

Research Article

# The Influence of Nutrition Competency Test Assistance Activities on Students

Riska Rusydi <sup>1\*</sup>, Rina Hasniyati <sup>2</sup>

<sup>1</sup> Politeknik Kesehatan Kementerian Kesehatan Padang, Indonesia ; Email : [riskarusydi@gmail.com](mailto:riskarusydi@gmail.com)

<sup>2</sup> Politeknik Kesehatan Kementerian Kesehatan Padang, Indonesia

\* Corresponding Author : Riska Rusydi

**Abstract:** The competence of health workers is obtained from passing the competency test taken by each health student. The failure to achieve the target for passing the competency test needs to be given more attention because it is related to the quality of graduates of a university. One of the ways to increase graduation is by providing assistance with special knowledge related to competency tests. This study aims to see the effect of providing nutrition competency test mentoring to nutrition students on competency test knowledge. This is an experimental study with a pre-experimental design (one group pretest-posttest) which was carried out by providing competency test assistance 3 times to respondents which was carried out in August 2024. Data processing was carried out using a paired sample t-test statistical test. There is an effect of providing competency test assistance on knowledge of the Nutrition competency test in D-III Nutrition students at the Ministry of Health, Padang Health Polytechnic ( $P = 0.000$ ).

**Keywords:** Competency Test; Knowledge; Mentoring; Nutrition; Nutrition Education.

## 1. Introduction

In an effort to improve the quality of health services, competent nutrition workers are needed, both in terms of quantity and distribution to carry out their roles and functions optimally. Improving the quality of nutrition education is one way to increase the availability of quality nutrition workers who have relevant competencies in running a nutrition service system (PERSAGI & AIPGI, 2019).

One of the efforts to encourage the acceleration of improving and equalizing the quality of nutrition education is through improving quality control of education graduates. In the current era, competency tests are part of efforts to standardize the registration and licensing of health workers to provide health services in Indonesia (Kemenristek Dikti, 2016).

The national competency test is an effective method to improve the quality of the education process and create graduates who meet the established competency standards (PERSAGI & AIPGI, 2019). Competency tests are one way for the government to collaborate with professional organizations to face internal and global challenges. Internal challenges include providing quality health services and prioritizing patient safety (BPPSDMK, 2014).

Competency testing is a process that aims to provide recognition of the competencies possessed by nutrition graduates, both diploma and bachelor's degrees. Recognition of these competencies must be based on the graduate's mastery of relevant work competencies (PERSAGI & AIPGI, 2019). Passing the Competency Test is marked by obtaining a competency test certificate as a requirement for submitting a Registration Certificate. The Registration Certificate is used as written evidence issued to health workers who have registered for official registration and have received legal recognition to be able to practice and already have competencies in accordance with their profession (President of the Republic of Indonesia, 2014).

In accordance with professional competency standards, competency testing is one way to evaluate the knowledge, abilities, and attitudes of health workers. The implementation of competency testing is expected to be a routine means to improve the quality of health workers and as preparation for the future (Rahma Fitria, 2018). Passing the competency test is an

Received: March 03, 2025

Revised: March 21, 2025

Accepted: April 23, 2025

Published: April 30, 2025



Copyright: © 2025 by the authors.

Submitted for possible open

access publication under the

terms and conditions of the

Creative Commons Attribution

(CC BY SA) license

([https://creativecommons.org/li](https://creativecommons.org/licenses/by-sa/4.0/)

[censes/by-sa/4.0/](https://creativecommons.org/licenses/by-sa/4.0/))

important factor for prospective health workers to enter the world of work. Based on existing events, it is known that competency tests have an important role in the quality of health workers, so preparation is needed before the competency test is carried out (Rahmah Fitria & Ningsih, 2024).

The pass rate of the nutrition competency test in the Diploma III Nutrition study program at the Padang Ministry of Health Polytechnic in 2024 was 92.1%. This result has not met the Main Performance Indicator (IKU) target of the Padang Ministry of Health Polytechnic, which is 97%. The pass rate can be influenced by several factors. Passing the competency test has a big influence on students because it is an exit exam which is a graduation requirement and states that they are competent as health workers (Krisdianto & Kusumawati, 2019). Many factors can affect the pass rate of the competency test in students (Abdillah, 2016).

There are three groups of factors related to the test results. Academic factors, cognitive factors and individual factors. Academic factors can be in the form of Academic Achievement Index (IPK), cognitive factors consist of test methods/types/status, critical thinking skills, emotional status, participant preparation for the test, and individual factors in the form of gender, age, ethnicity, family factors, past stress components (Hartina, Tahir, Nurdin, & Djafar, 2017). Therefore, the author wishes to provide assistance in the form of nutrition education related to competency tests on student knowledge in order to prepare for the nutrition competency test.

## 2. Proposed Method

This study is an experimental study with a pre-experimental design (one group pretest-posttest) which was conducted in August 2024. The sample was taken by purposive sampling of 37 on 5th semester students who will take the competency test in 2025. The activity was carried out 3 times of competency test knowledge assistance. Pre-test and post-test were carried out in the form of competency test simulations for students. Primary data includes data on students' competency test knowledge. Data processing was carried out using the paired sample t-test statistical test.

## 3. Results and Discussion

The following are the results of the pre-test and post-test knowledge scores of the nutritional competency test conducted on 5th semester students of the Diploma III Nutrition study program at the Padang Ministry of Health Polytechnic.

**Table 1.** Frequency Distribution of Nutrition Competency Test Scores

Variabel	Category	f	(%)
Pre Test	Good	0	0
	Moderate	10	27
	Less	27	73
Post Test	Good	3	8.1
	Moderate	23	62.2
	Less	11	29.7

Based on table 1, it is known that the pre-test results showed that no students had pre-test competency test scores in the good category and more than half of the respondents had competency test scores in the less category, namely 73%. In the post-test scores, 8.1% of students had post-test competency test scores in the good category and the less category decreased to 29.7%.

**Table 2.** The Influence of Nutrition Competency Test Assistance Activities on Students' Competency Test Scores

	Paired Differences			t	df	Sig.
	Mean	Lower	Upper			
NilaiPost – NilaiPre	15.324	12.069	19.348	7.723	36	.000

Based on table 2, p-value of 0.000 was obtained, which means that there is an effect of providing competency test assistance on the knowledge of the Nutrition competency test in D-III Nutrition students at the Padang Ministry of Health Polytechnic.

Education can increase a person's knowledge, with an increase in knowledge (Irawan, Umami, & Rahmawati, 2020). Increasing the pass rate of the competency test can be done through the tutoring process (Akbar, 2021). The results show that there is an effect of nutritional education assistance on the knowledge of the competency test in D-III Nutrition students ( $p\text{-value} = 0.000$ ).

This result is in line with the results of the study (Pangandaheng, 2023) which states that there is a difference between the Ukom value and the presence of intensive guidance in competency test activities (Pangandaheng & Hairat, 2023). Then, this result is also in line with the study (Choeron, 2020) which found that intensive guidance before Ukom has been proven to be effective in increasing student readiness in facing Ukom (Choeron & Metrikayanto, 2020). Furthermore, the results of the study showed that there was an increase in the pre-test results of 38.4% of respondents who had not met the passing grade and increased in the post-test to 100% of respondents who were able to meet the UKOM passing grade (Malisa, 2020).

Competency test assistance is a form of preparation in facing the competency test. Assistance or tutoring can improve the quality of individual learning through understanding the questions so that students can understand the questions easily, discuss the question review in full, and examine how to answer questions correctly and quickly (Sari, Ika Mardiatul Ulfa, & Desilestia Dwi Salmarini, 2020). In addition, tutoring before UKOM can apply problem-solving patterns from each type of case contained in the questions (Choeron & Metrikayanto, 2020).

Competency test assistance in the form of tutoring in preparation for UKOM greatly influences the increase in knowledge and competency test scores. In addition to providing material to students during mentoring, motivation can also be provided. Providing motivation is very important besides providing understanding because it is useful for students to support their enthusiasm in crossing space and time in preparing for competency tests (Pannen, 2016).

#### 4. Conclusions and Suggestion

Based on the results and discussion, it can be concluded that there is an influence of competency test assistance activities on competency test scores for D-III Nutrition students at the Padang Ministry of Health Polytechnic ( $p = 0.000$ ).

Therefore, the researcher suggests that competency test assistance for students can be used as a planned routine activity to support graduation and preparation of Nutrition Department students at the Padang Ministry of Health Polytechnic in facing competency tests.

#### Acknowledgments

We would like to express our gratitude to the D-III Nutrition students of the Padang Ministry of Health Polytechnic who were willing and enthusiastic about the mentoring activities carried out, then to the Director, Head of Department and the team of lecturers of the Nutrition Department of the Padang Ministry of Health Polytechnic who also supported this activity to run smoothly.

#### References

- [1] A. Abdillah, "Analisis Faktor-Faktor Yang Mempengaruhi Kelulusan Uji Kompetensi Ners Indonesia," JPAP: Jurnal Penelitian Administrasi Publik, vol. 2, no. 02, 2016. [Online]. Available: <https://doi.org/10.30996/jpap.v2i02.996>
- [2] Badan Pengembangan dan Pemberdayaan Sumber Daya Manusia Kesehatan (BPPSDMK), Peran Institusi Pendidikan Dalam Meningkatkan Kualitas Lulusan Yang Kompeten Melalui Uji Kompetensi, Pusat Standarisasi, Sertifikasi dan Pendidikan Berkelanjutan SDM Kesehatan, 2014.
- [3] R. C. Choeron and W. D. Metrikayanto, "Meningkatkan Kesiapan Uji Kompetensi Ners Melalui Bimbingan Intensif," Jurnal Ilmiah Keperawatan, vol. 6, no. 1, 2020. [Online]. Available: <https://doi.org/10.33023/jikep.v6i1.574>
- [4] R. Fitria, Persiapan Uji Kompetensi Bidan Sebagai Exit Exam, Universitas Andalas, 2018.
- [5] R. Fitria and D. A. Ningsih, "Faktor-Faktor yang Berhubungan dengan Kelulusan Uji Kompetensi Nasional pada Mahasiswa DIII Kebidanan dan DIII Keperawatan," Jurnal Ners, vol. 8, no. 1, pp. 279–285, 2024. [Online]. Available: <https://doi.org/10.31004/jn.v8i1.23106>
- [6] A. Hartina, T. Tahir, N. Nurdin, and M. Djafar, "Faktor Yang Berhubungan Dengan Kelulusan Uji Kompetensi Ners Indonesia (UKNI) Di Regional Sulawesi," Jurnal Persatuan Perawat Nasional Indonesia, vol. 2, no. 2, 2017. [Online]. Available: <https://doi.org/10.32419/jppni.v2i2.84>
- [7] A. M. A. Irawan, Z. Umami, and L. A. Rahmawati, "Peningkatan Pengetahuan Remaja Tentang Gizi dan Kesehatan Reproduksi," Jurnal Pemberdayaan Masyarakat Universitas Al Azhar Indonesia, vol. 02, no. 02, 2020.

- [8] Kemenristek Dikti, Permenristekdikti No 12 Tahun 2016 Tentang Tata Cara Pelaksanaan Uji Kompetensi Mahasiswa Bidang Kesehatan, Kemenristek Dikti Republik Indonesia, 2016.
- [9] M. A. Krisdianto and W. Kusumawati, "Faktor-Faktor yang Mempengaruhi Kelulusan Uji Kompetensi Ners Indonesia (UKNI)," *The Indonesia Journal of Health Science*, vol. 11, no. 1, 2019. [Online]. Available: <https://doi.org/10.32528/ijhs.v11i1.2232>
- [10] N. Malisa, "Pengaruh Bimbingan Uji Kompetensi Online Terhadap Hasil Try Out Lokal Uji Kompetensi Mahasiswa Akper RS. Dustira," *Jurnal Skolastik Keperawatan*, vol. 6, no. 1, pp. 56–61, 2020. [Online]. Available: <https://doi.org/10.35974/jsk.v6i1.2337>
- [11] T. Pangandaheng and U. Hairat, "Meningkatkan Kesiapan Mahasiswa DIII Keperawatan Dalam Menghadapi UKOM Melalui Bimbingan Intensif Di Masa Pandemi Covid-19," *Jurnal Keperawatan*, vol. 15, no. S4, 2023. [Online]. Available: <https://doi.org/10.32583/keperawatan.v15i4.1839>
- [12] P. Pannen, *Kebijakan Pendidikan Jarak Jauh dan E-Learning di Indonesia*, 2016.
- [13] PERSAGI and AIPGI, *Panduan Pelaksanaan Uji Kompetensi Nutrisisionis / Sarjana Gizi*, 2019.
- [14] Presiden Republik Indonesia, *Undang-Undang RI No 36 Tahun 2014 Tentang Tenaga Kesehatan*, Pub. L. No. UU No 36 Tahun 2014, 2014.
- [15] A. Sari, I. M. Ulfa, and D. D. Salmarini, "Layanan Persiapan Uji Kompetensi Tenaga Kesehatan Di Universitas Sari Mulia," *JURPIKAT (Jurnal Pengabdian Kepada Masyarakat)*, vol. 1, no. 3, pp. 275–285, 2020. [Online]. Available: <https://doi.org/10.37339/jurpikat.v1i3.303>