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9. ABSTRACT <p>The American Public Health Association, under a contract with the Agency for International Development, has designed a program in public health improvement which is called the <u>Development and Evaluation of Integrated Delivery Systems (DEIDS)</u>. The activity is designed to assist countries to demonstrate how to establish health delivery systems within seven years. Such projects include, but are not limited to, Maternal and Child Health and Family Planning and Nutrition. The projects are to cover large populations in predominantly rural areas. They are to utilize in-country resources for the service component, although external assistance organized by DEIDS is available for planning, evaluation, training, and limited amounts of essential equipment. It is expected that successful health delivery systems can be subsequently replicated in the country or in the region.</p> <p>These are phases through which DEIDS projects proceed:</p> <ol style="list-style-type: none"> <li>a) <u>Phase I</u> -- reconnaissance within a specific country or region, to gather information about disease patterns, health services as currently organized, local resources, cultural aspects, community involvement, the potential for integration of various parts of public health, opportunities for innovation, current and potential staffing, training, supervision, emphasis upon preventive services, outreach, cost, and evaluation</li> <li>b) <u>Phase II</u> -- Detailed planning. This phase begins if the survey in Phase I recommends it, and involves experts from the host country as well as experts assigned by DEIDS.</li> <li>c) <u>Phase III</u> -- Pilot Project Operations, which continue for as long as eight years.</li> </ol>		
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REPORT ON THE PRIMARY HEALTH  
NURSE CONCEPT IN INDONESIA

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## FOREWORD

This report is submitted with a sincere appreciation for the opportunity of studying and considering the Primary Health Nurse Project in Indonesia. It was an enriching experience for those of us who participated in it. Assistance from the entire staff of the USAID/Indonesia, Health and Population Division was given freely and abundantly. The Center for Training and Education, Ministry of Health, Indonesia staff was generous with their time and guidance. At every hospital and school site visited, the staffs were kind and gracious. We are extremely grateful to them all for their enthusiastic support and generosity.

**PROJECT GOAL:** To support the Government of Indonesia in its efforts to expand health services to the rural poor through the development of the Primary Health Nurse Program.

**PROJECT PURPOSE:** To describe the results of the health team's evaluation of the Primary Health Nurse Program at its present stage of development.

To make recommendations to the Government of Indonesia and United States Agency for International Development in the further development of the Primary Health Nurse concept.

To identify alternative methods of United States Agency for International Development assistance other than those set forth in the Project Identification Document.

### SUMMARY

The Primary Health Nurse program which fully supports the GOI commitment toward improved health services conforms with the AID commitment of improving the health status of the rural poor. The PID submitted to AID/W indicated USAID/Indonesia's interest in providing assistance to the GOI.

Following an in depth analysis and evaluation, fulfillment of the assistance proposed in the PID did not appear feasible. USAID/Indonesia's alternative proposals in support of this project, to provide technical assistance and limited construction and for research of the Primary Health Nurse concept, were not acceptable to the GOI.

The decision to suggest alternative proposals resulted from the positive and negative considerations revealed by the analysis and evaluation of the project. Those positive and negative aspects were crucial in the final decision and are listed below.

#### POSITIVE CONSIDERATIONS

1. A general objective of Pelita II in its health sector development is to attain the highest level of health for the people by providing health services to the greatest number of people more evenly. Providing health services to rural areas where the population is drastically underserved is stressed in the general policy.
2. Pelita II objectives and the concept of the Primary Health Nurse to deliver health services to the rural areas are highly consistent with AID's assistance policy.

3. The Primary Health Nurse concept is designed to train and retrain health personnel to be responsive to community health needs and to operate in existing health service facilities.
4. Evidence of commitment to new programs by the Ministry of Health has been demonstrated in various ways; i.e., planning is underway for ten Primary Health Nurse training schools to open in January, 1976; preparation of nurse instructors for the Primary Health Nurse programs is continuing; Family Planning programs, the Smallpox eradication program and projects to increase the number of Health Centers in rural areas are enjoying an apparent measure of success.
5. This concept furthers nursing education at a pace consistent with other health sector developments as well as overall development in other sectors.
6. The Primary Health Nurse concept contributes toward consolidation of the existing heterogeneous nursing categories, creates an esprit de corps among members of the nursing profession and furthers international nursing standardization and communications.

#### NEGATIVE CONSIDERATIONS

1. The concept development is in the first stage of progress. Planning, implementation, evaluation and utilization of the Primary Health Nurse are ambiguous and obscure. Communication between the Center for Training and Education in the Ministry of Health and the nursing schools throughout Indonesia is limited and could endanger the effectiveness of this program. The time-phasing methodology to

consolidate nursing personnel and to strengthen the progressive development of this discipline has not been designated as an important element in this basic concept.

2. Development of the Primary Health Nurse concept in Indonesia requires an enormous administrative responsibility. While there is evidence of commitment to this responsibility, there are not sufficient technical, management and planning resources to implement the Primary Health Nurse program on a rational basis.
3. The current and projected resources to adequately support this new concept are questioned in light of the following:
  - a. Inadequacies in four major areas, 1) Teacher training, 2) Manpower planning, 3) Field experience and supervision, 4) Curriculum and educational methodology.  
Need of
  - b. / Long-term financing to allow assurances for employment within the government manpool.
  - c. Current and persistent under-utilization of the country's modern health system.
  - d. The existing health workers, known as a powerful group, may exert negative forces aimed at maintaining a status quo in the nursing field.

## HISTORY

The purpose of this consultation was to assist the USAID Mission, Indonesia in the review and development of a Primary Health Nurse Training Project. The two nurse members of the team assigned to this project arrived in Jakarta on October 10, 1975. Four consultants who were in Jakarta together, for two different projects, met with Dr. J. Jarrett Clinton and Mrs. Kay Johnson. Dr. Clinton briefed us on the projects concerned and placed the Nursing Project in relation to the other activities of the Population and Health Division. We were advised at this meeting that our concern was to study the concept of the Primary Health Nurse proposal and to provide technical input for the project review paper if the project was considered feasible and manageable.

Appropriate literature was provided for our review and the bibliography is attached.

The Population and Health Division arranged various meetings to assist us. Three meetings were held at the Center for Training and Education, the Ministry of Health. The contacts there were the Director, Dr. Wirjawan Djojogito, and Miss Stien Wuntu, the nurse who is assigned to the Center. Attending one of those meetings were two WHO nurses assigned to the MOH, Ms. Sarah J. Lothar and Ms. June Vip.

A meeting to discuss trends in general education in Indonesia was held with Mr. Nat Colletta, USAID Education Advisor. The nurse participant training program was discussed with Mr. Daniel Terrell, Training Officer, USAID. Mr. Robert Queener briefed us on the loan office participation of the project. Other meetings included routine personnel activities.

Field visits were arranged through the Center for Training and Education. These included a one-day visit to the Teachers' Training School

at Cilandak, a three-day visit to Surabaya, East Java that included Sidoarjo and Mojokerto and finally a five-day visit to Ujung Pandang, South Sulawesi and Manado, North Sulawesi.

#### DESCRIPTION OF CONCEPT

The Concept of the PHN in Indonesia evolved from the commitment of the GOI to improve and expand health services on a more equitable and accessible basis. We acknowledge that the extension of health services in Indonesia, and the development of the nursing profession is a valid and perceptive judgment. AID shares the GOI commitment to this concept, therefore, USAID/Indonesia undertook an intensive study of the proposal.

Nursing manpower is provided by various training institutions throughout the country. These training institutions are located at the provincial and district levels. All of them operate with GOI permission, but are not under GOI control. The multiform nature of these training institutions is the reason Indonesia now enjoys twenty-four separate categories of nursing manpower.

The GOI in its consideration of health care services in Pelita II recognizes and states its current dissatisfaction of the health care services to the rural population. One of the major methods in alleviating and correcting this unsatisfactory situation, the GOI believes, is by providing the nursing manpower, appropriately trained, to staff those health care centers now available to the rural population.

The concept of the PHN as the provider of the health care services to the rural segment appears to be relevant and sound. This concept projects the principle of health care focused on a group now considered

underprivileged; a community and family oriented type of service; provided by a nurse able to function in this special milieu.

For the purpose of this report the terms Primary Health Nurse and Community Health Nurse are interchangeable.

The GOI proposes to provide the needed nursing manpower through two channels. The first and fastest is to retrain those nursing personnel now not sufficiently prepared to function effectively. This part of the program should provide approximately one half of the projected needs. This retraining period is of one year duration. This first phase would serve also to consolidate the nebulous groupings of nurses and to eliminate the ubiquitous training centers throughout the country.

The second part of the program is planned to prepare new nursing personnel entering the system. This training is for Junior High School graduates, men and women, and is for a three year period. This part of the program would allow for the gradual phase-out of the other nursing programs.

The program as envisioned should include an appropriate curriculum, an acceptable student-teacher ratio, the very important elements of adequate clinical and field experience for the candidates, supervision and guidance throughout the student training years, as well as the required support facilities of school buildings, dormitories, transportation, training aids and equipment.

The review of the available literature as well as the discussions held about the project tends to reveal serious constraints in the early implementation of the project with any acceptable degree of success or effectiveness.

The major constraints appear to be 1) the lack of viable curriculum, 2) inadequately planned experiences for the student candidates, 3) a very

serious lack of prepared nurse teachers, trainers and supervisors, and  
4) adequate evaluation plans are not part of the concept.

The curriculum as presented by the GOI is a simple listing of subjects to be taught and the hours of teaching for each of those subjects. Nursing is not listed among the subjects because the planners believe nursing can be taught adequately if integrated into the three subjects of maternity nursing, medical nursing and surgical nursing. This simple listing of subjects to be taught makes it impossible to determine its applicability to the health care services needed in Indonesia or to determine how the PHN is expected to function once she is placed on the job. The goals and objectives of the curriculum are not stated and the functions of the worker to be produced by this program are ephemeral. A meaningful curriculum should be geared specifically to the health problems of Indonesia and the major portions of the teaching and learning should be directed toward the health care problems the PHN will confront on the job.

The concomitant circumstance existing in Indonesia of the under utilization of health care services and the inadequacies of these services is extremely important to the implementation of the PHN training program. Nurses learn nursing in two major areas; in the classroom and in the laboratories. The laboratories for nurses are the hospitals, the health centers and the community. Current statistics indicate hospitals function at a thirty-five to fifty per cent occupancy rate. Accurate clinic attendance figures are unknown, but informal data suggest it is low.

It is impossible to state the exact patient-student ratio necessary in Indonesia to produce an effective worker, but a ratio must be established and maintained by the planners to assure a degree of competence from the

graduate. It is possible to state that one current situation in one school with a student body of eight hundred students, attached to a three hundred fifty bed hospital with a nursing staff of one hundred sixty nurses, will not provide adequate learning experience for the students of that school.

#### FIELD VISIT REPORTS

##### Cilandak Teachers' Training School, Cilandak

The Cilandak Teachers' Training School is one of four in Indonesia offering a one year program to prepare nurses and midwives for teaching. Since the school opened in 1973, one hundred twenty-two students have been graduated and thirty-three are now enrolled. Fifty-seven of the one hundred twenty-two graduates are now teaching while others are deployed in hospitals, health centers and government health departments.

Four full-time and seventeen part-time teachers are the implementers of the program. There is a departure from the more traditional, teacher-centered method of teaching to the newer, heuristic approach. This concept necessitates active participation of the learner by requiring him to identify his own learning needs. Students are encouraged to explore with each other the areas in which learning is necessary and to provide input which will improve his nursing knowledge. Self-evaluation by the student demonstrates another facet of his participation in the program. Theoretically, implementation is designed to emphasize skill, initiative, energy and critical analysis. Neighborhood health centers are staffed by the students and serve as the field for clinical experience. It appears the nurses and midwives are improving their clinical skills but there is no positive indication they are at the same time learning teaching skills.

## Teachers' Training School, Surabaya, East Java

The Teachers' Training School in Surabaya is in its fourth year of operation has graduated one hundred and eight students. Present enrollment is thirty-eight. No data is available on deployment of the graduates but government regulations require them to return to their original positions or to accept a new government assignment. The staff of the school indicated interest in a survey of their graduates but no definite planning has begun for either the nature of or the time framework for such a survey.

Present staff consists of four full-time and about fifty-seven part-time teachers. The director of the school also serves as director to a private school of nursing.

Candidates for the program must have at least two years of hospital or health center experience. Applicants are supplied by institutions and if chosen, return after completing the training program. Students are selected on the basis of experience and needs in the areas from which they come. The school has been able to accept about one-half of the applicants. Attrition has been very low generally, varying from one to four students per class in the schools' history. Twenty to twenty-five per cent of the students represent private sector while the remainder come from government institutions. Most students are married and less than half are men.

The students bring their biographies and area profiles on entry which serve as a basis for developing their curriculum. During the orientation and early in the program, teachers and students together develop this curriculum.

An introductory course in medical-surgical nursing is offered as well as government required courses in Religion, Civics, and

bahasa Indonesia. Twelve hours a week in the hospital and six hours a week in the community are intended to provide the student clinical experience for the first part of the training program.

Part two of the program indicates concentration on teaching methods, educational psychology, tests and measurements as well as nursing and family planning courses. Future midwife teachers are sent to obstetrical wards and maternal and child health care centers for clinical teaching experience. Future nurse teachers to to medical-burgical wards for their experience.

Part three of the program involves two hundred sixty hours of practice teaching under supervision according to the written work plan. Formal teaching and clinical supervision are carried out by the students in hospitals and classrooms.

The high degree of student involvement in planning and implementation reportedly results in highly motivated students. Imagination and resourcefulness were demonstrated in all of the student projects in the community.

Evaluation is designed to be frequent and as necessary with the students evaluating themselves, each other and in turn being evaluated by their instructors. A planned format for evaluation does not exist and most of it is done by discussion.

#### Primary Health Nurse Training School, Sidoarjo, East Java

The PHN school in Sidoarjo graduated its first class of thirty four students this year. This was a retraining session of one year duration. The graduates of this class are working in the Mojokerto demonstration field. The school has a full time teaching staff of four and part time teachers fifty plus, mainly medical officers. Currently the student body consists of thirty nine students, selected

from one hundred sixty six applicants to the program. Clinical experience is provided in the hospital attached to the school. This hospital has one hundred fifty beds and bed occupancy rate was reported as forty per cent. It was reported that students receive community health experience in neighboring Health Centers. The teachers interviewed reported they were using the curriculum sent to them from the Center for Training and Education. This school does not have a dormitory; the students live at home or with relatives in the town. They have two large classrooms, on the sparse side, which the teachers consider inadequate. Their equipment is limited to the UNICEF kit. The main problems they reported were they felt the third year of the program, which is scheduled as an internship, would work a hardship on the students who would then be preparing for final examinations. They reported also feeling very insecure about student evaluation and the use of male nurses in midwives. They believed the curriculum was very heavily weighted toward family planning and needed a broader base to provide the type of worker needed. They could not show us a rotation plan for student experience.

This school is operating under the handicap of being the pilot project with an untested curriculum, without supervisory support or guidance and unplanned student experience fields. The faculty members seem to be struggling with curriculum implementation and in improving the student status.

#### Health Centers in East Java in the Mojokerto Area

Two Health Centers, staffed by the recent graduates of the first PHN class were visited in Mojokerto. The first was at Modongan, which serves a population of eleven thousand and consists of six villages and eighteen hamlets. The PHN, a retrained assistant nurse, had past working experience in hospital clinics before entering the

PHN class. She had been working in this clinic for two months and admitted to the felt need for more experience in delivery of newborns as well as in diagnosis of illnesses.

The records reviewed indicated that five home deliveries were made in September, the average number of post natal visits made were three per week, while the average number of patients seen at the daily clinic was a total of five patients.

The Health Center was recently built under IDA/UNFPA funding and provided a model of a rural health center with running water as well as electricity provided by a generator. Two sub-health stations, located in the homes of village chiefs, were established in the two farthest villages within the district. The PHN reported she traveled to the sub-health stations on her bicycle weekly, or if indicated, more frequently.

The PHN was assisted by a volunteer whose major responsibilities centered with twenty or more different records and monthly reports of the health center. This volunteer, a junior high school graduate, receives an honorarium of RP 2,500 (US \$6.03) per month from the IDA/UNFPA.

Fuel for the generator was provided by the PHN. She reported that approximately RP 400 (US \$1.00) provided one hour of electricity. In view of the salary of the PHN, RP 12,500 (US \$30.15) per month, the maxim total number of hours of electricity providing her total monthly salary was used in this manner, would be thirty one hours per month.

The second Health Center visited was at Plososari serving a population of 15,728 consisting of 8 villages. The PHN, a retrained assistant midwife, had past working experience in a maternity section of a hospital. This PHN expressed no weaknesses or felt needs for additional training. This health center was funded also by IDA/UNFPA.

During the month of September, the PHN had delivered 11 newborns, while her average number of home visits per week was twelve post natal visits, and the daily average number of patients treated in the Health Center was nine. Two sub-health stations were established, again in village chief's houses and weekly visits were made by the PHN.

This PHN expressed problems with the water supply and was now required to hand carry the water from the village well. She also expressed problems with transportation costs to the required monthly visits to the district Health Center and the Regency Headquarters. The Regency Health Office was approximately 16 kilometers away and public transportation was necessary which was paid for by the PHN.

The supervisor of these new PHNs was provided by the Senior Midwife Supervisor, assigned to the Regency Health Office, as well as by one of four midwife coordinators. These four midwife coordinators, who acted as assistant supervisors, are unique to the usual structure of supervisors in other Regencies throughout Indonesia and are the result of this special IDA/UNFPA project in Mojokerto.

The supervisors were chosen by seniority and had been provided with no supervisory training prior to assignment. The midwife coordinator visited the PHN for one hour a week, which allowed her to cover each of her twelve Health Centers weekly.

The weaknesses of the PHNs as expressed by their supervisors were, 1) general lack of field experience, 2) general inability to keep reports correctly, 3) lack of initiative as well as the inability to ask for help when needed. The supervisors were planning to provide in-service training programs to assist with these problems.

### Teachers' Training School, Ujung Pandang, South Sulawesi

The Teachers' Training School in Ujung Pandang is in its second year of operation. Thirty-six students were graduated in the first year and present enrollment is eighteen. Three full time nurse instructors and three full time administrators implement the program. The director indicated they are trying to develop the heuristic concept. No written curriculum is available; a brief lesson plan outline was the only available written material for our consideration.

Expressed concerns centered on developing a curriculum in accord with MOH directive that could be implemented by the staff. Teaching content, practice teaching and evaluation have not been developed. It is questionable whether the heuristic concept, known to be difficult, can be effectively applied in these schools given the traditional education background of the teachers and students.

There was an expressed concern over the lack of evaluation of the teaching method and no provision for assisting the instructor once she has graduated. A built in system of evaluation is a necessity in determining whether or not this concept can be effectively used in a culture dominated by traditional educational methods.

### Nursing School, Ujung Pandang, South Sulawesi

The nursing school at Ujung Pandang is a combination of three programs in one. At this training institution, they prepare three categories of nursing personnel, simultaneously, the assistant nurse, the midwife and the nurse. The student body totals eight hundred. This school is attached to the local hospital of three hundred and fifty beds with a reported occupancy of seventy per cent. The hospital has a nursing staff of one hundred and fifty. They reported they had one thousand applicants for two hundred available vacancies

in the school. They are prepared to admit twenty-five PHN candidates in January and to phase out the schools now in existence. Two teachers are already in place who will teach in the new school. The majority of the teachers in the current programs are part time; the number of full time instructors is not known. Class rooms are quite large, teaching aids and equipment are not visible. Dormitory space is available only to the third year students, all others live in the town. The director of the school expressed her main concern as limited clinical experience facilities available and whether or not the new program will provide adequate staff for the hospital. The two curricula reviewed were again simple listings of subjects and teaching hours.

Major problems of this school seem to be underdeveloped curricula, an overwhelming number of students in proportion to faculty members available, and available laboratory experiences as well as an ill defined training definition for the three categories of nursing students. An administrative decision to normalize the student-patient ratio to a realistic level, where some learning can occur is an essential to the improvement of this school.

#### School of Nursing, Manado, North Sulawesi

The school in Manado is a combination of two programs in one. Here they prepare nurses and midwives in their two programs. They have one hundred ten students. Students are admitted to the school after taking an entrance examination and it is usual that the top students go into midwifery. It was reported there is a full time teaching staff of five nurses and six clinical instructors. The students receive their experience in the attached hospital of three hundred ten beds with a reported occupancy rate of eighty per cent. The hospital has a nursing staff of one hundred fifty-one. They expect to admit thirty students to the PHN program that they plan to

begin in January of 1976. The director of the school admitted to the concern that with only thirty students being admitted it would work a hardship on the hospital. They have a school building with two classrooms and administrative offices. Dormitory space for the student is provided throughout the hospital wherever they can find room for squeezing in bunk beds. Hospital personnel are anxious to increase the bed capacity of the hospital and they would like the dormitory spaces to be moved. They reported they have two thousand nine hundred deliveries per year. Students spend two weeks in the Health Centers during their training period for community health experience.

The two curricula for this school were developed to a greater extent than those of the previously described schools. A rudimentary student rotation and a higher nurse-teacher ratio is evident. The high hospital occupancy rate would allow adequate clinical experience for fewer students, however menial housekeeping tasks appear to dominate a large portion of student activity. Commitment to the PHN program is questionable in view of the fact that the admission of the first PHN students will begin within a 60 day period. Overall planning as well as curricula development for this program is not in evidence.

#### School of Nursing, Tondano, North Sulawesi

The school at Tondano is the only one seen at the district level. This is an eighteen month program and has a student body of twenty-four. This school prepares nurse assistants. The students all live out and they have but one very primitive classroom. The school is attached to a one hundred and one bed hospital with a reported occupancy rate of thirty five percent. The current class of students

was admitted a month previous to our visit, but as the curriculum was not ready yet, the students were working on the hospital wards. This school does not have any full-time nurse instructors. The hospital is staffed by sixty nurse assistants who graduated from this training program, seven nurses and three midwives. Students pay rupiah one thousand (U.S. \$2.41) per month to attend this school. The director reported that budget restraints and facilities would impede PHN training program on the district level. We learned here the pay status on graduation depends to some extent on the marital status of the candidates, example, the higher pay scale going to married people.

This school is operating under nearly intolerable circumstances. Lack of faculty members, an undeveloped and unplanned educational program, low hospital occupancy and primitive school facilities appear to render learning in this hospital school impossible.

## RECOMMENDATIONS

In view of the evaluation findings, the original USAID proposed assistance to provide funds for the construction of forty school buildings was eliminated, although some form of assistance is definitely indicated. Two alternative proposals were presented to the Director of Training and Education Center in the Ministry of Health. These proposals were:

1. Construction of four schools and their dormitories on one of the Outer Island, and to provide three man years of technical assistance with two or three technical advisors located at each of the two provincial schools. This proposal was rejected by the Government of Indonesia.
2. Utilization of available funding for basic Research and Development projects to aid in the future development of the Primary Health Nurse concept. This proposal is presently under consideration by the Office of Training and Education Center, Ministry of Health.

## GUIDE TO ACRONYMS

1. A.I.D. Agency for International Development
2. D.A.P. Development Assistance Program
3. G.O.I. Government of Indonesia
4. IDA/UNFPA International Development Association/  
United Nations Funds for Population  
Activities
5. M.O.H. Ministry of Health
6. Pelita II The Second Five Year Development Plan,  
Indonesia, Health
7. P.H.N. Primary Health Nurse
8. P.I.D. Project Identification Document
9. Rp Rupiah
10. UNICEF United National International Childrens  
Education Fund
11. WHO World Health Organization

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