

## Pharmaceutical care: The Perceptions of Community Pharmacists in Surabaya-Indonesia (A Pilot Study)

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## Background

- Pharmaceutical care was a concept initially defined in the early 1990s  
*“The responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient’s quality of life”*  
(Hepler & Strand, 1990)
- *“A practice in which the practitioner takes responsibility for a patient’s drug related needs and holds him or herself accountable for meeting these needs”.*  
(Strand & co-workers, 1997)
- Pharmaceutical care in Indonesia
  - The concept was introduced in the late 1990s
  - Standards of pharmaceutical care in community pharmacies was developed in September 2004  
(Keputusan Menteri Kesehatan RI No. 1027/MENKES/SK/IX/2004)

## Objectives

- To investigate the perceptions of community pharmacists in Surabaya-Indonesia towards:
  - concept of pharmaceutical care
  - barriers to implementation; and the proposed recommendations to overcome the barriers
  - implementation of pharmaceutical care in daily practice

## Methodology

- A cross-sectional questionnaire based survey
- Questionnaire
  - Section 1: respondent characteristics (Q 1-5)
  - Section 2: perceptions on issues related to pharmaceutical care (Q 6-10)
- Sample
  - A 50% proportionally random sampling of all community pharmacies in Surabaya - as listed by National Agency of Drug and Food Control (2000)

## Cont...

Location	Number of pharmacies	Sample
Central Surabaya	76	38
West Surabaya	53	26
East Surabaya	203	102
South Surabaya	115	57
North Surabaya	54	27
<b>Total</b>	<b>501</b>	<b>250</b>

## Cont....

### ■ Procedure

- Three consecutive mailings of questionnaire to the sample respondents at approximately 2-week intervals in January – February 2005
- Each mailing consisted: a cover letter (introducing the study and requesting participation from the pharmacies), the questionnaire, and a stamped-addressed envelope

### ■ Data analysis

- Descriptive statistics were generated for responses from closed questions
- Responses from open questions were arranged under the relevant themes, and occurrences were counted.

## Results

### Response Rate

Location	Sample	Respondents	Response rates
Central Surabaya	38	9	23.7%
West Surabaya	26	7	26.9%
East Surabaya	102	36	35.3%
South Surabaya	57	12	21.1%
North Surabaya	27	4	14.8%
<b>Total</b>	<b>250</b>	<b>68</b>	<b>27.2%</b>

## Results

### Characteristics of Respondents

Characteristic	Number	Percentage
<b>Age</b>		
< 30 years	19	19
31 – 40 years	20	20
> 40 years	29	29
<b>Gender</b>		
female	56	56
male	12	12
<b>Year of obtaining registration as pharmacist</b>		
< 1990	25	36.8
1990 – 2000	29	42.6
> 2000	14	20.6
<b>Hours spent in pharmacies</b>		
1 – 3 hours/ day	10	14.7
4 – 6 hours/ day	18	26.5
> 6 hours/ day	20	29.4
Others	20	29.4

## Results

### Definition & aims of pharmaceutical care

- **Definition**
  - Providing information related to drug therapy, which includes indication, drug class, contra-indication, adverse effects, directions for use, storage requirements (29/65)
  - Controlling availability, dispensing, and providing suitable medications for patients (12/65)
  - A patient-oriented service (10/65)
- **Aims**
  - To achieve a better patients' understanding on their disease and therapy (32/67)
  - To assure the safe, effective, and optimal drug use (19/67)

## Results

### Barriers & recommendations

Barriers	Recommendations
Lack of clinical education/ training (56/68)	Providing continuing education/ training, which involves clinicians
Poor access to patients' clinical data (55/66)	Establishing good relationships with doctors and patients Documenting patients' clinical data
Lack of well-trained staff (55/68)	Providing continuing education
Inadequate supports from Indonesian Pharmacist Association (51/67)	Increasing supports from Indonesian Pharmacist Association, including conducting regular meeting/ training or publishing newsletter
Inadequate remuneration (50/67)	Establishing standards for remuneration

## Results

### Other barriers & recommendations

Other Barriers	Recommendations
Pharmacist's factor (12) eg. lack of confidence, poor relationship with doctor	Providing training to improve skills Conducting meeting with doctors
Patient's factor (12) eg. patients unable to personally pick up their medication, or low patient expectations	Contacting patients by phone (recording their contact details) Promoting the role of pharmacists

## Results

### Implementation of pharmaceutical care in practice

- More than 70% of respondents agreed that pharmaceutical care should be provided in daily practice (49/68)  
*"it is pharmacists' responsibility to provide pharmaceutical care"*  
*"pharmaceutical care enable pharmacists to have a unique role that is only theirs"*
- 6 respondents did not provide a clear comment
- Only 2 respondents did not agree with the practice

## Conclusions

- Community pharmacists in Surabaya had limited understanding towards concept of pharmaceutical care, but most of them believed that the service is important
- There are a range of barriers which require further consideration, such as lack of well-trained staff, poor access to patient’s clinical data, and lack of remuneration
- Development is required in education, training, remuneration structure, pharmacists’ relationship with doctors, and the responsibilities of professional association

Thank You