

# The Study of The Type Laboratory Examination in Health Service Facilities With Integration Determination of Local Content Courses DIII-Health Analyst

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#### Abstract

Introduction: Health Laboratory Services is an integral part of healthcare services to the public. The main task of health analyst conducts healthcare laboratory services. In order to produce health analyst personnel who meet the needs of graduates or stake holders, the education will apply the curriculum for the learning process. Diploma in Education 3 students must take at least 108 credits (semester credit unit). Meanwhile, the education core Curriculum 3 medical laboratory technology defined by 82 credits. In order to fulfill the credits set need to be arranged local content to meet the shortage of credits from the core curriculum that is suitable for learning access. Purpose: Obtain the amount of data on the number of laboratory tests and local subjects. Method: Secondary Data from the recording and reporting of each laboratory for 3 months. Results: A total of 48.04% clinical chemical test types. A total of 18.87% hematological examination. A total of 1.88% of parasitological and microbiological examination. A total of 19.54% of immunological examination. The curriculum that is used by the Poltekkes Department of Health analyst Semarang 108 SKS with 82 SKS core curriculum and 26 SKS local payload. The subject or number of face-to-face is based on the data proportion of three large groups of tests, namely clinical chemistry (48.04%). Immunological examination (19.54%) and hematological examination (18.87%). Conclusion: The most proportion of tests on fasyankes are clinical chemistry (48.04%). Courses "Knowledge of materials practice" could be added to the curriculum of the D3 of the Poltekkes health analyst Program in Semarang. Suggestion: Need to calculate the credits and proportion of face to face or depth to the local content course "knowledge of practice materials" and placement in the semester.

**Keyword:** Types of Laboratory Examinations ; Local Charge Courses Diploma Health Analyst Program

# 1. Introduction

Healthcare Laboratory service is an integral part of health care to the community. The function of health laboratories as one of the health service units, is expected to provide careful and accurate examination result information. Along with the advancement of Science and Technology (science) and disease development, it is expected that the quality of laboratory test results is also as rhythmic as the development of the science. The authority of examination tasks in the laboratory is performed by health analyst personnel. Health analysts conduct laboratory testing using the knowledge and methodology of various disciplines, including biology, chemistry, and physics to assist and or enforce disease diagnosis, treatment monitoring and Prevention of disease in humans. The main task of health analyst conducting Health laboratory services, covering the field of hematology, clinical chemistry, Microbiology, immunology- serology, parasitology, mycology, Toxicology, water chemistry, food/beverage, and anatomy pathology.

DIII educational institutions that produce health analyst power must always develop themselves in answering the needs of the community, namely users of health analysts, especially the laboratory of Quality assurance to the test results and demands on excellent service. The special profile of graduates are as flebotomy technicians, medical laboratory technicians, verivices of clinical Laboratory examination, implementing medical laboratory services and research assistants. In order to produce health analyst personnel who meet the needs of graduates or stake holders, the education will apply the curriculum for the learning process. Referring to the Book of higher education curriculum for the Program 3 Dilpoma students must travel at least 108 credits (unit credit semester). Meanwhile, the educational core curriculum 3 of the Madik laboratory technology set amounted to 82 credits.

In the process of drafting a curriculum both core and curriculum of institution in the form of local content, always involve the users of graduates. With the expectation of a structured curriculum will give a provision of graduate skills and later ready to work in the community. One of the supporting data needed in the preparation of the curriculum is one of the data about the number of types of examination in the laboratory, including clinical laboratories, health laboratories in hospitals and in health centers, and laboratories Existing health. Such data is not present in health profiles such as other data that is easily accessed through the Internet or printed in the form of a health profile book.

## 2. Metod

The research results of 2011 Types of laboratory examination at RS.Dr. Muwardi, in 2 months showed hematological examination in the top order of a number of 24,464 patients and following clinical chemistry examination 121,193 patients and lowest examination Secretion of 3,061 patients. Weighted SKS of courses on the TLM 2014 curriculum for Hematology and bacteriology load 6 SKS, followed by clinical chemistry and bacteriology respectively 4 SKS. While the curriculum DIII Health analyst 2010 Distribution courses for hematology, clinical chemistry and bacteriology respectively 9.

SKS, and Parasitology 6 SKS. Data on the number of patients based on the type of laboratory examination for Puskesmas and clinical laboratory is not available even difficult to access or obtain. But health analysts work as well as the sector. Therefore, it is necessary to compiled a course in the form of local content to fulfill credit shortage from core curriculum that suitable with learning achievement (CP) or learning outcome, so that can produce professional graduates in the effort Meet the needs of society.

This type of research includes descriptive research. The samples used in this research consist of 6 health centers in Semarang, 3 Puskesmas and 3 clinical laboratories in the city of Semarang. Sampling is done with several considerations related to laboratory type and location of laboratory.

#### 3. Result and Discussion

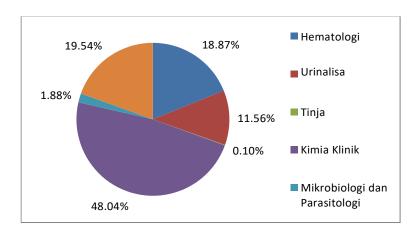
#### Result

Overall, the most examination is a clinical chemistry test of 48.08%, followed by immunology examination of 19.54% and a hematology test of 18.87%. These three checks are very critical in the pre-analytical process in order to produce representative results. Pre-analytical stage is an activity or step that must be done before the sample in the analysis. DiplomaIII Core curriculum of Poltekkes Ministry of Health analyst in Semarang is using Diploma III medical laboratory technology in 2014 with a program structure of 82 SKS. Further to meet the requirements of higher education curriculum DIPLOMA3 equipped to be 108 credits, consisting of 50 SKS theory and 58 SKS practice that adds a burden of as much as 26 credits are broken down by adding a load of credits from existing courses, and adding local content courses. Local content courses include:

- 1. The education of Anti-corruption culture (local charge required) in semester IV as much as 2 SKS.
- 2. Disaster response alert 2sks theory and practice.
- 3. Laboratory Information System 2 credits Tori and practice.
- 4. Introduction to medical laboratory in the first semester 2 SKS.
- 5. Identification of TB (local charge required) in semester V as much as 2 SKS.
- 6. Organic chemistry and analytical in the first semester 3 SKS.

The results of the assessment and discussion with several lecturers are still possible to increase the free credits more than 108 credits. Some inputs include subjects such as pathophysiology practice for revisit, can be replaced with local content subjects that are more support for learning achievement. In accordance with the data on the type of laboratory examination with the ability to work, among others, able to take precautions on the examination of clinical chemistry, hematology, Immunoserology, Immunohematology, Bacteriology, Virology, mycology, parasitology, systohistotechnological and toxicology clinics covering pre- analytical, analytical and post-analytical stages of confirming the conformity of processes to the standard to achieve quality test results. It is possible to add local content courses on "knowledge inspection materials" covering the aspect of all types of inspections with the proportion of depth of field material based on the three large groups of clinical chemical examinations (48.04%). Immunological examinations occupy the second stage of 19.54 and the Third Order of hematological examination is 18.87%. The expense of credits will be calculated based on material depth.

**Figure 1.** Diagram of recapitulation of examination amount in Fasyankes in June-August 2017



### Conclusion

- 1. As much as 48.04% (n = 58.387) is a type group of clinical chemical examinations of a total of 121,541 laboratory examinations.
- 2. As much as 18.87% (n = 22.933) is a group of hematology test types from a total of 121,541 laboratory test.
- 3.As much as 1.88% (n = 2.290) is a group of types of parasitology and microbiology examinations of a total of 121,541 laboratory examinations.
- 4. As much as 19.54% (n = 23.751) is a group of immunological examinations of a total of 121,541 laboratory examinations.
- 5. As much as 19.54% (n = 23.751) is a group of immunological examinations of a total of 121,541 laboratory examinations.
- 6.As much as 0.10% (n = 126) is a type of stool examination group of a total of 121,541 laboratory test.

7.Describe the data of laboratory examination type related to the courses for the access of learning in the applicable curriculum.

Proposed local content for health analyst institutions is the knowledge of examination materials.

# 4. Suggestion

Need to be counted and type of credits that are theory or Terori and practice for local payload courses that have been specified and reviewed the placement of the credits per semester.

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