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Health Sector Financing Project



**RESEARCH PLAN FOR KAP STUDY
OF PRESCRIBERS, DISPENSERS
AND CONSUMERS OF DRUGS**

Report 39

Prepared for:
Pharmaceutical Component

January 1990



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SECTION 1 BACKGROUND AND PROBLEM STATEMENT

Information generated through various studies, specifically the 1987 study of *Pharmaceuticals for Child Survival in Indonesia* ("CSPI") and the 1988 study *Where Does the Tetracycline Go?* ("CSP II"), have called attention to therapeutically questionable and economical inefficient practices in drug prescribing.

Specifically, these studies reveal that non-therapeutic prescribing practices are commonplace, as illustrated by the following:

- Antibiotics are being grossly overprescribed relative to the most common conditions for which treatment is sought—ARI, diarrhea, and skin disease.
- In cases of diarrhea, patients are receiving antibiotics and vitamins and minerals more than they are receiving ORS, the appropriate treatment in most cases.
- Similarly, antibiotics are being dispensed for treatment of ARI, though frequently they are not medically indicated.
- Given the nature of illnesses typically treated, the number of drugs prescribed is considered exceedingly high. Data show that 60 percent of patients are prescribed four or more drugs.
- Moreover, the use of injections is thought to be unnecessarily high.
- On the other hand, antibiotics are frequently dispensed in subtherapeutic doses because of the "three/day rule," thus not only diminishing the effectiveness of treatment, but adding to patient confusion about drug use.

The consequences of the above are significant from a number of respects:

- First, in bearing the burden of these high drug expenditures, the Government of Indonesia (GOI) is limited in its ability to meeting the goals set for increased levels of funding of priority child survival programs. There is good evidence that drug expenditures by the GOI are considerably higher than in other countries in a similar situation.
- Second, apart from the cost implications, there is concern about bacterial resistance and its likely effects on the long-term health of the population.
- Third, with both the provider and the patient party to current practices, it is evident that there are fundamental misconceptions about drug use, perpetuated by the system, that need to be corrected.

Currently, three "focused assessments" are underway related to drug procurement, distribution, and dispensing.

Manpower Study

Drug Management Study

Drug Use Study

These studies will help to pinpoint where solutions are needed on the supply side. However, in order to understand all of the issues and attitudes that underlie misuse of drugs by prescribers, dispensers, and consumers, a special study has been proposed.

This document contains the *design* and specific executional details of a proposed research study of knowledge, attitudes, and practices (KAP) of the three relevant target groups. It is hoped that the results of this intensive investigation of the dynamics underlying the behavior of health givers and receivers — along with the findings of the “focused Assessments”— will provide the basis for planning effective interventions to solve or correct supply side problems and for developing social marketing strategies to address attitudinal and behavioral factors that account for problems on the prescriber and the consumer side.

SECTION 2 RESEARCH INFORMATION OBJECTIVES

As stated earlier, the output of the proposed research is intended for social marketing programs — utilizing appropriate communications vehicles for education/reeducation and to foster changes in attitudes and behavior on the part of the key target groups and the prescribers and consumers of drugs.

To accomplish these purposes, the research will need to provide answers to these key questions:

1. What is the level of knowledge of the uses of antibiotics? Of the uses of vitamins?
 - Which specific types of antibiotics are known? How are they differentiated in terms of use?
 - Which specific types of vitamins and minerals are known? How are their uses explained?
2. What are the important (i.e., most influential) sources of information about antibiotics and about vitamins?
 - Where do practitioners get their information?
 - Where do customers get their information?
3. What beliefs/attitudes are held about antibiotics? About vitamins?
 - About their efficacy in general? For specific illnesses?
 - About their safety — for babies, children, adults?
 - About their preventive benefits? About their curative powers?
 - About the cost of antibiotics? Of vitamins?
4. What are perceived as the reasons for use of antibiotics? For use of vitamins? *And* the deterrent to use?
 - In general?
 - By babies, children, adults?
 - For treatment of : a) ARI; b) diarrhea; and c) skin diseases?
5. What beliefs and perceptions are held of injections versus oral medication?
 - What reasons govern use by providers of injections? When are they expected by patients?
 - What are seen as the advantages/disadvantages of injections vs. oral medication — for which illnesses? For what types of patients? Under what circumstances?
6. Why are multiple drugs freely dispensed?
 - What needs — medical, psychological, practical, or otherwise — are satisfied by giving/receiving multiple drugs?
 - Is this seen as a patient-pleasing tactic?

- What do patients expect? Do they feel that more is better?
7. What is the level of concern about overuse of antibiotics? About overuse of vitamins?
- What are perceived to be the dangers or risks of overuse of antibiotics? Of vitamins?
 - What are perceived to be the benefits of taking antibiotics, even if not medically necessary? Of taking vitamins as a form of medication?
8. What is the level of knowledge and attitudes toward alternate therapies?
- What alternate remedies does the health care giver recommend for ARI, diarrhea, and skin disease?
 - How familiar are patients with alternate therapies?
 - Why are these *not* offered more often?
 - Why are these not requested more often?
9. Are there circumstances when a patient is sent home without any Rx's? What are they?
- What explanation is given the patient?
 - How does the health care giver feel about *not* prescribing? About how the patient will react?
 - How does the patient feel? How does he/she react?
10. What are the routine day-to-day practices and procedures at health centers and hospitals that contribute to excessive prescribing of antibiotics and vitamins and to above-average giving of injections?
- How does the management of patient screening, examining, diagnosis, and prescribing contribute to the drug use problem?
 - What solutions are suggested?
11. What consumer practices with respect to management of illness (specifically, ARI, diarrhea, and skin disease) contribute to their expectation and demand for medication at health center or hospital?
- Are consumers quick or slow to seek treatment for ARI, diarrhea, skin disease?
 - When (at what stage of illness) do consumers go for treatment — as adults, to take baby or child? Does this enter into expectations?
 - What are the expectations when treatment is sought?
 - Are consumers, in general, passive or active patients?
 - How well do they articulate symptoms?
 - How likely are they to volunteer information or ask for information?
 - How likely are they to ask questions about the illness or about the treatment prescribed?
 - How do they relate to the doctor? To other medical personnel?

- What is the role of the dispenser vis-à-vis the patient?
 - What other factors influence the behavior of patients at health center or hospital?
 - Are attitudes and behavior same or different in health center and hospital?
 - How compliant are patients? Who are the compliant ones and why? Who is not compliant and why not?
12. What are the principal sources of information about illness, therapies, and prescriptive drugs *and* the relative credibility of these sources?
- Among prescribers — the relative importance of pre-service training, studying pharmacology, staying abreast of new medical information and developments, networking with professional peers, receiving in-service training, etc.
 - Among dispensers and patients — the relative importance of medical and paramedical sources, spouse, relatives, friends, community leaders, booklets, posters, radio or TV commercials, etc.

SECTION 3 RESEARCH PLAN CONSIDERATIONS

These specific considerations guided the thinking with respect to the overall design and methodology of this study.

1. Considering the nature of the information to be developed, i.e., the range of underlying reasons for behavior and attitudes and the beliefs that support behavior, the appropriate approach is qualitative.
 - Qualitative information collection techniques — focused group sessions and in-depth one-on-one interviews — allow for the indirect questioning and for probing that are necessary to generate meaningful answers to the many sensitive questions that need to be covered in this study.
 - Further, in qualitative research, it is possible to use various projective questions in place of less productive, direct questions. We suspect that direct questioning may not reveal the underlying causes of behavior on the part of the prescriber or the patient.
 - Another qualitative technique, observation, for study of the prescriber/patient and dispenser/patient interaction, can prove more revealing of the dynamics of the relationship than verbal narratives. We believe this may be especially the case in Indonesia where a strong sense of status may make a patient respondent reluctant to be as open as would be desired.
2. A qualitative approach permits starting on a small scale and proceeding on a step-by-step basis, which is an advantage in developmental studies such as this one.
 - Line of inquiry can be smoothed out, streamlined, sharpened, and strengthened based on empirical experience.
 - Further, insights gained about provider or consumer characteristics (e.g., age or education) impacting behavior and attitudes can be used in the formation of the next round of groups or in-depth interviews.
 - Similarly, hypotheses drawn from the first stage can be followed up in the next stage.
3. Both types of qualitative methods of collection of information are relevant in this study.
 - Individual in-depth interviews with patients, dispensers, and prescribers at health centers and hospitals for the purpose of building case history material, while the experience is still fresh in the minds of respective individual respondents.
 - Focused group sessions in the same community with recent patients to gain a somewhat broader picture of patient behavior, rationales, beliefs, and attitudes. To maximize the success of the group sessions, they should be held someplace in the community that is not identified with the health center or hospital.
4. We recommend starting the study in one location, possibly in one of the Jakarta subdistricts. The site should be selected where both the Puskesmas and the Rumah Sakit are judged to be fairly representative of the drug use situation. (Later on the study can be expanded to other provinces.)
5. Also, we feel what the study should focus on the three leading diseases — ARI, diarrhea and skin diseases. Accordingly we feel that the groups should be recruited with the illness as a qualifying variable.

6. As a start, the other relevant qualifying variables for formation of groups and selection of exiting patients to interview are as follows:
- Mothers of children under 5 years of age taken for treatment.
 - Women 18 years and older who went for treatment.
 - Men 18 years and older who went for treatment.
7. If quantification of the findings of the qualitative inquiry is considered necessary for reasons cited below, this preliminary investigation would help define the scope and design of the survey phase.

A survey to quantify information generated from qualitative research serves to:

- Identify and establish the relative size of market targets *with precision*.
- Measure levels of knowledge and awareness of key target groups.
- Determine present practices and behavior of key target groups.
- Determine the relative importance of issues and attitudes of the market targets influencing practices and behavior.
- Establish sources of information and their relative importance for delivery of appropriate messages to various market targets (e.g., consumers and health care providers).

SECTION 4 RESEARCH PLAN

METHOD

This proposed qualitative study uses three methods of data collection:

1. Individual in-depth interviews with:
 - Medical and paramedical personnel as well as dispensers at health center and hospital.
 - Patients — exit interviews at same locations with mothers of children under 5 years of age and with male and female patients, 18 years of age and older.
2. Observation of prescribers (physicians and paramedics) and dispensers at health center and hospital.
3. Focus groups in the community with mothers, women, and men who went for treatment for one of the designated illnesses within the past month.

SCOPE

The plan, as shown schematically below, is to conduct at least 8 interviews with prescribers and dispensers and 18 interviews with exiting patients at the facilities in the selected location. Additionally, the plan calls for a total of 4 hours of observation at the facilities.

A total of 9 focus group sessions, in the same community, is part of the purpose plan.

1. Focus Groups (9):

Focus Groups (9)	Illness Treated in Past Month		
	ARI	DIARRHEA	SKIN
Mothers	X	X	X
Women	X	X	X
Men	X	X	X

2. Individual In-Depth Interviews (8):

Individual In-Depth Interviews (8)	Puskesmas	Rumah Sakit
Physician	X	X
Paramedic (nurse)	X	X
Paramedic (midwife)	X	X
Dispenser	X	X

3. Exit Interviews with Patients (18):

Exit Interviews with Patients (18)	Puskesmas	Rumah Sakit
Mothers	3	3
Women	3	3
Men	3	3

4. Observation (4 hours):

Observation (4 hours)	Puskesmas	Rumah Sakit
Prescriber/Patient	1 hour	1 hour
Dispenser/Patient	1 hour	1 hour

LOCATION

The plan presented above is designed for execution at one or more locations to be determined by the management team.

The suggestion has been made to start the study in Jakarta and, at a later date, consider replicating the approach in West Sumatra and East Java locations.

SECTION 5 IMPLEMENTATION AND TIMETABLE

RESEARCH PERSONNEL

Experienced qualitative researchers are required for the success of this project. The researcher need not have a medical background, but must be carefully briefed on symptomology, treatment, and drugs. The researchers must have a full understanding of the study objectives and a complete grasp of the topics covered in the interview instruments.

For the in-depth interviews among both providers and patients, we recommend contracting with a medical anthropologist who has had relevant interviewing experience. A bilingual medical anthropologist would be desirable for working with the international consultant in fine-tuning the questionnaire instruments and in communicating the more subtle elements of the interviews. (Names of recommended anthropologists have been provided.)

It has been suggested and agreed that a pharmacologist, who could assess the appropriateness of the prescription given the patient, also be present during the observational sessions.

Two highly experienced researchers, who come highly recommended, for recruiting and moderating the focus groups are:

Yanti Sugarda
Surindo Utama
Jl. Pakubuwono VI/17
Kebayoran Baru, Jakarta
Telephone: 739-4379
770-079

Soraya Setiadi
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Jl. Pinang Emas VI/UQ 11
Sektor V — Pondok Indah
Jakarta 12310
Telephone: 750-1635

INTERVIEW INSTRUMENTS

These instruments will be developed for the data collection:

1. In-depth interview guides for:
 - a. Physician
 - b. Nurse/Midwife
 - c. Dispenser
 - d. ARI patients
 - e. Diarrhea patients
 - f. Skin disease patients
2. Observation recording form:
 - a. Checklist for recording the interaction between prescribers and patients.
 - b. Checklist for recording the interaction between dispensers and patients.
3. Focus group discussion guides with illness-specific versions for:
 - a. Mothers of children under 5 years
 - b. Women, 18 years and older
 - c. Men, 18 years and older

As indicated above, the ideal situation is for the international consultant to work with the in-country researcher to finalize the various interview instruments and to discuss projective techniques to be used. This would ensure that the proper language is used and that projectives are culturally correct.

TIMETABLE

<u>Activity</u>	<u>Date</u>
1. Review research plan	Beginning February
2. Prepare RFP	Mid-February
3. Identify/contract required research personnel	End February
- Anthropologist	
- Pharmacologist	
- Focus groups moderator	
4. Determine study site	March
- Health center	
- Hospital	
- Location of facility for focus groups	
5. Construct interview instruments and observation checklist forms	March
6. Schedule interviewing and observation days	March
7. Review/revise questionnaire instruments	March
8. Conduct interviews and focus group sessions	April
9. Conduct debriefing meetings on results of interviews and focus groups by research personnel	End April
10. Make oral presentation of findings by international consultant	End April
11. Issue final written report	May