Prioritizing Health Problems In Dukuh Demangan, Bantul, Yogyakarta Using Community Diagnosis And Hanlon Method

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Abstract.
Community diagnosis is an activity to determine the existence of a problem by collecting data on the community. Community diagnosis is an activity to explore the main issues faced by the community based on existing facts and take strategies and follow-up plans to resolve these problems. The study aimed to determine the description of health problems through community diagnosis in Dukuh Demangan, Sewon District, Bantul Regency. The method used in this research is quantitative and qualitative. The study design used in implementing the Field Learning Experience is a descriptive study. After determining the priority of the problem using the Hanlon method. The result shows that hypertension is the priority of health problems in Dukuh Demangan.

Keywords: *community diagnosis, Hanlon method, health problems, and hypertension.*

I. INTRODUCTION

Community diagnosis is an activity to determine the existence of a problem by collecting data on the community. The main activity is to explore the issues faced by the community based on existing facts and strategies and follow-up plans to solve the problems. This method is the beginning of the problem-solving cycle, which aims to observe the current issues in the community. Therefore, community diagnosis includes problems and solutions (or treatment) for solving problems based on existing sources [1].Community diagnosis activities were carried out at RT 04, Dukuh Demangan. Dukuh Demangan is part of the Bangunharjo Village in Sewon District, Bantul Regency, Special Province of Yogyakarta. The geographic location of the Bangunharjo Village is to the north of the Brontokusuman Village, Mergangsan; east of Tamanan Village, Banguntapan south of Timbulharjo Village, Sewon; and west of Panggungharjo Village, Sewon [2]. Therefore, the closest health service is Puskesmas Sewon II.

Based on health profile data for 2021 obtained from Puskesmas Sewon II, ten health problems often occur in Dukuh Demangan, such as essential (primary) hypertension, acute nasopharyngitis (common cold), non-insulin-dependent diabetes mellitus without complications, fever of unknown origin, dyspepsia, headaches, myalgia, hypertensive heart disease without (congestive) heart failure, insulin-dependent diabetes mellitus with neurological complications, and pulp necrosis [3].In general, community diagnosis is carried out to identify health problems that occur in the community. Without performing community diagnosis, there will be no solutions for the health problems that occur in the community. Therefore, community diagnosis was carried out at RT 04, Dukuh Demangan, to explore and analyze health problems in RT 04 and prove the suitability of the health profile data that had previously been obtained from the Puskesmas Sewon II. This research aims to describe health problems through community diagnosis at RT 04 Dukuh Demangan, Sewon, Bantul, Yogyakarta.

II. METHODS

This research uses quantitative and qualitative methods. The study design used in implementing the Field Learning Experience is a descriptive study. Descriptive research is intended to investigate the circumstances, conditions, or other things mentioned, and the results are presented as a research report [4]. The technique used in this research is an in-depth interview or in-depth interview. In-depth interviews are obtaining in-depth, open, and free information [5]. The research instrument used was a questionnaire.This research was conducted from April 19, 2022, to April 26, 2022.

The population in data collection was residents of RT 04 Dukuh Demangan, Bantul, Yogyakarta, with the minimum respondents' age of 18 years old. The sample used in data collection was 30 selected households.To determine the priority of the problem using the Hanlon method. This method uses four groups of criteria. From each criterion group, values are obtained by scoring with a certain scale. The criteria group is entered into a formula to obtain the result. The result of a group of criteria directly affects the decision-making process [6].

III. RESULT AND DISCUSSION

The data collected was divided into several categories: infectious diseases (ID), non-communicable diseases (ND), Occupational Health and Safety (OHS), Environmental Health (EH), an overview of COVID-19, and clean and healthy lifestyle (CHL). The result is presented in Table 1.

Table 1. Problems in Dukuh Demangan

No	Problems	Category	Frequency (people)
1	Diarrhea	ID	1
2	Asthma	ND	5
3	Diabetes Mellitus	ND	4
4	Hypertension	ND	9
5	Injury during Working	OHS	1
6	No LPG protection	OHS	22
7	No Handle in Container	OHS	6
8	No Lifting Aids	OHS	30
9	No Lid for Waste Water	EH	5
10	No Lid for Trash Bin	EH	27
11	No Brand Refill Drinking Water	EH	17
12	Not Fully Vaccinated	COVID-19	2
13	Was Confirmed Infected COVID-19	COVID-19	9
14	Smoking Inside the Room	CHL	27

From Table 1, six problems can be obtained by selecting the highest frequency from each category. After that, using Hanlon method, the problem can be prioritized based on the problem size, severity, effectiveness, and PEARL factor. Table 2 is the result of the problem priority based on Hanlon method.

Table 2. Results of Problem Priority using Hanlon Method

Problems	Size	Severity	Effectiveness	PEARL	Score	Rank
Diarrhea	1	2	5	1	25	6
Hypertension	9	10	3	1	87	1
No Lifting Aids	30	4	2	1	76	2
No Lid for Trash Bin	27	6	1	1	39	4
Was Confirmed Infected COVID-19	8	3	5	1	70	3
Smoking Inside the Room	3	6	2	1	32	5

The results of determining the priority of problems using the Hanlon method can be seen in Table 2. It is shown that the priority problem is hypertension. Hypertension is a condition where a person's blood pressure is ≥140 mmHg (systolic) and/or ≥ 90 mmHg. Apart from being a type of non-communicable disease, hypertension is also a major risk factor for other cardiovascular diseases [7].Risk factors for hypertension are divided into two: age and gender; both are risk factors that cannot be changed. Men have a higher risk of increasing blood pressure than women. After entering menopause, the prevalence of hypertension in women increases. It is because the age of ≥65 years old due to hormonal factors in women is a higher incidence of hypertension than in men; It is based on family history [8]. Risk factors that can be changed include nutrition, stress, obesity, diet, exercise habits, smoking habits, and consuming alcohol [9].Based on prioritization, the health problems found were similar to the top 10 diseases at the Puskesmas Sewon II, hypertension. Many people still experience hypertension who do not take regular medication and have blood checks every month. This is because people already feel healthy, so they are lazy to take medicine. However, drug consumption is carried out if hypertension recurs.

IV. CONCLUSION

There are six main health problems found through community diagnosis at RT 04 Dukuh Demangan, Sewon, Bantul, Yogyakarta, including diarrhea, hypertension, the unavailability of assistive devices for lifting heavy equipment, trash containers that are not covered, confirmed infected COVID-19, and indoor smoking. Based on the results of prioritizing health problems using the Hanlon method, the priority problem is hypertension, with a score of 87.

V. ACKNOWLEDGMENTS

This project was only possible with funding from Universitas Ahmad Dahlan, Yogyakarta, Indonesia.

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