

CHAPTER V

DISCUSSION, CONCLUSION AND RECOMENDATION

The objective of this research was primary focus on description of pharmacy service based of good pharmacy practice and customer knowledge and perception about self medication. The expectation of the study was that we can describe the pharmaceutical practice in community and get some new information related to good pharmacy practice in community pharmacy in East Jakarta. In terms of self-medication practice in community, we hoped we can describe the knowledge and perception of customers.

5.1 Discussion

5.1.1 Pharmacy practice in community

There was 30.6% male and 69.4% female pharmacists. The age range of pharmacists was 29 – 65 years old with the mean age of 45.1 years. Most of pharmacists had experience more than 15 years (43.9%), between 10 -15 years (19.4%), 6 – 10 years (17.3%), and between 3-5 years (16.3%). Only 3.1% of community pharmacies had pharmacists who had experience less than 2 years.

Most of pharmacists in the community pharmacy worked as their side job (71.4%). Similar to the previous study (Purwanti et al., 2004), 76.5% of pharmacists had other job beside their job as community pharmacist. This characteristic is a common practice in Indonesia. This working status also has an

implication to the score of good pharmacy practice. There was a significant association between pharmacist working statuses with the score of good pharmacy practice. From analysis using non-parametric test, the mean rank for having other job was lower than having no job (see table 11).

The number of pharmacists, who provided information to their customers in community pharmacies, was found to be considered low in East Jakarta. Most of pharmacists came to their pharmacies once in a week (38.8%). One of three pharmacists came once in a month. Only 13.3% of pharmacists came every day to their pharmacies.

Based on the opening hours of pharmacies, the time of giving information to their patients was mostly by pharmacist assistant (65.39%), followed by pharmacist (17.47%). This finding was similar with another study in Jakarta. In this study pharmacists provided information only 13.4% while pharmacist assistants provided 56.2% (Handayani et al., 2006). This finding is also compatible with a study in 2003 (Purwanti et al., 2004), the study found only 14.7% of information regarding the drug use provided by pharmacists. In United States, 37% pharmacies provided counseling for any information in 1982, 42% in 1994 and two-third of pharmacies provided counseling or an offer to counsel on a new prescription in 2000 (Christensen & Farris, 2006). As one of the pharmacist's role in the community to give information regarding drug use to their patients, the low information provided by pharmacist will influence customer's knowledge about the drug they bought.

Drug financing in developing countries mainly comes from out-of-pocket. Providing generic drugs seemed to be the choice of community pharmacies. In

our study, all pharmacies provided generic drugs. But if the customers complained about drug price, pharmacies mainly suggested another brand name with cheaper price (49%) and generic drugs (42.9%). The myth of generic drugs for lower quality seemed to be the main reason why the pharmacies suggested another brand name. It is also a similar situation in Indonesia, although the physician believes that generic drugs has the same quality with brand name drugs, 72% patients were encouraging their doctored to use branded drugs for the reason of quality (Rustamaji & Danu, 2005).

The finding from community pharmacy found that an average proportion of customers came to community pharmacies to get their prescription drugs (32.4%), and to repeat their prescriptions (8.6%). Although the core activity of community pharmacy is to provide prescription medicine to consumers with prescription, it seems the customers use pharmacy not only for their prescription drug. This was higher than Nguyen (2002) study in Vietnam, who found that less than 1% of customers came with prescription. In the US, dispensing prescription is still the primary duty of community pharmacies (Christensen & Farris, 2006).

Using the quality indicators developed based on the concept of good pharmacy practice to assess the quality of pharmacy services is a way to measure the practice and describe the present situation in East Jakarta. Some article was found using good pharmacy practice as their standard regarding the service of pharmacy in community (Syakhang, 2002; Larsson et al., 2006).

Low quality of service, in terms of good pharmacy practice measurement in this study, was found to be a problem in private pharmacies in East Jakarta Municipality.

In our finding, 69.4% of pharmacies were less than good and 3.1% were poor. Only 19.4% and 8.2% were good and very good, respectively. Similar to the study in Lao PDR (Syakhang, 2002), the quality of pharmacy services was low in relation to the concept of Good Pharmacy Practice characterized by bad order in the pharmacy, the lack of some essential drugs and some essential materials, little information on drug use to customers, inadequate drug labeling and mixing of drugs in the same bag.

A significant association was found between good pharmacy service and pharmacist working statuses. The frequencies of pharmacy practice in a month, type of pharmacy and number of prescription also were significantly associated with good pharmacy practice. There were no associations between gender of pharmacist, age of pharmacist, type of other job and pharmacist experience, with score of good pharmacy practice. Schommer et al., (2006) in a study about community pharmacies in US, found that age of pharmacist and working type (part time) were associated with medication dispensing practice, while there was no association between type of pharmacies (independent and chain pharmacies), gender and year licensed of pharmacist with medication dispensing and consultation activities.

More than a half of pharmacies had known the standard of pharmaceutical service published by DG of Pharmaceutical and Medical Devices. Otherwise, only one-fourth pharmacies had the document in their pharmacy.

In relationship between characteristics of pharmacy and regulation knowledge and the availability of document, we found the relationship only in pharmacist working statuses with regulation knowledge (see table 12). The other demographic characteristics have no association with regulation knowledge and the

availability of document. Even these associations cannot explain the causal effects, with the number of pharmacies knew some new regulations (mainly the regulation about standard of pharmacy services), but it had no influence with their practice. Syakhang (2002) found a positive relationship between quality indicator scores and availability of regulatory documents. But the correlation between the quality indicators and the drug sellers' knowledge of regulations was not statistically significant.

5.1.2 Self-medication practice among customer

In terms of demographic of customers, it was a fair balance of the gender of respondents. For education level, occupation, and income of respondent, most of them were high school (33.3%), private employee (45.6%) and between Rp. 1,000,000 – 2,500,000 (48.6%).

Most of people who came to pharmacy for self-medication, were sought for symptomatic drugs (25.5%). It is not surprising that 11.6% of customers came to pharmacy to get antibiotics drugs, and 7.5% and 2.4% of customers bought their drug related to their chronic disease (anti-hypertension and anti-hyperlipidemia, respectively). These findings were similar to the study in Croatia (Aljinovic-Vucic et al., 2005) which found that 28% of household do self-medication for NSAID's and 10% for antibiotics systemic. In Vietnam, Nguyen (2002) also found that antibiotics were sold to 17% of clients. Although the practice of buying prescription drug without prescription is illegal, this practice is a common situation in community pharmacy in Indonesia and many countries (Larsson et al., 2006; WHO, 2007a; Casner & Guerra, 1992).

Lack of information from pharmacy regarding the basic information about the use, dosage, usage, and duration was another finding from this study. If we accumulate the score of information obtained from pharmacies (score 1), most of customers (84.7%) got the score less or equal to 4. Syakhang (2002) in dispensing indicators of their study found 59.4% of the 420 consumers have no information about drug use.

The knowledge of customer for the drugs they bought was considered good. It shown from the score 2 (customer's knowledge) that 79.6% of customers got the score higher than or equal to 5. This knowledge not merely came from pharmacy. Three-fifth respondents (61.2%) said they did not get the information from pharmacies (see table 16). About 53.4% of customers said their knowledge were from their previous conditions.

Lack of time in customers view seemed not to be the reason for self-medication practice. Two-third (67.3%) of customer said lack of time was absolutely not their problem for self-medication practice. About 68.4% of the respondents said they do self-medication because of simple ailments. Information to get the drug was mainly came from previous use of the drugs (59.2%). Family or friend or neighborhood recommendation was in 36.1% of the respondent.

Price is also another finding that should be considered. Cheap price was one of the services provided by pharmacies. The answers from customers were "very important" with 27.6% and "important" with 24.5%. In Australia, 82% of the customer mentioned prices at their pharmacy were acceptable and 25% of the customers were "some influence" by price on their decision to use the pharmacy

(Suen et al, 2006). Price is also being one of important factor in determining pharmacy patronage (Taylor, 2001).

From the result obtained, it might seem that the customer did not want to see the pharmacist for self-medication. Most of customers preferred to see pharmacist assistant (50.3%), followed by pharmacist (27.2%) and store keeper (22.4%). In the US, only 37% of patients consuming non-prescription drugs sought assistance from any health professional regarding proper selection or use (Covington, 2006). This finding might also be related to pharmacists who were always unavailable during the opening hour of pharmacy. Taylor (2001) mentioned that social skills of pharmacist to be more important to patients than was any technical experience. He also stated that there is evidence that some consumers may hesitate to ask for advice.

Even two-third customers knew the role of pharmacist as a drug counselor (68%), but many reasons seemed to be the constraint of seeking pharmacist. Mainly in customers mind the pharmacist is not available when they come to pharmacy. Even when the pharmacist are available, physical barrier at the prescription counter, customer shyness, a lack of privacy and/or unwillingness to interrupt pharmacists that appearing too busy are become the potential barrier why they would not consult with pharmacist for self-medication (Taylor, 2006). Although the term of pharmacist is viewed as the most accessible health professional, or the gatekeeper to the health care system, but Taylor (2001) stated it is *pharmacies* rather than *pharmacists* that are accessible to the public. The gap between unpresence of pharmacist in the community pharmacy and the responsible self-medication practice should be eliminated. The trend of OTC market is increasing due to the switches from

prescription drugs to non-prescription drugs (Covington, 2006). This will implicate the need of pharmacist as the main source of information in community.

Pharmacist assistant who had the highest role for information in this study are needed to be highlighted. Our study shows pharmacist assistant provided 65.39% of information to their customers, and most of customers preferred to see pharmacist assistant for drug information (50.3%). Any intervention of training to pharmacist assistant might increase the quality of self-medication practice in short term.

There might be some reason explained why the drug information for self-medication was low. First, in our study there were 42.8% of customers asking the drug by themselves and 8.7% showing the label (see table 5). It means customers decided to buy the drug by themselves, indicating that they already knew about the drug they bought. It seems pharmacy staff felt not necessary to inform such kind of customers. Second, it was because limitations of pharmacy staff's knowledge. Third, it might be the important thing that the pharmacy business is still money oriented. People who bought self-medication drug, only paid less compared with prescription drugs. So pharmacy staff seemed to put more attention to their customer with prescription compared to customers with self-medication, and it will change the orientation from health care provider (health-oriented) and drug seller (profit-oriented).

Some of the limitations should be considered as a bias when assessing the findings.

1. It should be recognized that the answer from pharmacies and customer are inexact estimates, due to small sample size and not strictly random selection process. It can be reduced by dividing the area and selecting sample by random in small area.
2. The results from structured interviews should be regarded as rough indicators of the actual situation.
3. Customers were selected as they appeared in the pharmacies during 2-3 hours period. This selection was introduced a potential bias as the hours of selection may influence the type of customer. For example, there might be differences between men and women usually visit the pharmacies, or, the differences between employee and unemployed customers.

Although our study also has other limitations, such as recall bias, not revealing the truth by pharmacies or customers, or not identifying the knowledge precisely, but it allows critical issues to be raised relating to the public health effectiveness and safety of self-medication practice. An intervention by authorities might be useful to increase the knowledge and attitude of self-medication practice, both to the community pharmacies and consumers.

5.2 Conclusion

This study was carried out to determine the quality of pharmacy services in terms of good pharmacy practice in retail private pharmacy in the community in East Jakarta. In summary, the quality of private pharmacy services in East Jakarta was less than good in terms of Good Pharmacy Practice indicator.

In the relation between knowledge and practice of consumers about self medication, customer knowledge of self medication practice was fair in 71.8% of customers. Even though the knowledge of customer was good (Score 2), but the information from pharmacies was very low.

There were significant associations between total score of good pharmacy practice with job status, frequency of pharmacist practice, type of pharmacy and number of prescription. In this study, pharmacists who had no other job had higher score in good pharmacy practice than pharmacists who had other job. This study also indicated that pharmacists who came to pharmacies every day or twice a week got higher score than pharmacists who came once a week or once in a month. Chain pharmacies also got higher score than independent pharmacies.

Only one association found in the relation between demographics and knowledge of regulation and availability of document. Job status of pharmacist had significant associations with good pharmacy practice.

In customers, significant associations were found in education and income of respondent with the score of knowledge of customer for self medication (Score 2). A significant correlation was found in the information of customer from pharmacy (Score 1) with total score of good pharmacy practice. The correlation coefficient was .530 and considered as a reasonable correlation.

Since the profession of pharmacist has been moved away from its original focus for medicine supply to be more focus on patient care, the practice of pharmacist in Indonesia slowly follows the trends of pharmaceutical care. There is a gap in

education/information to the customers that can be fulfilled by pharmacists in the community.

5.3 Recommendation

Recommendation for community pharmacies:

1. Drug information should be provided in the community pharmacy for customers in terms of self-medication practice. Pharmacists and pharmacist assistants should be provided with knowledge for giving information to their customers. An active role by the pharmacist could increase the quality of self-medication practice.
2. Both education to pharmacy staff and customers should be provided by authorities. An appropriate training should be provided by authorities to improve the quality of services in community pharmacies, and public educations might improve the responsible self-medication practice among customers.
3. Pharmacists in the community should change their attitude to be reachable by their customers.

Recommendation for further study:

1. As this study was limited in one municipality, it could not find the variations in other areas especially in rural area. A further study should consider about this and expand the scope to other areas in order to cover and see the diversity.

2. As this study only focused on self-medication practice, a further study which include the prescription services, chronic disease such as diabetes, should be considered.
3. Since there was no reference for scoring system to classify and concluded the scores of good pharmacy practice and self-medication practice, it was an arbitrary conclusion. Further study should found this as the limitation in this study.

