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## **Self-Treatment Profile in Makassar Community**

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### **Abstract**

Implementation of self-treatment contained in all the social and cultural conditions and become part of the development of services in dealing with health issues. Healthy perception that pain affects the behavior of drug use. The use of drugs should be safe, dangerous if not used properly and effectively, according to the rules or how to use related to pains experienced. The study objective was to analyze the profile of self-treatment in Makassar city community when experiencing pains. This type of study used is a quantitative with Cross Sectional Study. This study used survey method using a questionnaire with the aim of explaining the relationship variables reason treatment, socioeconomic factors, a drug services. Linkage of these variables was analyzed as its own characteristics and treatment patterns of Makassar community. The study location was Pharmacies and Drug Stores distributed into 4 regions were the North, East, South and West in the city of Makassar, South Sulawesi Province, Indonesia. The sampling technique used in this study was multistage random sampling random. The sampling method (random) ensures every member of the population has an equal chance to be elected as members of the sample. The sample size in this study = 400 people. Population pharmacies in Makassar = 556, the number of pharmacies sampled = 84. The population of drugstores in Makassar = 38, the number of drug stores sampled = 28. Respondents who visited pharmacies sampled = 300 people. Respondents who visited the drugstore sampled = 100 people. The results showed that the people of Makassar conduct their own treatment in accordance with used drugs used with the pains experienced. However, they are less aware of the impact of drug side effects (ESO) and how to cope in the event of drug side effects and public is less aware about contraindications of the drugs used with certain diseases.

**Keywords:** health issues; self-care; Self-treatment.

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## **1. Introduction**

Self-treatment is a form of self-care by using drugs in health issues including symptoms, recurrent disease or minor health problems and does not depend on age [1].

Self-treatment is becoming increasingly important in addressing health where public was given a major role in the decision to treat diseases that are considered to overcome; the role of the community can improve self-empowerment.

Self-Treatment itself contributes to the financing access treatment because it does not use medical services and prescription medication costs so that costs can be minimized, but the risk of undesirable as excessive use of drugs, duration of treatment, dose of the drug is not appropriate, the effects of unwanted drug can occur and an important strategy is to maximize the benefits and minimize the risks [2].

Based on the results [3], the Central Bureau of Statistics noted that there are 66% of sick people in Indonesia does their treatment themselves. This rate is relatively higher than the percentage of the population that outpatient treatment to the doctor (44%).

Self-treatment with drug use can lead to irrational drug use, waste of resources; increase the occurrence of resistance of pathogenic, the danger of adverse reactions and prolonged suffering. If action was not taken then the dangers of drug interactions and side effects may be increased incident. Safety in the treatment itself depends on four factors: the drug itself (the inherent properties of the dose, the drug and duration), formulation, and information available and patient compliance [4].

National drug policy [5] showed that the rational use of drugs is not limited to the use of drugs by health workers (health providers) but also in their own treatment. From the 2001 data shows that the proportion of people treat themselves by 83.88% using the drug. Residents in urban areas use more of the drug reached 85.04% compared to 83.02% of the rural population. Therefore communication, information and education effectively and continuously are a necessity in the context of rational drug use.

Problems associated with the use of drugs obtained in pharmacies and drug stores in the act of doing self-treatment to overcome health problems faced were 1.

The use of drugs based on 1. the desire or disappearance of symptoms 2. improper dosage, 3. duration of use, 4. user where the drug is actually an indication of the use of medically non-existent, 5. the types of drugs with the potential toxicity or side effects is greater when other drugs are equally usefulness (efficacy) with less potential side effects are also present, 6. It does not provide treatment that is already known usefulness and safety (established efficacy and safety), 7. It provides treatment to drug with questionable efficacy and safety 8.

Use of drugs based solely on individual experience without referring to the feasible sources of scientific information, or based only on resources that cannot be ascertained the truth, 9. the use of drugs based on intuition without looking at the facts and scientific truth [6].

Socio-demographic Makassar has 14 districts and 143 villages, total population of 1,272,349 inhabitants. Age 20 years - 40 years as many as 491 591 people. Ethnically heterogeneous population, were Bugis, Makassar, Mandar, Toraja, Chinese, Javanese, and Buton. The level of education was high school graduates 96.48% and 57.56% of them were scholars. The population of Makassar as much as 30% ( $\pm$  400,000) were aged under 40 years and ever do self-treatment. The distribution of health facilities to access free drugs, limited free drug and hard drugs for use in self-treatment without consulting a doctor is the pharmacy 556 units and drug stores 38 units as well as small shops selling the drug, as well as medicinal plants [7,8].

The formulation of the study is how to profile of self-treatment Makassar city community when experiencing pain complaints? The study objective was to analyze the profile of self-treatment Makassar city community when experiencing pain complaints

## **2. Materials and Methods**

This type of study used in this research is a quantitative with Cross Sectional Study design. This study used survey method using a questionnaire with the aim of explaining the relationship variables reason treatment, socioeconomic factors, a drug services, security and self- treatment [9].

This study was conducted in the city of Makassar in 14 subdistricts were distributed into four regions, were North, East, South and West. The study was conducted in December 2015 until April, 2016.

The population in this study is the Makassar people who have done their own treatment using drugs, limited OTC drugs and hard drugs obtained from pharmacies and drug stores spread across the city of Makassar. Makassar society is domiciled in Makassar spread over 14 districts.

The sample size in this study uses the data parameter estimation with the following proportions:

$$n = z^2_{1-\alpha/2} \cdot p \cdot q / d^2$$

$$n = 1,96^2 \cdot 0,5 \cdot 0,5 / 0,05^2$$

$$n = 384,16$$

$$n = 384 \text{ and it became } = 400 \text{ respondents}$$

The sample in this study was referring to the criteria:

1. People of Makassar and live in one household
2. People of Makassar aged 17-65 years
3. People of Makassar who visited pharmacies and drug stores to buy OTC drugs, limited OTC drugs and hard drugs to be used as a self-treatment
4. Willing to be a respondent

The sampling technique used in this study was multistage random sampling technique is a way to be taken in the sampling, in order to obtain a sample that fits the subject of study.

Probability sampling is random sampling method (random) that ensures every member of the population has an equal chance to be elected as members of the sample. The sampling technique used in this study was multistage random sampling. Mechanical sample selection was done in stages and usually based on territorial division.

Population pharmacies in Makassar = 556, the number of pharmacies sampled = 84

Population drugstores in Makassar = 38, the number of drug stores sampled = 28

Number of pharmacies and drug stores sampled =  $84 + 28 = 112$

Respondents who visited the pharmacy =  $84/112 \times 400 = 300$

Respondents who visit drugstores =  $28/112 \times 400 = 100$

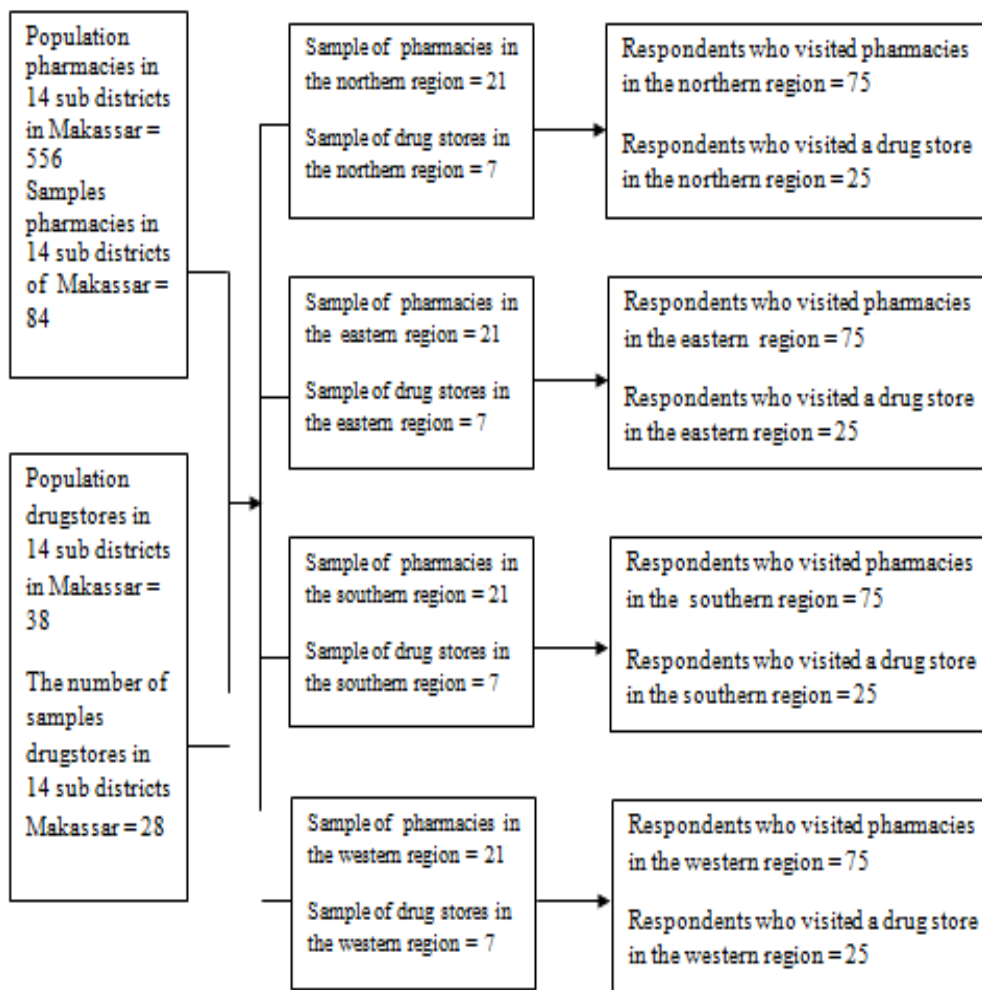


Figure 1: Distribution of respondents, pharmacies, drug stores and zoning

### 3. Result of Study

Characteristics of respondents in this study included age, gender, education, employment, and income. Distribution characteristics of the respondents as the following table:

**Table 1:** Characteristics of socio-demographic respondents that make self-treatment in Makassar. Source: Primary Data, 2016

Characteristics	Category	Frequency	Percentage
Age (years)	≤20	56	14,0
	21-30	169	42,3
	31-40	93	23,3
	41-50	43	10,8
	51-60	23	5,8
	>60	16	4,0
Sex	Male	153	38,3
	Female	247	61,8
Education Level	Junior High school	35	8,8
	Senior High school	183	45,8
	Diploma	66	16,5
	Sarjana	116	29,0
Occupation	Student	87	21,8
	Government Officer/Army/Police Officer	25	6,3
	Private workers	90	22,5
	Entrepreneurships	105	26,3
	Other	93	23,3
Monthly Income (Rp)	≤1.000.000	157	39,3
	1.000.001-2.000.000	94	23,5
	2.000.001-3.000.000	75	18,8
	3.000.001-4.000.000	36	9,0
	4.000.001-5.000.000	19	4,8
	>5.000.000	19	4,8

### 4. Discussion

Sociodemographic factors is one of the variables measured in the study of self-treatment in Makassar people. Ages 21-30 and women were the highest category of the characteristics of some categories and frequencies

respectively 169 (42.3%) and 247 (61.8%) from the 400 respondents who self-treatment.

Limited time to consult with doctor and health care units and cost savings reasons due to the high cost of doctors is the highest indicator of some reasons categories why respondents made their own treatment.

**Table 2:** Characteristics of Drugs Service Points. Source : Primary Data, 2016

Characteristics	Category	Frequency	Percentage
Distance Pharmacy / Drug Store from home (Km)	≤1	149	37,3
	1,1-2,0	90	22,5
	2,1-3,0	44	11,0
	3,1-4,0	17	4,3
	4,1-5,0	26	6,5
	>5,0	74	18,5
Why choose Pharmacy/Drug Store	The drugs is complete	74	18,5
	Can be trusted as a formal drug services	107	26,8
	Nearer home	116	29,0
	Friendly officer	75	18,8
	Other	28	7,0
Who recommend buying drugs in Pharmacies/Drug Store	Family	194	48,5
	Neighbour	53	13,3
	Health officer	58	14,5
	Other	95	23,8

**Table 3:** The reasons to make self-treatment. Source : Primary Data, 2016

Reasons make self-treatment	Frequency	Percentage
Have no time to go to the doctor or health clinici	307	76,8
Not willing to be examined by a doctor	142	35,5
Clinic or physician's office far away from home	200	50,0
The cost of medical practices is expensive	255	63,8
Saving cost	301	75,3

On drug safety indicator, average of community purchase drugs for the self-treatment is in conformity with the pains experienced and the drug has been frequently used. However, the average people who perform the self-

treatment does not know the side effects of used drugs (ESO) and they does not know what to do in case of side effects of drugs. Most of the 293 people (73.3%) did not know the drugs used are contraindicated with certain diseases. The incidence of adverse effects due to adverse drug reactions is an important concern for the people involved in drug services [10,11,12]. The high number and types of drugs in circulation resulting in higher drug use and the risk of error is increasing too. Medication errors that occur can lead to adverse drug reactions. Various factors that can lead to adverse drug reactions due to the safe use of drugs that are not understood by the individual. Problem used drug was closely related to the needs of experienced when using the drug. Identify the problem and resolve as well as the most important thing is to prevent misuse of drugs is an important thing in mind that the safety of drug use can ensure the success of the treatment [13].

**Table 4:** Initiatives to make self-treatment. Source : Primary Data, 2016

Initiatives to make self-treatment	Frequency	Percentage
Friends	12	3,0
Neighbour	14	3,5
Families	100	25,0
Themselves	263	65,8
Other	11	2,8
Total	400	100,0

Indicator of treatment security

**Table 5:** The proper of drugs selection. Source : Primary Data, 2016

No	Statement	Yes	No
1	Ever use other drugs than those purchased now to treat the same pains	223 (55,8%)	177 (44,3%)
2	Drugs purchased once prescribed by a doctor	179 (44,8%)	221 (55,3%)
3	Know that the drugs purchased are in accordance with the complaints	354 (88,5%)	46 (11,5%)
4	Drugs are purchased often used when the same pains	328 (82,0%)	72 (18,0%)
5	Know drugs purchased should not be taken by people who have a particular disease (contraindicated drugs)	107 (26,8%)	293 (73,3%)
6	Have a disease or condition that is not allowed to consume drugs purchased	21 (5,3%)	379 (94,8%)

**Table 6:** Appropriate doses of the drug. Source : Primary Data, 2016

No	Statement	Yes	No
1	Know the frequency of taking drugs purchased	363 (90,8%)	37 (9,3%)
2	Know the amount of drug every time a drink	320 (80,0%)	80 (20,0%)
3	Know of time (days) to use drugs	280 (70,0%)	120 (30,0%)

**Table 7:** The right use of drugs. Source : Primary Data, 2016

No	Statement	Yes	No
1	Know how to use (drinking) drugs	368 (92,0%)	32 (8,0%)
2	Know the time of use (drinking) drugs	347 (86,8%)	53 (13,3%)

**Table 8:** The right information about drugs. Source : Primary Data, 2016

No	Statement	Yes	No
1	Ever get information about drugs	301 (75,3%)	99 (24,8%)
2	Reading tables or medication instructions before use	244 (61,0%)	156 (39,0%)
3	Know how to find out expired of drugs	319 (79,8%)	81 (20,3%)

**Table 9:** The right storage of drugs. Source : Primary Data, 2016

No	Statement	Yes	No
1	Know how to store of purchased drugs	299 (74,8%)	101 (25,3%)
2	Know how long purchased drugs can be stored	215 (53,8%)	185 (46,3%)
3	Know where /room where purchased drugs should be kept	292 (73,0%)	108 (27,0%)

**Table 10:** Alert side effect of drug. Source : Primary Data, 2016

No	Statement	Yes	No
1	Know the adverse effect of drugs purchased	110 (27,5%)	290 (72,5%)
2	Ever experience the adverse effects of the previously used drugs	52 (13,0%)	348 (87,0%)
3	Know how to cope in the event of unwanted effects of the drugs	122 (30,5%)	278 (69,5%)



In terms of the initiative to conduct their own treatment, the average respondents do their own were 263 (65.8%) to buy drugs to pharmacies or drug stores and uses its own without the advice or instructions of others. While the recommendation to make self-treatment by going to a pharmacy or drugstore come from family party by occupying the largest frequency were 194 (48.5%).

## **5. Conclusion**

From the results of study and discussion can be concluded that the public Makassar perform their self-treatment was appropriate with the used drugs of pain experienced complaining. But they do not know the impact of drug side-effects (ESO) and how to cope in the event of adverse effects of drugs and people do not know the contraindications of the drug with certain diseases.

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## **Conflict of Interest**

This study does not have conflict of interest with any party involved in the study. The study was planned, performed, monitored and reported results are scientifically and it was not interfered by other parties.

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