



# Analysis Of Soap, Kie, And Icd X Writing Completeness In Medical Records At General Poly And Maternal And Child Health Family Planning

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<p><b>Track Record Article</b></p> <p>Accepted: 30 June 2023 Revised: 21 October 2023 Published: 30 December 2023</p> <p><b>How to cite :</b> Hafifah, Ginting, Novalinda, C., &amp; Nasution, Wahyuni, S. (2023). Analysis Of Soap, Kie, And Icd X Writing Completeness In Medical Records At General Poly And Maternal And Child Health Family Planning. <i>Contagion: Scientific Periodical Journal of Public Health and Coastal Health</i>, 5(4), 1529–1541.</p>	<p style="text-align: center;"><b>Abstract</b></p> <p><i>The health service information system in individual health efforts consists of a clinical information system, a health service administration system, a health service support system, and a health service decision support system. The aim of this research is to analyze the completeness of writing SOAP, KIE and ICD. This research is a descriptive study with a cross sectional research design which was carried out at the Darussalam Health Center in Medan in June-August 2022. The sample size was determined using the Slovin formula, namely the number of data listed was 3772 data and the data used as a sample was 97 samples. Data were analyzed using descriptive survey univariate analysis and bivariate analysis with the chi-square test. The results of the research were that the majority of SOAP fillings in General Poly and Maternal And Child Health Family Planning were fully filled, the majority of ICD fillings in General Poly and Maternal And Child Health Family Planning were fully filled, the majority of ICD X filling in General Poly and Maternal And Child Health Family Planning were fully filled. - Maternal And Child Health Family Planning is not complete, there is no increase in filling in the requirements for SOAP, IEC and ICD X at the General Poly and Maternal And Child Health Family Planning Poly. The suggestion in this research is that the results of this research can be used as input for conducting evaluations and training for all employees so that there will be improvements in writing clinical documentation.</i></p> <p><b>Keywords: General poly, Maternal And Child Health Family Planning, Medical records</b></p>
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## INTRODUCTION

Health is one of the basic needs of every human being (WHO, 2010). Without health will affect people and can make them unable to carry out normal activities as they should, improve or treat public health, so the government established hospitals, puskesmas or clinics that serve public health problems throughout Indonesia (Permenkes, 2014).

Community Health Center is a first-level health center that organizes public health efforts and individual health as a whole, by prioritizing promotion and prevention in their field of work (Kemenkes, 2008). Of course, not all health organizations can be separated from the role of medical records, even in the puskesmas itself (Halimatusadah, 2022). A medical record is a file that contains records and documents about the patient's identity, treatment, examination, procedures and other services provided to the patient (Aulia, 2022). The preparation of medical records begins when the

patient arrives at the hospital, after which the patient's medical data is recorded by doctors, nurses or other medical personnel who provide direct services to patients (Health, 2008b).

Medical records are records of patient diagnoses that contain, among others, the patient's identity, examination results, treatment and actions taken in connection with the services provided to patients (Health, 2008a). Medical records are a very important work tool in health services, because patient reports are a source of information and reference sources both for social information, medical information and all treatment procedures given to patients (Dherma, 2021). Therefore, the patient's file must be kept for a certain period of time (Istikomah, 2020).

Health information systems for individual health occupations consist of clinical information systems, health management systems, health support systems and health decision support systems (Kemenkes, 2008). One of the rapid developments in information technology today is the health management system consisting of a payment information system (billing) and a patient registration information system (Touwe, 2019).

SOAP describes the letter S as a record containing subjective information, meaning that the recording corresponds to the patient's statements and symptoms (Gosanti, 2018). Subjective medical information is usually called a medical history (Loka, 2018). The purpose of the history is to obtain comprehensive information from the patient about the patient's organo-biological, medical, psychosocial and environment (Fauziah, 2019). The letter O describes the objective report obtained from the results of the physical examination (Ayu, 2017). The results of the physical examination are objective signs of the disease (FKM, 2015). Physical examination is things that can be measured i.e. blood pressure, pulse, breathing, temperature, height, weight, head circumference and level of consciousness (Simanjuntak, 2019). In addition, the thing that needs to be added is data from laboratory examinations (Sukadi, 2017). Followed by letter A which contains studies and assessments based on findings and observations of the patient's condition. Assessment is a thought process to answer the problem questions mentioned in the list of problems (Windari, 2019). The assessment begins by writing down the diagnosis which is the main problem in the patient (Hatta, 2017). In addition, emphasis can also be added to the reason for the diagnosis and comparison (if any) (DKR, 1997). The assessment process is very dependent on the experience of each health worker (Widjaja, 2018). The selection of problems and the order of order are often not the same, but the main problem is a diagnosis that is very important in providing a basis for the patient's condition. Finally, namely P, is intended as a plan in overcoming the patient's problem (Permenkes, 2018). To complete the SOAP data, patients are usually given IEC (Communication, Information,

and Education) as a form of counseling given by doctors and write ICD X, which is the disease code or diagnosis suffered by the patient (Rejeki, 2017). This code is used to make it easier for doctors to classify the most types of disease findings in a health facility (Ernawaty, 2018).

Based on the results of preliminary research conducted by interviewing medical record managers, researchers concluded that the collaboration between Puskesmas and medical managers is still not going well. According to him, information in the patient's medical history is often incomplete so it must be corrected or re-examined. Based on the above problems, researchers are interested in the completeness of writing SOAP, Kie and ICD X in medical records at public poly and Maternal And Child Health Family Planning Darussalam Medan.

## **METHOD**

This research is a quantitative research with a cross sectional approach. Data was collected based on primary data, secondary data and tertiary data. The primary data collection technique is data on respondent characteristics, System use, User satisfaction, Structure, Environment, System quality, Information quality, Service quality and Net Benefits. Secondary data includes descriptive data at the research location and tertiary data is research data that is officially published such as journals and research reports. The data analysis to be carried out is univariate analysis This research is a descriptive study with a cross sectional research design. This study aims to analyze the completeness of writing SOAP, KIE and ICD This research was carried out at the General Poly and Maternal And Child Health Family Planning Darussalam Health Center. This research was carried out in October 2022. The population of this study was all medical record files in the General Poly and Maternal And Child Health Family Planning Darussalam Health Center from October to December 2022, a total of 97 sample medical records. The number of data listed is 3772 data and the data used as samples is 97 samples.

Based on the minimum sample size calculation, the minimum sample size obtained in this study was 97 medical record files. Retrieval of 97 medical record files will use proportional random sampling technique. Data were analyzed using univariate descriptive survey analysis and bivariate analysis with the chi-square test. The data analysis that will be carried out is processed using the statistical data processing program IBM SPSS Statistics version 26.0 for Windows. Data processing stages start from editing, coding, processing, and cleaning.

## RESULT

### Univariate Data Analysis

Univariate data analysis in this study was conducted to determine the analysis of the completeness of writing SOAP, IEC and ICD X on medical records in General Poly and Maternal And Child Health Family Planning. The frequency distribution in this study includes : completeness of writing SOAP, KIE and ICD X.

#### 1. Distribution of Completeness of SOAP Writing in Medical Records at General Poly and Maternal And Child Health Family Planning at Puskesmas Darussalam Medan

The distribution of the completeness of writing SOAP on medical records at public poly and Maternal And Child Health Family Planning at Puskesmas Darussalam Medan can be seen in the table figure below :

**Table 4.1 Completeness of SOAP Writing in Medical Records in Public Poly And Maternal And Child Health Family Planning at Puskesmas Darussalam Medan**

<b>SOAP Writing</b>	<b>N</b>	<b>%</b>
Very Complete	41	42,3
Complete	53	54,6
Incomplete	2	2,1
Very Incomplete	1	1,0
<b>Total</b>	<b>97</b>	<b>100</b>

Based on table 4.1 above, it is known that out of 97 respondents, very complete SOAP writing is 41 (42.3%) respondents, complete SOAP writing is 53 (54.6%) respondents, incomplete SOAP writing is 2 (2.1%) respondents and very incomplete SOAP writing is 1 (1.0%) respondent.

#### 2. Distribution of Completeness of IEC Writing on Medical Records at General Poly and Maternal And Child Health Family Planning at Puskesmas Darussalam Medan

The distribution of the completeness of IEC writing on medical records at public poly and Maternal And Child Health Family Planning at Puskesmas Darussalam Medan can be seen in the table figure below :

**Table 4.2 Completeness of IEC Writing on Medical Records in Public Poly And Maternal And Child Health Family Planning at Puskesmas Darussalam Medan**

<b>KIE Writing</b>	<b>N</b>	<b>%</b>
Very Complete	39	40,2
Complete	52	53,6
Incomplete	5	5,2
Very Incomplete	1	1,0
<b>Total</b>	<b>97</b>	<b>100</b>

Based on table 4.2 above, it is known that out of 97 respondents, very complete IEC writing is 39 (40.2%) respondents, complete IEC writing is 52 (53.6%) respondents, incomplete IEC writing is 5 (5.2%) respondents and very incomplete IEC writing is 1 (1.0%) respondent.

### **3. Distribution of Completeness of ICD X Writing on Medical Records at General Poly and Maternal And Child Health Family Planning at Puskesmas Darussalam Medan**

The distribution of the completeness of writing ICD X on medical records at public poly and Maternal And Child Health Family Planning at Puskesmas Darussalam Medan can be seen in the table figure below :

**Table 4.3 Completeness of ICD X Writing on Medical Records in General Poly And Maternal And Child Health Family Planning at Puskesmas Darussalam Medan**

<b>ICD X Writing</b>	<b>N</b>	<b>%</b>
Very Complete	50	51,5
Complete	42	43,3
Incomplete	2	2,1
Very Incomplete	3	3,1
<b>Total</b>	<b>97</b>	<b>100</b>

Based on table 4.3 above, it is known that out of 97 respondents, very complete ICD X writing is 50 (51.5%) respondents, ICD X writing is complete is 42 (43.3%) respondents, incomplete ICD X writing is 2 (2.1%) respondents and ICD X writing is very incomplete which is 3 (3.1%) respondents.

## Bivariate Data Analysis

### 1. Distribution of Completeness of SOAP, KIE, and ICD X Writing on Medical Records at Public Poly at Puskesmas Darussalam Medan for 3 Months (October, November, December)

The distribution of the completeness of writing SOAP, KIE, and ICD X in medical records at public poly and Maternal And Child Health Family Planning at Puskesmas Darussalam Medan can be seen in the table figure below:

**Table 4.4 Completeness of SOAP Writing in Medical Records in Public Poly And Maternal And Child Health Family Planning at Puskesmas Darussalam Medan for 3 months (October, November, December)**

Month	SOAP Writing								Total	p-Value
	Very Complete		Complete		Incomplete		Very Incomplete			
	n	%	N	%	N	%	n	%		
October	15	15,5	10	10,3	1	1,0	0	0	26	26,8
November	13	13,4	20	20,6	0	0	0	0	33	34,0
December	13	13,4	23	23,7	1	1,0	1	1,0	38	39,2
<b>Total</b>	<b>41</b>	<b>42,3</b>	<b>53</b>	<b>54,6</b>	<b>2</b>	<b>2,1</b>	<b>1</b>	<b>1,0</b>	<b>97</b>	<b>100</b>

Based on table 4.4 above, it is known that of the 97 respondents studied, respondents stated that the writing of SOAP in October was very complete, namely as many as 15 (15.5%) respondents. The complete writing of SOAP in November was 20 (20.6%) respondents. As well as the complete writing of SOAP in December, there were 23 (23.7%) respondents.

Based on the results of the calculation above, it is known that the results of statistical tests obtained p significance values of  $0.369 > 0.05$ . So it can be concluded that there are many incomplete SOAP fillings at the Darussalam Medan Health Center.

**Table 4.5 Completeness of IEC Writing on Medical Records in General Poly And Maternal And Child Health Family Planning at Puskesmas Darussalam Medan for 3 months (October, November, December)**

Month	KIE Writing								Total	p-Value
	Very Complete		Complete		Incomplete		Very Incomplete			
	n	%	N	%	n	%	N	%		
October	12	12,4	13	13,4	1	1,0	0	0	26	26,8
November	12	12,4	18	18,6	2	2,1	1	1,0	33	34,0
December	15	15,5	21	21,6	2	2,1	0	0	38	39,2
<b>Total</b>	<b>39</b>	<b>40,2</b>	<b>52</b>	<b>53,6</b>	<b>5</b>	<b>5,2</b>	<b>1</b>	<b>1,0</b>	<b>97</b>	<b>100</b>

Based on table 4.5 above, it is known that of the 97 respondents studied, respondents stated that the IEC writing in October was complete, which was 13 (13.4%) respondents. The complete IEC writing in November was 18 (18.6%) respondents. As well as the complete IEC writing in December, there were 21 (21.6%) respondents.

Based on the results of the calculation above, it is known that the results of statistical tests obtained p significance values of  $0.866 > 0.05$ . So it can be concluded that there are many incomplete IEC fillings at the Darussalam Medan Health Center.

**Table 4.6 Completeness of ICD X Writing on Medical Records in General Poly And Maternal And Child Health Family Planning at Puskesmas Darussalam Medan for 3 months (October, November, December)**

Month	ICD X Writing								Total	p-Value
	Very Complete		Complete		Incomplete		Very Incomplete			
	N	%	n	%	n	%	n	%		
October	18	18,6	6	6,2	1	1,0	1	1,0	26	26,8
November	13	13,4	18	18,6	0	0	2	2,1	33	34,0
December	19	19,6	18	18,6	1	1,0	0	0	38	39,2
<b>Total</b>	<b>50</b>	<b>51,5</b>	<b>42</b>	<b>43,3</b>	<b>2</b>	<b>2,1</b>	<b>3</b>	<b>3,1</b>	<b>97</b>	<b>100</b>

Based on table 4.6 above, it is known that of the 97 respondents studied, respondents stated that ICD X writing in October was very complete, namely 18 (18.6%) respondents. The writing of ICD X in November was complete as many as 18 (18.6%) respondents. As well as the writing of ICD X in December which was very complete, as many as 19 (19.6%) respondents

Based on the results of the calculation above, it is known that the results of statistical tests obtained p significance values, namely  $0.152 > 0.05$ . So it can be concluded that there are many incomplete ICD X fillings at the Darussalam Medan Health Center

## DISCUSSION

### **Knowledge Relationship to Personal Hygiene and Sanitation Behavior of Food Handlers in Culinary Complex Pengging Square Boyolali**

Formal education factors influence knowledge. Knowledge is very closely related to education, where it is expected that with higher education, the person will be more knowledgeable. However, it should be emphasized that it does not mean that someone who is poorly educated is low in knowledge. This is because increased knowledge is not obtained from formal education alone but can be obtained through non-formal education. A person's knowledge of an object contains two positive and negative aspects. These two aspects will determine a person's attitude, the more positive aspects and objects that are known, the more positive attitudes towards certain objects will cause a more positive attitude (Wawan et al., 2010).

Based on the research results it shows that there is a significant relationship between knowledge and personal hygiene and sanitation behaviour of food handlers, p-value = 0.000. Food handlers with bad knowledge have a 7.792 chance of bad behaviour compared to those with good behaviour, with a 95% CI value between 2.403 – 25.777.

The results of this research are strengthened by research conducted at Senggol Batubulan Market, Sukawati District, Gianyar Regency, which shows that there is a relationship between the level of knowledge and the application of personal hygiene to food handlers (p-value=0,006) (Aprivia et al., 2021). This research is also in line with research conducted at restaurants in Kuwait, which shows a relationship between knowledge and the practices of food handlers (Al-Kandari et al., 2019).

This research aligns with Miranti et al. (2018), which states that food handlers with bad knowledge are 7.792 times more likely to behave badly than those who behave well. Food handlers' hygiene behaviour must be distinct from knowledge about food hygiene and sanitation. The knowledge of food handlers is very important in handling food so that the food produced is protected from contamination. Knowledge is important in implementing food sanitation hygiene, namely, to reduce the risk of food poisoning due to contamination (Maulana et al., 2020).



The results of this study support Firdani (2022) research, which found that food hygiene and sanitation practices in food handlers working at Andalas University Canteen, Padang, West Sumatra, Indonesia are significantly related to the knowledge of food handlers. This is in line with research Perdanawati (2019) conducted by Perdanawati regarding the relationship between knowledge of hygienic sanitation and attitudes towards choosing snacks, which showed the results that there was a positive and significant relationship between knowledge of hygienic sanitation and attitudes towards choosing snacks. The higher the sanitation and hygiene knowledge level, the higher the attitude value towards choosing snack foods.

Based on the research results, the knowledge level of food handlers is still low; this is because food handlers still need to understand good personal hygiene, selecting and handling appropriate food ingredients and the lack of cleanliness of the cooking utensils used. Therefore, a food handler's knowledge of sanitation and hygiene will greatly influence the quality of the food served to consumers. Low knowledge of handlers in using footwear when serving food and in food processing. This is because the handlers need to learn how important it is to use footwear in food sanitation, so many handlers ignore it.

### **Relationship of Attitudes towards Personal Hygiene and Sanitation Behavior of Food Handlers in the Culinary Complex of Pengging Square Boyolali**

Attitude shows part of mental readiness, namely a process that occurs within a person, together or coordinated with each individual's experience, directing and determining responses to various objects or situations (Notoatmodjo, 2014). The attitude of food handlers regarding food hygiene and sanitation can influence the application of hygiene and sanitation in the food handling process. Poor hygiene and sanitation in food preparation can affect the food quality (Aldiani, 2018).

The research results show a significant relationship between attitudes towards the personal hygiene and sanitation behaviour of food handlers,  $p$ -value = 0.001. Food handlers with a bad attitude are 6.548 times more likely to behave badly than those with a good attitude. This study's results align with research by Astuti et al., (2023), which states that there is a relationship between attitude and personal hygiene behaviour of food handlers ( $p$ -value=0.009).

Research Madrdhatillah (2019) stated a significant relationship exists between attitudes and food handlers' sanitary hygiene. Hygiene of food handlers with a negative attitude have a 4.190 times greater risk of not meeting food handler hygiene requirements than respondents with a positive attitude. Therefore, food handlers with good attitudes do not necessarily have

good personal hygiene behaviour and vice versa. Providing good information can form a positive attitude among food handlers so that the behaviour shown is the same as their actual attitude.

The results of this research are strengthened by research conducted in the Lahore area, Pakistan, which shows that there is a relationship between attitudes and behavioural practices of food handlers ( $p$ -value  $< 0.005$ ) (Ahmed et al., 2021). This is also in line with research conducted along Jalan Raya Tajem Maguwoharjo Yogyakarta, showing that there is a relationship between attitudes and food handlers' sanitation hygiene practices ( $p$ -value  $-0.032$ ) (Maghafirah et al., 2018).

There is a tendency towards hygiene attitudes and practices in food handlers, if the attitude of food handlers is positive, then the hygiene practices carried out will be good, but if the attitude of handlers is negative then the hygiene practices carried out will be less (Husaini et al., 2022). According to Sajdah et al., (2022), experience, length of work, level of education, and mass media can also influence attitudes. Then, these factors can shape and influence a person's response to an object, and that response is the basis for shaping a person's attitude.

Based on the results of research conducted, the handlers have a negative attitude towards the sanitary hygiene of food handlers; this is because the handlers have habitual behaviour, where the handlers are not used to processing food properly, such as not washing their hands first before processing food and serving food. Handlers need help applying or carrying out good and healthy food processing methods, so the food served does not meet hygiene and sanitation requirements. Maintaining the cleanliness and safety of food for health so that it is not contaminated, efforts are made in processing and serving food as best as possible to produce healthy food.

The handlers have a negative opinion about using footwear when serving food and processing food. This is because handlers have a negative attitude towards using footwear in food sanitation, so many food handlers need to use aprons and footwear.

### **The Relationship of Working Period to Personal Hygiene and Sanitation Behavior of Food Handlers in the Culinary Complex of Pengging Square Boyolali**

Work period is generally the length of time a person works in the same or different fields of activity, usually measured in time. A long period of work also affects an employee's level of proficiency. Therefore, the period of work that a person undergoes provides work experience, which then influences a person's level of professionalism (Farhansyah, 2022).

Employers will tend to prefer employees who have work experience or, in other words have sufficient working time because an employee who has a lot of work experience or in other

words has enough work will be able to quickly adjust to the environment and the work he will do. Likewise, if there is a problem at work, an employee who has enough working time will easily find a solution to solve the problem. The working period is the entirety of the understanding, knowledge, and skills he has gained while working. The amount of employee contribution to the working period can be measured by productivity (Dwi et al., 2017).

The research results show a significant relationship between work experience and personal hygiene and sanitation behaviour of food handlers,  $p$ -value = 0.042. Food handlers with less than 5 years of service have a 2.886 times chance of bad behaviour compared to those with good behaviour. Length of work can also be a factor in food handlers' need for hygiene practices when processing and serving food other than the level of knowledge. This is due to their partial service life of less than 6 years and their direct observation from researchers. This is supported by the theory that the length of work influences the hygiene practices of food handlers. The service length will affect the knowledge and behaviour of food handlers. The longer the food handler works, the more knowledge the handler will have throughout the work (Sajdah et al., 2022).

Lack of employee awareness of established hygiene and sanitation behaviour so that they only work according to habits that have been carried out for years. This research is in line with research that concludes that the length of work and knowledge of food handlers only sometimes lead to good hygiene behaviour. Food handlers who have worked for a long time have more experience compared to new employees (Purwaningsih et al., 2019)

The length of the work period is a factor that influences someone to have insight, broad experience and many roles in shaping behaviour compared to people with less work experience. So, the longer you work, the more you can influence the level of knowledge, attitudes, and good hygiene behaviour (Kumbadewi et al., 2021). Food handlers who have worked for 6-15 years are expected to have the experience and skills needed to do their work more optimally. (Suma'mur, 2013). The longer the working period, the more experience related to food sanitation hygiene so that the working period can be a good predictor of productivity at work (Rahmawati et al., 2023).

Based on the research results, it is clear that there are still some who do not meet the requirements for handlers who have a long period of service or a new period of service, this could be due to other factors such as the education level of the majority of respondents being low, the knowledge of the respondents being good but not implementing good food hygiene and sanitation, the habits of food handlers such as not washing hands before and after processing food or when serving customers, not using equipment or using hands directly when

picking up fried food, not using an apron when processing food, still wearing jewelry and still talking when processing food, and using a cloth repeatedly to wipe hands and also cutlery.

## CONCLUSION

The conclusion from the results of this research is that there is a relationship between knowledge (p-value=0.000), there is attitude relationship (p-value=0.001), and there is a relationship between length of service (p-value=0.042) with personal hygiene and sanitation of food handlers at the Alun culinary complex Pengging Boyolali Square. It is recommended for food sellers to wear clean aprons and wash them every day so that the quality of the food is guaranteed. It is recommended to wear footwear when serving and processing food because, according to researchers' observations, most food handlers still need to wear it fully.

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