

# The First 1000 Days of Life Optimization with Maternal and Child Health Handbook Utilization

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**Abstract:** The first 1000 days of life children (0-23 months) was the golden period of growth and development that determine quality of life. Parenting can be the optimization process to maximize the growth and development of the child, praying only with utilization of Maternal and Child Health (MCH) handbook. The objectives of article was to review the importance of MCH handbook utilization as an effort to reduce morbidity and mortality of children. MCH handbook contains information about maternal health (pregnancy, labour and postpartum) and child health (monitoring of growth and development, immunization program and health record) as well as give information about how to maintain and caring maternal and child health. The information provided in MCH handbook can improve the knowledge and understanding of mothers about growth stimulation, care of illness, the risk of complications information, how and where to obtain medical care that contributed to reduction of morbidity and mortality in children.

## INTRODUCTION

The First 1000 days of life was the period since the baby in the womb until the child is two years old. This phase was due to a growth spurt of the brain very rapidly. The problems of growth and development particularly vulnerable at this time, so that the proper up bringing can determine the quality of child's life. The malnutrition of this period can result in damage or inhibition of growth that can not be repaired in the future. Balanced nutrition during pregnancy will make the fetus grow healthy, healthy babies born as a powerful and perfect in every phase of development and growth [1]. One factor that can optimize the process of development of the fetus during pregnancy is maternal nutrient adequacy. Mothers who lack balanced nutrition as a folic acid deficiency increases the risk of defect neural tube, malnutrition in pregnant women can also cause the mother had less chronic energy which affects the transfer of nutrients to the fetus is less than optimal, causing the fetus is experiencing chronic malnutrition and the fetus becomes stunting. Children who experience stunting causes lower intelligence could reduce the quality of life of children.

The first 1000 days effort to optimize the child is appropriate parenting such as exclusive breastfeeding, nutrition with attention to balanced nutrition, stimulation of early detection of growth and development on an ongoing basis to maximize the growth process of children. Mothers who have knowledge of appropriate parenting on children would be more likely to apply the appropriate parenting, one of the efforts to improve parenting and proper child care can be done by utilizing the resources Maternal and Child Health Handbook as maternal and child health care. Healthy pregnancy becomes a determining factor for the quality of life of children. Pregnant women who have health problems, women who are malnourished during pregnancy, anemic, increasing the possibility of stunting. Increased knowledge of mothers and families about maternal and child health care is very important to reduce morbidity and mortality.

The information in MCH handbook can increase of knowledge and understanding of mothers, families, caregivers and volunteers about MCH so that it can mobilize and empower people to live healthy lives, providing information the risk of complications, how and where to obtain help with my health, and to improve public access to health services quality [2][3]. Knowledge of child care, especially care of nutrition, growth monitoring, and

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treatment of children was sick need to be known by mothers, families and communities that contribute greatly to the reduction of morbidity and mortality in children [4].

## DISCUSSION

### Maternal And Child Health (MCH) Handbook

MCH Handbook containing records maternal health (pregnancy, childbirth and postpartum) and children (newborns until children aged 6 years) and contains a variety of information on how to maintain and care for mother and child health [5]. MCH handbook has 3 benefits include:

a. The Information Sources of Maternal and Child Health

MCH handbook was an media of Communication Information Education (CIE) and the first major use of health personnel to improve understanding mother, husband and family or caregivers of children in institutions or social welfare agencies will child maternal health care to children aged 6 years. MCH handbook contains information about maternal and child health are very complete, including immunization, nutritional needs, the stimulation of growth and development, as well as promotive and preventive efforts, including early detection of maternal and child health issues [2]. According to [6]. MCH Handbook helpful to provide maternal and child health education for parents, allowing parents make decisions during the perinatal period and phase of development. The information contained in MCH handbook parents can know the signs of symptoms disease, and knowing when to visit doctors health personnel or hospital. The meta-analysis Baequni show that the utilization of MCH handbook be positive effect on child care knowledge 1,2 times greater than the mother who does not use MCH handbook (OR 1.22), but did not significantly affect the practice of child care (OR 0, 99) [7]. MCH Handbook increased the mother's knowledge on exclusive breastfeeding (OR 2. 59), knowledge about infant feeding (OR 2.26).

Research in Bangladesh in 2009 show that 78% of mother who having MCH handbook states that the MCH handbook can increase awareness about maternal and child health. Pregnant women who have MCH handbook has a level of knowledge, better practices of the MCH, as well as greater utilization of MCH services compared with the control group which only has a general Health Record Card [8]. In Indonesia Mother who have children aged 9- 23 months using the MCH Handbook (1589; 52.4%) had a 2.9 times greater likelihood provide complete primary immunization (12 doses) compared with mothers who did not use MCHhandbook (627; 23 9%) [9].The Utilization of MCH handbook will contribute positively to increase visits Antenatal Care (ANC) in Vietnam, and effectively improve the knowledge and practice of exclusive breastfeeding [10].

b. Communication tool

MCH handbook can serve as a good communication between health professionals with patients, as well as among health personnel. For health workers and parents MCH handbook can be used as a means of monitoring the health of children, such as child development. Parents can find out the delay problems of child development ataus child's health problems by utilizing MCH handbook. MCH handbook has a positive effect on the health of children because of the problems can be detected early by parents [6].

c. As a document recording the MCH services

According to the [2] MCH handbook can be used as evidence the recording of maternal and child health services thoroughly and continuously held by the mother or family. Therefore all maternal and child health services including immunization, Stimulation Detection Early Intervention Growth Development (SDEIGD) as well as the records of the disease and developmental problems must be recorded completely and correctly. MCH handbook used as evidence:

- 1) Monitor the health of mothers and children, including early detection of maternal and child health issues In the study Ohara et al Obstetric complications in Japanese siblings of schizophrenics, MCH handbook was used as a research instrument for the MCH medical records to describe an ongoing basis since the health of pregnant women up to the age of 6 years old children [11].
- 2) Used in the health insurance system when submitting claims for services.
- 3) Used as a condition of aid on a government program or private.

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- 4) As a means of communication between health care providers in the referral system. Information recorded in the book MCH help parents and health professionals to take decisions effectively [6].

### **The Utilization Of MCH Handbook**

Utilization of MCH handbook can be assessed from the ownership MCHMCH book. Mothers bring MCH handbook when visiting health care facilities or attend an event related to MCH program has received information from health care providers who use the MCH book [13]. According to [14] use MCH book by mothers can be assessed:

- a. Mother has a book MCH
- b. MCH handbook ownership not affect health care utilization Health behaviors may increase if the book MCH utilized effectively. Needed awareness of mothers that MCH handbook is very useful to increase knowledge about MCH, so the mother will be in the habit of reading, understand the contents of MCH Handbook and use it to apply the information contained in the book MCH, not just bring a book every time visiting health care facilities [15].
- c. Bringing the MCH Handbook every time you visit a health facility
- d. Read the messages contained in MCH handbook
- e. Understand the message contained in MCH handbook
- f. Applying the message contained in the MCH handbook [5].

### **Optimization The First 1000 Days Of Life**

The First 1000 days of life is the period since the child in the womb until the child is two years old. This phase is referred to as a spurt because the period of brain growth occurs very rapidly. Malnutrition this period will result in damage or inhibition of growth that can not be repaired future next life. Adequate nutrition during pregnancy will make the fetus grow and be born as a healthy baby strong and perfect in every phase of development and growth. Efforts should be made to optimize the 1000 days of life among others [1]:

- a. Applying for Clean and Healthy Behaviour (CHB)  
The CHB implementation of family members can be prevent illness, optimum productivity, children grow up to be healthy and intelligent and be healthy environment
- b. Planning for childbirth without complications
- c. Fulfillment of balanced nutrition through Early Initiation of Breastfeeding and exclusive breastfeeding for 6 months, and complementary of breastfeeding (CoB)
- d. Fully basic immunization
- e. The Family Planning for the future of families and children MCH handbook contains complete health information includes maternal health (suggestion to prenatal care, daily care, balanced nutrition in pregnant women, things that should be avoided pregnant women, childbirth preparation, danger signs of pregnancy, signs of labor, the process labor, danger signs of labor, postpartum maternal care, things to avoid maternal and postpartum mothers, breastfeeding technique is correct, alarm puerperal women, family planning) and how proper hand washing. Child health-related information include signs of healthy children, newborn care, child immunization, child growth monitoring, stimulation of child development, parenting on children, the daily child care (personal hygiene, dental hygiene, care of illness, fulfillment child nutrition, health card graphics and the prevention of violence against children. Mothers and families who read and apply the information / messages MCH handbook can optimize the first 1000 days of life period.

### **CONCLUSION**

Various studies suggest that use MCH book is very important because it is an effort to optimize the development of the child during the first 1000 days of life that will determine the quality of the child's life.

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