ORIGINAL ARTICLE

PROFILE OF COMMUNITY PHARMACISTS’ PERFORMANCE BY PHARMACY TEAM PERCEPTION

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Abstract

The new vision of Indonesian community in the future to be reached through the health development is formulated as “Healthy Indonesia 2010”. Health development is executed with priority given to health promotion and disease prevention efforts beside the curative and health recovery efforts. Pharmaceutical services which part of health services has important role. Good Pharmaceutical Practices reached by good performance of pharmacists. One of tools to appraise performance of pharmacists is by the pharmacy team perception. The goals of this study were to describe performance of pharmacists in community pharmacy practices by pharmacy team perception. A cross-sectional study design utilizing questionnaires, measuring previously validated constructs was used. Sample sizes in this study are 145 respondents (pharmacy team) in 74 community pharmacies in Surabaya, Indonesia, taken by purposive sampling technique. Results of this research shows education profiles of pharmacy teams were senior high school in pharmacy as majority (more than 50%) and 11.8% respondents memiliki pendidikan non-farmasi with university level. The profiles of performance of pharmacists on professional activities are: (1) Screening of prescription with 21.4% low performance (2) Dispensing and compounding with 19.8% low performance (3) Drug information, counseling, and monitoring with 37.1% low performance (4) Health promotion and education with 54.5 % low performance. Pharmacists’ performance in pharmaceutical care practices still doesn’t meet requirement standard, especially in health promotion and education aspect. It is need further assessment to mapping the contributing factor in pharmacists’ performance and several steps to improve good pharmaceutical practices such as: continuing professional education.

Keywords: pharmacists’s performance, community pharmacy, perception, pharmacy team
INTRODUCTION

The new vision of Indonesian community in the future to be reached through the health development is formulated as “Healthy Indonesia 2010”. Health development is executed with priority given to health promotion and disease prevention efforts. This gaps will affect the successfullness of pharmaceutical services. The essential role of the practising pharmacist, especially in community pharmacy is providing appropriate advice and counselling by the pharmacist can encourage patient compliance through a better understanding by the patient of their medication, thereby improving therapeutic efficacy and the patient’s well-being. Patient compliance from the pharmacist’s point of view is largely dependent upon the communication of information necessary for the correct use of medication in association with supportive advice or counseling.

Therefore, pharmacist must give drug information, counselling, and monitoring services in community pharmacy related to rational drug use as community request. Nowadays, there is disparity between everyday practices of performance of pharmacist on drug information, counselling, and monitoring services in community pharmacy and the current recommendation of practices of pharmaceutical care (Athijah, 2005). This gap will affect the successfullness of pharmaceutical services. The facts that occur in pharmacies can be monitored from the workings of the pharmacist in pharmaceutical services. The one component that can measure the performance of pharmacists is a pharmacy team perception in a pharmacy.

The goals of this study were to describe pharmacy team profiles and their perceptions around community pharmacists’ performance in professional activities. Therby helping pharmacists formulate an enhanced role for the profession within a health care environment.

METHODS

Data source

A cross-sectional study design utilizing questionnaires, measuring previously validated constructs was used. Pharmacy teams as respondents was taken by purposive sampling technique. Setting of this study is community pharmacies in Surabaya, Indonesia. Data collection for the study was conducted between August and September, 2006.

Variables

The variables of this study consist of three informations, personal information of pharmacy teams, volume of community pharmacies, and pharmacy teams’perceptions of pharmacists’ performance.

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Measures

Pharmacy teams were asked the intensity of pharmacists doing the professional activities when they present in community pharmacies. The intensity of professional activities were measured using 7-point Likert-type scale ranging from 1 (never) to 7 (always). Professional activities based on Standard of Pharmaceutical Services in Community Pharmacy issued by Indonesian Ministry of Health. These activities related to prescription screening, prescription compounding and dispensing, drug information, consultation, and monitoring, and activities related to health promotion and education to community. These items were taken from previous studies of pharmacists’ performance. Those who perceived that pharmacists were likely never do these activities were interpreted with negative and very negative performance. Those who responded that pharmacists were likely always do these professional activities were expressed with positive and very positive performance. Furthermore, those who reported that pharmacists in the middle intensity were described with neither negative or positive performance. Personal informations of pharmacy team, such as are gender, age, education, experience, workday, and position in pharmacy were asked. Responses related to volume of pharmacy measures included number of prescription served daily and number of patients served daily.

RESULTS AND DISCUSSION

The results of this study, there were questionnaires of 145 respondents that fullfilled. Its spread in 74 community pharmacies in Surabaya.

Demographics information

The demographic profiles of the respondents in gender are very comparable, more than 90% was women. The average of age of respondents was 31,6 years old. With largest proportion of age (46,2%) was in range between 21 and 30 years old.

The education profiles of pharmacy teams were senior high school in pharmacy as majority and of course its also correlate with position in pharmacy as pharmacy technician, both more than 50% respondents. Interestingly, there was only 3,4% pharmacy teams were pharmacists, but education of respondents in university was 15,2%. It means 11,8% respondents had non-pharmacy education with university level.
To help develop a ratio of technicians to pharmacists, we also asked respondents how many pharmacists worked in their pharmacies. Pharmacist respondents also reported an average of 3 pharmacist FTEs per community pharmacy, for a ratio of 1 technician FTE per pharmacist FTE in community settings.

Responses related to experience profiles of pharmacy teams expressed with duration of working in community pharmacy. The mean±SD of experience was 9.63±9.49 years and duration of working in current pharmacy was 5.9±6.35 years. More than 50% respondents had experience under 6 years. The same result happens to respondents who asked regarding duration of working in current community pharmacy which is most of them (73.1%) work under 6 years too. These proportion between duration of experience and working in current pharmacy indicate that there’s job turnover of 6 persons in every 10 respondents.

The profiles of pharmacists’ performance on professional activities

The pharmacy teams rated their perceptions about pharmacists’ performance for screening of prescription activities. Table 1 displays the results with.

Table 1. Pharmacy teams perception toward pharmacists’ performance on screening of prescription activities (*Item based on Standard of Pharmaceutical Services in Community Pharmacy issued by Indonesian Ministry of Health, 2004)

<table>
<thead>
<tr>
<th>Screening of prescription activities*</th>
<th>Respondents’ perception toward pharmacists’ performance (n=145)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Negative or very negative (%)</td>
</tr>
<tr>
<td>Administrative screening</td>
<td>14.5</td>
</tr>
<tr>
<td>Pharmaceutics screening</td>
<td>20.7</td>
</tr>
<tr>
<td>Clinical screening</td>
<td>29.0</td>
</tr>
<tr>
<td>Composite</td>
<td>21.4</td>
</tr>
</tbody>
</table>

(*Item based on Standard of Pharmaceutical Services in Community Pharmacy issued by Indonesian Ministry of Health, 2004)

From the existing data, all administrative activities begin screening prescription screening, pharmaceutical screening and clinical screening already done by the pharmacist. Nevertheless, there are still 21.4 percent of respondents stated that screening of prescription is not done by the pharmacist.

Table 2 showed that compounding activities by pharmacists get the lowest appraisal. This is because in the pharmacy there is usually an interpreter who worked on the prescription compounding activities. Whereas pharmacist is only supervised the interpreter.

In the component of drug information, counselling, and monitoring activities (Table 3), the performance of pharmacists is the lowest. It is especially in giving counseling to the patient, monitoring drug therapy and medication recording, whereas it is a key component in ensuring the success of patients’ therapy.

Another interesting results were in performance of pharmacist on health promotion and education activities (Table 4). This composite result showed better perception from pharmacy team than previous activities, although residential care were the lowest performance of pharmacist. This could be evaluated that items of giving information, counselling and monitoring more details technically than health promotion and education activities. And also pharmacist were rarely had direct interaction with patient so this activities are rare to do by pharmacist (Faturothmah, et al., 2008). This must be corrected immediately by the pharmacist, to achieve the mission of Healthy Indonesia 2010. Things can be done by the pharmacist in improving competence is to follow the continuing education to improve their quality of professional performance in pharmacy.

From those data it can be concluded that pharmacist is still very small role in the health care component to the community, a solid system should be constructed by the college pharmacy and professional organizations to enhance the role of pharmacists in the community. Forward expectations are pharmacists can more active role in providing health services to the community.
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Table 3. Pharmacy teams’ perception toward pharmacists’ performance on drug information, counselling, and monitoring activities.

<table>
<thead>
<tr>
<th>Drug information, counselling, and monitoring activities</th>
<th>Respondents’ perception toward pharmacists’ performance (n=145)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Negative or very negative, (%)</td>
</tr>
<tr>
<td>Giving right, clear, current information wisely</td>
<td>17.3</td>
</tr>
<tr>
<td>Giving information about drug use management</td>
<td>20.0</td>
</tr>
<tr>
<td>Giving pharmaceutical dosage form, medication and health counselling</td>
<td>26.2</td>
</tr>
<tr>
<td>Giving drug counselling to patient with prescription and self medication</td>
<td>22.8</td>
</tr>
<tr>
<td>Giving continuing counselling to patient with chronic diseases</td>
<td>46.2</td>
</tr>
<tr>
<td>Drug monitoring to specific patient by phone or asking when they revisit pharmacy</td>
<td>60.7</td>
</tr>
<tr>
<td>Medication recording to patient especially with chronic diseases</td>
<td>66.9</td>
</tr>
<tr>
<td>Composite</td>
<td>37.1</td>
</tr>
</tbody>
</table>

Table 4. Pharmacy teams’ perception toward pharmacists’ performance on health promotion and education activities.

<table>
<thead>
<tr>
<th>Health promotion and education activities*</th>
<th>Respondents’ perception toward pharmacists’ performance (n=145)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Negative or very negative, (%)</td>
</tr>
<tr>
<td>Giving drug use information to public</td>
<td>60.0</td>
</tr>
<tr>
<td>Interacting actively with other health provider</td>
<td>38.6</td>
</tr>
<tr>
<td>Educating patient about self medication</td>
<td>36.6</td>
</tr>
<tr>
<td>Participating in continuing pharmacist education</td>
<td>49.0</td>
</tr>
<tr>
<td>Residential care to patient especially with chronic diseases</td>
<td>88.3</td>
</tr>
<tr>
<td>Composite</td>
<td>54.5</td>
</tr>
</tbody>
</table>

CONCLUSION
The performance of pharmacist professional activities in prescription screening, dispensing and compounding activities, delivering drug information, counselling, and monitoring services was still low. Therefore, pharmacist as “long life learner” needs continuing education programs served by college pharmacy and professional organizations in order to advance their pharmaceutical care practices.

Limitations
Since this is the first such study of the pharmacy technician workforce, and no baseline profile or exact number of practising pharmacy technicians exist, it is difficult to assess the extent to which the findings are representative of the pharmacy technician population as a whole. For these reasons, care should be taken in extrapolating these results to the overall population.

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