# DEONTOLOGICAL ASPECTS IN THE IMPLEMENTATION OF P-Care AT THE FIRST LEVEL OF HEALTH FACILITIES IN YOGYAKARTA CITY

**Zahwa Arsy Azzahra[1]*, Yayi Suryo Prabandari[2], Anis Fuad[3], Novita Indah Permatasari[4], Anggi Khairina Hanum Hasibuan[5]**

[1]Bioethics and Medical Humanity Department, Faculty of Medicine and Health Sciences, Graduate School, Republic Indonesian Defence University, Bogor
[2]Bioethics program, Graduate School, Gadjah Mada University, Yogyakarta
[3]Public Health Sciences, Faculty of Medicine, Public Health, and Nursing, Gadjah Mada University, Yogyakarta
[4]Clinical Pathology Department, Faculty of Medicine and Health Sciences, Graduate School, Republic Indonesian Defence University, Bogor
[5]Faculty of Science and Engineering Defence, Republic Indonesian Defence University, Bogor

*)Email Korespondensi: zahwaarsyazzahra@gmail.com

***Abstract: Deontological Aspects in The Implementation of P-Care at The First Level of Health Facilities in Yogyakarta City.*** *The 2015 Sustainable Development Goals (SDGs) opened a new focus on Universal Health Coverage (UHC). In Indonesia, the UHC concept has been proclaimed since 2000 which is then organized by Badan Penyelenggara Jaminan Sosial (BPJS) following the Law of the Republic of Indonesia number 24 of 2011 Article 9 concerning the National Security Administering Body. In implementing Indonesia's national health insurance (JKN), BPJS kesehatan uses a cloud-based information system for Fasilitas Kesehatan Tingkat Pertama (FKTP) / The first level health facility, namely Primary Care (P-Care) which contains medical information for more than 222 million people. According to the Health Insurance Portability and Accountability (HIPAA), data in P-Care includes Protected Health Information (PHI) which can lead to potential ethical violations. This study aims to determine ethical issues from the Deontology aspect related to the application of P-Care in FKTPs in Yogyakarta City. The Method of research is the sequential exploratory mix method. The deontology point of view was chosen because the principle of Deontology, namely personal intrinsic value cannot be separated from ethical issues. The results showed that there are ethical issues in the application of P-Care in FKTPs in Yogyakarta City, namely privacy and confidentiality, security, and informed consent with the important issue being the involvement of third parties in P-Care data input, P-Care which can be accessed anywhere, lack of personal validation, as well as a printed diagnosis that anyone can read. The most powerful influencing factor is the intrinsic value of each agent in understanding these ethical issues.*

***Keywords**: Ethics, Deontology, Primary Care, FKTP, BPJS, Yogyakarta*

## INTRODUCTION

"Health in 2015: from MDGs to SDGs" is an analysis of new global health trends launched by the World Health Organization (WHO) in 2015 as a renewal of the MDGs (Millennium Development Goals) that have existed for 15 years. Sustainable Development Goals (SDGs) are more related to health aspects and universal health coverage (UHC) (Assefa *et al*, 2020). In Indonesia, the UHC concept has been launched since 2000 by the incumbent president, Abdurrahman Wahid, regarding the concept of the national social security system (SJSN). which was later revised in the Law (UU) of the Republic of Indonesia number 24 of 2011 Article 9 concerning the National Guarantee Agency. Mentioned; "BPJS Kesehatan as referred to in article 5 paragraph (2) letter organizes a health insurance program." The Government of the Republic of Indonesia established the

JKN system according to the WHO global mandate, namely UHC.

In implementing Indonesia's national health insurance (JKN), BPJS Kesehatan uses a cloud-based information system for first-level health facilities (FKTP), namely Primary Care (P-Care). P-Care is used as a financing facility for FKTPs while hospital financing is through Indonesia case base groups (INA-CBG's). As of 1 August 2020, 22,923 FKTPs have used P-Care. This is a big change for FKTPs in Indonesia because previously FKTPs used a manual recording system. The results of research on health facilities (rifaskes) of the Indonesian Ministry of Health in 2011 recorded that 78.4% of health centers had computers and 17.2% of puskesmas with internet connections. The results of the 2019 rifaskes, computer inventory calculations almost touched 8.5 times the number of health centers, with an average computer ownership rate of 10 computers with an internet connection increasing by 87%. With the existence of cultural changes due to regulations as already mentioned, it becomes a bigger challenge both in terms of practice and ethics (General Data Protection Regulation, 2016). P-Care stores health information for 224,149,019 Indonesians. The data contained in P-Care is crucial and can lead to potential ethical violations, such as diagnosis results, drugs used, hospital codes, and other information that will be very dangerous if it falls to irresponsible parties (Ng *et al*, 2019), it supports the potential risk of ethical violations (Ienca *et al*, 2018).

According to Beauchamp and Childress, there are four basic principles of bioethics, namely: respect for autonomy, beneficence, non-maleficence, and justice (Beauchamp & Childress, 2013). The four principles of bioethics thinking are used as guidelines in making decisions on bioethics issues and are also used as principles in the bioethics school of thought. Respect for autonomy puts forward human autonomy, which is the principle of deontological thinking. This school, popularized by Immanuel Kant in 1788, is said to be the most influential moral form (Barrow *et al*, 2022). Deontology is an ethical thought stream which states that the morality of an action depends on a person's intrinsic nature (Conway & Gawrosnki, 2013). The deontological school of thought has the principle of goodness which is closely related to the potential ethical issues previously mentioned, namely absolute such as honesty (privacy and confidentiality), trust (security), autonomy, and justice (justice). This is why deontology was chosen as the basis for the analysis of this study.

## METHODS

Research This research was conducted at the FKTP partner of BPJS Kesehatan in Yogyakarta City for three months from April to July 2020. Methods this study used are search mixed method Sequential exploratory which is divided into three stages, namely preliminary studies, qualitative data collection stages, and quantitative data collection stages accompanied by additional interviews to complete the data. At the quantitative stage, the variables used in the study were demographic characteristics as independent variables, namely gender (X1), age (X2), and total time as a doctor (X3). The dependent variable used was general understanding of ethics (Y1), understanding of medical ethics (Y2), understanding of P-Care. in general (Y3), then understanding the ethical aspects related to P-Care namely issues of privacy and confidentiality (Y4), security issues in using P-Care (Y5), and issues of informed consent in using P-Care (Y6). This research was conducted using a mix method. The first method is a qualitative method by interviewing prospective respondents who fall into the inclusion criteria. The interview guide was formulated from the results of a preliminary study. Preliminary study interviews refer to the literature sources on ethics in the electronic medical record mentioned earlier. The data obtained were transcribed into text data for coding so that categories were obtained as a reference for the formulation of research instruments in the next step.

The next step of data collection used quantitative methods by distributing questionnaires to prospective respondents, namely FKTP partners of BPJS Kesehatan in Yogyakarta City. As well as further interviews to get an explanation of the answers to the respondents' questionnaire. The analysis was carried out in stages starting from data numeration, transferring data into research results tables, data cleaning, data presentation, validity and reliability testing, then final data analysis. The final data analysis was done by calculating the average, standard deviation, and the number of each question score, then the categorical data were presented in the table of research results.

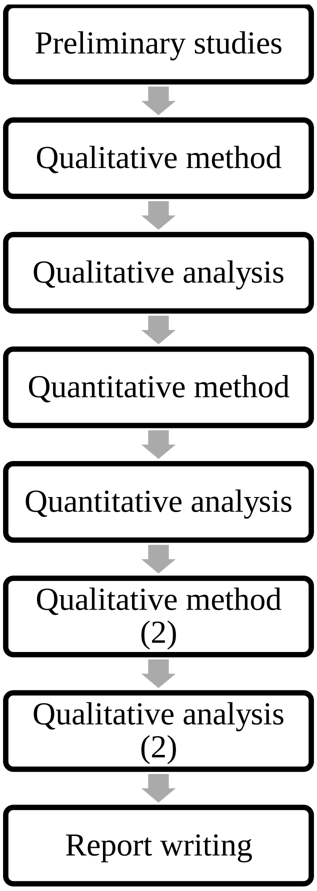

**Figure 1. Stage of research**

## RESULTS

### Results of the Preliminary Study Phase

Data obtained from the preliminary study is an interview guide grid for data collection consisting of several aspects. The first aspect is the issue of privacy and confidentiality, the second aspect is the issue of data management, the next aspect is the issue of security, the next aspect is the issue of informed consent, and the last issue is the issue of system development. From the data from the preliminary study results, ethical issues in P-Care can be found Potential for further discussion, namely the issue of privacy and confidentiality, data management, security, informed consent, and system development

**Table 1. Qualitative Stage Results**

| Themes | Informant Opinion |
|---|---|
| Ethics in general | Ethics are rules/limitations/ norms/empathy/ways to do things as they should.<br>Ethics can be applied in all aspects of life. For example, communication ethics, coughing ethics, eating ethics, and so on.<br>General ethics are interrelated with medical ethics Medical |
| Ethics in general | Ethics are rules/limitations/ norms/empathy/ways to do things as they should.<br>Ethics can be applied in all aspects of life. For example, communication ethics, coughing ethics, eating ethics, and so on.<br>General ethics are interrelated with medical ethics Medical |
| Medical Ethics | Ethics are the boundaries/rules /standards of the relationship between doctors and patients and their families<br>Medical ethics are used when doctors practice as an example of respecting the wishes of patients, not discriminating against patients, acting accordingly on procedures, and so on.<br>Medical ethics is closely related to ethics in general<br>Medical ethics is made based on the doctor's oath. |
| P-Care in general | P-Care is an information system facilitated by BPJS for the process of claims, capitation, referrals, and activities that require integration between health facilities and other BPJS.<br>The data stored in P-Care is basic, namely demographic data, drugs, prognosis, vital signs, diagnosis, referrals, and allergies.<br>Data in P-Care is filled in real- time |
| Issues of privacy and confidentiality in using P-Care | Some feel that privacy and confidentiality can be potentially violated because of a third party (doctor's assistant) who inputs P-Care data, but some feel it is not because a doctor's assistant has been given knowledge of privacy and confidentiality.<br>BPJS limitations in access to patient data in P-Care |

| | |
|---|---|
| | The P-Care security system provided by BPJS can protect the confidentiality of patient data in P-Care<br>Not only health facilities, but BPJS must also act like doctors in maintaining the privacy and confidentiality of patient data inside P-Care<br>Data confidentiality in P-Care can be overlooked if it relates to the legal realm |
| Security issues in using P-Care | The use of passwords for P-Care access is considered very good<br>Patient medical records on P-Care are quite safe because they are not as complete as Original medical records<br>The security system owned by BPJS is expected to be quite safe. |
| Issues of informed consent in using P-Care | Patients are not given informed consent by the insurance company (BPJS) regarding the use of P-Care<br>Patients are not given informed consent by health facilities regarding their data into P-Care<br>Enteredl Faskes not given informed consent by the insurance (BPJS) regarding the use of P-Care but has been given an MoU and is deemed sufficient |

**Table 2. Distribution of Questionnaire Answers (Results Quantitaive Stage)**

| No | Domain | Favorable (%) | Non-favorable (%) |
|---|---|---|---|
| 1 | Understanding of ethics in general | 100 | 0 |
| 2 | Understanding of medical ethics in general | 97 | 3 |
| 3 | Understanding of P-Care in general | 76 | 24 |
| 4 | Aspects of privacy in using P-Care | 84 | 16 |
| 5 | Security aspects in using P-Care | 88 | 12 |
| 6 | Aspects of informed consent in using P-Care | 82 | 14 |

In the characteristics of the total time profession as a doctor, which is <10 years and> 10 years, there is one statement item that produces a value below 0.05, namely statement number 17 which is presented in the following figure, namely; "It is not a problem when patient data input into P-Care is done by a third person, namely a doctor's assistant." It has a p-value of 0.049. This value fulfills the correlation requirements between the two variables, in other words, there is a relationship between the opinions on statement item 17 and the total time the respondent works as a doctor.

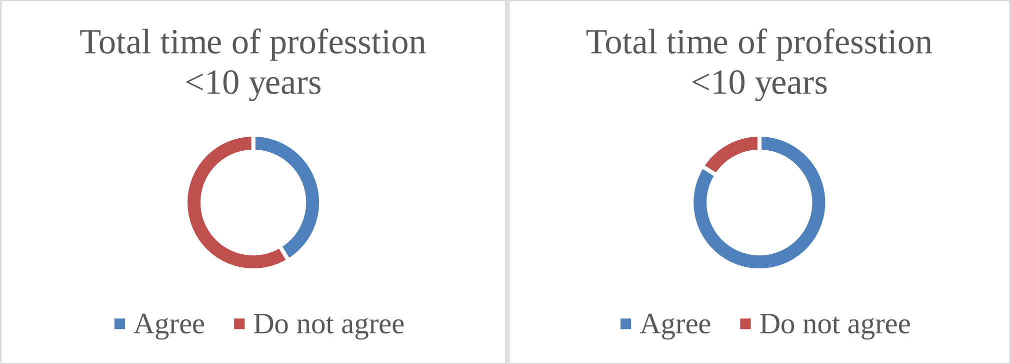

**Figure 2. Distribution of Answers to Point 17**

This can occur because of two possibilities, work experience affects the understanding of conditions in the field or differences in the interpretation of statements. If it is described in a distribution diagram the answers to item 17 are as follows. For the elaboration of item 17, an explanation of two respondents from each of the following criteria was taken.

"Yes, there is (a doctor's assistant) ... If I am not busy, I also input the P-Car myself." (i2, male, <40, <10).

The sample of respondents in criteria one tends to feel that it is still a doctor who should operate the P-Care by himself to maintain the confidentiality of the contents of the patient's medical record, only to doctors and patients. The sample of respondents in criteria two felt that a doctor's assistant was also someone who understood confidentiality so it was not a problem if P-Care input was assisted by a doctor's assistant.

"Admin (P-Care) I already understand the ethics of data confidentiality." (i1, female,> 40,> 10).

## DISCUSSION

Based on the results of the research data analysis, the respondents' opinions on the statement of the category of ethical understanding are generally quite good and relatively the same in the total statements regarding ethics in general. Overall, respondents think that ethics is the norm/ rule for dealing with other people. Respondents' understanding of ethics is considered quite good in accordance with Aristotle's definition of ethics, namely ethics is the science of good / bad things. In general, the respondents' understanding of medical ethics has the same concept, namely what is stated in the Indonesian code of medical ethics and medical oath. Respondents' understanding of P-Care in this regard is limited to technical matters and the information contained in P-Care is following the doctor's position as a P-Care user. In general, doctors know the technical use of, and what patient data are available in P-Care. Respondents considered that P-Care was not a medical record because the patient data in P-Care was not as complete as the medical records belonging to the FKTP. However, according to HIPAA (2018), demographic data combined with medical data is protected health information (PHI) protected medical information (The HIPAA Guide, 2018).

### Issues of privacy and confidentiality in P-Care

The first ethical issues that arise and are most often associated with the implementation of health information systems and electronic medical records are issues of privacy and confidentiality. The issue of confidentiality and privacy is increasingly becoming a big problem in line with the increasingly massive information technology today (Kusmaryanto, 2015; Quach *et al*, 2022).

In the setting of the BPJS partner FKTP in Yogyakarta, the real issue that occurs is when patient data in P-Care can be accessed by a third person, namely a doctor's assistant. From a deontological point of view, is it said that doctors have violated their obligation to maintain the confidentiality of patient information by providing access to third parties? When viewed from a deontological point of view, the doctor's action of giving access to third parties is incorrect because he neglects the privacy and confidentiality of patient information. However, to discuss this one cannot ignore other contexts. Physicians provide access to assistants with the confidence that; 1) patient information in P-Care is a code known to doctors and assistants only, and 2) assistants understand their responsibilities and have knowledge of patient privacy and confidentiality. So that giving access to a doctor's assistant is not the same as neglecting the privacy and confidentiality of patient information because on the other hand, the assistant has done actions that according to a deontological point of view are correct, namely maintaining patient information according to the responsibilities he carries. Then if so, why do health facilities use assistants? According to the informant's explanation, the use of assistants is based on considerations of work effectiveness and efficiency without other intentions. By using medical assistants, you can focus more on providing health services.

From a deontological point of view, the consequences that occur due to actions are not considered. The school of thought that takes this into account is utilitarianism. Therefore, based on previous research deontology and utilitarianism are two schools of thought that 'attack' each other (Tseng & Wang, 2021). The deontological theory created by Immanuel Kant is perfect but difficult to imply into real events. There then the utilitarianism school of thought proposed by Jeremy Bentham came into play. If the context is seen from the point of view of utilitarianism, the doctor's actions are said to be correct because he provides more benefits than if he does not use the assistance of an assistant. If doctors do input P-Care on their own, practice time can be wasted and fewer patients receive treatment. It is different when doctors use the help of assistants, many patients can get treatment, and doctors are also not disturbed in their practice. In addition, doctors open new jobs for other people, and in FKTP whose assistants do not have a medical background, doctors also teach the principles of privacy and confidentiality to others.

According to informants in the medical and dentistry code of ethics, it was clearly written regarding the obligation to maintain confidentiality, namely in the medical code of ethics, chapter 16 of the obligations of doctors to patients, article 16, "Every doctor is obliged to keep everything he knows about a patient, even after the patient dies. " It is the same as the code of ethics for dentistry, the chapter on the obligations of dentists to patients, article 10 paragraph 3, " Dentists in Indonesia are obliged to keep everything they know about patient’s secret, even after the patient dies. " and article 14; "Dentists in Indonesia are obliged to keep, maintain, and keep patient medical records confidential". This statement is in accordance with the concept of deontology, which is doing something because of one's own obligations. In addition, the informant said that so far there is no requirement from the application provider, namely BPJS, for doctors to complete P-Care independently. Is it for this reason that the use of an assistant is a common thing at this time? Referring to research results that are not clearly stated whether they are fair or not. However, the results of the study can describe the reasons behind the use of assistants.

Discussing aspects of privacy cannot be separated from discussing aspects of confidentiality. Confidentiality is a fundamental concept for all medical professionals and their respective code of conduct. Privacy and confidentiality have the same meaning in several contexts. In addition, there is a difference in that confidentiality relates more to the information collected and how it is protected. Meanwhile, privacy is related to who can access this collection of information. Confidentiality is created when someone is delegated the responsibility to hold a belief (Kusmaryanto, 2015).

In the setting of FKTP partners BPJS Yogyakarta City, confidentiality is discussed in terms of the limit of health insurance by assistants and BPJS. Based on the research results, the assistant also has the responsibility to access P-Care according to the doctor's direction. The assistant's job is limited to entering data and editing data if necessary. Assistants are not allowed to access P-Care without the permission of the related doctor / FKTP. Likewise with the pharmacy officer. Access to P-Care other than that is violating obligations and neglecting responsibility.

Another interesting issue regarding privacy and confidentiality arises when the FKTPs internal question of the risk of privacy violations. Is the doctor who is registered in the FKTP responsible or is the assistant directly using P-Care? From the research results it is known that the informants are objective in this matter and state that the burden of responsibility must be found through investigation and resolved fairly. If the violation of privacy is administrative in nature, the sanctions are different from if the violation of privacy is threatening the health of the patient. If the violation of privacy is administrative in nature and the fault lies with the assistant then the burden of responsibility lies with the assistant and vice versa. Nevertheless, the informants doubted that this happened because the informants had confidence in their respective assistants who also knew about the principles of privacy and confidentiality of patient data.

Likewise, if there are conditions in which the patient's printed diagnosis can be read by others. The diagnoses in the P-Care have a specific code, but not all of the diagnostic codes are printed in the code on the reference sheet. This poses a potential risk of violating patient privacy and confidentiality. In the field, this was also an issue from the informants who because of the limitations of P-Care still could not be resolved. With the aim of protecting the privacy and confidentiality of patients for which they are responsible, informants enforce operational standards for printed diagnoses put in envelopes before they are given to patients. This action is a reflection of Deontology theory according to Immanuel Kant, namely with self-awareness, taking action to carry out its obligations in this case protecting patient privacy and confidentiality.

The description of previous examples of privacy and confidentiality issues cannot be separated from the discussion from the point of view of the information owner, namely the patient. The opinion expressed by Olvingson is the possibility that "What the public wants is not absolute privacy but a reasonable guarantee that their sensitive information is treated properly, fairly, is respected, has high security, and the information is used for health purposes". This theory is quite relevant to current conditions. Information integrity is important to avoid dissemination of personal information errors (Olvingson *et al*, 2002).

## Security issues in P-Care

Confidentiality and integrity lead to the goal of maintaining data security in accordance with the theory of security guarding, namely the CIA: confidentiality, integrity, availability (Lundgren & Möller, 2019). Discussion of confidentiality cannot be separated from security and vice versa. The focus of the security aspect in using P-Care lies in the FKTP's trust in the P-Care security system prepared by BPJS. For security, the FKTP itself, namely the password for P-Care access, is considered to be able to properly maintain the security of patient data in P-Care. It is also for this reason that P-Care passwords are not shared with any officer. If done on average, the maximum password is only informed to doctors, P-Care officers / nurses, and pharmacy officers. This provides a clear example of Immanuel Kant's theory of deontology that the good / bad of actions is judged by their intrinsic value. Is giving the password to the nurse a good thing? On the other hand, doctors are obliged to maintain the security of patient data in any form. When viewed from a deontological point of view, it is wrong to give doctors access to other people (assistants). However, the assistant uses access properly according to his obligations and responsibilities. Doctors also give access to nurses because they have confirmed this and do not give access to just anyone. Deontologically, doctors are obliged to maintain patient safety, and providing P-Care access to nurses is considered not to endanger the security of patient data. Likewise with the health institution where the respondent works. They can guarantee the safety of the patient's medical records both on the P-Care and on paper.

Another issue related to the security aspect of P-Care arises when patient data in P-Care can be known by anyone as long as they have an insurance card and other people's identification. What if there are irresponsible people who do this to find out the medical history of others? The results showed that the medical history in P-Care had not been used. Just as a capitation. However, it is undeniable that such risks can occur. In addition, the validation of insurance participants is only on the insurance card, identification card, and photo. While the photo on the ID is not very valid. To avoid this, the FKTP requires family assistance from the patient. Deontologically, the FKTP action is considered a good thing because it is carried out with the inner intention of carrying out the obligation, namely maintaining the confidentiality of patient data. In addition, the FKTP provides patient history through medical records, not through what has been entered in the P-Care so that the risk of privacy violations can be minimized.

Another interesting issue is when P-Care can be accessed anywhere as long as you know the username and password. The results showed that this risk had been minimized by the FKTP, such as providing information to assistants that P-Care had to be accessed during working hours, changing passwords regularly, and using passwords consisting of a combination of characters that were difficult to memorize. However, the highest potential risk lies in the intrinsic value of each person, in this case the FKTP assistant. Has he been acting within himself according to Deontology, namely carrying out his responsibilities?

This is in accordance with Ricoeur's theory that deontology is a combination of self-respect, care, and justice. When that obligation is carried out, goodness has also been carried out. The respondent's explanation is in line with the theory of aphilosopher named Ricoeur in expressing the idea of "little ethics" in 1992 in his book entitled "Oneself as Another" which was refined in another book entitled "The Just" (fair) in 2000 and 2007 narrating that ethics is what is considered good (teleological, Aristotle's point of view) whereas morals are what makes something obligatory (deontological, Kantian point of view) (Mouton, 2016). The opportunity for a wider exchange of information will occur and for that we need rules to protect patient privacy (Berner, 2008).

Returning to the previous explanation, in the deontological aspect the essence is that the obligation / responsibility carried out is a good thing. The officer involved has been given the following workload and has the responsibility to keep the P-Care password data and patient data confidential and the officer has carried out their obligations and responsibilities. As explained by the respondent, the officer who assists the respondent in entering medical record data, if he is not a nurse or does not have a health background, then he is a person who has been educated as a nurse. Other health workers do not have access to P-Care for the sake of maintaining the security of patient data in P-Care. BPJS has limited access only to diagnosis access for the purpose of claiming to the FKTP. BPJS does not have access to every P-Care owned by the FKTP. The confidentiality and integrity of information requires safeguarding against unauthorized reading and writing of data. To protect data security from unauthorized reading and writing, access control, authentication, and authorization systems are required. Access control and effective authentication (for example, verification from authorized parties) are used to prevent this (Olvingson *et al*, 2002). Regarding the definition of P-Care according to respondents which is not an electronic medical record but a health information system, respondents felt that patient data in P-Care was safer because the medical data entered was only certain data, not complete as in paper medical records, and only use codes known to P-Care and BPJS users.

### The issue of informed consent in the application of P-Care

The next aspect is the use of informed consent. Before discussing informed consent in P-Care, it is necessary to make an agreement regarding informed consent in P-Care with the MoU. In this case, the MoU discussed is a business agreement between the insurance provider and the health facility which contains a contract, while the informed consent is an explanation agreement regarding the use of P-Care, both from the insurance provider to the health facilities as well as to insurance users and from health facilities to patients. Informed consent is used as a way to deal with issues related to confidentiality but over time the intended use has begun to erode due to many unforeseen conditions both from users and from system usability. In addition, it is also due to the increasing possibility of information systems collecting data without the relevant consent (Olvingson *et al*, 2002). As an example of the issue of informed consent in the setting of FKTP partners of BPJS in Yogyakarta City, most respondents considered that the use of informed consent from BPJS for FKTPs was not necessary because there was already an MoU and the use of P-Care was also for integration with all FKTPs, although some respondents considered that it should still be there. informed consent. Likewise, with the giving informed consent FKTP to patients regarding the use of P-Care. Respondents considered it unnecessary as long as the patient received good health services. By not giving informed consent to the patient, is it wrong if judged from a deontological point of view? Suppose that with informed consent given to patients, does it affect the quality of service to patients? Vice versa, when the FKTP did not give informed consent to patients, the quality of service provided decreased? Analysis of the deontological point of view is seen from the obligations of doctors. Is the doctor obliged to give consent to patients regarding the use of the information system? If not, then the doctor is not said to have acted inappropriately. According to one respondent, informed consent to use P-Care does not need to be given to patients, as long as before medical action, doctors always give consent either directly or in writing to patients. As long as doctors carry out their obligations and responsibilities, namely to serve patients well, according to a deontological point of view the doctor is a good doctor.

Then who is obliged to give consent to the patient? Is it insurance? On the other hand, if the condition of the participant is that the patient does not have an issue with the informed consent of the use of the information system and the risks involved, does this obligation still exist, such as when the FKTP felt that they did not have a problem with consent as P-Care long as there was an MoU? Regarding the informed consent from the FKTP to patients, there is debate about this. Does the patient need to be given a yes / no choice regarding the need to share patient information across health institutions (Berner, 2008). In its forum, the American College of Medical Informatics (ACMI) discussed whether patients need to give informed consent in the use of health information systems.

For purposes such as public health agencies it is considered difficult to present informed consent because the large number of the public is involved as well because most of the data is secondary data but this should not be used as an excuse to let go of responsibility related to privacy and data confidentiality (Olvingson *et al*, 2002).

## CONCLUSION

Issues related to the principle of deontological thinking in the application of P-Care in BPJS Kesehatan FKTP partners in Yogyakarta City that occur are privacy and confidentiality, security, and informed consent, namely: Disagreements regarding P-Care data input conducted by third person (doctor's assistant) can increase the risk of violation of privacy and confidentiality and especially when the assistant doctor does not have a health background, Limits of third person both doctor and BPJS assistants in accessing patient data in P-Care, Security system prepared by BPJS for P-Care is not yet known, Insurance participants (patients) who are not given informed consent in using P-Care but still receive good health services.

Factors that can influence the occurrence of issues related to the flow of deontological thinking are ethical understanding, understanding of medical ethics, understanding issues of privacy and confidentiality, security, and consent, and understanding the obligations and responsibilities of each of the P-Care users in FKTP. BPJS Kesehatan partners in Yogyakarta City.

A preventive strategy that can be done to overcome potential risks is to provide an understanding of the obligations and responsibilities, especially in maintaining confidentiality to P-Care users, as well as ensuring that health agencies and insurers can maintain the safety of patient data in P-Care.

## REFERENCES

Assefa, Y., Hill, P. S., Gilks, C. F., Admassu, M., Tesfaye, D., and Van Damme, W. (2020). Primary Health Care Contributions to Universal Health Coverage, Ethiopia. *Bulletin of the World Health Organization*, 98(12): 894–905A. https://doi.org/10.2471/BLT.19.248328

Barrow JM, Khandhar PB. Deontology. (2022). In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK459296/

Beauchamp TL, Childress JF. (2013). *Principles of Biomedical Ethics*. United States of America: Oxford University Press

Berner E. S. (2008). Ethical And Legal Issues In The Use Of Health Information Technology To Improve Patient Safety. *HEC forum: An Interdisciplinary Journal On Hospitals' Ethical And Legal Issues*, 20(3): 243–258. https://doi.org/10.1007/s10730-008-9074-5

Conway, P., and Gawronski, B. (2013). Deontological and Utilitarian Inclinations in Moral Decision Making: A Process Dissociation Approach. *Journal of Personality and Social Psychology*, *104*(2), 216–235. https://doi.org/10.1037/a0031021.

General Data Protection Regulation. (2016). European Parliament of the Council

Ienca, M., Ferretti, A., Hurst, S., Puhan, M., Lovis, C., and Vayena, E. (2018). Considerations for Ethics Review of Big Data Health Research: A Scoping Review. *PloS One*, *13*(10), e0204937. https://doi.org/10.1371/journal.pone.0204937

Kusmaryanto, CB. (2015). *Bioetika*. Jakarta: PT. Gramedia.

Lundgren, B., and Möller, N. (2019). Defining Information Security. *Science and Engineering Ethics*, 25(2): 419–441. https://doi.org/10.1007/s11948-017-9992-1

Mouton Dorey C. (2016). Rethinking the Ethical Approach to Health Information Management Through Narration: Pertinence of Ricœur's 'Little Ethics'. *Medicine, health care, and philosophy*, 19(4): 531–543. https://doi.org/10.1007/s11019-016-9713-6

Ng, Junice Yi Siu, Royasia Viki Ramadani, Donni Hendrawan, Duong Tuan Duc, and Pham Huy Tuan Kiet. (2019). National Health Insurance Databases in Indonesia, Vietnam and the Philippines. *PharmacoEconomics.* https://doi.org/10.1007/s41669-019-0127-2.

Olvingson, C., Hallberg, J., Timpka, T., and Lindqvist, K. (2002). Ethical Issues in Public Health informatics: implications for system design when sharing geographic information. *Journal of biomedical informatics*, 35(3): 178–185. https://doi.org/10.1016/s1532-0464(02)00527-0

Quach, S., Thaichon, P., Martin, K.D. *et al.* (2022). Digital Technologies: Tensions in Privacy and Data. *J. of the Acad. Mark. Sci.* 50: 1299–1323. https://doi.org/10.1007/s11747-022-00845-y

The HIPAA Guide. (2018).

Tseng, P. E., and Wang, Y. H. (2021) Deontological or Utilitarian? An Eternal Ethical Dilemma in *Outbreak*. *International journal of Environmental Research and Public Health*, 18(16): 8565. https://doi.org/10.3390/ijerph18168565