IDENTIFICATION OF HERBAL PRODUCTS USED BY FAMILY IN THE CAMPUS ENVIRONMENT OF DARUSSALAM UNIVERSITY

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Abstract. In the health sector, the development of medicinal products circulating in the community is increasingly widespread. As stated in Law No. 3 of 2009 concerning health article 48 (1) which states that one health effort can be carried out with traditional health services. Today the use of traditional medicines is increasing from year to year. Herbal medicines circulating in Indonesia are safe to consume if the product is registered with BPOM and does not contain BKO (Medicinal Chemicals). On the other hand, the use of herbal medicines in the family environment of UNIDA Gontor is increasing. So the need for identification related to herbal products that are used to ensure safety. This research was conducted by identifying herbal products that are used based on features, functions, and benefits. This research method is RAP (Rapid Assessment Procedure) with a qualitative approach. The results showed that the products used by 72 respondents amounted to 100 products with categories based on features reviewed from 4 aspects (1) The level of product safety used is based on raw materials as much as 96% and based on claims of efficacy as much as 76%. (2) The type of product used is based on the category of herbal medicine as much as 94.7%, OHT as much as 5.3% and none fitofarmaka. (3) Completeness of information listed on the product packaging label is 83%. (4) The level of understanding of respondents based on features and benefits in the range of understanding to very understanding while in the function in the range of less understanding to understand. The use of herbal products based on function is as much as 71% supplement, as much as 19% preventive form and helps treat complaints as much as 10%. The use of herbal products based on benefits is classified as safe because it has a higher benefit ratio compared to the side effects.

Keywords: Herbal Products, Feature, Function, Benefits, The Family of UNIDA Gontor.

1. Introduction

Health development in Indonesia aims to increase awareness, willingness and ability to live a healthy life for everyone to realize the highest degree of public health. The health effort can be carried out in the form of activities with promotive, preventive, curative and rehabilitative approaches that are carried out continuously. As in Law No. 36 of 2009 concerning Health

article 48 paragraph (1) states that there are 17 health efforts, one of which is a traditional health service effort.

The development of traditional health services using herbs today is increasing rapidly, namely in 2009 as much as 15.04%, 2010 as much as 31.7%, 2012 as much as 41.7%, and the latest data in 2018 as much as 44.3% (Kemenkes RI, 2018). Herbal medicines circulating in Indonesia are safe to consume with a record already registered with BPOM. However, herbal medicines that have been used for generations (herbal medicine) do not need clinical trials because they have been used for 3 generations or 180 years (Parwata, 2016) such as Tolak Angin, Wood Herbs, and Diapet (Utami, 2018).

In herbal medicine alone it should not contain BKO (Medicinal Chemicals) because it can endanger the health and be fatal. Nowadays, many herbal medicines are clinically still not supported by strong and consistent evidence (Kamaluddin, 2016). Observation results show that the use of herbal medicines among the families of UNIDA Gontor lecturers has been increasing rapidly in recent years.

So the purpose of this study is to determine the level of safety of herbal products used by UNIDA Gontor's lecturer family by identifying herbal related products based on features, functions, and benefits. As well as presenting the use of herbal products in the categories of herbal medicine, OHT, and fitofarmaka.

2. Theoretical Review

2.1. Herbal Medicine

Herbal medicines are raw materials or preparations derived from plants that have therapeutic effects or other effects that are beneficial to human health. The composition can be in the form of raw materials or materials that have undergone further processing that comes from one or more types of plants (WHO, 2005).

Regulation of the Minister of Health number 88 of 2013 concerning the parent of the development of raw materials for traditional medicines refers to the National Traditional Medicines Policy (KOTRANAS) explaining that the intended traditional medicines are not limited to traditional preparations that are used for generations (herbs) but also include ingredients or gelenik preparations that have been through pre-clinical and clinical trials such as Standardized Herbs (OHT) and phytopharmaka.

Herbal medicine categories in circulation in Indonesia consist of 3 types, namely herbal medicine, OHT, and Fitofarmaka. Herbal medicine is a traditional Indonesian medicine that has proven its safety and efficacy based on empirical data and has been used for generations (Permenkes, 2016). OHT (Standardized Herbal Medicines) is a drug preparation made from natural raw materials that have been proven scientifically and safety efficacy (preclinical testing) such as Fitolac and Diabmeneer (Utami, 2018). While phytopharmaca is a drug preparation made from natural ingredients that have been standardized in safety and efficacy and scientifically proven both preclinical and clinical trials such as Stimuno Tensigard, and Nodiar (Permenkes, 2016).

2.2. Types of Herbal Product Identification

Herbal products are unique in that there are features, functions, and benefits (Kotler & Keller, 2009). The feature is a characteristic of a product that is designed to enhance the function and consumer interest in the product (Arifin & Saidani, 2012).

The function is a benefit obtained by consumers after using a product that is the suitability of the function listed in the product packaging (Juwandi, 2004). The benefit is the benefit obtained by consumers in using the product that has a high benefit ratio compared to the side effects caused (Rambat, 2001).

2.3. Government Regulations Regarding Product Labels

According to Government Regulation No. 69 of 1999 article 2 (1), that is, every person who manufactures or imports packaged food in the territory of Indonesia must include a label inside and or outside the food packaging. Also, based on Minister of Health Regulation No. 246 of 1990 article 1 (9) states that the herbal medicine label must include information in the form of product name, composition, net weight, name and address of the business actor, expiry date, rules of use, date of manufacture, side effects, symbol of herbal medicine, dosage of use, efficacy, and usefulness, contraindication (if any), registration number, production code number, specific ingredient information (if any), alcohol content (if any)

3. Method

3.1 Research Design

The design of this study uses the RAP (*Rapid Assessment Procedure*) method or a rapid assessment procedure with a qualitative descriptive approach. So in this study, researchers will identify the use of herbal products used by respondents based on features, functions, and benefits.

3.2 Research Place and Time

This research will be conducted in the campus environment of UNIDA Gontor, both for the families of lecturers who live in UNIDA Siman, as well as Gontor Putri 1 and 2. The time in this study starts from September 2019 to January 2020.

3.3 Research Samples

The population in this study is the lecturers of UNIDA Gontor with a total population of 250 people. The research sample that will be used as a respondent uses a purposive sampling technique which is a method for selecting respondents by determining criteria included in the research category (Saryono & Anggraeni, 2010). The sample of respondents to be taken using the Slovin formula with an error rate of 10% so that the degree of trust in this study is 90%.

Slovin formula:

$$n = \frac{N}{N(d^2) + 1}$$

With information:

n : Sample Size

N : Large population

d : The degree of accuracy of the alleged magnitude of the sample = 0.1 (10%)

So that the results obtained based on the Slovin formula are 72 respondents from a total population of 250 people.

3.4 Ways of Data Collection

In this study, researchers conducted interviews with respondents by contacting respondents who used herbal products and were willing to become respondents. Interviews were conducted face-to-face by visiting respondents in the office or at home. In this study, researchers brought tools such as pens, notebooks, and recorders to help facilitate data processing. At the end of the interview, the researcher asked respondents to provide samples of herbal products that were used as research documentation.

3.5 Data Analysis and Processing

The data obtained will be analyzed using a qualitative descriptive analysis that describes the results that have been obtained by researchers by accurately describing the facts related to the phenomena conducted in the interview. The data processing is done using Microsoft Office Word and Microsoft Office Excel.

Stages of data processing are: (1) Organizing data obtained during interviews, (2) Conducting data categorization of the same type, (3) Interpret data obtained to answer research problems and describe phenomena related to research, (4) Evaluate interpretations to avoid misinterpretations.

4. Result and Discussion

4.1 Overview of Research Subjects

In carrying out the identification related to the use of herbal products used by 72 respondents. The respondents with male gender amounted to 73.6% and female respondents amounted to 26.4%. In this case, lecturers who teach at UNIDA Gontor are dominated by male lecturers so that many of them use herbal products.

According to (Nur, 2004) respondents with male gender tend to use the internet to search for information compared to social media while women tend to use the internet for social media. If respondents based on education level were dominated by S-2 lecturers (94.4%) than S-3 (5.6%). This is because the university of UNIDA Gontor was only established in 2014 so that not many lecturers have doctoral degrees and no one has graduated students at the doctoral level.

4.2 Feature

In distributing herbal products in Indonesia must have a marketing authorization (Permenkes, 2012) and include clear information on the packaging (Government Regulation, 1999). The licensing agency related to the circulation of a product in Indonesia can be through BPOM, MUI, and PIRT.

BPOM licensing is the highest licensing that takes care of drug and food control (BPOM, 2017). MUI is a licensing institution based on the deliberations of Muslim scholars and scholars who determine the halal status of a product by Islamic law (Government Regulation, 2014). Whereas PIRT is a licensing scope for district or city service for MSMEs and home industries (Nurwidiana, 2019). So that from 100 products used there are licensing:

BPOM	BPOM & MUI	PIRT & MUI	PIRT
25 Product	36 Product	16 Product	19 Product

Table 1. Types of Licensing of Herbal Products

Based on features on herbal products, it can be viewed from 4 aspects, namely: (1) The safety of herbal products can be seen on the packaging label based on the raw materials used and claims of efficacy as in tables 2 and 3, namely:

KATEGORI	BPOM	BPOM & MUI	PIRT & MUI	PIRT
Secure	25%	36%	16%	19%
Not secure	0%	0%	0%	4%

Table 3. Safety Levels of Herbal Products Based on Claims Efficacy

KATEGORI	BPOM	BPOM & MUI	PIRT & MUI	PIRT
Secure	23%	33%	10%	10%
Not secure	2%	3%	6%	13%

Table 4. Completeness of Herbal Product Information

KATEGORI	BPOM & MUI	BPOM	PIRT & MUI	PIRT
Complete	25%	36%	16%	6%
Not Complete	0%	0%	0%	17%

In table 2. 96% of the products are classified as safe based on the raw materials listed on the packaging. This is very important considering the number of cases related to herbal products that contain BKO (medicinal chemicals) and are fatal to health.

In table 3. there are 76% of products classified as safe based on the claims of efficacy listed on the packaging. Herbal products with BPOM permission claim the product is only as a supplement and helps prevent or treat it not as a medicine. Whereas the PIRT permit product can only claim as food, not as a supplement or medicine.

(2) Types of herbal products based on herbal, OHT, and phytopharmaca categories, namely:

JAMU	OHT	FITOFARMAKA
94,7%	5,3%	0%

Based on the percentage of use of herbal products in a sequence, respondents use more herbs, OHT and no one uses phytopharmaca. Phytopharmaca herbal products are herbal products that can be equated with synthetic chemical drugs because they have been proven clinically (evidence-based medicine).

(3) Completeness of information listed on herbal products as in table 4. 83% of products have completed information standards based on the type of license. Completeness of information is important because it can guarantee the safety and authenticity of a product to consumers in using a product.

(4) The level of understanding of herbal medicine categories based on herbal medicine, OHT, and phytopharmaca. Based on the overall 2 respondents understand related herbal medicine categories, namely:

Respondents	Understand	
A (1 Respondents)	Jamu and OHT	
B (1 Respondents)	Jamu, OHT, and fitofarmaka	
70 Respondents	Do not understand	

The level of understanding of respondents related to features and benefits in the range of understanding to very understanding. While the functions in the range do not understand until understand. This is based on the ability of respondents to understand the active compounds contained in the product composition and the ability to analyze products that are categorized as insecure or contain BKO.

4.3 Function

The use of herbal products must have to match the benefits felt by consumers with the product claims listed on the packaging. The percentage functions required by respondents based on the product used are:

Supplement	Preventive Form	Help Treat
71%	19%	10%

Herbal products used by many respondents were classified as overclime, but the use of these products was limited to the table above. The respondent's answer related to the perceived benefits of making the body healthier, stamina, not easily hurt and tired when on the move.

4.4 Benefits

In the aspect of benefits, the use of herbal products is following the information contained in the packaging label. Although there are some products that state claims to cure, respondents only use it as a cure or prevent.

The reasons respondents use herbal medicines are the lack of side effects and even almost not found, minimize the use of chemicals, do not cause dependence effects, and can be used continuously to maintain health.

So based on the perceived benefits, respondents will choose to use herbal medicines before using synthetic chemical drugs to help treat or prevent a complaint.

5. Conclussion

The use of herbal products used by respondents based on features can be reviewed from the aspect of product safety level based on raw materials (96%) and efficacy claims (76%), correctness of information on product packaging labels 83% and respondent knowledge levels based on herbal, OHT, and fitofarmaka as many as 2 respondents.

The use of herbal products based on function is a supplement (71%), preventive form (19%) and helps treat complaints (10%). The use of herbal products based on benefits is considered safe, which has a higher benefit ratio compared to the side effects.

The use of herbal products based on the category of herbal medicine was 94.7%, OHT was 5.3%, and fitofarmaka was 0%. So that herbal products that have not included the logo of herbal medicines are 62 products from the total products used by respondents.

6. Suggestions

For further research, it is necessary to test the levels of active substances in the products used by respondents to find out the level of truth by the packaging labels listed on the product and the need for making manuals or guidelines on how to choose herbal products that are safe, useful and guaranteed. As well as for the government to make a special policy regarding product truth standards with PIRT permit status that can be accessed by the general public.

7. Acknowledgements

We all researchers in this study would like to thank the Darussalam Gontor University for providing an internal research grant to conduct research related to the identification of herbal products used by UNIDA Gontor's lecturer family

References

[1] Juwandi, H I. 2004. Kepuasan Pelayanan Jasa. Jakarta. Erlangga, Hal: 97.

[2] Kamaluddin. 2016. *Obat Herbal Berkhasiat, Keamanan Perlu Dimonitor*. Jurnal of Indonesian Medical Association.

[3] Nurwidiana, Fatmawati, W., & Masidah, E. (2019). Pendampingan Proses Produksi dan Kemasan Produk Industri Kecim Minuman Herbal. Jurnal Community Empowerment, Vol. 4, Hal: 57-65.

[4] Nur, A. 2014. Pengaruh Usia, Tingkat Pendidikan, dan Jenis Kelamin Terhadap Perilaku Konsumsi Media. Jurnal Ilmu Komunikasi, Vol. 1, No. 11.

[5] Parwata, I Made O A. 2016. Obat Tradisional. Skripsi. Bali: Universitas Udayana.

[6] Peraturan Menteri Kesehatan Republik Indonesia Nomor 6 Tahun 2016. Formularium Obat Herbal Asli Indonesia. Jakarta. Menteri Kesehatan Republik Indonesia

[7] P. Kotler., dan Keller KL. 2009. Manajemen Pemasaran Jilid 1. Edisi 13. Jakarta. Airlangga.

[8] Peraturan Pemerintah Republik Indonesia Nomor 69 Tahun 1999. *Label dan Iklan Pangan*. Jakarta. Menteri Kesehatan Republik Indonesia.

[9] Peraturan Mentri Kesehatan No 246/Menkes/Per/V/1990 tentang *Izin Uaha Industri Obat Tradisional dan Pendaftaran Obat Tradisional*, Jakarta: Departemen Kesehatan Republik Indonesia.

[10] Peraturan Menteri Kesehatan Republik Indonesia Nomor 007 Tahun 2012. Registrasi Obat Tradisional. Jakarta

[11] Peraturan Menteri Kesehatan Republik Indonesia Nomor 07 Tahun 2012. *Regristrasi Obat Tradisional*. Jakarta. Menteri Kesehatan Republik Indonesia.

[12] Peraturan Badan Pengawas Obat dan Makanan Nomor 26 Tahun 2017. Organisasi dan Tata Kerja Badan Pengawas Obat dan Makanan. Jakarta

[13] Peraturan Pemerintah Republik Indonesia Nomor 31 Tahun 2014. Jaminan Produk Halal. Jakarta

[14] Peraturan Menteri Kesehatan Republik Indonesia Nomor 88 Tahun 2013. *Induk Pengembangan Bahan Baku Obat Tradisional Merujuk Pada Kebijakan Obat Tradisional Nasional*. Jakarta

[15] Rambat, L dan Hamdani. 2001. Manajemen Pemasaran Jasa. Jakarta. Selemba Empat, Hal: 127.

[16] Saidani, Basrah; Arifin Samsul. 2012. Pengaruh Kualitas Produk dan Kualitas Layanan Terhadap Kepuasan Konsumen dan Minat Beli Pada Ranch Market. Jurnal Riset Manajemen Sains Indonesia. Vol. 3, No. 1. Hal:5.

[17] Saryono, Mekar Dwi Anggraeini. 2010. *Metodologi Penelitian Kualitatif Dalam Bidang Kesehatan*. Mulia Medika. Yogyakarta.

[18] Undang-Undang Republik Indonesia Nomor 36 Tahun 2009. Kesehatan. Jakarta.

[19] Utami, Ebti Rizki. 2018. Hubungan Pengetahuan Keluarga Dengan Penggunaan Obat Tradisional di Desa Nunggalrejo Kecamatan Punggur Kabupaten Lampung Tengah. Skripsi, Fakultas Kedokteran, Universitas Lampung. Hal: 1-58.

[20] WHO. 2005. *National Policy on Traditional Medicine and Regulation of Herbal Medicine*. Report of a WHO global surve. Geneva