Qualitative Study of Efforts to Prevent Fabrication and Falsification of Research Data of Yogyakarta Midwifery Students

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Abstract

Midwifery education requires midwifery students to be able to conduct research to develop the knowledge they have received and to support community service, but there are still many mistakes that occur in research such as fabrication, falsification and plagiarism. This research was conducted to find out the efforts made by the institution in preventing the fabrication and falsification of data for students of Diploma IV Midwifery Program in Yogyakarta. This research is a qualitative research using a narrative study approach. Data collection in this study used semi-structured interviews. This research was conducted with 8 informants including the Head of the Quality Assurance Agency of the Study Program, Head of Study Program, Quality Assurance Department, the Head of the Study Program, Thesis Coordinator and five lecturers of Diploma IV Midwifery Program in Yogyakarta. Efforts to prevent and overcome fabrication, falsification and plagiarism are carried out from the mentoring stage until the trial takes place, starting from the supervising lecturer, thesis coordinator, to the examining lecturer during the thesis examination, and there has been no written sanction given to students related to the fabrication and falsification of research data. Fabrication and falsification of data will result in wrong research so that it will create wrong knowledge as well.

Keywords

research; fabrication; falsification

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Introduction

Indonesia, as a developing country, in 2015 has committed to participating in the global development agenda within the framework of sustainable development goals (SDGs) (Rassanjani, 2018). One of the global development efforts that can be carried out is human development or the first pillar which consists of providing quality, evidence-based education developed through research (Didham et al 2018). The research aims for students to play a fundamental role in creating knowledge and supporting the development of analytical and creative capacities that enable the discovery of solutions to local and global problems in all areas of sustainable development (United Nations Educational, 2016).

Midwives as one of the spearheads of providing health services, especially midwifery, to the community have four roles in society, namely as educators, implementers, managers and researchers. Midwives as researchers must have investigative abilities in the health sector both independently and as a group (Aticeh et al., 2014).

Midwife education requires midwifery students to be able to conduct research to develop the knowledge they have received so far and to support community service (Fullerton et al., 2013). Research carried out by students on various problems developing in society can produce solutions or innovations that can provide direct benefits to the surrounding community (Steiner & Posch, 2018). So that student research is expected to be of good quality so that it can be applied in society (McCormick et al., 2013).

The problems in student research include the most frequent ethical writing problems, namely plagiarism, falsification and fabrication. (Deshmukh et al., 2017) explained that fabrication is making up research data or results and recording or reporting them. Falsification is manipulating materials, equipment, or research processes, changing or omitting data or results so that

research is not accurately represented in research records, while plagiarism is the use of other people's ideas, processes, results, or words without citing existing sources.

According to Khadem-Rezaiyan & Dadgarmoghaddam (2017), one of the Health Universities in Iran, 37 percent of students do fabrication, 40 percent do falsification and 25 percent to 50 percent of students do plagiarism (Khadem-Rezaiyan & Dadgarmoghaddam, 2017) .

The educational institution where the research took place is one of the institutions in Yogyakarta which has a Diploma IV Midwifery Study Program (Adnani et al., 2022). The results of the preliminary study showed that the institution had a guidebook for writing a thesis, had clear sanctions for research errors, and had an ethics committee. However, based on research by (Prasetiono et al., 2014) perpetrators of plagiarism will receive severe punishment such as expulsion from school/university, but in reality detecting fabrication, falsification and plagiarism is very difficult so these penalties or sanctions have not been implemented optimally. Based on the background, the researcher is interested in knowing efforts to prevent fabrication and falsification of research data in the Diploma IV Midwifery Study Program in Yogyakarta (Zhao et al., 2016).

Method

This research uses a qualitative research method with a narrative study approach which aims to explain in depth a person's experience according to the sequence of events in the form of a chronology of events (Creswell, 2018). This research was conducted to determine efforts to prevent fabrication and falsification of research data for students of the Diploma IV Midwifery Study Program at one of the educational institutions in Yogyakarta. The subjects in this research were 8 informants, namely the Head of the Study Program Quality Assurance Agency, the Head of the Study Program, the Study

Program Thesis Coordinator and five Lecturers in the Diploma IV Midwifery Study Program in Yogyakarta. Determining research informants was carried out using a purposive sampling technique with the help of a gate keeper, namely the Admin of the Diploma IV Midwifery Study Program.

This research uses research instruments in the form of interview guides, audio records, and field notes. The data collection technique used was a semi-structured interview with an interview duration of between 30-60 minutes for each informant. The data analysis used in this research is thematic analysis.

Results and Discussion

The research carried out at one of the educational institutions in Yogyakarta was by interviewing eight informants who worked at the Yogyakarta Midwifery Diploma IV Study Program with a minimum education level of Masters and had been permanent lecturers for more than two years.

Table 1. Informant Characteristics

Informant	Position	Guiding experience
N1	Lecturer	14 years
N2	Head of Quality Assurance	5 years
N3	Lecturer	3 years
N4	Lecturer	9 years
N5	Lecturer	13 years old
N6	Lecturer	3 years
N7	Head of study program	13 years old
N8	Thesis coordinator	14 years

Midwifery student research has research procedures, based on the research guidebook established by the Institution, you can see the flow of submission and implementation of the final assignment as follows:
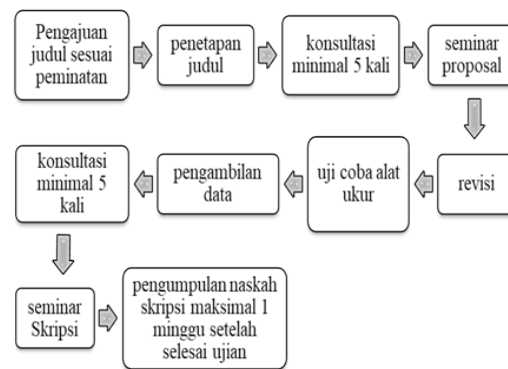

Figure 1. Flow of Submission and Implementation of Final Project Preparation

Based on this flow, after collecting the data, the data will be consulted with the supervisor.

"Process the results later. After that, start again with the results guidance with the two supervisors. When it's finished, then we will move forward with the results exam" (N2)

Falsification of research data, whether in part or in whole, is something that must be prevented among students (Chaddah, 2021). Four lecturers from the Diploma IV Midwifery Study Program said that efforts to prevent data falsification carried out by supervising lecturers were by checking student research instruments, as follows:

"In order to prevent falsification of research, there is a selection that we will open, sis, the questionnaire. Check the questionnaire" (N1)

"We check the data one by one in the questionnaires" (N4)

"We first crosscheck the questionnaire or the instruments he uses" (N5)

"From the consul, I have checked the results of the questionnaire, then for secondary data, look at the master table" (N6)

One lecturer stated that he would check the research data by contacting the midwife where the student's research took place, as stated by the Quality Assurer as follows:

"I checked with the midwife myself" (N2)

Inspecting research instruments is not

only done in this way, but there is another way to detect falsification of student research data, namely by looking at the suitability of the research questionnaire with the raw data obtained by students and processing the data. This is in accordance with the following statement:

"So we have to adjust the questionnaire, then the raw data, then the data processing and SPSS, usually those are the three things I check. (N3)

Examination of research instruments is not only carried out by the supervisor, but the Center for Research and Community Service also plays a role in carrying out the examination (Maba et al., 2018). All student data will be checked for correctness one by one by the Thesis Team. In accordance with the information from the Thesis Coordinator as follows:

"So like this, before students submit their results, we, the thesis team, carry out a selection check of student data, the student questionnaire." (N8)

Documentation is also evidence that can be used to check the authenticity of student research data. The form of documentation analyzed is in the form of photos of respondents (Maher et al., 2018). This is in accordance with the respondent's statement as follows:

"For initial detection, the documentation is certain, but the documentation means that not all respondents were photographed, right, only a few samples." (N2)

"Evidence of their research, whether from photo documentation, recordings, or so on, that shows that they did their research there, reply letters and so on" (N3)

There were also three lecturers who stated that to see falsification of research data is to look at the writing patterns on students' research instruments as follows:

"I asked for the questionnaire, sis. Usually the questionnaire says podo kabeh. That was discovered" (N2)

"Crosscheck the questionnaire, check the writing pattern and then check the consistency of the answers" (N5)

"You can also see the writing of the questionnaire" (N6)

Interviewee 2 also has another way to detect falsification of student research data, namely by looking at the color of the ink used and looking at the physical shape of the research instruments. This was expressed by the interviewee as follows:

"Then ink can also be done, ink. Or from straps, for example, if it falls, it won't be possible to stick it in the same hole, right? Well, that's also discovered" (N2)

One lecturer stated that supervisor support was an important role in helping students complete their final assignments. Every time the thesis supervisor provides guidance, he or she provides motivation to the student that the research carried out by the student, whether related or not, is still the result of research. Like the following statement:

"I have emphasized that the research is going on in terms of starting from the beginning and you don't know the answer, so don't be afraid whether there is a relationship or not, it doesn't matter, so it doesn't affect their judgment, that's how it is" (N3)

Based on the results of the interview, it was found that the prevention efforts carried out by the Diploma IV Midwifery Study Program in Yogyakarta included, among other things, carrying out cross-checks on questionnaires, master tables and SPSS data processing, looking at photo documentation of respondents, analyzing writing and the physical form of questionnaires, providing support. supervisor, and finally a check or filtration from the D4 Midwifery study program thesis team, this is in accordance with the statement by (Deshmukh Krishi Vidyapeeth et al., 2017) that falsification can be detected starting from the initial level of research to the highest level, in this case the initial level of research is the thesis supervisor itself until the examination by the thesis coordinator and research examiners.

Kang & Hwang, (2020) stated that fabrication efforts can occur because researchers consider that research does not re-

quire data quality but quantity of interview results. Data falsification can also occur due to the absence of national regulations regarding scientific data violations. (Jereb et al., 2018) stated that effective communication about rules, increasing student awareness about sanctions or punishments, and enforcing existing sanctions will reduce bad behavior.

Efforts to prevent fabrication and falsification carried out by students are by providing sanctions in the form of re-collecting data, so that the student has to repeat the exam.

"What I know is there is a re-examination" (N1)

"He has to do research again" (N4)

"If at the time of the announcement it is proven or he admits it, then he will immediately be declared as having failed and repeat it" (N7)

Data often relies heavily on theory, in the sense that data presentation and observations are used to support a theory or hypothesis. However, in scientific research, data is used to develop theories or hypotheses. So, wrong data will result in wrong results, obtaining wrong hypotheses and new theories (Resnik, 2014). Gupta's research, (2013) revealed that there are several strategic steps to fight for research integrity, including: zero tolerance for all allegations of violations; the existence of clear information about policies, procedures and guidelines related to existing violations; the role of the Mentor in supervising the progress of the research; the existence of institutions that function to review and evaluate their institutions' research and training environments, such as internal audits of research records; there is communication or socialization regarding applicable rules, procedures for handling violations, developing and promoting ethical behavior and providing clear prevention.

Efforts to overcome falsification of research data can take the form of verbal warnings, reducing exam scores, re-collecting data which causes students to take a re-

examination. The sanctions imposed to date are based on the supervisor and there are no written rules or SOPs regarding sanctions imposed for falsifying student research data. This is not in accordance with Gupta's (2013) research which states that every organization involved in clinical research must have and implement clear policies as well as Standard Operating Procedures (SOP), and open communication between research groups about important aspects of the research. clinical.

Conclusion

Scientific research is an effort to obtain hypotheses and new knowledge, but with data falsification, either fabrication or falsification, the research results obtained are the results of wrong research. In this case, efforts to prevent fabrication and falsification are carried out in the Yogyakarta Midwifery Diploma IV Study Program starting from supervisors, thesis coordinators, to examining lecturers during thesis exams, but there are no written rules regarding sanctions that are enforced in dealing with falsification of student research data

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