90.4 | 48 | 9.6 | 500 | 100.0 |
| 14. Brush the teeth before sleeping | 157 | 31.4 | 343 | 68.6 | 500 | 100.0 |
| 15. Change the clothes Post play outside the home | 360 | 72.0 | 140 | 28.0 | 500 | 100.0 |

Children need a special attention on health matters; therefore parents usually will do everything for their children when their children suffer from illness. Parents usually brought children to doctor or giving medicine as well as take care of children in house. Results showed that 66.2 percent parents brought their children to Puskesmas (community health centre) when children suffered from illness, 15.0 percent brought to midwife or local nurse, 12.6 percent to doctor/ clinic, 4.8 percent parents only bought general medicine which usually sell in drugstore, and 0.8 percent didn't care when children suffered from illness, and 0.2 percent they brought children to shaman. Community health centre (Puskesmas) was a common place where parents always brought their children to get some subsidized cheap medic, it showed by 66.2% parents sent their children to Puskesmas. It showed that parent's awareness to treat their children to community health centre good enough (Table 5.5.27).

Table 5.5.27 Distribution of sample based on place where parents brought when children suffered from illness

| Cure place | n | % |
|-------------------------------------|------------|--------------|
| Community health centre (Puskesmas) | 331 | 66.2 |
| Midwife | 75 | 15.0 |
| Posyandu | 63 | 12.6 |
| General medicine | 24 | 4.8 |
| Let it happen / didn't care | 7 | 1.4 |
| Total | 500 | 100.0 |

5.5.3 Relations between Variable

Parents who gave and accompanied the children during eating time had significantly ($p = 0.003$) positive relationship ($r = 0.135$) with score of psycho-social stimulation. "Care" as interpreted by Karyadi 1985 in Susanti 2003 as the whole interactions between parents and children, for example giving education on self-discipline during eating time. Hurlock 1995 revealed that one condition that optimizing on children growth and development was family condition. Therefore, care pattern which was carried personally out by parents could optimize children development.

There is a positive and statistically significant correlation between health care pattern and score of child development. This means that as good the health care pattern as increasingly good the child development score, or the children development increasingly in other words. Range et al. 1997 in Yulia 2008 revealed that there is a strong relationship on health care pattern with hygiene practice applied by the mother. Hygiene practice that supported health care pattern are including defecating habit, hand washing habit, good and nutritious food, and access towards modern health facilities. Evans, Myers and Ilfeld (2000) revealed that children development was a holistic and affected by various factors, including health factor



5.6

Child Growth

5.6.1 Child Characteristics

Based on appointed criterion in this research (child 6 - 60 months old), then was appointed the number of samples with totaling 500 children with sex distribution seen on the Table 39. Sex distribution spread on percentage of male 48.8% and female 51.2% (Table 5.6.1).

Table 5.6.1 Sex distributions of children

| Sex | n | % |
|--------|-----|-------|
| Male | 244 | 48.8 |
| Female | 256 | 51.2 |
| Total | 500 | 100.0 |

In this research, determination of children age category between 6 months to 60 months considering on this age group is a vulnerable group which has a high potential on illness which it could also influence the nutrition status. The category of the age of these under five years old was afterwards divided into five age groups, as being seen in the Table 40. Sample distribution spread totaling 44,2% was in the age 49-60 months, 29,0% was in the age 37-48 months, 18,6% was in the age 25-36 months, 6,4% was in the age 13-24 months and only 1,8% was in the age 6-12 months (Table 5.6.2).

Table 5.6.2. Child Age Distributions (months)

| Age (month) | n | % |
|-------------|-----|-------|
| 6-12 | 9 | 1.8 |
| 13-24 | 32 | 6.4 |
| 25-36 | 93 | 18.6 |
| 37-48 | 145 | 29.0 |
| 49-60 | 221 | 44.2 |
| Total | 500 | 100.0 |

Anthropometric characteristics. Anthropometric characteristics of children consist of bodyweight and height according to age (Table 96). The average age of children of the BMP family is 44.5 ± 13.033 months, with the lowest age of 6 months and the highest of 59 months. In Table 96 can be seen the bodyweight of children under five years is on average 13.9 ± 2.6 kg, with the lowest weight of 6.5 kg and the highest body weight of 22.2 kg. The average height of children under five years is 93.8 ± 12.2 cm, with the lowest height of 12 cm and the highest height of 120 cm. The characteristics of children under five years based on weight and height in age groups are presented in Table 5.6.3.

Table 5.6.3 Anthropometric Characteristics of Children under Five Years

| Age group (month) | | Weight | Height |
|----------------------|---------------|----------------|------------------|
| 6 – 12 (n = 9) | Mean \pm Sd | 10.0 ± 3.1 | 77.2 ± 13.6 |
| | Minimum | 6.6 ; 16.3 | 64.5 ; 100.8 |
| 13 – 24 (n = 32) | Mean \pm Sd | 10.2 ± 1.4 | 77.7 ± 7.1 |
| | Min; Max | 7.6 ; 13 | 61 ; 93 |
| 25 – 36 (n = 92) | Mean \pm Sd | 12.0 ± 1.7 | 84.6 ± 10.0 |
| | Min; Max | 7.6 ; 18.5 | 12 ; 108 |
| 37 – 48 (n = 146) | Mean \pm Sd | 13.4 ± 1.7 | 92.8 ± 6.1 |
| | Min; Max | 9.8 ; 20.6 | 75.6 ; 110 |
| 49 – 60 (n = 221) | Mean \pm Sd | 15.8 ± 1.9 | 101.2 ± 10.7 |
| | Min; Max | 11.5 ; 22.2 | 12 ; 120 |
| Total (n = 500) | Mean \pm Sd | 13.9 ± 2.6 | 93.8 ± 12.2 |
| | Min; Max | 6.6 ; 22.2 | 12 ; 120 |

5.6.2 Child Food Consumption

The children energy and nutrient intake is presented in Table 5.6.4. It shows that the children energy and protein intake is 1107.64 kcal and 28.30 g per capita per day. This energy and protein intake has fulfilled the energy and protein sufficiency level (Recommended Dietary Allowances, RDA). The energy and protein intake has reached > 90% RDA. The energy intake

mostly comes from rice, while the protein intake, besides come from rice, is also from grains/legumes.

The calcium, phosphor, seng, iron and vitamin A intake per capita are 322.28 mg, 403.09 mg, 2.93 mg, 8.85 mg, and 324.99 RE respectively. The phosphor and iron -intake have exceeded the RDA, but the calcium, seng and vitamin A only meet 65.15 %, 33.09%, and 77.39% of the RDA requirement respectively.

Table 5.6.4 Child daily energy and nutrient intake

| Nutrients | Intake | RDA | % RDA |
|----------------|---------|---------|--------|
| Energi (kcal) | 1107.64 | 1280.00 | 91.51 |
| Protein (g) | 28.30 | 32.13 | 93.29 |
| Kalsium (mg) | 322.28 | 498.60 | 65.15 |
| Fosfor (mg) | 403.09 | 397.55 | 102.88 |
| Iron (mg) | 8.85 | 7.56 | 117.44 |
| Seng (mg) | 2.93 | 8.97 | 33.09 |
| Vitamin A (RE) | 324.99 | 425.90 | 77.39 |

The estimated results of nutrient and energy intake in the household show that food availability in the WMW household has been meet, although, some of nutrients were not fulfill the RDA requirements.

Table 5.6.5 Percentage of children according to classification of sufficiency level of nutrient intake

| Zat Gizi | < 70% AKG | >= 70% AKG |
|-----------|-----------|------------|
| Energi | 27.0 | 73.0 |
| Protein | 35.4 | 64.6 |
| Kalsium | 71.2 | 28.8 |
| Fosfor | 38.5 | 61.5 |
| Besi | 20.6 | 79.4 |
| Vitamin A | 61.4 | 38.6 |
| Vitamin C | 99.8 | 0.2 |
| Seng | 96.0 | 4.0 |

The household food insecurity can be seen from the energy intake indicator which is below 70%. Table 5.6.5 shows that there are 27% children are in the group with food insecurity. If we consider the micronutrient aspect, we can see that there are a lot of children that still can not meet their micronutrient requirement. The energy intake had significant ($p = 0.008$) positive relationship ($r = 0.120$) with eating care pattern, caregiver nutrition knowledge ($r = 0.205$), and with family strength ($r = 0.125$)

5.6.3 Health Status

Nutrition problems are caused not only by a lack of nutrition, but also by infectious diseases. Children who consume enough food but often suffer from diarrhea or respiration infection and fever can eventually suffer from nutritional deficiency. The immunity of children who don't eat enough food will become weak. In such condition they are likely to develop infectious diseases, and this will certainly decrease their appetite, resulting in nutritional deficiency. The health status of children during the last six months is presented in Table 5.6.6, and health status of children during the last one month is presented in Table 5.6.7.

Around 76.2 percent of children had suffered illnesses during the last six months (Table 5.6.6). Type of illness that was suffered including fever, influenza, cough, diarrhea, smallpox, worms illness, toothache, eczema, asthma and lungs infection. The biggest percentage of the illness was fever (68.0%), influenza (32.0%), and cough (31.5%). The number of children who suffered on illnesses during last six months was the implications of less on environmental hygiene and sanitation of children's living-environment. Observation showed that many WMW children's living-environment less on hygiene and sanitation. It would be a good condition for breeding of micro-organisms which facilitated on children's illnesses. There were two factors, outside and inside of human body caused emergence of illnesses, including

diarrhea. The outside factor could be microorganism invasion, chemicals and physical influence. Whereas the inside factor could be a body deviation like disturbance of hormonal and metabolism balance or imbalance on the exchange process of substance in the human body (Lumenta, 1989). A pain could reduce the usefulness of nutrient in human body, further will influenced to the growth and development of children. Therefore, children who suffered on illnesses tended inactive that finally had an impact on declining their development (Satoto, 1990).

Table 5.6.6. Distribution of children health status during the last six months

| Children health status | n | % |
|--|-----|-------|
| Children had suffered illnesses during the last six months | | |
| No | 119 | 23,8 |
| Yes | 381 | 76,2 |
| Total | 500 | 100,0 |
| Type of illness that was suffered (n=381) | | |
| Fever | 259 | 68,0 |
| Influenza | 122 | 32,0 |
| Cough | 120 | 31,5 |
| Diarrhea | 40 | 10,5 |
| Smallpox | 4 | 1,0 |
| Worms illness | 1 | 0,3 |
| Toothache | 15 | 3,9 |
| Asthma | 4 | 1,0 |
| Lungs infection | 8 | 2,1 |

There are 58.8% of children suffered from illnesses during the last one month (Table 5.6.7). There are several type of illnesses had suffered respondent, covering fever. Research indicated that more than half of sample respondent influenza, cough, diarrhea, vomiting, toothache, eczema, asthma, and lungs infection. The biggest percentage of the illness was fever (58.6%), influenza (29.5%), and cough (19.9%). This was not different from

the children's condition, generally their house and environment was in low level as well as personal hygiene so that became a trigger of illnesses.

Table 5.6.7. Distribution of children health status during the last one month

| Children health status | n | % |
|---|-----|-------|
| Children had suffered illnesses during the last one month s | | |
| No | 205 | 41,2 |
| Yes | 292 | 58,8 |
| Total | 500 | 100,0 |
| Type of illness that was suffered (n=292) | | |
| Fever | 171 | 58,6 |
| Influenza | 86 | 29,5 |
| Cough | 58 | 19,9 |
| Diarrhea, | 27 | 9,2 |
| Vomiting | 2 | 0,7 |
| Toothache | 9 | 3,1 |
| Eczema | 3 | 1,0 |
| Asthma | 5 | 1,7 |
| Lungs infection | 6 | 2,1 |

Further, about 86.0% sample of children stated that they suffered from illnesses 1-2 times for the last one month, and 5.1% of children suffered from illnesses > 4 times for the last one month (Table 5.6.8).

Table 5.6.8 Distribution of children health status during the last one month

| Frequency of illnesses during the last one month (n=292) | | |
|--|-----|-------|
| 1-2 times | 251 | 86,0 |
| 3-4 times | 26 | 8,9 |
| > 4 times | 15 | 5,1 |
| Total | 292 | 100,0 |
| Severity level of illnesses (n=292) | | |
| Can do the activity as usual | 128 | 43,8 |
| Activity decrease | 115 | 39,4 |
| Must be rest for 1-3 days | 32 | 11,0 |
| Must be rest for > 4 days | 17 | 5,8 |
| Total | 292 | 100,0 |

Being seen from the level of illnesses seriousness, around 43.8% sample of respondent could carry out the activity as usual, whereas 39.4% could carry out the activity in decreased condition. and 5.8% children must be rest for > 4 days. The intensity of illnesses suffered could cause reduction on work productivity which had implications in the family income reduction.

Medical treatment method that was carried out by respondent was self bought general medicine personally, went to doctor or midwife, and took alternative medicine as medical treatment. From Table 5.6,9 can be seen that almost 92.5% sample said they went to doctor or public health centre (puskesmas) when their children suffered from illnesses, and only 0.7% respondent used drugstore, and 0.3% used traditional medicine for medical treatment. This condition showed that respondent have a good access to (puskesmas) government health service. Poor Family has insurance from government, so they got free medication.

Table 5.6.9. Distribution of children base on Medical treatment method

| Medical treatment method (n=292) | | |
|----------------------------------|-----|-------|
| Went to public health centre | 289 | 99.0 |
| Traditional medicine | 1 | 0,3 |
| Drugstore | 2 | 0,7 |
| Total | 292 | 100,0 |

There are significant ($p = 0.000$) positive relationship ($r = 1.00$) between health status with child health care pattern. It is mean that a good health care pattern will be support a good child health status.

5.6.4 Nutritional Status

The nutritional status in this report is based on the results of measuring body weight and body height. Therefore, the nutritional status is analyzed using three kinds of index, namely weight for age (W/A), height for Age (H/A), and weight for height (W/H).

5.6.4.1 Weight for Age Index (W/A)

The index of weight for age describes the present nutritional status indicating the body mass. This body mass is very sensitive to changes in the condition of children, for example diseases, decreased appetite or decrease quality of nutrition consumed. The average z-score of W/A by children age are presented in Figure 5.6.1.

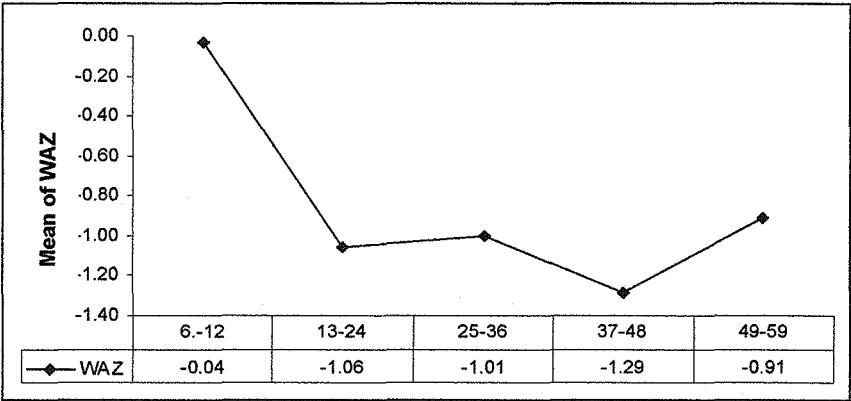


Figure 5.6.1 The average z-score of W/A by children age

Based on the results of Z score calculation index of W/A, in figure 5.6.1 can be seen that the average Z-score for children age 6-12 months, 13-14 months, 25-36 months, 37-48 months, and 49-59 months are -0.04, -1.06, -1.01, -1.29 and -0.91 respectively. The highest average Z-score for children was in the age of 6-12 months. Z score of BMP children decent after 12 months old, due to poor nutritious weaning food.

The average z-score of W/A for the children under five years in BMP families is -1.03, so its curve of z-score moves to the left compared to WHO standard. The distribution of children under five years based the z-Score can be seen in Figure 5.6.2.

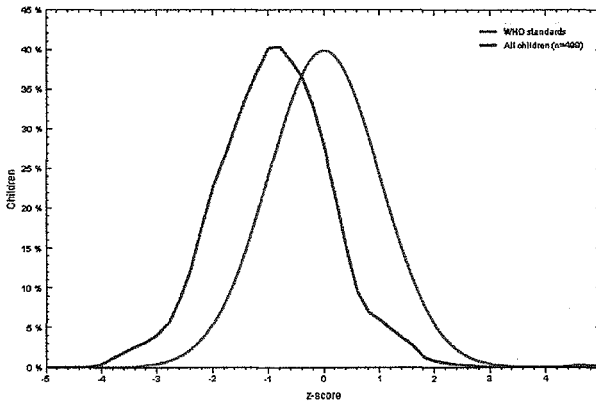


Figure 5.6.2 Distribution of Children Five Years based on z-Scores of BW/A

The children who have the index of W/A in the inadequate category (Z-score < -2) according to WHO (1995) referred to as underweight. So from the results of this study it is found that the prevalence of underweight in children under five years among the families of mothers working as a BMP is 14.2 %, and 2.2 % were in severe underweight (Z-score < -3). This figure, based on the WHO (1995), is the moderate category, i.e. between 10 to 19 %. However, the severe malnutrition percentage of 2.2% indicates that the nutritional status of children in the BMP families is of great concern. Malnutrition arises when a child is at the age of > 12 months (Table 5.6.10). This is because the provision of additional food besides milk in BMP families does not meet nutritious needs, and on the other hand the milk quality has reduced decreased.

The underweight prevalence of WMW's children is higher than that of both West Java province and Sukabumi District Children in general according to the result of The Basic Health Research (Riskesdas) 2007, that is 11.3% (Depkes 2008).

Table 5.6.10 Distribution of Children based on the Nutritional index of W/A

| Nutritional status | Age group (month) | | | | | Total |
|--------------------|-------------------|------------------|------------------|------------------|------------------|------------------|
| | 6-12 | 13-24 | 25-36 | 37-48 | 49-60 | |
| Overweight | .0 | .0 | 1.1 | .0 | .0 | 0,2 |
| Normal | 88.9 | 78.1 | 81.5 | 78.1 | 88.2 | 83.4 |
| Underweight | 11.1 | 15.6 | 15.2 | 17.8 | 11.3 | 14.2 |
| Severe | .0 | 6.3 | 2.2 | 4.1 | .5 | 2.2 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| Mean \pm Sd | -0.04 \pm 1.23 | -1.06 \pm 1.14 | -1.01 \pm 1.13 | -1.29 \pm 0.95 | -0.91 \pm 0.90 | -1.03 \pm 1.00 |

5.6.4.2 Height for Age Index (H/A)

Body height is the result of cumulative growth since birth. According to Supariasa (2002), it is an anthropometric measurement indicating the skeletal growth. In the normal condition, height grows with the increasing age. Riyadi (2001) views that the height for age index tells more of the past nutritional status. Inadequate height for age is referred to as *stunting* (Gibson 2005). The average z-scores of H/A by children age are presented in Figure 5.6.3.

Based on the results of Z score calculation index of H/A, in figure 1 can be seen that the average Z-score for children 6-12 months old, 13-14 months, 25-36 months, 37-48 months, and 49-59 months are -0.30, -1.13, -1.27, -1.59 and -1.07. The highest H/A Z score was in the age of 6-12 months.

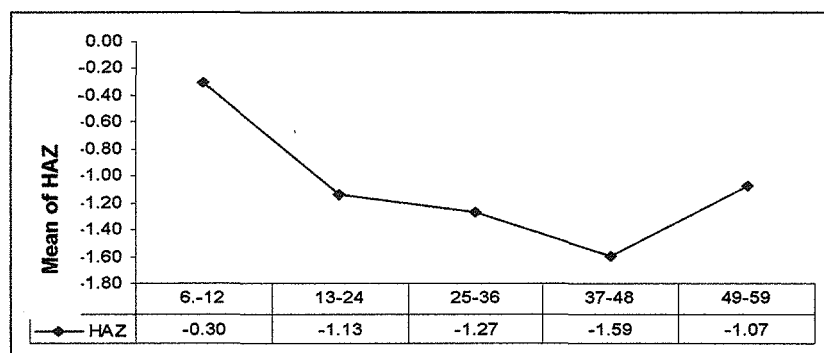


Figure 5.6.3 The average z-scores of H/A by children age

The average z-scores of H/A is -1.25, thus the curve of z-score moves to the left compared to WHO standard. This indicates that the nutritional status of the children among BMP families is poor if it is based on the index of H/A. Distribution of children below five years based on z-scores of H/A can be seen in Figure 5.6.4.

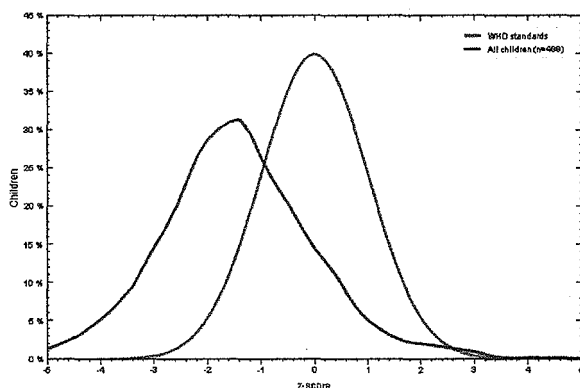


Figure 5.6.4 Distribution of Children based on z-scores of H/A

According to WHO, Z-score ≥ -2 of H/A index was categorized as a normal nutritional status, and Z-score < -2 of H/A index was categorized as a stunted (Table 5.6.11).

Table 5.6.11 Distribution of Children under Five Years based on the Nutritional Index of H/A

| Nutritional status | Age group (month) | | | | | Total |
|--------------------|-------------------|------------------|------------------|------------------|------------------|------------------|
| | 6-12 | 13-24 | 25-36 | 37-48 | 49-60 | |
| Normal | 88.9 | 59.4 | 65.2 | 61.0 | 79.2 | 70.2 |
| Stunted | 11.1 | 40.6 | 34.8 | 39.0 | 20.8 | 29.8 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| Mean \pm Sd | -0.30 \pm 1.67 | -1.13 \pm 1.73 | -1.27 \pm 1.48 | -1.59 \pm 1.33 | -1.07 \pm 1.28 | -1.25 \pm 1.33 |

Based on the index of H/A (Table 5.6.11), 70.2 % of children are in the normal category (Z-score ≥ -2), and 29.8 % in the stunted category (Z-score < -2). This prevalence of stunted WMW children is much higher than

that of West Java Province children in general based on the result of Riskesdas 2007, which is only about 15.7% (Depkes 2008). This means that the welfare condition among the WMW families in is still low.

From Table 5.6.11 it appears that the stunting children among the mothers working as BMP are 29.8 %. This figure according to WHO (1995) falls into the moderate category because it is below 40 %. Children are likely to be in the highly stunted category at the age of 13 months. According to Gibson (2005), *stunting* indicates that in the past the children of BMP mothers experienced a lack of food intake, poor quality of nutrients, high frequency of diseases, or a combination of various factors. If it happens during childhood, it can result in a decreased height in adulthood and reduced work capacity, and affect a child's birth (Gibson 2005).

5.6.4.3 Weight for Height Index (W/H)

Bodyweight has a linear relationship with height. In normal condition the growth of body weight will increase in line with height at a certain speed. The index of W/H is an indicator used to assess the present nutritional status if an accurate data of age is not available (Supariasa 2002).

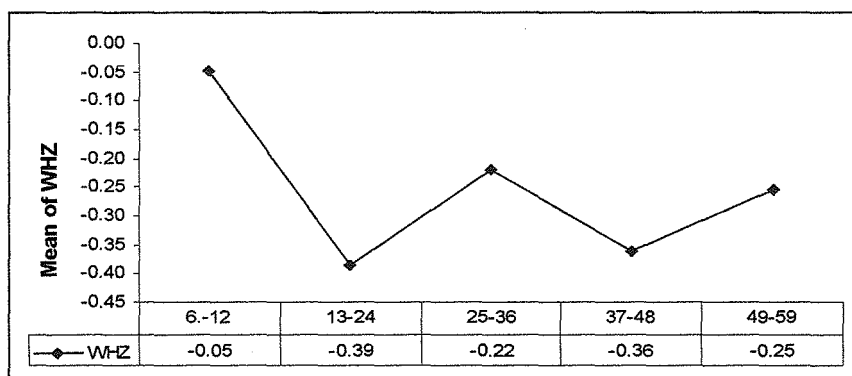


Figure 5.6.5. The average z-scores of W/H by children age

Based on the results of Z score calculation index of W/H, in figure 5.6.5 can be seen that the average Z-score for children 6-12 months old, 13-14 months, 25-36 months, 37-48 months, and 49-59 months are -0.05, -0.39, -0.22, -0.36 and -0.25. The highest W/H Z score was in the age of 6-12 months.

The average z-score of W/H is -0.28, the lowest value compared to the values of other indices. The z-score curve moves a little to the left compared to WHO standard. This indicates that the nutritional status of children based on the index of W/H is almost equal to the nutritional standard set up by WHO. The distribution of z-scores for BW/BH among children below five years can be seen in Figure 5.6.6.

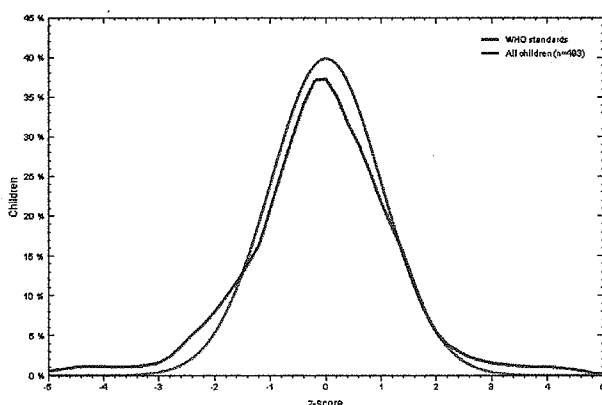


Figure 5.6.6 Distribution of Children based on the z-Scores of W/H

According to WHO category, Z-score > 2 was categorized as a overweight, Z-score $(-2)-2$ of W/H index was categorized as a normal nutritional status, and Z-score < -2 of W/H index was categorized as a wasted. Distribution of Children under Five Years based on the index of W/H is presented in Table 5.6.12.

Table 5.6.12 Distribution of Children based on the index of W/H.

| Nutritional status | Age group (month) | | | | | Total |
|--------------------|-------------------|------------------|------------------|------------------|------------------|------------------|
| | 6-12 | 13-24 | 25-36 | 37-48 | 49-60 | |
| Overweight | 0 | 3.13 | 4.35 | 2.05 | 1.36 | 2.20 |
| Normal | 100 | 87.50 | 89.13 | 92.47 | 94.57 | 92.6 |
| Wasted | 0 | 6.25 | 4.35 | 4.11 | 2.26 | 3.4 |
| Severe | 0 | 3.13 | 2.17 | 1.37 | 1.81 | 1.8 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| Mean \pm Sd | -0.05 \pm 0.96 | -0.39 \pm 1.25 | -0.22 \pm 1.20 | -0.36 \pm 1.15 | -0.25 \pm 1.01 | -0.28 \pm 1.10 |

It can be seen from Table 5.6.12 that most children (92.6 %) have the index of W/H in the normal, but 5.2 % are in the wasted, and even worse 1.8 % are in the severe (Z-score < -3). The lower weight for height is called *wasting*, whereas an excessive weight by height is referred to as *overweight* (WHO 2005). The research results showed that the prevalence of *wasting* among the children in the mothers working as BMP accounted for 5.2 %. This figure, according to WHO (1995), is the severe category because it exceeds 5%. Therefore, from the wasting prevalence of 5.2 %, it can be concluded that there is the problem of malnutrition among the children under five years in the families of mothers who work as BMP.

5.6.4.4 Determinants of Nutritional Status

A nutritional status has a significantly positive correlation with the caregiver nutrition knowledge, the family strength, child health status and the level of energy consumption (Table 5.6.13).

Table 5.6.13. Nutritional status Coefficient correlation

| Variables | r | p |
|-------------------------------|-------|-------|
| Caregiver Nutrition knowledge | 0.117 | 0.009 |
| Energy intake | 0.207 | 0.000 |
| Health status | 0.098 | 0.028 |
| Family strength | 0.723 | 0.723 |

Based on multiple regression analysis, variable that influenced nutritional status, namely the family strength, child health status and the level of energy consumption (Table 5.6.14)

Table 5.6.14. Determinant of child nutritional status

| Independent variables | B | p |
|-----------------------|------|------|
| Energy intake | .109 | .001 |
| Health status | .064 | .036 |
| Family strength | .704 | .000 |



Child Development

One of factors that influenced Child Development is the psycho-social stimulation. Psycho-social stimulation is the activity in the family by a mother or other members of the family given to children so that they can develop optimally according to certain stages.

The term development refers to a series of progressive changes as a result of maturity and experience. As stated by Van den Daele, development is cumulative changes. It does not mean that it is merely an additional growth of some centimeters in the body height of a person or an improved capacity, but it is a complex integration process of many structures and functions (Hurlock 1980).

Children development is divided into five age groups: 0-12 months, 13 – 24 months, 25 – 36 months, 36 – 48 months and 48-60 months. In the age groups of 0-12 months, 13 – 24 months, and 25 – 36 months, the sub-components of development are hard motoric skills (the movement that involves most body organs and usually requires some energy because it uses bigger muscles), soft motoric skills (the movement that involves only certain body organs and uses small muscles, and so it does not require much energy, however, it needs an accurate coordination), passive communication, active communication, intelligence, helping one's self, and social behaviors. Meanwhile in the age groups of 36 – 48 months and 48-60 months the sub-components are hard motoric skills, soft motoric skills, understanding gestures and speech, expression with verbal gestures, intelligence, helping one's self and socializing (social behaviors).

5.7.1 Psycho-social stimulation

According to Hurlock (1992), it promotes the physical and mental development of a child as it is an effort of the family directly or indirectly to influence the child's development. For the purpose of this research, two instruments of parenting environment (HOME) are used, namely one for the age of 0-3 years and the other for the age of 4-6 years. The parenting environment for children aged 0-3 years includes: 1) emotional and verbal responses, 2) acceptance of children's behaviors, 3) environment organization, 4) supply of toys, 5) mother's involvement, and 6) opportunity of various parenting. Meanwhile, the parenting environment for children aged 4-6 years consists of: 1) learning stimulation, 2) language stimulation, 3) academic stimulation, 4) physical circumstance, 5) warmth and acceptance, 6) acceptance of a child, and 7) variety of experience.

5.7.1.1 Psycho-social stimulation in the Age Group of 0 - 3 Years

The psycho-social stimulation was assessed by using HOME instrument. Based on the results of HOME score calculation, in Table 92 can be seen the psycho-social stimulation score of this age group is the lowest for the acceptance of children's behavior (12.85), followed by the toys supply (with the score of 36.27) and variety of parenting (with the score of 40.34) (Table 92). The highest score (70.74) of home component is for the emotional and verbal response.

If the psycho-social stimulation score of ≥ 80 is the cut off point as a good category and score < 80 is the cut off point as a poor category, then the average of six components of psycho-social stimulation for the age of 0 - 3 years are in a poor category because the scores vary from 12.85 to 70.74 with the average score of 46.22 (Table 5.7.1).

Table 5.7.1 Distribution of The psycho-social stimulation scores based on the Group Age of 0-3 Years

| HOME component | Mean | SD |
|---|-------|-------|
| Emotional and verbal response | 70.74 | 18.14 |
| Acceptance of children's behavior | 12.85 | 16.51 |
| Organization of children's environment | 57.68 | 16.72 |
| Toys availability to the children | 36.27 | 22.88 |
| Joining of the mother with the children | 54.12 | 19.13 |
| Variety's opportunity of parenting | 40.34 | 24.00 |
| The psycho-social stimulation score of 0 – 3 year | 46.22 | 10.85 |

Based on the low and good psycho-social stimulation category, in Table 5.7.2 can be seen most of WMW families are in a poor category for almost all psycho-social stimulation components. This condition due to low of caregiver education and most of them never got education of psycho-social stimulation for children which is being developed by government.

Table 5.7.2 Distribution of psycho-social stimulation score based on the Development Category of Children aged 0-3 years

| Home component | Poor | Good |
|---|------|------|
| Emotional and verbal response | 59.6 | 40.4 |
| Acceptance of children's behavior | 78.0 | 22.0 |
| Organization of children's environment | 88.8 | 11.2 |
| Toys availability to the children | 97.2 | 2.8 |
| Joining of the mother with the children | 86.5 | 13.5 |
| Variety's opportunity of parenting | 88.8 | 11.2 |

5.7.1.2 Psycho-social stimulation in the Age Group of 4 - 5 Years

The psycho-social stimulation score of this age group is the lowest (22.28) for the learning stimulation (Table 5.7.3). The highest score (86.65) of psycho-social stimulation component for the age of 4-5 years is for the component of acceptance and language stimulation.

Table 5.7.3 Distribution of psycho-social stimulation Scores based on the Age Group of 4-5 Years

| Psycho-social stimulation component | Mean | SD |
|---|-------|-------|
| Learning stimulation | 22.28 | 15.72 |
| Language stimulation | 82.34 | 12.91 |
| Physic environment | 76.89 | 23.00 |
| Warmth and acceptance | 71.34 | 23.89 |
| Academic stimulation | 79.13 | 26.78 |
| Modeling | 61.99 | 20.55 |
| Variety of Experience | 47.62 | 15.95 |
| Acceptance | 86.65 | 23.44 |
| Psycho-social stimulation score of 4-5 year | 60.72 | 9.76 |

If the minimum score of 80 is taken as the cut off for a good category of psycho-social stimulation, then there are two components of psycho-social stimulation in a good category namely: acceptance and language stimulation. The average psycho-social stimulation score as a whole for this age group is 60.72, which is still below the *cut off* of 80.

Based on poor and good category of psycho-social stimulation, in Table 94 can be seen that most of WMW families are in the low category for six component of psycho-social stimulation at the age of 4-5 years, except academic and language stimulation component.

The results of the research showed that in general the Psycho-social stimulation category both at the children aged 0-3 years and 4-5 years are in the low category. The low psychosocial stimulation may be due to the still low education and low family income of WMW family. According to Hardinsyah and Suhardjo 1987 referred to in Susanti 2003, the family economic level would determine the volume of funding sources that can potentially be allocated for child care. In addition, the status of working wives tended to cause them to take more time to work than be at home.

Table 5.7.4 Distribution of HOME scores based on Development Category at the Age of 4-5 Years

| HOME Components | Poor | Good |
|-----------------------|------|------|
| Learning stimulation | 64.4 | 35.6 |
| Language stimulation | 32.0 | 68.0 |
| Physical environment | 46.3 | 53.7 |
| Warmth and acceptance | 54.3 | 45.7 |
| Academic stimulation | 28.9 | 71.1 |
| Modeling | 64.3 | 35.7 |
| Variety of experience | 98.8 | 1.2 |
| Acceptance | 32.6 | 67.4 |
| Total Home | 97.8 | 2.2 |

5.7.2 Child Development in the Age Group of 0-12 months

In this age group, child development was assessed through seven components, namely: hard motoric skill, soft motoric skill, passive communication, active communication, intelligence, helping themselves and social behavior.

Table 5.7.5 Average Scores of Child Development in the Age Group of 0-12 Months

| Child development component | Mean | SD |
|-----------------------------|-------|-------|
| Hard motoric skill | 66.67 | 17.32 |
| Soft motoric skill | 77.78 | 29.17 |
| Passive communication | 80.00 | 22.36 |
| Active communication | 75.00 | 30.62 |
| Intelligence | 84.13 | 15.06 |
| Helping one's self | 70.37 | 35.14 |
| Social behavior | 77.78 | 23.33 |
| Total | 75.96 | 24.71 |

Table 5.7.5 shows the average child development component score in the age group of 0-12 months was in range 66.67 – 84.13, and on average score 75.96 ± 24.71 . The highest score (84.13) of child development is for

the component of intelligence, and the lowest score (66.67) of child development is for the component of hard motoric skill. Low score of hard motoric skill due to inadequate psycho-social stimulation on component of children's environment organization and toys availability to the children in WMW family.

If the score of 80 is taken as the *cut off* for a good category in child development, then the average score of 75.96 indicates an inadequate development of children in WMW families.

5.7.3 Child Development in the Age Group of 13 – 24 Months

The children in the age group of 13-24 months show a little better development for the component of hard and soft motoric skill with the score of 91.52 and 80.80 (Table 5.7.6). Whereas, Passive communication, helping one's self, active communication, intelligence and social behaviors are still poor category with the score of less than 70 %. The lowest score is in active communication and intelligence. Physically WMW's children were active, but they could not communicate their desire well.

Table 5.7.6 Average Score of Child Development in the age group of 13-24 months

| Child development component | Mean | SD |
|-----------------------------|-------|-------|
| Hard motoric skill | 91.52 | 16.97 |
| Soft motoric skill | 80.80 | 26.57 |
| Passive communication | 60.63 | 38.18 |
| Active communication | 54.69 | 34.19 |
| Intelligence | 59.82 | 17.94 |
| Helping one's self | 63.13 | 25.46 |
| Social behavior | 65.00 | 27.82 |
| Total | 67.94 | 26.73 |

Table 5.7.6 shows the average child development component score in the age group of 13-24 months was in range 54.69 – 91.52, and on

average score 67.94 ± 26.73 . The average score of 67.94 indicate as a poor child development category.

5.7.4 Child Development in the Age Group of 25 – 36 Months

Children in this group age had better scores of development than the previous age groups. Three development components have the score of more 80 %, namely, hard motoric skills, helping one’s self and active communication. The lowest child development is found in the component of soft motoric skill with the score of 67.59. As a whole, the achieved score of development in this age group is still below 80, i.e. 79.41 (Table 5.7.7).

Table 5.7.7 Average Scores of Child Development in the Age Group of 25-36 Months

| Child development | Mean | SD |
|-----------------------|-------|-------|
| Hard motoric skill | 84.09 | 17.83 |
| Soft motoric skill | 67.59 | 20.87 |
| Passive communication | 78.93 | 23.10 |
| Active communication | 81.72 | 21.60 |
| Intelligence | 77.81 | 17.19 |
| Helping one’s self | 87.53 | 13.80 |
| Social behavior | 78.19 | 18.67 |
| Total | 79.41 | 19.01 |

5.7.5 Child Development in the Age Group of 36 – 48 Months

Children in this age group had a little lower score of child development than the age group of 25 – 36 months. Only two components of child development score had more than 80, i.e. social behavior and helping one’s self. The lowest achievement is found in the soft motoric skills with the score of 61.58. On average the achieved score in this age group is still below 80, that is, 75.65 (Table 103). This average score indicate inadequate child development.

Table 5.7.8 Average Score of Child Development in the Age Group of 36-48 months

| Child development | Mean | SD |
|-----------------------------------|-------|-------|
| Hard motoric skill | 76.86 | 21.01 |
| Soft motoric skill | 61.58 | 25.89 |
| understanding gestures and speech | 76.69 | 26.77 |
| expression with verbal gestures | 76.14 | 23.25 |
| Intelligence | 64.29 | 24.12 |
| Helping one's self | 81.38 | 21.40 |
| Social behavior | 92.64 | 19.03 |
| Total | 75.65 | 23.07 |

5.7.6 Child Development in the Age Group of 48-60 Months

Children in this age group achieve the highest score of development compared to the other age groups. Only two components have the scores below 80, namely: soft motoric skill and helping one's self. The other components have the scores of more than 80. On average, the achieved score of children development in this age group is above 80, i.e. 85.85 ± 20.65 or in a good category of child development (Table 5.7.9).

Table 5.7.9 Average Score of Child Development in the Age Group of 48-60 months

| Child development | Mean | SD |
|-----------------------------------|-------|-------|
| Hard motoric skill | 97.29 | 12.82 |
| Soft motoric skill | 76.62 | 31.49 |
| understanding gestures and speech | 89.32 | 17.32 |
| expression with verbal gestures | 85.07 | 21.05 |
| Intelligence | 83.97 | 20.20 |
| Helping one's self | 76.24 | 25.03 |
| Social behavior | 92.46 | 16.62 |
| Total | 85.85 | 20.65 |

5.7.7 Child Development category

Child Development was divided in to two category, namely : a good category if the child development score is ≥ 80 , and vice versa a poor category if the child development score is < 80 . Base on this category, in Table 105 can be seen that the children having a good category of hard skill development are those in the age group of 48-60 months. Meanwhile, the children in the age group of 36-48 months have a low category of hard skill development.

Table 5.7.10 Distribution of children based on the child Development Category

| Age | Child development | Poor | Good |
|---------------|-----------------------|------|------|
| 0 – 12 Month | Hard motoric skill | 44.4 | 55.6 |
| | Soft motoric skill | 44.4 | 55.6 |
| | Passive communication | 33.3 | 66.7 |
| | Active communication | 44.4 | 55.6 |
| | Intelligence | 33.3 | 66.7 |
| | Helping one's self | 44.4 | 55.6 |
| | Social behavior | 44.4 | 55.6 |
| | Total | 55.6 | 44.4 |
| 13 – 24 Month | Hard motoric skill | 12.5 | 87.5 |
| | Soft motoric skill | 31.3 | 68.8 |
| | Passive communication | 50.0 | 50.0 |
| | Active communication | 71.9 | 28.1 |
| | Intelligence | 87.5 | 12.5 |
| | Helping one's self | 56.3 | 43.8 |
| | Social behavior | 53.1 | 46.9 |
| | Total | 71.9 | 28.1 |
| 25 – 36 Month | Hard motoric skill | 24.7 | 75.3 |
| | Soft motoric skill | 68.8 | 31.2 |
| | Passive communication | 22.6 | 77.4 |
| | Active communication | 23.7 | 76.3 |
| | Intelligence | 44.1 | 55.9 |
| | Helping one's self | 9.7 | 90.3 |

| Age | Child development | Poor | Good |
|------------------|-----------------------------------|------|------|
| | Social behavior | 34.4 | 65.6 |
| | Total | 45.2 | 54.8 |
| 36 – 48 Month | Hard motoric skill | 53.1 | 46.9 |
| | Soft motoric skill | 73.8 | 26.2 |
| | understanding gestures and speech | 32.4 | 67.6 |
| | expression with verbal gestures | 31.0 | 69.0 |
| | Intelligence | 74.5 | 25.5 |
| | Helping one's self | 51.7 | 48.3 |
| | Social behavior | 16.6 | 83.4 |
| | Total | 60.7 | 39.3 |
| 48-60 Month | Hard motoric skill | 5.4 | 94.6 |
| | Soft motoric skill | 43.0 | 57.0 |
| | understanding gestures and speech | 13.6 | 86.4 |
| | expression with verbal gestures | 19.5 | 80.5 |
| | Intelligence | 27.6 | 72.4 |
| | Helping one's self | 47.5 | 52.5 |
| | Social behavior | 19.0 | 81.0 |
| | Total | 23.1 | 76.9 |

Development of Soft Motoric Skills. The soft motoric skill refers to the movement that involves only certain body organs and uses small muscles, and so it does not require much energy. However, it needs an accurate coordination. It appears from Table 105 that the children with a good category of soft skill development are those in the age group of 13-24 months. On other hand, the children in the age group of 36-48 months have a low category of skill development.

Passive and Active Communication. The development of communication proceeds in line with the motoric development. Communication means an exchange of ideas and emotion in various forms such as gestures, emotional expressions, speech, and written language. The most common and effective communication is by means of speech, which mental-motoric skill (Hurlock 1999). From Table 105 it can be seen that the

children with a good level of passive communication are those in the age group of 25-36 months, whereas the age group of 13-24 months a low level of passive communication. Next, the children having a good level of active communication are those in the age group of 25-36 months, while the age group of 13-24 months has a low category of active communication.

Development of Intelligence. Among the children below five years, their thinking skill initially starts through the five senses, for example seeing colors, listening to sounds or voices, perceiving taste, etc. Then, through the words heard and taught, a child knows that everything has a name. Thinking and understanding initially is limited to what is visible and touchable or playable. Through a play and teaching by parents or other people, a child step by step recognize, understand its surrounding, and has the capacity to solve a problem. A child will have an understanding of concepts such as a concept of object, color, human being, and shape. All these concepts or thoughts then develop to a higher level, more abstract or complex, for example, understanding and using the concepts of same-different, increasing-decreasing, cause-effect, and others (Depkes 1997 referred to in Susanti 2003). Table 101 shows that the children with a good category of intelligence are those in the age group of 48-60 months; while the age group of 13-24 months has a low level of intelligence.

Development of Helping One's Self and Social Behavior. A child at early life depends on other people in satisfying its needs. Along with the improvement of motoric skill and speech, the child is motivated to do some activities alone and mix with other people besides the family members. Parents have to train the independence of a child, initially in meeting the child's daily needs. This skill is further improved along the increasing age. A child needs to make friends, so the social mixing skill also needs improvement and the child needs to be taught about rules, politeness, and others so that it will not be difficult to enter a new environment (Depkes

1997 referred to in Susanti 2003). The children with a good level of development (helping one's self and social behavior) are those in the age group of 25-36 months; whereas the age group of 13-24 months has a low category of development (Table 5.7.10).

At the age of 0-12 months, two components of development are the best, namely passive communication and intelligence (66.7); while other components such as hard skills, soft skill, active communication, helping one's self, and social behavior are still in a low category (44.4). As a whole, the development of children in the age groups of 0-12 months is still low (Table 5.7.10).

At the age of 13-24 months, the hard motoric skill has the highest level of development (87.5), and the lowest development is in intelligence (87.5). On average the children at the age of 13-24 months are still low in such development (Table 5.7.10).

At the age of 25-36 months, the component with the best development is helping one's self, i.e. 90.3, and the lowest level of development happens to the soft motoric skill with the score of 68.8. As a whole, the development of children at the age of 25-36 months is already good (Table 5.7.10).

At the age of 36-48 months, the social behavior has the best level of development with the score of 83.4, whereas the lowest category of development happens to intelligence with the score of 74.5. The overall development of children at the age of 36-48 months is still considered low (Table 5.7.10).

At the age of 48-60 months, the hard motoric skill reaches the best level of development with the score of 94.6, but helping one's self has the

lowest degree of development with the score of 47.5. The overall development of children at the age of 48-60 months is already considered to be good (Table 5.7.10).

5.7.8 Relationship between Variables

The research results show that most children who have a high category of child development have in fact a high energy intake of more than 70 % AKG. In contrast, the children with a low category of child development have a low energy intake of less than 70 % (Table 5.7.11). There is a significant positive relationship ($p = 0.000$) between the energy intake and child development ($r = 0.215$).

Table 5.7.11 Cross Tabulation of Energy Intake Category and child development Category

| Energy Intake | Categories of child Development | | Total | p |
|---------------|---------------------------------|------|-------|-------|
| | Low | High | | |
| <70 RDA | 57.0 | 43.0 | 100 | 0.000 |
| ≥ 70 RDA | 41.4 | 58.6 | 100 | |

The research results show that most children having a poor nutritional status of W/A have a low category of child development, while those having a normal nutritional status of W/A have a good category of child development (Table 5.7.12). The results show that there is a positive direct relationship ($r = 0.940$) between growth and development. The better the growth, the better would be its development. This is in line with the views of Pollitt 2000, Hautvast, *et al.* 2000, that a poor nutritional status during childhood can lead to disorders in cognitive development and slowed mental and motoric development.

Table 5.7.12 Cross Tabulation of Nutritional Status (W/A) and child development category

| Child Nutritional Status | Categories of child Development | | Total | p |
|--------------------------|---------------------------------|------|-------|-------|
| | Low | High | | |
| Normal | 100.0 | 0.0 | 100 | 0.000 |
| Underweight | 28.7 | 71.3 | 100 | |

5.7.9 Analysis of Structural Equation Model on Factors that Affect a Child's Growth and Development

Statistics program software LISREL-8w (Joreskog & Sorbom 1989) was used in this research in SEM analyzing that was applied for construct validity tests that often carried out for social science data analysis. Construct validity was connected with the idea from Campbell and Fiske in Melbi et al. (1995b) about the convergent validity and discriminate validity. This validity could be measured by carrying out the correlation between variables that theoretically has tight positive relationship (construct validity and convergent) or has not connected (discriminates validity; according to Bollen 1989). In order to conclude validity of measurement, there are two matters to be concerned: (1) has the co-variant relationship with the other measurements available in same construct; (2) connected with the other measurements in other construct in one significant theoretical model (Bollen 1989; Anastasi in Melby et al. 1995b).

Based on Figure 5.7.1, the Chi-Square value (289.00 (0.28)), GFI / Goodness of Fit Index (0.78), and RMSE / Root Mean Square Error (4) were fit with data collected according to Bollen (1989).

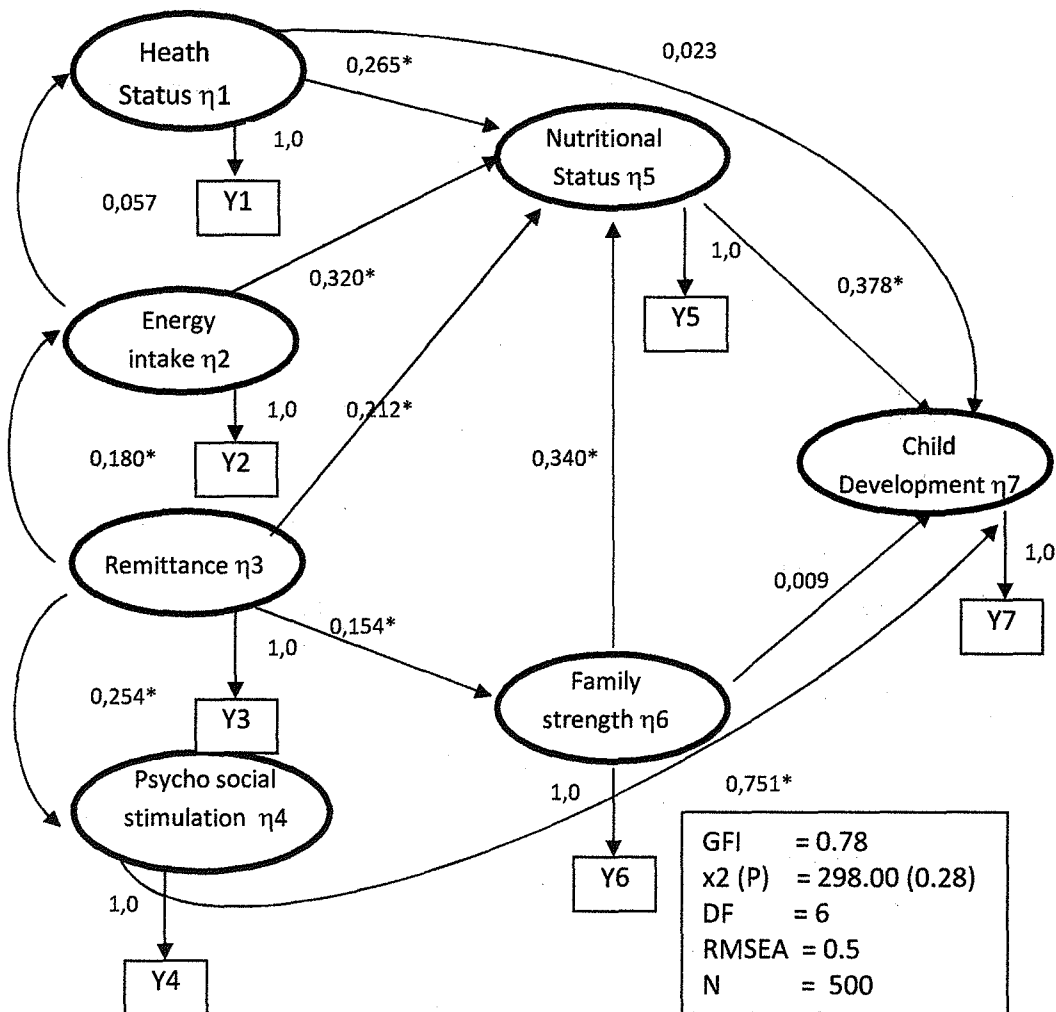


Figure 5.7. 1. Structural Equation Model on Factors that Affect a Child's Growth and Development

Based on table 5.7.13, a good nutritional status was influenced directly by height of health status, good sufficient energy consumption, height on remittance and better on family strength. Indirectly, it influenced

by remittance (through its influence on energy consumption). The family's strength was influenced directly by increasingly the height remittance.

Table 5.7.13 Decomposition Effect on the Models Analysis of Factors those were influential against Development of Children BMP Family

| NO | Variables | Total Effect | Direct Effect | Indirect Effect |
|--------------------------------|--------------------------------|--------------|---------------|-----------------|
| η5 (Nutritional Status) | | | | |
| 1 | η1 (Health Status) | 0,265* | 0,265* | 0,000 |
| 2 | η2 (Energy Intake) | 0,335* | 0,320* | 0,015 |
| 3 | η3 (Remittance) | 0,273* | 0,212* | 0,061 |
| 4 | η6 (Family strength) | 0,340* | 0,340* | 0,000 |
| η6 (Family strength) | | | | |
| 3 | η3 (Remittance) | 0,154* | 0,154* | 0,000 |
| η7 (Child Development) | | | | |
| 1 | η1 (Health Status) | 0,123 | 0,023 | 0,100 |
| 2 | η2 (Energy Intake) | 0,121 | 0,000 | 0,121 |
| 3 | η3 (Remittance) | 0,314* | 0,000 | 0,314* |
| 4 | η4 (Psycho social stimulation) | 0,751* | 0,751* | 0,000 |
| 5 | η5 (Nutritional Status) | 0,478* | 0,378* | 0,100 |
| 6 | η6 (Family strength) | 0,009 | 0,009 | 0,000 |

Further good development of children was influenced directly by house living environment and nutrition status. However, children development was indirectly influenced by children health status (through its influence on nutritional status, high on energy consumption of energy, and high on remittance. Therefore, based on SEM analysis, it could conclude that children development was influenced by remittance, health status, and energy consumption in indirectly manner. Those three variables influenced on children nutritional status which further will affect on long way children development process. In other side, a children nutritional status was a direct influential variable.



The protection programs are provided by the government for WMWs in the destination countries and their families

5.8.1 Legal Basis for the Protection and Placement of IW/WMW

1. Law No.39/ 2004 on Placement and Protection of Indonesian Workers abroad
2. Presidential Instruction of the Republic of Indonesia No. 6/2006 on Policy Reform of Placement and Protection System for Indonesian Workers
3. Regulation of Employment and Transmigration Ministry No. PER 18/MEN/VII/2007 on Implementation of Placement and Protection for Indonesian Workers abroad.
4. Regulation of Employment and Transmigration Ministry No. PER. 22/MEN/XII/2008 on Implementation of Placement and Protection for Indonesian Workers abroad.
5. Local Regulation of Sukabumi District No. 15/2002 on Arrangement of Local Services in the District of Sukabumi.
6. Local Regulation of Sukabumi District No 13/2005 on Recruitment of Overseas Indonesian Workers from the District of Sukabumi.
7. Decree of Sukabumi District No 579/2002 on Organization and Working System of the Employment and Transmigration Services in the District of Sukabumi.

5.8.2 Efforts in the Socialization of Policies/Programs in the District of Sukabumi on the Placement of Indonesian Workers

The growth of labor force in Sukabumi District is imbalanced against the employment growth. The low work opportunity has made the local government unable as yet to ban the departure of some residents to work

overseas. To deal with the problems of Indonesian workers particularly women migrant workers (WMWs), the local government of Sukabumi has made such efforts as introducing the Local Regulation of Sukabumi District No. 13/2005 on Recruitment of Overseas Indonesian Workers from the District of Sukabumi. It regulates the responsibilities of field officers and or PPTKIS (non-government Indonesian worker providers) in coordination with the Office of Employment and Transmigration Services in the recruitment of Indonesian worker candidates, and in the understanding of regulations on emigration, employment, crimes in the countries of destinations, rights and obligation of WMW candidates, types of jobs and destination locations.

The activities by the Local Government of Sukabumi District in socializing the regulation are as follows:

1. Extension to the community through radios and direct contacts carried out at districts and villages. The purpose of the extension is to ensure that the people are increasingly aware of laws, and understand rights and obligations so that they will better prepared to become Indonesian workers and face fewer problems.
2. Extension/Development of Staff in the offices of PPTKIS. This activity is intended to make the staff more responsible for the Indonesian workers who will be sent abroad and implement the transfer and overseas placement of Indonesian workers according to the existing regulations.
3. Selection of Indonesian worker candidates. Only the candidates with determined qualifications are permitted to work overseas, namely, aged between 18-35 years at departure, permission from husbands or parents, and without physical disabilities.

The three activities have produced a good result, indicated by the number of Indonesian worker candidates who reported to the Employment and Transmigration Services in Sukabumi – dramatically

increasing from 60 people in 2006 to 7,682 people in 2007. However, some problems were still found such as:

1. Some PPTKIS conducted recruitment without coordination with the Employment and Transmigration Services in Sukabumi District, and this can be seen from the number of reported cases from Indonesian workers who are not registered in the office of Employment and Transmigration Services in Sukabumi.
2. A lack of good administration in the overseas placement of Indonesian workers for example the delayed solution to the cases of Indonesian workers by PPTKIS and the government.
3. The existing government regulations in reality have not been able to protect the Indonesian workers from a number of problems, for example, poor (inhuman) treatments against the Indonesian workers when they are abroad or back home in Indonesia.
4. Divorce case in WMW's family still high are 8.8%, due to the low of commitment between husband and wife.
5. Child growth and development of WMW's child were not optimal, due to lack of psycho-social stimulation..

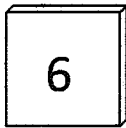
In order to increase the WMW protection, there are several aspects to be considered which covered not only recruitment process and overseas protection, but also the protection of WMW families. The seminar that was carried out on August 27th, 2009 in the District of Sukabumi resulted several agreements and programs that will be conducted and financed by the regional government, followings are:

1. Establishing Community Based Educating Groups or Kelompok Pengajaran Berbasis Masyarakat (KPB), that will help WMW preparing their skills and expertise before departing for destination country. Several skills and expertise that will be taught are:

communicating skills, language ability and understanding of destination country, understanding of working contract, skills for using electronics portable, finance management, etc.

2. Improvement of data and information to be accessible for other related department or body in charge. This program will be carried out by the Office of Employment and Transmigration (Disnakertrans) cooperate with the Office of Civil Service in Regency of Sukabumi.
3. Set up of WMW minimal standard of education in Junior High School that will be put into effect next four years through the regional government regulation of Sukabumi Regency.
4. Establishing families' economics empowerment through training on management of finance and entrepreneurship to increase the value of remittance, so as the aims of WMW to increase family economics welfare could be reached. This program will be carried out by the Office of Social, Sukabumi Regency.
5. Establishing WMW family's assistance by the Office of Social, Regency Sukabumi. This program aimed to maintain cohesiveness of the marriage and mutual understanding between the husband and wife in order to avoid misunderstandings which lead divorcing.
6. Establishing WMW family's assistance which concern on children developing and care pattern through the family assistance training (Bina Keluarga Balita) for children's caregiver as well as monthly monitoring on children growth and development by social staff of Health Centre Community (Posyandu). This program will be carried out by Office of Health Service of Sukabumi Regency.
7. Establishing of comprehensive problems assistance program which will be carried out problem-solving post WMW both for WMW personally and for their family member.

8. Strengthening of the law for PPTKIS (non-government Indonesian worker providers) by closing permit for PPTKIS which had proved on violation and deviation.



CONCLUSSION

In selecting the country of destination, WMWs are usually influenced by the majority of those around who have worked as WMWs. Saudi Arabia is favored by some WMW (95.6%) because, in addition to the high salary there is another hope of the WMWs that they can perform *Umroh* or Hajj (Islamic rituals). There are several purpose of wife to be a WMW, various things among them were to pay the debt (4.8%), wanted to build the house (34.0%), to pay the debt and build the house (37.6), and want to go on a pilgrimage to Mecca (0.2%). Some of WMW (22%) sent remittance regularly, 50.6% irregularly, and 27.4% never sent remittance. The remittance ranged between Rp 100,000 and 70,000,000 with the average remittance of Rp 6,559,850 \pm 9,032,828. The pattern of remittance uses was for consumptive purposes, investment, to pay debt, and for helping family.

Most head of household's age (52, 6%) were in age-range 41-60 years, 94,2% education of the head of household was \leq 9 year years, and 53.2 percent head of household worked as a manual laborer. The WMW's family were extended family, 46.8% of WMW's family have family size 5-7 persons.

There is significant-difference household income between pre and post wife became WMW. Average pre WMW family income was Rp 234,763.62/capita/month and post WMW Rp 313,426.25/capita/month, that meant there are a significant increase by Rp 78,662.63/capita/month which also marked by the significant-difference between pre and post ($p=0.000$). Being seen from the income contribution of the family member (wife, husband and the other member), the biggest contribution was from

the wife income which increased of 26.60 percent after wife has became WMW. There are a significant decline of poor-family percentage on pre and post WMW. Before wife became WMW, 55.6 percent of family classified as poor-family, and after wife became WMW, the poor-family decreased to 37.6 percent. Generally, percentage of assets ownership tended to increase post WMW like ownership of the motorcycle and bicycle, ownership of livestock, electronic like mobile phone, television, and radio-tape, the household equipment like washing machine, rice-cooker and the gas stove as well as ownership of furniture.

There were changes of structural and function on WMW's family such as : changes in breadwinner roles, changes in head of household's role, changes in the role of economics, changes in the role of children's caretaker, and changes in the role of decision-maker. Before wife became WMW, 83.6% husband played a role as the breadwinner, 4.2% wife as single family breadwinner, and 1.8% wife together with husband as breadwinner. After wife became WMW, the role of wife as breadwinner rose to 24.6% while wife together with husband as breadwinner rose to 61.8%.

WMW Parent's role as a head of household increase from 30.0% pre WMW to 48.4% post WMW. Old children (0.6%) also played a role as head of the household post WMW. However there was declined on husband role as head of household from 67.4% pre WMW became 49.0% post WMW.

The husband's economic contribution towards the family's economics descended from 85.0% pre WMW to 77.0% post WMW. In other side, wife's contribution towards family economics had increased from 14.4% pre WMW to 71.3% post WMW.

The role of extended family as a children's caregiver had increased, after wife became WMW, role of extended family had increased to 43.4%, and role of husband or nuclear family had descended.

Before wife became WMW, role of husband and wife in decision making for the interests of the children was very high (79.4%), and role of extended family was very small only 1%. After wife became WMW, role of nuclear family like husband and older children still quite high, but the role of extended family like the grandmother increased sharply to 37.6%. This was happened because many of WMW's children were looked after by their grandmother.

Most of WMW family (87.6%) classified on good social environment. The role of the social environment helped the WMW family since sometime WMW who actually work outside were late on money transferring to their family, so that the neighbor and relatives support were felt most helped.

There are many family financial problems, among them was debt. There are 74.4 percent of WMW family who had a debt on pre-WMW, and 37.1 % of WMW family had a debt ratio and asset \geq 50%. But, after wives became WMW, percentage of WMW family who had a debt decline to 60.4 percent, and also percentage of WMW family who had a debt and asset ratio more than 50% decline to 27.6 %.

On Average, most of families have a good physical strength pre and post WMW. High physical strength indicated by family's statement which 94.8% pre WMW and 96.0% post WMW that the family member supported each other in increasing the family income.

Family social strength on average tended high both pre WMW and post WMW. The highest social strength indicated by sample respondents statement that family had a goals to be achieved, family member co-operated on resolving problems and appreciate each other among the family member at pre WMW (99.6%; 98.0%; 97.6%) and post WMW (99.8%; 95.4%; 97.0%) respectively. However, there were a several causes that decrease family social strength post WMW, which is less on role distribution among family member, decline on co-operation among family member in

problem resolve, as well as decline on communication among family member.

Most of family psychological strength tends to decline on post WMW compared to pre WMW. Although there is increasing on good self-concept from 42.2% pre WMW and 51.4% post WMW, but there is increasing on guilty feel of mother on children care that is from 21.0% pre WMW and 52.4% post WMW.

There is an increase on family physical strength post WMW, and statistically significant ($p=0.000$). As wife became WMW, there is an increase on high family physical strength from 63.2% pre WMW to 67.2% post WMW. This increase resulted by remittance received every month from mother as WMW. Correlation analysis showed there is a positive relations ($r = 0.127$) between remittance and physical strength of family, which means as increasingly remittance received as higher the physical strength of family. However, there is declining trend on family social strength post WMW, and statistically significant ($p=0.000$). As mother became WMW, there is a declining trend on social strength from 97.4% pre WMW to 95.6% post WMW. This condition more caused by lack of communication among family member as their mother became WMW. Moreover, after wife become a WMW, there is also declining on family psychological strength, with statistically significant ($p=0.045$). As wife became WMW there is reducing on psychological strength from 70.4% pre WMW to 68.0% post WMW. Declining on social strength is more caused by increase on guilty fell of wife on children care.

Generally, there is declining on total **family strength** score from 66.81 ± 6.69 pre WMW to 64.49 ± 7.04 post WMW with statistically significant ($p=0.000$). This situation impacted to total high family strength from 55.8 % pre WMW to 38.4% post WMW. Based on multiple linear regressions analysis, WMW family strength was influenced positively by

family Social environment, Household head Education level and the fluent of remittance. In contrast, WMW family strength was influenced negatively by Social problem and Economic problem.

Most **eating care pattern** on children (63.4%) categorized on good level, 31.6% on moderate level and 5% on less level. Almost mother (84.6 %) gave colostrum when first time suckling her children, 92.6 percent mothers gave her breast milk, but only 29.0 percent mothers gave her breast milk in an exclusive manner (giving breast milk simultaneously until children reach 6 months, without interrupted by other food). Most caregivers (84.6 percent) introduced on consuming vegetables, made their children accustomed to consume fruits, legume, animal based-food, and 51.4 percent caregivers paid attention on children eating-time schedule, .

WMW children have a good eating habit. Most children (72.2%) ate 3 times a day, 76.6% of children ate together with other family members, and children were given opportunity to choose their food personally.

The other family member (grandmother, father and older brother or sister) often played a role on eating care pattern. Grandmother (63.2%), father (11.6%), older brother (15.6%) played a role to prepare eating for children.

Most of caregivers (79.8%) had the **health care pattern** in the medium category. About 82.2 percent caregivers always weighed their children routine every month. When caregivers realized their children's weight descended, mostly 48.7 percent they will give their children with vitamins. About 96.0 percent of caregivers bring their children to health care community centre to be immunized. Overall over 90.0 percent hygiene practice was implemented by caregiver, there are 75.4 percent of the each family member had their own towel personally, 81.2 percent of children accustomed to cut off the nail 1 time a week, 90.8 percent of children accustomed to wash hand before eating, 99.4 percent accustomed to Use

the soap every take a bath, 72.0 percent of children accustomed to Change the clothes Post play outside the home, 77.8 percent of children accustomed tooth brushing 2 times a day, and only 31.4 percent children accustomed tooth brushing before sleeping.

Sex distribution of children spread on percentage of male 48.8% and female 51.2%. Age distribution spread totaling 44,2% was in the age 49-60 months, 29,0% was in the age 37-48 months, 18,6% was in the age 25-36 months, 6,4% was in the age 13-24 months and only 1,8% was in the age 6-12 months.

The average children energy and protein intake is 1107.64 kcal and 28.30 g per capita per day. This energy and protein intake has fulfilled the energy and protein sufficiency level (Recommended Dietary Allowances, RDA). The energy and protein intake has reached > 90% RDA. The energy intake mostly comes from rice, while the protein intake, besides come from rice, is also from grains/legumes. The calcium, phosphor, seng, iron and vitamin A intake per capita are 322.28 mg, 403.09 mg, 2.93 mg, 8.85 mg, and 324.99 RE respectively. The phosphor and iron -intake have exceeded the RDA, but the calcium, seng and vitamin A only meet 65.15 %, 33.09%, and 77.39% of the RDA requirement respectively. The estimated results of nutrient and energy intake in the household show that food availability in the WMW household has been meet, although, some of nutrients were not fulfill the RDA requirements. There are 27% children are in the group with food insecurity. The energy intake had significant ($p = 0.008$) positive relationship ($r = 0.120$) with eating care pattern, caregiver nutrition knowledge ($r = 0.205$), and with family strength ($r = 0.125$)

Around 76.2 percent of children had suffered illnesses during the last six months. Type of illness that was suffered including fever, influenza, cough, diarrhea, smallpox, worms illness, toothache, eczema, asthma and lungs infection. The number of children who suffered on illnesses during last

six months was the implications of less on environmental hygiene and sanitation of WMW children's living-environment. Further, about 86.0% sample of children stated that they suffered from illnesses 1-2 times for the last one month, and 5.1% of children suffered from illnesses > 4 times for the last one month. There are significant ($p = 0.000$) positive relationship ($r = 1.00$) between health status with child health care pattern.

The nutritional status (child growth) in this report is based on the results of measuring body weight and body height. Therefore, the nutritional status is analyzed using three kinds of index, namely weight for age (W/A), height for Age (H/A), and weight for height (W/H). So from the results of this study it is found that the prevalence of underweight is 14.2 % (Z-score <-2), and 2.2 % were in severe underweight (Z-score <-3), 29.8 % are stunted, and 7 % are wasted. The underweight prevalence of WMW's children is higher than that of both West Java province and Sukabumi District Children in general according to the result of The Basic Health Research (Riskesdas) 2007 that is 11.3% (Depkes 2008). The prevalence of stunted WMW children (7%) is much higher than that of West Java Province children in general based on the result of Riskesdas 2007, which is only about 15.7% (Depkes 2008). This means that the welfare condition among the WMW families in is still low. Based on multiple regression analysis, determinants of nutritional status are the family strength, child health status and the level of energy consumption

Most of WMW families are in a poor category for almost all psycho-social stimulation components. They are poor in the learning stimulation, Physic environment, Warmth and acceptance, Modeling, and Variety of Experience.

The average child development in the age group of 0-12 months was a good category. The highest score (84.13) of child development is for the

component of intelligence, and the lowest score (66.67) of child development is for the component of hard motoric skill.

The children in the age group of 13-24 months show a little better development for the component of hard and soft motoric skill. Whereas, Passive communication, helping one's self, active communication, intelligence and social behaviors are still poor category. The average child development in the age group of 13-24 months was a poor category.

Children in the age group of 25-36 months had better scores of development than the previous age groups. Three development components have the high score, namely, hard motoric skills, helping one's self and active communication. The lowest child development is found in the component of soft motoric skill. The average child development in the age group of 25-36 months was a good category.

Children in the age group of 37-48 months were inadequate child development. Only two components of child development have the high score, i.e. social behavior and helping one's self, while others have the low score.

Children in the age group of 49-60 months achieve the highest score of development compared to the other age groups. Only two components have the low scores, namely: soft motoric skill and helping one's self. The other components have the high scores. On average, child development in the age group of 49-60 months was a good category.

Based on Pearson analysis, there is a significant positive relationship ($p = 0.000$) between the energy intake and child development ($r = 0.215$). Also, there is a positive direct relationship ($r = 0.940$) between nutritional status and child development.

Based on **Structural Equation Model (SEM) analysis**, the Chi-Square value (289.00 (0.28)), GFI / Goodness of Fit Index (0.78), and RMSE / Root

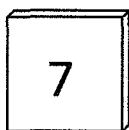
Mean Square Error (4) were fit with data collected according to Bollen (1989). Based on **SEM analysis** a good nutritional status was influenced directly by height of health status, good sufficient energy consumption, height on remittance and better on family strength. Indirectly, it influenced by remittance (through its influence on energy consumption). The family's strength was influenced directly by increasingly the height remittance. Further good development of children was influenced directly by house living environment and nutrition status. However, children development was indirectly influenced by children health status (through its influence on nutritional status, high on energy consumption of energy, and high on remittance. Therefore, based on SEM analysis, it could conclude that children development was influenced by remittance, health status, and energy consumption in indirectly manner. Those three variables influenced on children nutritional status which further will affect on long way children development process. In other side, a children nutritional status was a direct influential variable.

In order to increase the WMW family protection, there are several agreements and programs that will be conducted and financed by the regional government which resulted from the seminar on August 27th, 2009, followings are:

9. Establishing Community Based Educating Groups or Kelompok Pengajaran Berbasis Masyarakat (KPBK), that will help WMW preparing their skills and expertise before departing for destination country. Several skills and expertise that will be taught are: communicating skills, language ability and understanding of destination country, understanding of working contract, skills for using electronics portable, finance management, etc.
10. Improvement of data and information to be accessible for other related department or body in charge. This program will be carried

out by the Office of Employment and Transmigration (Disnakertrans) cooperate with the Office of Civil Service in Regency of Sukabumi.

11. Set up of WMW minimal standard of education in Junior High School that will be put into effect next four years through the regional government regulation of Sukabumi Regency.
12. Establishing families' economics empowerment through training on management of finance and entrepreneurship to increase the value of remittance, so as the aims of WMW to increase family economics welfare could be reached. This program will be carried out by the Office of Social, Sukabumi Regency.
13. Establishing WMW family's assistance by the Office of Social, Regency Sukabumi. This program aimed to maintain cohesiveness of the marriage and mutual understanding between the husband and wife in order to avoid misunderstandings which lead divorcing.
14. Establishing WMW family's assistance which concern on children developing and care pattern through the family assistance training (Bina Keluarga Balita) for children's caregiver as well as monthly monitoring on children growth and development by social staff of Health Centre Community (Posyandu). This program will be carried out by Office of Health Service of Sukabumi Regency.
15. Establishing of comprehensive problems assistance program which will be carried out problem-solving post WMW both for WMW personally and for their family member.
16. Strengthening of the law for PPTKIS (non-government Indonesian worker providers) by closing permit for PPTKIS which had proved on violation and deviation.



BIBLIOGRAPHY

- ACC/SCN. 1997. Stunting and Young Child Development. ACC/SCN's Commission on the Nutrition Challenges of the 21st Century. Desember.
- & IFPRI. 2000. Nutrition Throughout The Life Cycle. 4th Report on The World Nutrition Situation. January.
- Adam MM. 1999. Marital Status and Happiness [Thesis]. Departement of Sociology Faculty of the Virginia Polytechnic Institute and State University.
- Agresti A. 1986. Statistical Methods for the Social Sciences. 2nd Edition. San Francisco: Dellen Publishing Company.
- Akdon. 1994. Parent's Social Economy Status and Child's Education. FIP, IKIP Bandung.
- Allen, L & S. Gillespie. 2001. What Works ? A Review of the Efficacy and Effectiveness of Nutrition Interventions. ACC/SCN Nutrition Policy Paper No : 19.
- Anderson, J.W., B.A. Johnstone, D.T. Remley. 1999. Breastfeeding and cognitive development : a meta analysis. American Journal Clinical Nutrition. Vol. 70 : 525-35.
- Ang. TH. 2003. Marital Crisis Moments. *online, com*.
- Arcia, G. 1999. A Cost-Effective Methods for Targetting Social Safety Nets Benefits. CAER II Discussion Papers No. 24. July 1999. Error! Hyperlink reference not valid.. [29 April 2003].
- Arikunto S. 1998. Research Procedure A Practical Closure. Jakarta: Rineka Cipta.
- Arisman MB. 2007. Nutrition in Life Cycle. Jakarta; EGC Medical Book Publisher
- Asian Development Bank. 2001. Malnutrition in Asia and The Pacific. ADB Nutrition and Development Series No: 4. IFPRI. Manila- Philippines.

- (BPS) Statistic Centre Body. 2003. Infant's Antropometri Analisis, National Social Economy Survey 2000. Jakarta.
- Baharsyah, J.S. 1998. Social Safety Net – Global Perspektive. In Proceeding Society enforcement and Social Security Net : Groups Target Labor and Citizenship Research Centre –LIPI and UNICEF. Jakarta.
- Batchelor, J. 1999. Failure to Thrive in Young Children. Research and Practice Evaluated. The Children's Society. London. <http://www.wellclosesquare.co.uk/trainingclinical/pgrowth2.htm>. [29 April 2003].
- Bower, C. 1999. Developmental Delays. http://www.memberstripod.com/Caroline_Bower/devel2.htm. [29 April 2003].
- Borgatta, Edgar F, Marie LB. 1992. Encyclopedia of Sociology, Volume 4. New York: MacMillan Publishing Company.
- [BPS] Statistic Centre Body. 2002. Bogor Regency in Year Lifting 2001. Bogor District Government, Department of local Planning, Bogor District in cooperation with BPS Bogor , Bogor.
- [BPS] Statistic Centre Body. 2002. Bogor City in Year Lifting 2001. Bogor District Government, Department of local Planning, Bogor District in cooperation with BPS Bogor , Bogor.
- [BPS] Statistic Centre Body. 1994. Community welfare Indicator 1993. Jakarta, BPS.
- Bryant WK. 1990. The Economic Organization of The Household. Cambridge University Press New York Pors Chester Melbourne Sydney.
- Campbell, D.T, & J.C. Stanley. 1979. Experimental and Quasi Experimental
- Claeson, M & R.J. Waldman. 2000. The Evolution of Child Health Programmes in Developing Countries : from Targeting Diseases to Targeting People. Bulletin of WHO. Vol. 78 no. 10.
- Cohen, R.J., K.H. Brown, J. Canahuati, L.L. Rivera, & K.G. Dewey. 1994. Effects of age of introduction of complementary foods on infant breast milk intake, total energy intake, and growth : a randomised intervention study in Honduras. The Lancet. Vol 344 : 288-293. July, 30.

- Collett, D. 1991. *Modelling Binary Data*. Department of Applied Statistics, University of Reading, UK. Chapman & Hall, London.
- Conger, D.R., G.H. Elder, Jr, F.O. Lorenz, R.L. Simon, & L.B. Whitbeck. 1994. *Families in Troubled Times. Adapting to Change in Rural America*. Aldine De Gruyter. New York.
- Consuela GS *et al.* 1993. *A guide to Research Methods* (Alimuddin T, Translator: Alam Syah, Guide: University of Indonesia, Jakarta).
- Crescent. 2001. *Impact of JPS Basic Health Care on The Health Status of Poor Communities (Dampak Pelayanan JPS-BK terhadap Status Kesehatan Keluarga Miskin)*. Center for Regional Resource Development and Community Empowerment. Bogor.
- David G. 1959. *A Parents Guide to the Emotional Needs of Children*. New York: Hawthorn Books, Inc, Publisher
- Deacon RE, Firebough FM. 1981. *Family Resource Management Principles and Applications*. Boston: Atlantic Avenue 470.
- Delbert CM. 1991. *Handbook of Research Design and Social Measurement Fifth Edition*. SAGE Publications, New Delhi: Newbury Park London,.
- Department of Health. 1995. *Thirteen Basic Guide on Balance Nutrition (PUGS)*. Society Health Maintenance General Directory Health Departement RI. Jakarta.
- Department of Health. 1997. *Implementation Guide on the Effort Neonatal Increase*. Health Departement RI. Jakarta.
- Design for Research. Hought Mifflin Company. Boston, USA. <http://www2.chasss.ncsu.edu/basic/design.htm>. [29 April 2003].
- _____. 1999. *Implementation Guide on Programmed Social Safety Net in Health Side (JPS-BK)*. Jakarta.
- Desmarita, Ika. 2004. *Family Strength Studies: A Perspective the Changes on Family Life on Aceh's Chaos Victims in Brebes Regency, Central Java Province*. A Mini Thesis of Community Nutrition and Family Resource Departement, Agriculture Faculty, Bogor Agricultural University.

- Dewey, K.G. 2001. The challenges of promoting optimal infant growth. American Society for Nutritional Sciences. Journal of Nutrition. 131 : 1879-1880. USA.
- Dhopeshwarkar, G A. 2000. Nutrition and Brain Development. Plenum Press. New York and London.
- Elder Jr. 1991. Economic Pressure and Marital Quality: An Illustration of the Method Variance Problem in the Causal Modeling of Family Processes. Journal of Marriage and the Family 53 (May 1991): 375-388. Departemen of Sociology. University of North Carolina Chapel Hill.
- Engle PL, P. Menon & L. Haddad. 1996. care and nutrition; Concept and measurement. Washington DC: International Food Policy Research Institute (IFPRI).
- Engle, P. 1999. The Role of Caring Practices and Resources for Care in Child Survival, Growth and Development : South and Southeast Asia. Asian Development Review, Vol 17 : 132-167
- Engle, P.L. 1995. Child Caregiving and Infant and Preschool Nutrition. Proceedings of Child Growth and Nutrition in Developing Countries : Priorities for Action. Editor Pinstrup-Andersen P, D. Pelletier, H. Aderman. Cornell University Press. Ithaca. USA.
- ESCAP HRD. 1999. Module Two Child Development. http://www.escap-hrd.org/train/mod2_background.pdf/. [2 Mei 2003].
- Eshelman, Jr. 1985. The Family : An Introduction (4th ed.), Boston.
- Evans, J.L., R.G. Myers, & E.M. Ilfeld. 2000. Early Childhood Counts. A Programming Guide on Early Childhood Care for Development. The World Bank. USA.
- Fawzi, W.W, M.R. Forman, A. Levy, B.I. Graubard, L. Naggan & H.W. Berendes. 1997. Maternal Anthropometry and Infant Feeding Practices in Israel in relation to growth in infancy : the North African Infant Feeding Study. American Journal of Clinical Nutrition Vol 65 : 1731-1737
- Galloway, R. 1994. Prepregnancy Nutritional Status and Its Impact on Birthweight SCN News No.11 ACC/SCN.

- Gibson RS. 2005. Principles of Nutritional Assessment. New York: Oxford University Press.
- Gibson, R. 1993. Nutritional Assessment : A Laboratory Manual. University of Guelph. Oxford University, New York. USA.
- Gillespie, S. 1997. An Overview. Nutrition and Poverty. Papers from the ACC/SCN 24 th Session Symposium. Kathmandu. March.
- Goldsmith EB. 1996. Resource Management for Individuals and Families. West publishing Co.
- Government of Republic Indonesia in Cooperation with WHO. 2000. National Action Plan on Food and Nutrition 2001-2005.
- Grantham-Mc Gregor, S.M, L.C. Fernald, K. Sethuraman. 1999. Infections and Micronutrient Deficiencies : Iodine, Iron and Zinc. Food and Nutrition Bulletin. Vol. 20, No. 1. March.
- Guhardja, dkk. 1992. Family Resource Management. Community Nutrition and Family Resource Departement, Agriculture Faculty, Bogor Agricultural University.
- Gunarsa SD, Gunarsa YSD. 1995. Practical Psychology : Child, Teenage and Family. Jakarta: PT. BPK Gunung Mulia.
- Gundik G. 1993. Farmer's Income and Welfare and it's determinant In Opsus Simpei Karuhei Area Kapuas Province of Centre Kalimantan [Thesis]. Bogor: Bogor Agricultural University, Post Degree Programmed.
- Hack, M, N K Klein & H G Taylor. 1999. Issue of Low Birthweight. Publication of The David and Lucille Packard Foundation. USA.
- Hamilton IM, Thompson AI. 1987. Family Assessment Inventories for Research and Practice. The University of Wisconsin-Madison.
- Hardinsyah. 2001. Complementary Feeding and Caring Practise in Indonesia. National Seminar and Workshop Optimizing Early Child Nutrition. 26-27 September. Jakarta.
- Hautvast, J.L.A, J.J.M Tolboom, E.M. Kafwembe, R.M. Musonda, & V. Mwanakasale. 2000. Severe Linear Growth Retardation in Rural Zambian Children : the influence of biological variables. American Journal Clinical Nutrition. Vol. 71 : 550-559.

- Hayslip, B. Jr. & P.E. Panek. 1989. *Adult Development and Aging*. Harper and Row Publishers Inc. New York.
- Helen Keller International. 2002. Special series on breastfeeding and complementary feeding practises. *Indonesia Crisis Bulletin* Yr 4, Iss 14
- Hennekens, C.H., & Buring, J.E. 1987. *Epidemiology in Medicine*. Little, Brown and Company. Boston/Toronto.
- Hicks, N. & Q. Wodon. 2000. *Economic Shocks, Safety Nets, and Fiscal Constraints : Sosial Protection for The Poor in Latin America*. Error! Hyperlink reference not valid.. [25 April 2003].
- Hidayat AC. 1992, *Analisis on Income and Fisherman household Welfare in Trammel Net di Perkampungan Muara Angke, Pluit Regency , Penyaringan Subdistrict*. Sosek Perikanan Major. Bogor: IPB, FP.
- Howariyah N. 1999. *Analysis on Welfare level and Fisherman Income Distribution [Thesis]*. Bogor: IPB, SOSEK-FPIL.
- Howell, F. 2001. *Social Assistance : Theoretical Background*. Social Protection in Asia and the Pacific Asian Development Bank. <http://www.adb.org/documents/books/social-protection/default.asp>
- Hurlock, E. B. 1994. *Child's Development Psycology*. Gramedia. Jakarta.
- Hurlock, EB. 1980. *Development Psychology*. Jakarta: erlangga Publisher
- Hurlock, EB. 1995. *Development Psychology*. Jakarta: erlangga Publisher
- Ihromi TO. 1999. *Family Sociology Collection*. Jakarta: Obor Indonesia Foundation.
- Isaac S., & W.B. Michael. 1990. *Handbook in Research and Evaluation*. Edits Publishers. San Diego, California.
- Jacinta FR. 2002. *Influence on Previous Family to Marriage*. Jakarta: Team - psikologi-com.
- Jahari, A.B. 2000. *Growth Scoring. Nutritional Research and Development Centre*. College Literature on Nutritional Epidemiology. Not for Public. Bogor.

- *et al.* 2000. Positive Deviation KEP Problems in North Jakarta DKI Jakarta, Villages BOGOR Regency West Java and East Lombok NTB. Indonesia science and Knowledge Institute and UNICEF- Indonesia, Jakarta.
- , C. Saco-Pollit, M A Husaini & E. Pollit. 2000. Effects of an energy and micronutrient supplement on motor development and motor activity in undernourished children in Indonesia. *Eur. J. Clin. Nutr.* 54(Supl), S74-S79.
- & I. Sumarno. 2002. Society Nutritional Status in Indonesia. *Pangan Magazine*. No. 38/XI/Jan Hal. 20 – 29.
- , Sandjaja, H. Sudiman, Soekirman, I. Jus'at, F. Jalal, D. Latief, & Atmarita. 2000. Infant's Nutritional Status in Indonesia Before and At Crisis (Anthropometry Analysis Data Susenas 1989 to 1999). National Widya Karya Food and Nutrition (WKNPG) VII. LIPI. Jakarta.
- Jalal, F, R. Tilden, N. Sardjunani, Mashari. 2003. Overview of Social safety Protection Efforts in Health, Education and Family Planning in Indonesia 1998-2003. (Draft). Bappenas. Jakarta.
- James, W.P.T. 2002. Will feeding mothers prevent the Asian metabolic syndrome epidemic ? *Asia Pacific Journal Clinical Nutrition* 11 (Supl): S516-S523
- Jellife, D. B. & E.F.P. Jellife. 1989. *Community Nutrition Assessment*. Oxford University Press. USA.
- Junaedi D. 2001. *Marital Guidance on Maintaining Blessfull Family Based on Qoran and As-Sunnah*. Jakarta: Akademika Pressindo.
- Kendig H. 1986. *Ageing and Families: A Social Network Perspective*. Australia: Allen & Unwi.
- Kidder, L.H. 1981. *Research Methods in Social Relations*. Holt, Rinehart, and Winston. USA.
- King FS, Burgess,A. 1995. *Nutrition for Developing Countries*. New York: Oxford University Press.
- Kiyosaki R. & Lechter SL. 2003. *Rich Dad, Poor Dad*. Jakarta : PT.Gramedia.
- Kleinbaum, D.G. 1994. *Logistic Regression*. Springer, New York.

- Kolb-Hindarmanto, I. 1998. Social Safety Net – Global Perspektive. In Proceeding Society enforcement and Social Security Net : Groups Target Labor and Citizenship Research Centre –LIPI and UNICEF. Jakarta.
- _____ & Y. Raharjo. 1999. Groups Targets in Running Social Security Net. In Preceding Society enforcement and Social Security Net: Groups Target Labor and Citizenship Research Centre –LIPI and UNICEF. Jakarta.
- Komite Penanggulangan Kemiskinan. 2002. Manual Book. Poverty Handling Committee. Jakarta.
- _____. 2003. Document Poverty Handling Interim Strategy. A Framework Process on Compiling Long Term Poverty Handling. Poverty Handling Committee. Jakarta.
- Kompas. 2004. Ban Vulnerable Position on Women Migrant. Jakarta
- Konig, S. 1995. The Cost of Malnutrition. Technical Support Group F. Hoffman-La Roche Ltd. 4/0895 : 2 edition. No. 50623. Switzerland.
- Krebs, N.F. 2000. Dietary zinc and iron sources, physical growth and cognitive development of breastfed infants. American Society for Nutritional Sciences. Vol. 130 : 358S-360S.
- Kusnanto, H. 1999. Social Safety Net In Health Side as Rescue Intervention in Crisis Period. Health Service Management Journal. Vol. 02 No. 01.
- Kususmawati Y & Mutalazimah. 2004. Relation on Mother's Education and Nutritional Knowledge with Infant's Body weight Born in RSUD dr. Moewardi Surakarta. Infokes 8:1.
- Lechtig, A. 1985. Nutritional Needs and Assessment of Normal Growth. Gracey, M & F. Falkner (Eds). Nestle Nutrition. Raven Press. New York.
- Lernershow, S., D. Hosmer, J. Klar, & S. Lwanga. 1990. Adequacy of Sample Size in Health Studies. John Wiley & Sons, Chichester.
- Madanijah, S. 2003. Education Model "Gi-Psi-Sehat" For Mother and its Impact to Mother's Behavior, Learning Environment, Food Consumption, and Child's Early Nutritional Status. Dissertation. Post Degree Programmed. IPB. Bogor.

- Markman H. 1997. Tips of Marriage Couple on Financial Management. Intisari online. Com
- Markum, A.H., S. Ismael, H. Alatas, A. Akib, A. Firmansyah, & S. Sastroasmoro. 1991. Literature on Child's Health Science. Book I. Child Health Science Department Medical Science Faculty University of Indonesia. Jakarta.
- Marquis, G.S, J.Habicht, C F. Lanata, R.E. Black, K.M. Rasmussen. 1997. Breast milk or animal-product foods improve linear growth of Peruvian toddlers consuming marginal diets. American Journal of Clinical Nutrition Vol: 66 1102-9.
- Martianto DH. 2002. Parenting With Wisdom and its Effect to Child's Maturity Psicosocial. Working Paper, Not For Public, GMK. Bogor: Bogor Agriculture Institute, Post Degree Programme.
- Martorell, R. 1995. Promoting Healthy Growth : Rationale and Benefits. Proceedings of Child Growth and Nutrition in Developing Countries : Priorities for Action. Editor Pinstrup-Andersen P, D. Pelletier, H. Aderman. Cornel University Press. Ithaca. USA.
- Maryati S. 1994. Family Health and Environment. Yogyakarta: Kanisius Publisher.
- Megawangi R. 1999. Letting Different, New Prespective About Gender Relation. Jakarta: Mizan Publisher.
- Meredith Corporation. 2002. Stages of Child Development. Ladies Home Journal's Child Development from Birth to 4 years. <http://www.lhj.com/home/stages-of-child-development.html>.. [29 April 2003].
- Meyer HJ. 1989. Marital and Mother Child Relationships: Developmental History, Parent Personality, and Child Difficultness, penerbit Ran.
- Monks F.J, A.M.P. Knoers & S.R. Haditono. 1987. Development Psycology. Gajah Mada University Press. Yogyakarta.
- Muchtar, Dadang. 2004. Problems of Indonesia's Women Migrant Labour in Saudi Arabia. The Development on Counseling and Medical Service and its Refference To WMW to Indonesian Republic Representatives in Three Countries (Malaysia, Sausi Arabia, and Hongkong). Bogor 16-17 Juni 2004.

- Muhilal, F. Jalal, Hardinsyah. 1998. National Widyakarya Food and Nutrition VI. Indonesia science and Knowledge Institute. Jakarta
- Mulyanto S, Evers HD, ed. 1985. Poverty and Basic Needs. Jakarta: CV.Rajawali.
- Myers, R. 1992. The Twelve Who Survive. Strengthening Programmes of Early Childhood Development in the Third World. Routidge in Co-operation with UNESCO for the Consultative Group on Early Childhood Care and Development. London.
- Novita S. 2000. Analysis on Income Rate and Welfare Level in Fisherman Family [Thesis]. Bogor: IPB, Sosek.
- NRDC. 2000. Impact of Supplemental Feeding and Blended Food on The Health and Nutritional Status of Infants and Children. Nutrition Research and Development Center. Bogor.
- Oktavia L, Basri AG. 2002. Relation between Real Acceptable Social Support With non/the existence with Depress Disturbance Post Birth on Young Women. Social Psicology Journal, Vol.8, No. 01. Juli 2002. Jakarta: University of Indonesia, Psycology Faculty.
- Olson DH. 2002. Seven Types of Marriage. Online. Com
- Ortiz, I 2001. Introduction Social Protection in Asia and the Pacific Asian Development Bank. <http://www.adb.org.documents/books/social-protection/default.asp>
- Papalia, D.E, S.W. Olds. 1986. Human Development Mc Graw-Hill Book Company. New York. USA
- Percikan Iman. 2002. To Arrange Family Conflict. Magazine , No.10.Thn.III October 2002 M Rajab l423 H.
- Picciano. M.F. 1996. Present Knowledge in Nutrition. Eds : E.E. Ziegler & L.J. Filer Jr. ILSI Press. Washington DC.
- Pinstrup-Andersen, P., D. Pelletier, & H. Alderman. 1995. Child Growth and Nutrition in Developing Countries. Cornell University Press. USA
- Pipes, P.L. 1981. Nutrition in Infancy and Childhood. Mosby Company. Missouri. USA.

_____. 1996. Nutrition During Infancy. Dalam Nutrition Throughout The Life Cycle. Editor Worthington-Roberts, B.S dan S.R. Williams. Mosby-Year Book, Inc. USA.

Pojda, J & L. Kelley. 2000. Low Birthweight. ACC/SCN Nutrition Policy Paper #18

Pollit, E & S Oh. 1994. Early supplementary feeding, child development and health policy. Food Nutr. Bull 15(3) : 208-214.

----- . 2000. A development view of the undernourished child : background and purpose of the study in Pangalengan, Indonesia. European Journal of Clinical Nutrition. Vol. 54 , Suppl 2, S2-S10, May.

PSW-UIN. 2003. Explanatory Endeavor Material. Jakarta : UIN Syarif Hidayatullah.

Purnawijayanti HA. 2001. Hygiene Sanitation and Working Safety in Food Processing. Yogyakarta: Kanisius.

Raharjo, Y. 1998. Social Safety Net – National Perspective. In Prosiding Social Safety Net – the Development, Concept and its Application. Labor and Citizenship Research Centre –LIPI and UNICEF. Jakarta.

Rezeki, A S. 2006. Gender Role in Poor Family Life the Receiver on Direct Fuel Subsidize in Bogor City and Residence. A Mini Thesis for society nutrition and Family Resource Department, Agriculture Faculty, Bogor Agriculture Institute.

Richard S. 1997. Tips of Marriage Couple on Financial Management. Intisari on line. Com.

Rifai MSS. 1990. Family Information. Jur. PKK. Bandung: IKIP, FPTK.

Rifai MSS. 1999. Main Basic on Family Welfare Education. Jur. PKK. Bandung: IKIP, FPTK.

Riyadi H. 2001. Antropometri's Methode on Nutrition Status Scoring. Bogor. Society nutrition and Family Resource Department. Agriculture Faculty.

Rohner RP. 1986. The Warmth Dimension Foundation of Parental Accetance-Rejection Theory. SAGE. Publications, The Publishers of Professional Social Science, Beverly Hills Newbury Park. London New Delhi.

- Rosso, P. 1990. Nutrition and Metabolism in Pregnancy : Mother and Fetus. Oxford University Press. New York.
- Sandjaja *et al.* 2001. The Impact of Supplemental Feeding on the Nutritional Status of Infants and Children. Centre for Research and Development in Nutrition. Bogor.
- Santoso. 2002. SPSS Version 10 Professional Statistic Data Processing. PT.Elex Media Komputindo Kelompok Gramedia.
- Santrock, J.W. 1997. Life Span Development. Brown & Benchmark Publishers. Medison. USA.
- Saripurnawan, D. 1999. Society Health Centre Activity: General View on Puskesmas Employee's Activity and Interaction. Society Health Science research and Development Centre. Gajah Mada University. Yogyakarta.
- Satoto. 1990. Child Growth and Development the Observation on Children Age 0-18 Months in Mlonnggo Sub district, Jepara Residence, Central Java. Doctoral Disertaion in Medical Science, Diponegoro University. Semarang.
- Scanzoni LD, Scanzoni J. 1988. Man Women and Change. New York: McGraw Hill.
- Schwartz, Scott. 1994. Marriages and Family Diversity and Change. New Jersey: Prentice Hall.
- Seifert, K.L & R.J. Hoffnung. 1987. Child and Adolescent Development. Houghton Mifflin Company. Boston. USA.
- Shochib M. 1998. Pola Asuh OrangTua Dalam Membantu Anak Mengembangkan Disiplin Diri. Jakarta: Rineka Cipta.
- Simondon, K.B., F. Simondon, R. Costes, V. Delaunay, & A. Diallo. 2001. Breast-feeding is associated with improved growth in length, but not weight, in rural Senegalese toddlers. American Journal Clinical Nutrition. Vol 73 : 959-967.
- Singarimbun M, Effendi. 1989. Survey Research Methode. Jakarta: LP3ES.
- Singgih Y. 2002. Psycology Basics For Ideal Family. Jakarta: PT.BPK Gunung Agung Mulia.

- Siegel S. 1997. Statistik Non-parametrik Untuk Ilmu-ilmu Sosial. Jakarta: PT. Gramedia Pustaka Utama.
- Simons RL *et al.* 1996. Understanding Differences Between Divorced and Intact, Part.3. Family Structure Differences in Stress and Behavioral Predisposition, Thousand Oaks, CA: Sage Publications, London New Delhi.
- Siregar Y. 1990. Parent's Role in Developing Children Through Stimulation. Bandung: IDAJI.
- Soekirman. 2000. Nutrition and applied. Departement of Nasional Education. Jakarta.
- Soelaeman MI. 1994. Education in Family. Bandung: Alfabeta.
- Soetjiningsih & R. Ekawati. 2000. Calendar Infant's Growth and Development New Approach on Infant's Early Detection on Growth Faltering by Family in Year 2000. Family Welfare Research Centre BKKBN. Jakarta.
- Stanislaus S. 1993. A Thesis on Relation between Parenting with Teenages Agresifity. Bandung: Pajajaran University, Post Graduate Psychology Study Programe – BKU Social Psychology.
- Statistic of Indonesia 2001. Jakarta.
- Stephensen, C B. 1999. Burden of infection on growth failure. J. Nutr. 129 (supl) : 534S-538S.
- Suhardjo *et al.* 2006. Food, Nutrition, and Agriculture. UI Press. Jakarta
- Sukesi, Keppi dan Umi Wisaptiningsih. 2002. Social Safety Net for Women Labor in Informal Sector (A Case on Women Seller in Traditional Market and Street Trader). Research Centre Agriculture Faculty Brawijaya University. Malang.
- Sumodiningrat, G. 1999. Society Endeavoring and Social Safety Net. PT Gramedia Pustaka Utama. Jakarta.
- Sunarti, Euis. 2001. A Study on Family Strength and Its Measured : Case Review on The Influence on Pregnancy Quality. Thesis, Bogor Agriculture Institute.

- Sunarti Euis. 2002. Feminism: the History of an Ideology and Paradigm, Tatsqif Tarbiyah Tsaqofiyah, SAKSI Supplement, Edision 17/IV.
- Supariasa IN. 2002. Nutrition Status Scoring. Jakarta : EGC Medical Book Publisher.
- Surachai. 2000. Experimental Design. <http://www.pham.chula.ac.th/surachai/academic/research%20%process%20%.11.pdf>. [29 April 2003].
- Susilawati. 1999. Finding Nutrition Intervention Implementation on Poor Family as a Respond to the Impact of Indonesia's Crisis. Society Health Science research and Development Centre. Gajah Mada University. Yogyakarta.
- _____ & A. Marfai. 1999. Challenge and Factor Supporting Programmed on Food Feeding Curing Combine Social Safety Net In Health Side. Health Service Management Journal. Vol. 02 No. 01.
- Susanti, Eva. 2003. Parenting and Infant's Growth Development in Fisherman Family in Juragan and Pandega. A Mini Thesis for society nutrition and Family Resource Departement, Agriculture Faculty, Bogor Agriculture Institute.
- Susilawati & J. Saripurnawan. 1999. Case Study on Social Safety Net In Health Side (SSNHS) in Society Health Centre (Puskesmas). Health Service Management Journal. Vol. 02 No. 01.
- Suyono, H. 1998. Social Security Network – Social Safety Net in Developing Welfare Family. On Prosiding Social Safety Net – the Development, Concept and its Application. Labor and Citizenship Research Centre – LIPI and UNICEF. Jakarta.
- Tanziha, Ikeu. 2005. Measurement Analysis on food Consumption and Local District Social Economic To Determine the Determinant and Hunger Indicator. Dissertation, Bogor Agriculture Institute.
- Tejo, P A. 2002. Parenting, Nutrition Status, and Infant's Social Development on Family suffer from Sambas's Chaos in West Kalimantan Province. A Mini Thesis for society nutrition and Family Resource Department, Agriculture Faculty, Bogor Agriculture Institute.

- Thaha, R *et al.* 2001. Impact of JPS-BK Supplemental Feeding of *Underweight* Pregnant Mothers on Nutritional Status of Infants and Children. Food Research Center, School of Health and Nutrition, Hasanuddin University. Makassar.
- Thame, M. R.J. Wilks, N. McFarlane-Anderson, F.I. Bennet & T.E. Forrester. 1997, Relationship between maternal nutritional status and infant's weight and body proportions at birth. *European Journal of Clinical Nutrition* Vol 51 : 134-138
- Tomkins, A & F. Watson.1989. *Malnutrition and Infection*. ACC/SCN No.5.Geneva.
- Trochim, W.H.K. 2002. The Nonequivalent Groups Design. <http://www.trochim.human.cornell.edu/quasnegd.htm> (15 April 2003).
- Turner, J.S., & D.B. Helms. 1991. *Lifespan Development*. Holt, Rineart, Winston, Inc. USA.
- United Nations. 1994. *The Concept of Family Health*. Occasional Papers Series No. 15.
- Victoria, C.G., S.S. Morris, F.C. Barros, B.L. Horta, E. Weiderpass, & E. Tomasi. Breast-feeding and growth in Brazilian infants. *American Journal Clinical Nutrition*. Vol. 67 : 452-458.
- Villalpando, S. & M. Lopez-Alarcon. Growth faltering is prevented by breast-feeding in underprivileged infants from Mexico city. 2000. *American Society for Nutritional Sciences*. Vol. 130 : 546-552.
- Wahini M. 2002. *Marriage Quality Dimension*. Family Interaction Working Paper, Not For Public. Bogor: IPB, Post Graduate Degree.
- Waterlow, J.C., & A.M.Tomkins. 1992. *Nutrition and Infection*. Protein Energy Malnutrition. Edward Arnold. London
- [WHO]. 1995. *Physical status : the use and interpretation of antropometry*: Geneva : WHO
- Widianti, S. 2004. *Gender Analysis about Individual Characteristic and the Delinquency Behavior among Boys and Girls Students of Industrial Technical Senior High School and General Senior High School in Bogor*. A Mini Thesis for society nutrition and Family Resource Department, Agriculture Faculty, Bogor Agriculture Institute.

- Williams, S.R. 1996. Nutrition and Assessment Basics. Nutrition Throughout The Life Cycle. Editor Worthington-Roberts, B.S dan S.R. Williams. Mosby-Year Book, Inc. USA.
- Williamson R. 1972. Marriages and Family Relations. New York-London-Sidney-Toronto: John Willey and Sons.
- Winarno, F.G. 1994. Matching Technology to Resources and Needs. The Asean Experience. Proceedings of The XVth International Congress of Nutrition. Ed M. Wahlqvist *et al.* Smith-Gordon. United of Kingdom.
- Woodhouse, S.J. 1999. A speech from the Delegation Chief of UNICEF Indonesia – Malaysia. In Prociding Social Safety Net – The Development, Concepts and Its Applications. Labor and Citizenship Research Centre – LIPI and UNICEF. Jakarta.
- World Bank. 2001. Sosial Safety Net Assessment (SSNA), A Toolkit for Latin America and the Caribbean. http://wbIn0018.worldbank.org/SSNA Tool Draft_Report12001.pdf. [29 April 2003].
- World Health Organization. 1995. Physical Status : The Use and Interpretation of Anthropometry. Report of a WHO Expert Committee. Genewa.
- Yang, X, B.H. Hsu-Hage, H. Tian, G. Hu, Q. Dong, J. Wu & M.L. Wahlqvist. 1998. The role of income and education in food consumption and nutrien intake in a Chinese population. Asia Pacific Journal of Clinical Nutrition 7(3/4): 217-223.
- Yulia, Cica. 2008. Babies Food and Health Parenting Pattern on Women Tea Leaves Picker Family in Malabar Garden PTPN VIII. Thesis, Bogor Agriculture Institute.
- Zeitlin, M, Ghassemi, H, & Mansour, M. 1990. Positive Deviance In Child Nutrition. The United Nation University, Japan
- Zeitlin, M.F., R. Megawangi, E.M. Kramer, N.D. Colletta, E.D. Babatunde, & D. Garman. 1992. Strengthening The Family to Participate in Development. Tufts University Medford. USA.



**Department of Community Nutrition,
Faculty of Human Ecology,
Bogor Agricultural University
And
NEYS-VAN HOOGSTRATEN FOUNDATION
2009**

