

# The Effect of Health Service of Poor People on Human Development in Regional Development of Medan City

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**Abstract-** Health service is conducted to obtain a better level of health of the society. A decent level of health would increase of productivity, quality of life, and human development index as well as reducing poverty. The objectives of the research are (1) to analyze the effects of health services for the poor people on the health status in Medan City and (2) to analyze the effect of health and human services on regional developments in Medan City. This is an explanatory research. Population is poor family living in Medan City having *Askeskin* or *Jamkesmas* card. A number of 876 samples were chosen proportionally from 21 sub-district of Medan City. The effect of health service of poor people on human and regional development was analyzed by linear regression test. The result showed that there was a significant effect of the level of health services on health of poor people. Also, there is a significant effect of the quality of health service on human development in the regional development perspective. Therefore, it can be concluded that the increase of quality of health services for poor people would accelerate the process of human and regional development. It is suggested that the government of Medan City to provide a sufficient budget for health services so that people, especially poor people have a good access for health services. Meanwhile, in a regional development perspective, the government should position human development as the priority of development.

**Index Terms-** healthy service, human development, poverty.

## I. INTRODUCTION

Health services for the poor is not only the fulfillment of the rights of the poor as mandated in Article 31 paragraph (1) of the 1945 Constitution but also in the millennium development goals (Millennium Development Goals). To that end, the role of government is to mobilize community participation in the organization and financing of health with regard to social functioning health services for disadvantaged communities remain guaranteed. Central Statistics Agency (BPS) recorded the number of poor people in Indonesia in 2007 totaled 39.30 million (17.75 percent). Meanwhile, according to the World Bank, 58 % of Indonesia's population have an income of U.S \$ 2 a day or less. With the income that their access to health services will low, (BPS, 2007). In 2006 the numbers of poor families in the city of Medan were 170,526 families. Meanwhile, the number of people who receive health services in hospitals, either the first visit or referral visits as many as 101 649 people.

Health services have an important role in improving public health. Many efforts are planned and implemented, such as health care for the poor population (Azwar, 1994).

Human development is very important in the effort to reduce poverty, education and health as well enable the poor to increase the value of its assets given that they are important for their energy (Lanjouw et al, 2001). Meanwhile, Sen (1999) states human development can improve economic development. Conversely, if a low human development will affect the human ability to meet basic needs. Furthermore, if basic needs are not met, then the population can be trapped in poverty.

In addition, developing health should be viewed as an investment for the improvement of human resource quality expressed by human development index (HDI). Health is one of the components of the HDI in addition to education and economics income. Meanwhile, health is also associated with education and income. The better a person's Health degree expected the better the level of education and increasing productivity, which ultimately increased revenue. This will break the chains of poverty, especially in poor communities. To measure the achievement of human development community Medan can be assessed by the Human Development Index (HDI), so that the known rate of progress, prosperity, and welfare level as a result of urban development processes undertaken. According to (BPS.2006) the 74.5 HDI Medan is located on top of the HDI North Sumatra Province of 72,0. In order to enhance the development of the area of Medan required human development and health efforts. Health status may affect human development index, while poverty affects people's ability to access health services. Based on the above, this study aims to analyze the influence of health services for the poor to human development in the development area in the city of Medan.

## II. METHOD

This research is explanatory research. The experiment was conducted in May-December 2008 in the city of Medan. The study population is the poor who get a health card or medical treatment. A total of 876 samples selected by proportional allocation of 21 districts in the city of Medan. Data was collected through interviews of households using a structured questionnaire that has been tested its validity and reliability.

The quality of health services assessed from seven aspects: effectiveness, safety measures, availability, continuity, acceptance, affordability, and human relations. Assessed health status of the morbidity, mortality, and nutritional status. Meanwhile, poverty is measured by two indicators, namely food and clothing. Data are presented descriptively. The influence of health care to health development and construction area were analyzed with multiple linear regression, with the model equations:

DK =  $\alpha + \beta \cdot PK + e$  ..... 1  
 PM =  $\alpha_1 + \beta_1 \cdot PK + E$  ..... 2  
 where: DK : health status ; PM : human development ; PK = Health services ;  $\alpha, \alpha_1 =$  constant;  $\beta, \beta_1 =$  regression coefficient ;  
 e = error of term

III. RESULT

3.1 Respondent characteristics

The number of respondents in this study were 876 people, consisting of 482 (55 %) women and 394 (45 %) of men. Then, 394 (45 %) of respondents aged 41-60 years , 342 (39 %) aged 21-40 years , and 131 people (15 %) aged 61-80 years , and 9 people (1 %) aged 80 years upwards. This fact reveals that the poor in the city of Medan generally come from young and middle age groups.

Table 1. Distribution of respondents by age group

Age group (year)	Frequence	
	n	%
21-40	342	39,00
41-60	394	45,00
61-80	131	15,00
>80	9	1,00
Total	876	100,00

Nearly half of respondents are primary school graduates, there were 429 people (49 %), followed by high school graduates more than 254 people (29 %), high school graduates of 114 respondents (13 %), and Bachelor (S1) graduate 9 people (1 %).

Table 2. Distribution of Respondents by Education Level

Education level	Frequence	
	N	%
Basic school	429	49,00
Junior high school	254	29,00
Senior high school	114	13,00
Bachelor degree	9	1,00
Total	876	100,00

3.2 Health services

Effectiveness Service

Effectiveness of health center services assessed from the patient 's perception of the health center's ability to cure or alleviate severe illness. By the time the poor treatment to the clinic, they stated that the health center is able to treat the disease. So that the health center is still a place for the poor to seek treatment. This is evident from the 70 % and 14 % of respondents, respectively, agreed and strongly agreed health centers are able to treat the disease. Only 8 % of respondents

agreed that lack of health centers are able to treat the disease. The remaining 7 % of respondents admitted to not agree.

Table 3. Effectiveness of Health Services by Health Center

Respondent attitude	Service effectiveness	
	n	%
Strongly agree	613	70,00
Agree	123	14,00
Less agree	71	8,00
Not agree	62	7,00
Strongly not agree	0	0,00
Total	876	100,00

Meanwhile, 72 % of respondents agreed that health centers were able to reduce the weight of the disease. That plus the 13 % who claimed to strongly agree. Only 15 % of respondents disagree or disagree health centers were able to reduce the weight of the disease.

Security Measures Services

Security measures refers to the ability of health centers to avoid the risk of injury and avoid transmission of disease between patients. From Table 4 shows that the respondents generally agreed that the health center is able to claim to avoid the risk of injury to the patient. The total percentage of agree and strongly agree claimed is 78 %. Only 12 % of respondents did not agree and 1 % said strongly agree.

Table 4. Security Measures by Health Center Services

Respondent attitude	Safety of service action			
	Avoid of injury risks		Avoid of illness transmission	
	n	%	n	%
Strongly agree	61	7,00	79	9,00
Agree	622	71,00	622	71,00
Less agree	79	9,00	0	0,00
Not agree	105	12,00	105	12,00
Strongly not agree	9	1,00	70	8,00
Total	876	100,00	876	100,00

Similarly, in the case of health centers capability prevent disease transmission between patients. About 80 % of respondents agreed health centers were able to prevent disease transmissions between patients (agree and strongly agree). Only some respondents expressed disagreement (12%) and strongly disagree (8 %).

Availability of Services

Availability of service is expressed in the completeness of supporting facilities and the readiness of health services health centers health personnel. A total of 16 % and 71 % of the respondents strongly agree and agree to support the health center facilities with good health care. Only 11 % of respondents did

not agree and the rest (2 %) stated strongly disagree that health care facilities health centers support adequate.

**Table 5. Availability of Health Services by Health Center**

Respondent attitude	Service availability			
	Supporting facility		Health staff readiness	
	n	%	N	%
Strongly agree	140	16,00	148	17,00
Agree	622	71,00	649	74,00
Less agree	96	11,00	18	2,00
Not agree	18	2,00	61	7,00
Strongly not agree	0	0,00	0	0,00
<b>Total</b>	<b>876</b>	<b>100,00</b>	<b>876</b>	<b>100,00</b>

Most of the respondents generally claimed that the health center staff is ready to serve outpatients. Some 17 % of respondents said strongly agree and 74 % of respondents agreed health center personnel ready to provide outpatient health services. Only 2 % and 7 % of respondents stated, respectively, less agree and disagree.

**Services Continuity**

Continuity of care is stated in the referral service readiness and completeness of the medical record. From Table 6 shows that the 41 % and 53 % of respondents claimed strongly agree and agree health centers prepare referral service for patients who need to be referred. That means basically 94 % of respondents admitted to health centers prepare a referral service for health care sustainability.

**Table 6. Continuity of Health Services by Health Center**

Respondents attitude	Services availability			
	Referral services		Completeness of medical record	
	n	%	n	%
Strongly agree	360	41	61	7
Agree	464	53	473	54
Less agree	26	3	132	15
Not agree	26	3	149	17
Strongly not agree	0	0	61	7
<b>Total</b>	<b>876</b>	<b>100,00</b>	<b>876</b>	<b>100,00</b>

However, respondents' perceptions of the completeness of medical records to support continuity of care is different. Only about half (54 %) of respondents agreed equip health centers with good medical record. There was 39 % of respondents disagreed (less, not, and strongly disagree) equip health centers with good medical record.

**Affordability Service**

Affordability of health services is expressed with the availability of health centers and affordability of medicines. The results of the study revealed that 71 % of respondents reported

the number of existing health centers to be sufficient. While the rest (29 %) claimed amount is still less health centers. Meanwhile, in terms of drug prices, approximately 53 % of respondents say that the prices of medicines are not affordable, 47% admitted affordable.

**3.3 Relationships between Humans**

One of the factors that determine the quality of health care is the application of good human relations among health care workers to patients. Human relations is intended in this study was the willingness of healthcare workers to answer questions well and speeds patient registration process.

The results of the study revealed that 68 % of respondents reported that health workers answer their questions with respect to the disease properly. In fact, 28 % of respondents strongly agreed, while the remaining 4% claimed not agree that the patient's health workers to answer questions properly. A total of 73 % and 22 % of respondents agreed and strongly agreed, respectively, that the health center with the registration process well and quickly. Meanwhile, the rest (5 %) did not assess the health center with the registration process quickly.

**3.4 Health Status**

Health status is expressed in the ability of disease prevention effects of treatment on disease. Of the study revealed that 61 % and 37 % of respondents, respectively, claimed to agree and strongly agree the disease can be prevented. Only 2 % of respondents did not agree that the disease can be prevented. After treatment to the clinic, 71 % of respondents feel the disease is reduced. Strongly agreed that states there is 21 %, while the less agree and disagree (6%) and (2%), respectively.

**3.5 Human Development**

Illness impact on income

Diseased condition of the body will reduce productivity and ultimately will lose revenue. The results of this study showed that 85 % of respondents reported their income was reduced by 100,000 as a result of illness. About 8 % of respondents reported reduced earnings for Rp.101.000 – Rp.200.000 per month. Respondents who claimed to decreased revenues of Rp.201.000 – Rp.300.000 by 4 %, while revenue declined by Rp.301.000 – Rp.400,000 per month by 1 %. Finally, respondents who experienced a decline in revenue as a result of ill – Rp. 500.000 Rp.400.000 or 2 %.

**3.6 Poverty**

In this study, poverty is indicated by the difficulty in obtaining a source of income and the percentage of food needs. The results of the study revealed that about 34 %, 31 %, and 23% of respondents claimed very hard, difficult, and somewhat difficult to get a source of income, respectively. There were 12 % of them claimed to have no trouble getting a source of income.

The results also revealed that many respondents could not meet their food needs. There were 28 % of respondents admitted only able to meet the food needs as much as 41-60 %. Twenty-seven percent of respondents claimed to be able to feed as many as 61-80 %. Only 24 % of respondents to meet the food needs as much as 81-100 %. In fact there are only 21 % of respondents were able to meet their food needs at most 40 %.

### 3.7 Hypothesis Test Results

The first hypothesis assumed no effect of health services for the poor to health status was tested by the following regression analysis.

**Table 7.** Regression Analysis of the Effects of Health Care Health Status

Variable	Model		Significant (p)
	Regression coefficient	t <sub>count</sub>	
Constant	1.709	22.779	.000
Health service	0.600	29.278	.000

$F_{count} = 857.196$   
 $R_{Square} = 0.495$   
 $n = 876$   
 $t_{table} (\alpha=5\%) = 1,96$   
 $error\ of\ term = 0.16464$

From the table above regression equation  $DK = 1,709 + 0.600PK + 0.164$ . This equation shows the regression coefficient is positive. That means health care affect the degree of health. That is, if the poor have better health care then the health status of the poor would be better.

$R_{square}$  value of 0.495, meaning that there is a correlation or relationship between health services by health status. Health care can explain 49.5 % effect on health status. Further note on the calculation of regression coefficient is positive, the health service (0600). With  $t_{count} 29\ 278 > t_{table}$ , it means health services significantly influence health status.

The second hypothesis is assumed to influence the health care of human development was tested by the following regression analysis.

**Table 8.** Regression Analysis of the Effects of Health Care Human Development

Variabel	Model		Significant (p)
	Regression coefficient	t <sub>count</sub>	
Constant	1.892	14.946	.000
Health service	0.539	15.335	.000

$F_{count} = 235,175$   
 $R_{Square} = 0.212$   
 $n = 876$   
 $t_{table} \alpha=0,05 = 1,96$   
 $Error\ of\ term = 0,27798$

From the table above, the regression equation is  $PM = 1,892 + 0.539PK + 0.277$ . This equation shows that the regression coefficient is positive. That is, health care affects human development. If people get better health care then it will affect the level of human development for the better.

$R_{square}$  value = 0.212 there is a significant correlation between the development of human health care. It shows health

care can explain 21.2 % effect on human development. Further note on the calculation of regression coefficient is positive, the health service (0539). With  $t_{count} 15\ 335 > t_{table}$ , it means the health service has a positive impact on human development.

## IV. DISCUSSION

### 4.1 Effect of Health Care of the Health Status

The results of this study indicate that health care services are comprised of effectiveness, safety measures, availability of services, continuity of service, reception service, affordability and human relationships that can affect cure rates are poor people who need health care.

The findings of this study are consistent with the research and (Godefridus Milena, 2000), which states necessary health services more and more valuable to society, compared with others, (Mayoralas 2000). health care services that would look good on it's own level of patient satisfaction. Factor needs plays a more important role in the ability to predict more use of services related to the healing process (medical consultation, emergency and hospitalization), (Milena 2000). A person's character and enable more relevant in explaining the usefulness of health services, which indicates a level of inequality of these services.

To achieve the necessary level of good health preparedness support of health -related services, preparation of personnel and personnel - oriented health -related goals need to be supported by experience and capability development or school health organizations.

(Kay and Denis, 2005) also found the need for health care standards higher for health care providers so that effective health services could be implemented. The existence of sophisticated services also assists clinical health services. As said (Kinman,1999), one of the indicators that are used to provide good health care is the use of sophisticated equipment to assist in the clinical care.

Services include public health efforts aimed at disease prevention and health promotion, specific protection, and a variety of case findings. Between the human health development there is a close relationship. People who have good health status makes it possible to produce high-value services. Instead of people who have poor health status will lose time that could produce high-value services that result in high economic losses as well. It is in accordance with the opinion of the (Adisasmito Argadiredja, 2007), that unhealthy body will greatly affect the amount of their daily income. If they cannot work due to illness, meaning their income was not there on that day. Resulted in prolonged pain they are financially burdened having to seek treatment.

### 4.2 Influence of the Development of Human Health Services.

The results of this study showed an increase in health care consists of effective service, security measures, availability of services, continuity of service, reception service, affordability and relationships between people who obtained the poor then it will speed up the process of human development (purchasing power) for the poor.

Based on the above calculation fifth research hypothesis can be supported or accepted the ministry of health has a positive and

significant impact on human development in the city of Medan. The results are consistent with research conducted by (Lion et al., 1999) that socioeconomic status affects the ability to access of health care services affect health conditions. If the health condition is not good, it will lead to reduced income levels that have implications on purchasing power weakened. Purchasing power can result in the development of the human index level low. According to (Krieger and Fee, 1994) may affect the health status of household income levels.

According to (Lindelov, 2006) obtained public health services will affect the health and well-being in terms of level of human development. Research done by (Phipps, 2003) explains that a person's health condition will affect the levels of the economy that would result in the level of poverty. According to (Alba and Park, 2003) the economic condition of a person depends on the level of earnings that will directly affect the ability of buying. purchasing power is one of the indicators of the Human Development Index.

Human development is a development concept aimed at improving the quality of people's lives, so that development can be enjoyed equitably implemented (Montilla, 2006). The explanation given above shows that the maintenance of optimal health will not result in substantial economic losses. Meanwhile, the poor economy has also resulted in other health problems, which is more infectious diseases thrive in the poor region.

#### V. CONCLUSION

Health Services has significant impact on health status. If there is an increase in the quality of health care received by the public, especially the poor then it will be the improvement in health status (morbidity accelerate the healing process) for the poor. Health services also significantly influence human development. Improving the quality of health care received by the public will speed the process of human development for the poor.

#### VI. SUGGESTION

The government should provide a sufficient budget for health care is a right of every citizen so that health services can be enjoyed continuously by residents, especially the poor

equally. Health is a strategic factor for increasing the productivity of poor people in developing regions. In the concept of regional development, the government should pay attention to human development as a development priority. Human development policies geared to the poor in an effort to boost productivity increase income and purchasing power.

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