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**TECHNICAL NURSE TRAINING PROJECT IN EGYPT  
(PROJECT IDENTIFICATION DOCUMENT)**

(A study commissioned by USAID, financed under Contract AID/NE-70368)

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SELECTED DATA ON EGYPT

HEALTH AND HEALTH-RELATED DATA

Total Area	1,002,000 km <sup>2</sup>
Total Population (November 1976)	38.2 million
Density per km <sup>2</sup> of inhabitable area (1976)	1,030
Density per km <sup>2</sup> of cultivable area (1976)	1,400
Rate of Natural Increase of the Population (1976)	2.4%
Crude Birth Rate (1976)	36/1,000
Crude Death Rate (1976)	12/1,000
Life Expectancy at Birth (1976)	55 years
Infant Mortality Rate (1976)	116/1,000
Maternal Mortality Rate (1972)	100/100,000
Urban Population as Percent of Total Population (1976)	44%
Adult Literacy Rate (1976):	
Males	56.8%
Females	29.0%
Primary School Enrollment (1976):	
Males	85%
Females	55%
Age Structure (1976):	
0 - 11	31.6%
12 - 64	65.5%
65 and over	2.9%
Population per Physician (1974)	1,536
Population per Nurse (1974)	1,562
Current Family Planning Users as Percentage of	
Married Women aged 15-45 (Mid-1977)	18.2%
Per Capita Gross National Product (1976)	US\$280
Per Capita Income (1975)	
Urban	\$193
Rural	\$83

## SUMMARY

### SECONDARY TECHNICAL NURSE TRAINING PROGRAM

#### Problem Identification

There is mounting concern that most of Egypt's recently graduated nurses are inadequately prepared to practice professionally. Ministry of Health (MOH) Officials have acknowledged a general dissatisfaction with the quality of both nursing education and the professional performance of nursing school graduates.

The lack of satisfactory nurse performance can be traced to a variety of factors: an inappropriate nurse curriculum, unprepared nursing instructors, inadequate clinical practice by student nurses, poor living conditions for students, lack of opportunities to relate to people in a direct and productive manner, and the placement of very young students in a difficult program.

Although there are many programs for training nurses in Egypt (See Annex I), the Secondary Technical Nursing (STN) program is by far the largest source of trained nurses (See Annex II). An improvement in this program which enhances the competencies of its graduates can be expected to have broad ramifications. Consequently, the STN program is the focus of this paper.

Presently the nurse graduated from the STN program is often not prepared, and often not allowed to do many simple procedures that are common practice elsewhere. Her role and functions are not well defined. In many cases the situation has a profound impact upon the nurses' perception of self and the profession of nursing which inevitably translates into reduced quality of care.

#### The Project

The proposed project will train nurses in the Secondary Technical Nursing Program in areas of knowledge, skills and attitudes needed to respond to the primary health care and nursing needs of the people of Egypt with special emphasis given to health promotion, and maternal-child health and family planning.

To accomplish this, the project will provide:

1. Revision, testing and implementation of the Secondary Technical Nurse Curricula.
2. Training of instructors to administer the new curricula.
3. Design and testing of training materials.
4. Renovation of facilities and provision of equipment for selected nursing schools.
5. Design, testing, and implementation of in-service and continuing nursing education (CNE) programs.
6. Development of nurse job descriptions with delegated responsibility for specific tasks.

A logical framework of the project design summary is shown in Annex III.

#### Relationship to Country Strategy

This project proposes to improve the performance of Egyptian nurses to deliver health care services. Since the majority of nurses are now being trained in the Secondary Technical Nurse program, improvement in the actual competence of these graduates should have positive effects on health status of the general population especially in the areas of maternal-child health and family planning where the most acute needs have already been identified. This should result in an improved quality of life for the people of Egypt.

## PROJECT ISSUES

### Issue 1: Role and Functions of the Practicing Nurse

Currently the role and functions of the practicing nurse are viewed differently by different individuals. Frequently nurses are not allowed by physicians to carry out simple nursing procedures that are commonly performed by nurses elsewhere (such as taking temperatures, blood pressures and changing dressings). The role and function of the nurse must be clearly identified by the MOH, especially those functions that are clearly an expansion of the present role. Positive and supportive actions must be taken by MOH personnel at the central and regional levels to ensure that the expanded role is accepted, and nurses can carry out the activities for which they have been trained.

### Issue 2: Present Capability of the MOH/GOE in Training Activities for the Secondary Technical Nurse Program

The present capability of the MOH to carry out the training program is limited by the inadequate number and uneven distribution of qualified training personnel which result in shortages of qualified instructors in some of the areas of greatest need. The Director of the STN program has been active in the evaluation study recently completed and is aware of the problems related to personnel distribution. Because of his interest, it is expected that personnel assignments will be made to meet training needs. Success of the project depends on the development and assignment of trained personnel in adequate numbers in the project training centers and schools.

### Issue 3: Establishment of Standards/Criteria for Training Facilities

Although the MOH in conjunction with MOE has set criteria for training centers as well as specifications regarding teacher/student ratios and other related matters, schools have proliferated in many areas of the country with complete disregard for these requirements. It is imperative that a mechanism

be developed to require adherence to some standards. The problem is related to the decentralization of authority that allows decisions to be made at the governorate level not in congruence with standards set at the central level. The Project Paper study team needs to confront this issue related to the political/professional ramifications.

#### Issue 4: Nurses as an Export Item

In spite of the large number of nurses in training, shortages will persist because so many nurses leave the country for employment elsewhere, usually in the Gulf area. Such departures affect the nurse supply and threaten quality of care. There is ready market for the better-trained nurses since often the most highly skilled leave Egypt in search of greater professional opportunity. For reasons of improving international relations and exchange, restrictions on professional travel are not severe. The problems of quantity of practitioners or quality of practice cannot be separated from the nurse export policy.

In relation to this project, an understanding or agreement must be reached with the MOH which encourages nurses receiving long-term or short-term participant training to remain in country through the life of the project.

Serious consideration needs to be given to the actions some of the Gulf states have taken to cut back on immigration from Arabic countries for reasons both political and cultural. An implication may be that Egypt should consider improving quality with deemphasis on quantity since the number of nurses going abroad may soon be reduced.<sup>1</sup>

## INTRODUCTION

### Background and Rationale

The Secondary Technical Nursing (STN) Program was developed to increase the number of nurses while consolidating several paramedical programs into one concerted effort (See Annex IV). Prior to this program, nurses and paramedic personnel were trained through no less than nine different programs. To eliminate this redundancy and to enhance educational quality the STN program was conceived in light of the following goals:

"to prepare qualified girls for nursing services of a high level of effectiveness, knowledge, while supplying them with the appropriate amount of scientific, culture and technical education, allowing them to reach a level of effectiveness suitable for the nursing profession and improving the general mental, physical, social and national preparation of girls, aiming to prepare them as citizens aware of their duties toward God, family, country and humanity as a whole."

Early activities were equally ambitious. Planning and implementation efforts during 1972 resulted in the immediate opening of 123 schools with an initial enrollment of over 5,000 students. The impressive achievement expressed as a large, rapidly established, operational program was not without shortcomings. The issue of educational quality appeared to be somewhat overlooked if not ignored. One indicator of this was the vast disparity in the student/instructor ratio among the schools. This ratio ranged from 4:1 to as high as 82:1. Also the instructors' prior experience in teaching was exceedingly low.<sup>1</sup> However, these deficiencies were expected from project inception. The overall strategy as proposed by MOH planners was first to increase the quantity of nurses in training and then to improve program quality once the training was in progress. The ramifications of this planning strategy were unfortunate. While the program has been highly successful in achieving its enrollment objectives, the original intention of gradually improving educational quality has remained unfulfilled.

## DETAILED DESCRIPTION

Since 1975, 24,000 nurses have graduated from the Secondary Technical Nursing (STN) Schools. They are working in a variety of health care facilities. This program has been credited with increasing the number of nurses employed by the GOE from 22,004 in 1972 to 34,021 in 1979. With the bulk of this increase under the Secondary Technical Nurse classification, nurses now constitute the largest health personnel resource in the country.<sup>2</sup>

Despite Egypt's extensive health care infrastructure and the general availability of health resources and personnel there are ever present allegations that the health care services provided to the Egyptian public are inadequate. The most extreme assertion is that Egyptians are not provided with means to maintain or to promote health.

The claims of inherent weaknesses in basic health services available to most Egyptians are not unfounded. This contention may be confirmed through examination of some basic health indicators. The population continues to increase by more than 1 million persons each year. Infant mortality rates are among the highest in developing countries. Preventable diseases account for much of the high level of morbidity among Egyptians. Consequently, it may not be unreasonable to conclude that continuity of care, family care, and community health care exist in principle only.<sup>3,4</sup>

The deficiencies within a system can seldomly be attributed to one source. But sometimes there exist certain components within a system that become conspicuous due to their lack of contributions to the overall system. Such is the characterization of the nursing profession in Egypt.

Although Egyptian nurses have the potential to affect tremendous changes in health care delivery, they are presently unwilling or unable to do so. As educators, nurses are in a position to facilitate changes in personal and family health attitudes, in such diverse areas as nutrition, sanitation, and family planning. As health practitioners, nurses are often able to encourage compliance with health care regimes and to assist in the prevention as well as the treatment of diseases. Yet recent experience in Egypt suggests nurses to be incompetent, ineffective and non-productive. They appear to lack both

initiative and motivation coupled with an unsatisfactory level of technical expertise.<sup>1</sup> As a result they are not meeting either the needs of the Egyptian population or the expectations of high level Ministry of Health officials. If it is assumed that the performance of Egyptian nurses as health promoters is much less than should be expected, an explanation may be sought by reviewing both sociocultural factors as well as specific weaknesses within the nurse education programs.<sup>5,6</sup>

The social and professional status of nurses is surprisingly low. This is supported by the generally low wages paid to nurses for their services. While the salaries of Secondary Technical Nurse School graduates compare favorably with other technical school graduates, the nurses tend to work longer hours on variable shifts, to have more responsibilities, and to face tasks likely to be stressful and taxing. The economic situation of nurses contributes greatly to their low morale and general dissatisfaction. Studies about the socio-cultural factors related to nursing point toward the need for recognition of the profession within the organizational structure of the health care system.<sup>5</sup>

The present pattern of application, admission and graduation from the three levels of nursing education programs in Egypt (secondary technical, post-secondary technical and baccalaureate) indicates that the greatest source of future nurses will be the output from the Secondary Technical Nurse programs (See Annex V). This observation coupled with the previously described disheartening state of the nursing profession, definitely makes the curriculum and techniques used in the STN programs a subject of concern.

An evaluation of the Secondary Technical Nurse program recently conducted by the MOH<sup>2</sup> identified the following areas of weakness: (1) an insufficient emphasis on public health, particularly family planning; (2) insufficient and poorly trained instructors; (3) inadequate and unsupervised clinical experience for students; (4) lack of teaching aids and inadequate texts, and (5) in some instances, poor teaching facilities and equipment.<sup>6</sup>

Some of these issues are discussed in the next sections of this document.

## IDEN IFICATION OF SPECIFIC PROBLEMS

The STN program was intended to increase the supply of practicing nurses trained to provide overall basic nursing care to the population. By incorporating the technical training with the secondary school program, dual certification was made possible. The nurse as a secondary school graduate and professional nurse has an enhanced opportunity for upward career mobility and increased social and professional status.

Although the MOH is beginning to achieve its goals in terms of numbers, MOH officials are beginning to realize that both quality of performance and potential for advancement of STN graduates are limited.<sup>6</sup> In the preparation of this document, the HSI field team made firsthand observations, interviewed individuals and reviewed past reports. Through this process problems related to broad areas in nursing have been identified and presented as follows:

### The STN Curriculum

The STN Curriculum is described in Annexes VI and VII. The typical student, who is usually 15 years old, has to contend with 540 hours taught by secondary school teachers, 130 hours by physicians, 152 hours by nurse instructors and 10 hours by a social worker. In the second year as well as the third, the secondary school subjects continue at the same rate but the professional content is markedly skewed with 328 hours taught by physicians compared to only 93 taught by nurses. Thus the assumption must be made that nursing practice is taught in the clinical area. It is often observed that there is really little clinical supervision in the practice areas due to the inadequate number of clinical instructors. Also, a student's clinical time is often not spent in goal-directed activities but rather in clerical tasks such as delivering messages and performing errands. The achievement of competency in nursing is difficult in such a setting.

Annex VI also shows that whereas the ordinary technical school student has the usual 3-month vacation, the nursing student works 45 hours a week for 12 weeks in the summer. The actual hours may well exceed this because of night duty assignments in shifts which may last for as much as 12 hours.

While the educational system stresses an abundance of course work for nursing students, there is evidence that linkages between courses are so weak that much of the material seems either irrelevant or redundant. So while the workload is awesome, it is so lacking in structure that it does little to facilitate and may actually impede learning.

In essence, the curriculum does not provide the student nurses the climate for mastery of nursing competencies, nor does it provide any hint of the career mobility that they desire.

#### The STN Faculty Members

The MOH evaluation report provided an excellent description of the inadequacy of the teaching by nursing faculty in the Secondary Technical Nurse Schools. Some of the reasons cited include: disparate educational background; lack of teaching and/or clinical expertise; and the teaching of subjects outside of the instructors' specialty. Also, many nursing instructors lack interpersonal skills and tend to use inappropriate ways to discipline students. The report found that many nursing faculty perceive themselves as overworked and underpaid and consequently many were ambivalent toward teaching.<sup>3</sup> Annex VIII show some areas of deficiency in clinical subjects for nursing students.

#### The Students

Students generally enter nursing because of a lack of other educational options. Nursing is seldom a first career choice. Society's negative image of the nurse becomes a part of the student's self-perception as any latent idealism is usually dispelled by the reality of the low regard given to the profession.<sup>1,5</sup>

Nurses often do not develop nursing competencies because their clinical experience is limited to a few simple nursing tasks and many clerical activities. Assuming that the most beneficial training is gained through the patient encounter, tasks unrelated to patient care cannot be seen as supportive of the training process. As a result, nurses learn little about many subjects ranging from personal hygiene to health maintenance.

The social life of the nursing student is limited. There are many restrictions within nursing dormitories and often space is not available for reading or relaxation. The work/study burden often makes it difficult to develop personal relationships socially, academically or professionally.

### The Training Sites

Schools are found both within hospitals and as separate buildings. Some of the hospitals used for clinical practice have 50 beds, others have 250 beds and there is a wide variation in the types of clinical experience that may be available. Most schools have clinical laboratories, many have limited audio-visual facilities. About half of the schools have boarding facilities. Libraries are often restricted to faculty use.

The training sites vary markedly. Some schools have taken far more students than they can handle so over-crowding is common; others have ample space.<sup>6</sup>

### The Graduate

The STN graduate displays a minimum number of technical competencies. Their knowledge base may be inadequate, with a negative image of nursing, coupled with poor self-concept and an apathetic sense of powerlessness about the consequences of their work. The initial training may be their only in-service training. They are often ill-informed about many health-related subjects such as family planning. In contrast, the graduates represent the Ministry's hope for alleviating the nursing shortage. They occupy an important position in the health care plans for Egypt. Yet they are not meeting these expectations.<sup>5,6</sup>

## Summary

While a restructured curriculum appears to be a necessary task, revamping the curriculum alone will not change the current state of affairs. Training focus must be on teachers and practicing nurses as well as students to give the overall training process vitality.

## ALTERNATIVE SOLUTIONS

The STN training program has been identified as having many problems and so needs to be scrutinized and its existence justified. Other educational alternatives might be considered.

- Option 1. Allow the program to phase out naturally as students graduate and admit no new students. This option would imply another source of nurses to replace the STN Program, possibly the technical nurse program which takes students post-secondary school graduation. Currently graduates of this program are too few to meet the personnel needs. Expanding the number of technical schools would not be a realistic solution because recruitment at this level is difficult. More desirable career options are available to secondary school graduates.
- Option 2. Place a moratorium on new admissions to the program until the schools and the curriculum are reorganized. This option would decrease the output of trained STN graduates but allow curriculum modification to overcome some existing problems. The decreased nurse output is unacceptable to the MOH. A third option as presented in this paper was preferred.
- Option 3. Continue the program and try to improve it while training of new candidates is carried out. This option satisfies internal political, social and economic considerations while providing the large number of trained health manpower for an expanding infrastructure.

## PROJECT DESCRIPTION

### Project Goals

The proposed project is one of several planned and on-going activities in the USAID Health Sector Program that aims at improving the quality of life for a population through improved health status. There are many goals which may be associated with improved health status. Those most directly related to the STN training program are as follows:

- to reduce morbidity rates
- to reduce population growth rate
- to reduce infant and child mortality
- to improve life expectancy

This project will provide the GOE with trained nurses who have the basic knowledge, skills and attitudes to respond to the primary health care and nursing needs of the people of Egypt especially in the areas of maternal child health and family planning. The overall goals of this program are as follows:

1. To expand the role of the nurse in the health care provider team, in both curative and preventive services.
2. To gain general acceptance from both medical and nursing professionals for the expanded role of the nurse.
3. To increase the competency of nurses in areas that have been identified as appropriate to meeting health and nursing needs of the people of Egypt.
4. To enhance the "image" of the nurse, giving her increased status and a potential for career mobility, thus promoting women in the health professions.

### Project Objectives

Realization of program goals is directly dependent upon success in achieving the program's measureable objectives. The following activities are proposed as essential tasks which must be accomplished to attain the overall project goals. Consequently, they are viewed as program objectives.

## Objective 1: Curriculum Revision

A conceptually sound competency-based curriculum will be implemented in selected Secondary Technical Nursing Schools so that nurses will be trained in the skills needed to meet health and nursing needs of the people.

- a) The professional roles of nurses will be identified and the responsibilities associated with these roles analyzed for their skills, knowledge and attitude components. Development of job descriptions will be part of this objective.
- b) Student learning activities will be planned that will achieve the competencies identified.

The present system of training will be revised so that nurses will be able to carry out basic procedures skillfully and safely in various health care facilities. The role requirements of nurses will include development of attitudes and skills in interpersonal relationships that will enable them to recognize health opportunities and use them to promote healthy living practices. Strong emphasis will be given to preventive/promotional aspects of Maternal-Child Health and Family Planning.

As part of this component, criteria will be established for minimum teacher/student ratios to meet the needs of this program; criteria for design of schools of nursing; and an evaluation process will begin.

The final result will be a program that can produce a nurse competent to address the expanding health and nursing needs of the population.

## Objective 2: Teacher-Training Program to Implement the Revised Curriculum

Crucial to the introduction of a new curriculum is the training of the instructors who will be involved in the educational process.

The curriculum as proposed will require a completely different instructor approach. That is, instructors will be trained in teaching methodology with considerable emphasis on the clinical skill aspects of nursing practice. The instructor will serve as a role model for students. Methods for developing

attitudes will be a prominent part of the planned student learning activities. Intermittent and terminal evaluation strategies for theory and practice are an important part of the program. It is anticipated that 240 teachers trained in four designated regional centers over the life of the project will be able to provide sufficient staff at selected training facilities to meet a proposed student/teacher ration of 10:1.

Instructors who have had previous teacher training certification can be oriented through the in-service programs. Teachers retrained through this in-service will total 240. The proposed in-service programs can use content identified and training materials produced for the original teacher-training program. This will insure that a similar approach will be used by all instructors involved in the basic training of students. Responsibility for coordinating these activities will be at the regional level but the actual training can be carried out at the governorate or possibly at the district level. If the in-service programs are given in the regional training center, the one-month training can be given between the long-term teacher training programs.

### Objective 3: Provision of Training Materials, Furniture, Supplies and Equipment

Training centers established through this project as well as 30 selected schools now operating will require numerous supplies.

A recent MOH evaluation study gives a good enumeration of equipment and audio-visual materials that teachers themselves have identified as useful, desired but unavailable in the schools. The exact nature and amounts for the centers and the schools can be determined by the PP team. The items include software for AV teaching aids, library equipment, furniture, books, etc.

Also, personal hygiene kits including tooth paste, brush, soap, comb, etc. will be required by the 10,000 students who will enter the program over the life of the project.

The amount of funds to be obligated to this component should equal about 20% of all other training costs.

#### Objective 4: Renovation of Selected Facilities

The four training centers as well as two locations now being used for teacher-training programs will probably require some form of renovation. More extensive alterations may be required at the other locations.

A total of thirty schools will require varying degrees of renovation prior to project implementation. These efforts should be concentrated initially on the poorest areas, particularly in Upper Egypt. Output from this component will be 4 training centers and 30 schools renovated to standards conducive to training.

#### Objective 5: Image Modifier Program (Output)

A campaign to project a more positive image of the nurse should include sponsorship of "open house" at 143 nursing schools on a yearly basis and use of various media such as radio and television to present favorable views of nurses and the nursing profession.

#### Objective 6: Fellowships - Participant Training for Nurse Graduates for Education/Training Responsibilities

A cadre of nurses will benefit from fellowships for study in the U.S. and/or other countries. Applicants from the Secondary Technical Nursing Schools should be given first priority with additional consideration if they are assigned and/or returning to the underserved areas as in Upper Egypt and rural areas. Participant training:

Long-term U.S.	-	1 year	--	15 nurses
Short-term U.S.	-	3 months	--	20 nurses
Short-term, 3rd country			--	32 nurses

(Short-term observation and study trip to places such as Sudan, Indonesia, Morocco or others)

## TECHNICAL ANALYSIS

The strategy underlying the project proposed is a multifaceted approach to a problem that will address many factors simultaneously. In curriculum development, a systematic approach to course development includes a step-by-step process which will describe and analyze the professional performance desired. Training cannot be attempted until developmental activities have been completed. These activities include developing a conceptual framework for the curriculum, determining competencies to be taught, developing training objectives to reflect the desired competencies, planning for in-service education, and preparing instructors for actual training. Analyzing competencies for their skill, knowledge and attitudinal components may present a challenge as attitudes are not generally a part of the present learning system. Instructions now tend to focus on specific facts which must be committed to memory by the students - often with no other use or purpose. The reorientation in content and method of instruction that will be required of teachers in the new program will be a challenge. For this reason alone it may be necessary to train a relatively large number of teachers to initiate the program. Teachers will need to learn to function within a dynamic learning situation with learning/teaching strategies that may be new, as well as different methods for evaluation.

Retraining of teachers who have had previous courses in teaching should pose minimal problems as the concept of in-service education is not new. Nor should there be any major technical difficulties with the "reorientation" of previously trained graduate nurses. Content for the in-service training will be similar to content developed for the new curriculum but the task of training trainers for the in-service education will require perseverance and determination especially since some of the "common core" content may be unfamiliar (e.g. development of role identities and perceptions of self).

Consideration must also be given to the fact that the Secondary Technical Nurse Training is sponsored by MOH in collaboration with the Ministry of Education (MOE). Therefore, changes of a technical nature must be cleared through the MOE. Otherwise, the secondary certification will be jeopardized if the new curriculum is not approved by the MOE. Such a vast curriculum

revampment as will be necessary will certainly place different pressures on secondary school teachers. Some changes should even be considered that would make the secondary courses more relevant, e.g. many hours of English language might be focused on terms related to health or medicine; science content might be chosen to complement the medical and/or nursing content, etc.

The effectiveness of teaching by physicians in this program will need to be addressed, possibly causing some consternation in the medical profession. Doctors may well resist use of a suggested outline content areas to meet instructional objectives. The traditional self-selected lecture may not lend itself to the new program and the possibility that the physician instructor will be "evaluated" may be disconcerting to some physicians. Physician lectures may well be decreased in this program.

Training will be carried out concurrently in three broad areas for three constituencies - students in the basic program, faculty in-service training for instructors in these programs, and in-service training for practicing nurses in the involved facilities. Various fellowships will be continued throughout the project augmenting the number of well prepared instructors.

Focus in all training areas will be on competencies to be achieved as well as on subjects that will foster continuing self-development.

The proposed project components are all technically feasible but resistance to change can be expected due to dynamic conservatism, institutional bureaucracy and the complexity of the change itself. The evaluation as proposed may well be too controversial - not because of complexity or disinterest - but because the manpower requirements may be too demanding in light of all the other activities to be carried out. Should this be the case, a less ambitious plan might need to be considered.

## PROJECT BENEFICIARIES

The major beneficiaries of this program will be the women and children of Egypt who receive medical/health services from nurse providers. STN schools are the largest suppliers of trained nurses. Improving the performance of the nurses trained under this project will enhance their capability to affect the lives of others in a positive way. Nurses, the majority of whom are women, many with children, will benefit from the improved quality of training, and the enhanced professional status of a nurse.

The process of curriculum development will provide a number of nurses with experience in a systematic approach to solving problems. While these initial benefits will accrue to the Ministry of Health through revising the curriculum, the process itself will benefit the participants not only in their professional but also their personal lives. A measure of their professional achievement will be shown not only in the basic program for training nurses but in the in-service education course that will enhance the capabilities of those nurses already in practice.

The improved performance of nurses will increase their professional recognition and ideally their self-perception and feelings of worth. The satisfaction that is derived from such recognition will in turn engender more enthusiasm for their work and thus better care to the people.

Benefits from the development and use of training materials accrue not only to the users of the materials, but ultimately to the community who receives the improved services for which the training aids have been designed.

The renovation of school facilities will initially affect the trainees. In view of the social aspects related to student life, any improvement in living conditions will enhance their self-esteem, their ability to relate positively to others and thus to provide better health care services through interpersonal skills focused on education and promotion of healthy living.

The media campaign to present a more positive image of the nurse to the public will benefit the nurses themselves while concurrently making the public more receptive to services provided by nurses. If the result of a campaign

of this nature is that nursing is seen as an honorable and desirable profession, then future benefits can be expected in an increased number of applicants to nursing programs by selection rather than consignment.

The evaluation components of the project are expected to provide the MOH with a systematic approach to assessing the effectiveness of their training programs, that may have general application to other allied-health professions.

## SOCIAL AND CULTURAL CONSIDERATIONS

A program to develop and to improve curriculum by providing qualified teachers, teaching/learning resources and facilities has the potential of improving the effectiveness and productivity of nurses and consequently affecting changes in the health care delivery system. Such changes will entail governmental commitment to nursing education which will motivate better qualified students to apply to nursing.

Any implementation program must take into consideration issues that have been discussed earlier such as low status, negative image, and low self-concept of nurses; their real and perceived powerlessness in the organizational structure of the health care delivery systems; and the resultant undesirability of nursing as an educational option. The economic problems in nursing and the fact that nursing programs admit students with the lowest achievement grades as measured by MOE are other complicating factors. Therefore, any successful program to succeed must take into account the following: (a) Recognizing that Egyptians value educational achievement, this program will continue to provide a high school certificate. The program is designed so that the graduate obtains both a high school certificate and a nursing diploma; and (b) Since there is a high degree of social prestige associated with a valued university education, this program will provide the credentials to allow students the potential educational mobility into Junior and Senior College programs. Though such opportunities have been available in the past, they were not pragmatic, nor were they appropriately facilitated. The fact that the certification and mobility is provided in this program should make it more acceptable, especially if the graduate is more visible and more able to relate to the community.

Another important issue in achieving project's objectives is related to incentives. USAID mission order 3-10 (12/14/18) states that "payment in the nature of salary, overtime compensation, honorary or incentive awards may not be made to the employees or officials of cooperating Egyptian entities." Exceptions are made on a case by case basis. The question of incentives for MOH project personnel will require the MOH to consider adequate and timely

budget allocation for appropriate incentives if it is determined that incentives are necessary for the project to succeed.

Because of the economic situation in Egypt, incentives are often useful to encourage work productivity. Therefore, discussions have been held with the GOE/MOH who promised due consideration of the matter. Other incentives provided by the program are better teachers, teaching facilities and teaching/learning materials, fellowships and opportunities for improved mobility.

The program potential will be realized only if a systematic and organized program is developed to modify the image of the nurse among peers, colleagues, other health workers and society at large. Experience has indicated that members of the medical profession, seem to afford nurses better image and team memberships if nurses demonstrate higher level competencies. Credentials such as a baccalaureate degree are well received. The desire to enhance the image of the nurse has been made through verbal commitments at different levels within the MOH. The combination of an image modification program and Ministerial commitment to raise the status of the nurse will provide strong support for achievement of program objectives.

The STN program involves taking students out of their close knit family ties and sheltered environment to remote areas of Egypt. Feasibility is strongly related to the provision of sound education program and facilities, a potential for career mobility, and social and economic security. Students and their families have recognized that the available nursing programs, even with their shortcomings can still offer a possibility for advancement. Career and social advancement are strong incentives that often prompt women to travel and to work alone in the more affluent Gulf countries.

Sex/role identity for Egyptians does not present a constraint in educational mobility nor in career commitment. Women who are trained in any career continue to work through matrimonial and child-bearing years. Attrition is negligible. Therefore, the potential for this program in providing practitioners who will continue to work over a long period is excellent.

A major constraint in in-service programs for teachers and graduates participating in training programs that require travel is the need for child care. This presents a special problem with nurses that have very small

children. This issue may hamper the selection of appropriate training candidates and could be a major deterrent to others. Decentralization of in-country training programs could decrease the effect of such constraints. Financial support and provisions for child care could minimize these constraints.

A more detailed study of the social and cultural issues involved in this project is attached to this report as an addendum entitled: "Social and Cultural Factors Affecting the Nursing Profession in Egypt."

## OTHER HEALTH-RELATED PROJECTS

### USAID

USAID's four current projects: (1) Rural Health, (2) Urban Health (3) Family Planning (4) Suez Canal University as well as the proposed Diarrhea Disease Control Project, all are complementary to the proposed new activity.

All of USAID's projects have large local training elements and are actively involved in both in-service and reorientation training of nurses. The focus of their activities is in actual delivery of health and family planning services, and the preparation of personnel to assume more productive roles especially in relation to Maternal-Child Health and Family Planning.

While this project has a similar focus - involving training and re-training of nurses, the perspective in terms of initial basic training of nurse providers is different. It is strongly suggested that a coordinating mechanism between all USAID projects and this activity be developed for the exchange of ideas, development and use of similar training material, and possible use of facilities.

### UNICEF

UNICEF is active in maternal and child care and has supplied MCH-related equipment to nurse-training schools and MCH centers.

### WHO

WHO has supported nurse training in Egypt for a number of years particularly to the High Institutes of Nursing and the development of the Center for Educational Technology (Roda).

#### JAPANESE GOVERNMENT

The Japanese Government is assisting in establishing a new facility for a nurse teacher-training center at the Center for Educational Technology (Roda).

#### BRITISH GOVERNMENT

The British Government is providing technical assistance and commodities in the Minia Governorate, utilizing the World Bank methodology for the delivery of health and family planning services by nurses.

#### GERMAN GOVERNMENT

The German Government is providing some small scale technical assistance to improve health delivery services which includes nurses.

## PROJECT COST ELEMENTS

There can be much flexibility in the expenditure of resources to achieve project objectives. Depending upon the prioritization of the various cost elements within the project and the allocation of resources among them, overall project costs may vary markedly. Since many resource allocation issues are unresolved at present, it is not advisable to present project cost estimates within this report. Rather this report presents an approach which will yield an estimate for the total cost of the project while concurrently serving as a planning tool which demonstrates the financial implications of various project related decisions that should prove most useful in the preparation of the Project Paper. This approach is outlined as follows.

Since it is possible to identify a number of discrete activities which together constitute the overall STN project, cost estimates can be made through the use of modular or component approach. Each module is comprised of specific tasks which in turn are assigned corresponding costs. The modules are:

- Teacher Training
- Teacher Enrichment
- Facilities
- Project Administration
- Conceptual Framework
- Evaluation
- Image Modifiers
- In-Service Training
- Treatment Protocol
- Commodities
- Fellowships
- Technical Assistance

The modular approach is intended to provide AID management flexibility in comparing output desired with associated costs considering structural constraints (logistics, space problems, number of faculty, etc.) and resources available for this project. Annex IX shows an itemization of project's cost elements which comprise each module.

## ENVIRONMENTAL ASSESSMENT

There will be no adverse effects on the environment as a result of this project. The increased emphasis on health promotion and preventive measures to maintain health may well produce actual health status improvement as the graduates from the programs become more aware of the relationships between environment and health, and are able to carry out their expanded roles.

## PROJECT PAPER STRATEGY AND TERMS OF REFERENCE

### Strategy

The project paper will be prepared by USAID/Egypt in collaboration with a group appointed by the Minister of Health. USAID will be assisted by a consultant group described below. The project paper will be submitted to AID/W for approval.

The STN program evaluation study by MOH, previously described in summary, is available to provide data useful to the proposed project design team.

The team will consider USAID's ongoing and proposed health and population activities and those of other donors in design preparation.

The design team should include:

- |  |          |
|--|----------|
| a. Team Leader - Nurse education (curriculum specialist/management)  | 12 weeks |
| b. Nurse - Teacher training/In-service specialist  | 12 weeks |
| c. Logistic/supply management specialist:<br>(latter part of team visit)   | 4 weeks  |
| d. Economist - budget/fiscal:<br>(latter part of team visit)   | 4 weeks  |
| e. An Arabic-speaking social scientist<br>preferably a nurse   | 6 weeks  |
| f. Architectural specialist-nurse training facility  | 6 weeks  |
| g. Communication-media specialist familiar with<br>Health Personnel advocacy   | 8 weeks  |
| h. Health evaluation consultant  | 8 weeks  |
| i. AID project design officer (2 weeks at beginning and<br>2 weeks at end of project, or consultant thoroughly<br>familiar with AID/PP design, preferably with extensive<br>health experience) |          |

## Terms of Reference

The objective of the design mission is to prepare a comprehensive report for the conceptualization of the project; its design and all technical inputs and outputs. The study team will prepare an analysis; program design and implementation schedule for the following:

1. Curriculum development with a competency based focus.
2. Teacher training
3. In-service education
4. Use of media in advocacy
5. Facility renovation
6. Commodities
7. Evaluation

The analysis shall:

- provide basic information on present social, organizational, technical, and institutional factors that may impact on the project,
- provide a conceptual design for implementation,
- focus on feasibility of technical, economic, social and administrative alternatives,
- describe and provide total cost estimates of all inputs to include technical assistance, training, equipment, commodities and operating expenses,
- consider the relative merits of selected new construction vs. renovation of existing substandard facilities in marginal programs,
- examine the merits of pre-project participant training activities and the scheduling of visits to allow some "English as a Second Language" training,
- investigate the possibility of WHO-sponsored curriculum workshop.
- include the feasibility of admitting male students to a STN program,

## SUGGESTED EVALUATION ACTIVITIES

The proposed project includes two distinct evaluation modules that incorporate several components:

(1) The first module is proposed to develop, to test, and to implement evaluation protocols for each nursing competency included in the curriculum. It is expected that at the end of the first year of the project, written protocols that include minimum and maximum levels of competency mastery will be completed and tested among experimental and control groups of faculty and students for validity, reliability and statistical significance. Evaluation protocols will be developed using similar protocols available in WHO and in those schools of nursing in the U.S. and the Middle East that use competency-based curricula in their teaching.

(2) The second module on evaluation is the project evaluation module which has two components, one on process and the other on product evaluation. To avoid pitfalls inherent in a product evaluation - basically the evaluation conducted at the completion of the implementation of all project phases - a continuous evaluation between and within phases is proposed. The process evaluation will develop measurable criteria to test various concepts. The major objective of the proposed process evaluation is a reassessment and a corresponding modification of subsequent phases as deemed necessary. The second proposed component of the second evaluation module is the project product evaluation. This is a final evaluation of the project and all its modules. The criterion selected for the product evaluation will evolve from the framework and will address the attainment of the objectives related to different subject groups and the different modules.

## PROJECT INPUTS

### Government of Egypt

- a) Budget Resources: The Egyptian Government through the Ministry of Health is in charge of health manpower training. For the purpose of this project, it is assumed the resources normally allotted for Secondary Technical Nurse Training programs will continue.
- b) Infrastructure/Manpower: Personnel requirements for this project are presently available within the MOH system. No additional costs related to the basic salary of involved personnel are anticipated although the MOH will have to consider incentives to encourage their involvement in the project. Since increased enrollment beyond the life of the project may require an increased training budget, future costs to the GOE may well increase if certain aims of the project are to be fulfilled.

Training facilities are now available for the major part of this project although their condition may be less than acceptable. Normal recurring costs for building maintenance can be expected to continue. If any additional construction is desired by the GOE, it is assumed that the costs will be assumed by the GOE/MOH as a normal part of replacing/renovating existing structures on a continuing basis.

### AID Inputs/Responsibilities

- a) AID will provide \_\_\_\_\_ over the life of the project of which \_\_\_\_ will be in Egyptian pounds purchased with U.S. dollars. U.S. dollars costs will provide for 315 pm technical assistance, participant training (15 LT-US, 20 ST-US, 32 ST-3rd country). Egyptian pounds will provide for project local costs; project support; training activities; 100 pm technical assistance; commodities such as vehicles; educational materials and training aids; facility renovation; and local media.

- b) USAID will appoint a Project Officer to monitor GOE and contractor progress, and to assure timely provision of AID inputs.

#### WHO Contribution

WHO/EMRO is now supporting a program at the Roda Institute where a variety of teaching aids, manuals, and learning modules are being produced. The STN project will have access to these materials. Technical assistance at the Institute by a part-time consultant, is being supported by WHO until March 1981.

Since discussions with WHO/EMRO personnel indicate a willingness to participate in training programs, a more detailed analysis of their possible contribution to this project should be done as part of the Project Paper. Expected support from WHO might be in the nature of technical support for training, support to the Roda Institute, or possibly hardware and software for audio-visual aids.

#### Project Hope

Project Hope is currently involved in training practitioners in specialty areas of nursing. These program areas can be useful in providing special competencies to nurses who in turn will be "role models" for students.

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## ANNEX I

## NURSING PROGRAMS IN EGYPT\*

Name of Program	Admission Year and Language Begun	Requirement	Diploma Degree	Duration
High Institute of Nursing, Cairo	1964	Secondary Certificate, Arabic and English	Bachelor of Nursing	4 Years study + 1 year internship
High Institute of Nursing, Alexandria	1955	Secondary Certificate, Arabic and English	Bachelor of Nursing	4 Years study + 1 year internship
High Institute of Nursing, Alexandria	1969	B.A. in Nursing with grade of "good" + 2 years of experience	M.A. in Nursing	2 Years
Ain-Shams and other universities	-	M.A.	Ph.D.	Varies
Technical Nurses two-year program, Alexandria	1972	Secondary Certificate, Arabic and English	Diploma	2 Years
Old Diploma Nurse Program (discontinued)	1952	Preparatory Certificate, Arabic and English	Diploma	3 Years, 5 Months
New Technical Secondary Nurse Program	1972	Preparatory Certificate, Arabic and English	Certificate Secondary/ Technical	3 Years
Health Visitor Program (School nurse)	1946	Preparatory Certificate, Arabic and English	Diploma	Began as 2-year program in 1947; extended to 3 years in 1957
First Aid Program	1970	Males only, Preparatory Certificate, Arabic and English	Diploma	3 Years
Assistant Midwife (11 areas, 16 schools)	1942	Preparatory Certificate, Arabic and English	Certificate	68 Weeks
1 Year University Hospital Speciality Program	1962	Diploma, 3 year program + 2 years experience	Diploma in nursing specialty	1 Year in speciality chosen
Ahmed Maher General Hospital, Post-Basic Training Program	1961	High Institute Nursing graduate of 3 year diploma + 2 years experience	Certificate	3 or 4 months

\*Britanak, Rose, Report Nursing Manpower in Egypt

ANNEX II  
NUMBER OF GRADUATES FROM  
THE TECHNICAL SECONDARY SCHOOLS OF NURSING  
FIRST SESSION 1980

<u>Subject</u>	<u>Number</u>
Ministry of Public Health	2,454
	82
Health Insurance	77
Al Azhar University	40
Special	<u>48</u>
<u>Total</u>	<u>2,701</u>

<u>No.</u>	<u>Governorate</u>	<u>School</u>	
1	Cairo	Dar Al Shefa	19
		Heliopolis	14
		Al Gomhoriah	18
2	Alexandria	Al Moasat	9
3	Giza		<u>18</u>
	<u>Total</u>		<u>82</u>
1	Cairo	Al Nasr (Helwan)	22
2	Alexandria	Gamal Abd El Nasser	19
		Karmouz (Alomali)	18
3	Kaliobeia	Al Nil - Shubra	13
4	Giza	6 October	<u>5</u>
	<u>Total</u>		<u>77</u>
1	Cairo	Al Banat Al-Islamieh	15*
		Bab Al Shaariah	<u>25*</u>
	<u>Total</u>		<u>40</u>

\*Al Azhar University

THE TECHNICAL SECONDARY SCHOOLS OF NURSING  
AND  
THE NUMBER OF THE GRADUATES  
FIRST SESSION, 1980

<u>No.</u>	<u>Governorate</u>	<u>School</u>	<u>Number</u>
1	Cairo	Shubra Al-Aam	41
		Dar Al Esteshfaa	22
		Abassieh (Fevers)	9
		Boulac Al Aam	38
		Dar Al Salam	23
		Alou Al Reish	31
		Manshiet Al Bakri	24
		Al Mounira	36
		Talabet Al Bohoth	20
		Al Khazindarah	38
		Al Itali	9
		Helwan Al Aam	6
		Abbasia (Chest)	10
		Ahmad Maher	60
Al Galaa	33		
Al Maraa Al-Gedidah	<u>48</u>		
	Subtotal	464	
2	Alexandria	Ras Al Teen	32
		Dar Ismail	35
		Karmoux Al-Aam	36
		Al Talaba - Sporting	<u>30</u>
		Subtotal	133
3	Port Saeed	Port Saeed	<u>19</u>
		Subtotal	19

<u>No.</u>	<u>Governorate</u>	<u>School</u>	<u>Number</u>
4	Suez	Suez	<u>17</u>
		Subtotal	17
5	Ismailia	Ismailia	<u>25</u>
		Subtotal	25
6	Damietta	Damietta	57
		Faraskour	<u>35</u>
		Subtotal	92
7	Al Dakahlia	Al Mansourah	22
		Meet Ghamr	17
		Sherbeen	11
		Dekernes	5
		Belkas	6
		Al Manzala	15
		Aga	13
		Al Senbellawein	<u>8</u>
		Subtotal	97
8	Al Sharkia	Al Zagazig	6
		Fakous	12
		Minia Al Kamh	7
		Hehia	9
		Diarb Negm	5
		Abou Hammad	6
		Abou Kebir	9
		Belbeis	21
		Kafr Sakr	<u>9</u>
		Subtotal	84

<u>No.</u>	<u>Governorate</u>	<u>School</u>	<u>Number</u>
9	Al Kalyobeia	Banha	29
		Kaliub	26
		Tookh	24
		Naser	25
		Al Kanater	17
		Kafr Shokr	22
		Shebeen Al Kanater	<u>13</u>
		Subtotal	156
10	Kafr Al Sheikh		31
			32
		Desouk	23
		Beiela	28
		Sidi Salem	<u>20</u>
		Subtotal	134
11	Al Gharbeia	Tanta	72
		Al Mahala Al Kobra	78
		Samanoud	38
		Kotour	26
		Al Santa	35
		Zefta	33
		Kafr Al Zayat	28
		Basioun	<u>8</u>
Subtotal	318		
12	Al Menofeia	Menouf	21
		Shebin Al Koum	28
		Berket Al Sabaa	22
		Al Shohadaa	15
		Al Bagour	23
		Ashmoon	6
		Tala	<u>20</u>
Subtotal	135		

<u>No.</u>	<u>Governorate</u>	<u>School</u>	<u>Number</u>
13	Al Beheira	Damanhour	66
		Kafr Al Dawar	72
		Rasheed	30
		Kom Hamada	52
		Abou Al Matamir	15
		Itai Al Baroud	<u>37</u>
		Subtotal	272
14	Al Giza	Om Almasreyeen	20
			16
			18
		Boulac Al Dakrour	14
		Al Hawamdeiah	4
		Al Badrashein	2
		Al Saf	-
		Al Ayat	<u>9</u>
		Subtotal	83
15	Bani Suef	Bani Suef	51
		Al Wasta	15
		Al Fashn	24
		Beba	<u>28</u>
		Subtotal	118
16	Al Fayoum	Al Fayoum	20
		Sanouris	23
		Etsa	12
		Ebshway	<u>10</u>
		Subtotal	65

<u>No.</u>	<u>Governorate</u>	<u>School</u>	<u>Number</u>
17	Al Menia	Al Menia	38
		Maghagha	9
		Mallawi	<u>11</u>
		Subtotal	58
18	Asiot	Asiot	74
		Dairot	29
		Al Koseia	9
		Abou Teeg	19
		Abnoob	16
		Sedfa	17
		Manfaloot	10
		Al Badari	<u>9</u>
		Subtotal	183
19	Souhag	Souhag	<u>16</u>
		Subtotal	16
20	Kena	-	-
21	Aswan	-	-
22	Matrough	Matrouch	<u>14</u>
		Subtotal	14
23	Al Wadi Al Gadeed	Al Wadi Al Gadeed	<u>11</u>
		Subtotal	11
24	Al Bahr Al Ahmar	-	-
25	Sinai	Sinai and Al Tahreer	<u>240</u>
		Subtotal	240
<u>GRAND TOTAL</u>			<u>2,502</u>

a) Graduates of Al Maraa Al Guedidah 48  
b) Graduates for Ministry of Public Health 2,452

Total Graduates

Annex III

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

AID

Life of Project: \_\_\_\_\_  
From FY '81 to FY '86  
Total U.S. Funding \_\_\_\_\_  
Date Prepared: \_\_\_\_\_

Project Title & Number: Technical Nurses Training #263 - 0135

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><u>Program or Sector Goal: The Broader Objective To Which This Project Contributes:</u></p> <p>To improve the general health status of the Egyptian people.</p>	<p><u>Measures of Goal Achievement:</u></p> <ol style="list-style-type: none"> <li>1. Progressive increase of life expectancy at birth.</li> <li>2. Decrease in infant mortality.</li> <li>3. Progressive reduction of age-specific morbidity rates.</li> <li>4. Achievement of national population goals.</li> <li>5. Budget allocation for improved services.</li> </ol>	<ol style="list-style-type: none"> <li>1. GOE statistics/surveys, census/life tables, vital registration records.</li> <li>2. Clinic, hospital, health center records, surveys, analysis of planning documents.</li> </ol>	<p><u>Assumptions for Achieving Goal Targets:</u></p> <ol style="list-style-type: none"> <li>1. Utilization of services will improve health status.</li> <li>2. Accessible services will be utilized.</li> <li>3. GOE will address population problems aggressively.</li> <li>4. GOE will give priority to primary health care at periphery of systems.</li> <li>5. GOE/MOH will donate adequate human, financial resources.</li> </ol>
<p><u>Project Purpose:</u></p> <p>To provide the GOE with trained nurses who have basic knowledge skills and attitudes needed to respond to the primary health care and nursing needs of Egypt, especially in the areas of maternal-child health and family planning.</p>	<p><u>Conditions That Will Indicate Purpose Has Been Achieved: End of Project Status:</u></p> <ol style="list-style-type: none"> <li>1. Nurses play vastly expanded role in health care provider team, both curative and preventive.</li> <li>2. Nurses' preventive and curative functions clearly specified and designated.</li> <li>3. Nurse training constantly evaluated and altered according to continuing needs.</li> <li>4. CNE program.</li> <li>5. Medical and nursing professions accept expanded role of nurses as described in new job descriptions.</li> </ol>	<ol style="list-style-type: none"> <li>1. Job descriptions; clinic and hospital records; surveys; evaluation reports.</li> <li>2. Job descriptions; functional analysis; reports and observations. MOH directives, policy guidance. Supervisory reports.</li> <li>3. Personnel inventory for training purposes. Evaluation reports; analysis of recommendations made and adopted.</li> <li>4. Functional surveys, reports.</li> </ol>	<p><u>Assumptions for Achieving Purpose:</u></p> <ol style="list-style-type: none"> <li>1. Adequate clinical supervised training experience will be made available.</li> <li>2. MOH health systems will develop meaningful supervisory roles.</li> <li>3. GOE will strongly support primary health care to best utilize trained nurses.</li> <li>4. Image of the nurse will improve with time. Medical profession will be oriented and supportive to this endeavor.</li> </ol>

<p><u>Input:</u></p> <ol style="list-style-type: none"> <li>1. Technical assistance 418 pm</li> <li>2. Training 67 participants 7080 in-country &amp; in-service programs.</li> <li>3. Commodities, education materials, training aids.</li> <li>4. Miscellaneous facility renovation.</li> </ol>	<p><u>Implementation Target (Type and Quantity):</u></p> <ol style="list-style-type: none"> <li>1. Implementation target (type and quantity).</li> <li>2. Consultants (person/years) in different aspects of nursing to train counterparts &amp; revise curriculum &amp; develop in-service training and continuing education programs.</li> <li>3. Various in-country &amp; U.S. training.</li> <li>4. Teaching aid requirements &amp; equipments provided.</li> </ol>	<ol style="list-style-type: none"> <li>1. Mission files.</li> <li>2. On-site audits.</li> </ol>	<p><u>Assumptions for Achieving Input:</u></p> <ol style="list-style-type: none"> <li>1. GOE will provide project personnel and counterparts for implementation in timely fashion.</li> <li>2. Continuing assistance will be received from several agencies now involved in programs.</li> </ol>
<p><u>Output:</u></p> <ol style="list-style-type: none"> <li>1. Secondary technical nurse curriculum revised, tested, implemented.</li> <li>2. Instructors trained to administer new curriculum.</li> <li>3. Training materials designed, tested.</li> <li>4. Selected nursing schools renovated and equipped.</li> <li>5. In-service and continuing nursing education (CNE) programs designed, tested and implemented.</li> <li>6. New nurse job descriptions with delegated responsibility.</li> </ol>	<p><u>Magnitude of Output:</u></p> <ol style="list-style-type: none"> <li>1. Three year curriculum developed, tested and approved by MOH. Instructors trained in country overseas.</li> <li>2. Materials designed, tested, and procurement underway.</li> <li>3. Schools renovated and all schools fully equipped.</li> <li>4. Nurses undergo in-service training.</li> <li>5. CNE courses established. One general job description.</li> </ol>	<p><u>Assumptions for Achieving Output:</u></p> <ol style="list-style-type: none"> <li>1. MOH Decree.</li> <li>2. MOH and USAID documents.</li> <li>3. Training plans, protocols and post training evaluation.</li> <li>4. Formal endorsements of curriculum and new job descriptions by MOH, medical syndicate and nursing syndicate.</li> </ol>	<p><u>Assumptions for Achieving Output:</u></p> <ol style="list-style-type: none"> <li>1. GOE/MOH will provide full time personnel with task assignment.</li> <li>2. Qualified instructors can be recruited, trained and restrained by the system.</li> <li>3. Training materials software will be specifically oriented to Egyptian needs.</li> <li>4. Nurses will be released from daily duties for in-service and CNE.</li> <li>5. Strong support can be obtained from these organizations.</li> </ol>

Organization of the Nursing Technical Secondary School  
(Ministry of Health)

The organization of this school was carried out through a "Ministerial Decision" No. 292 in 1972.

This document was jointly declared by the Ministry of Health and the Ministry of Education.

The decision and regulations pertaining to it were published in the official newspaper (Al-Wakal-Al-Masria) and authority given for implementation for the school year 1972-1973.

The aim of the program is stated as "to prepare qualified girls to serve as highly efficient nurses, and to provide them with the proper scientific, technical and cultural studies to be able to reach a standard required for the nursing profession and to develop the mental, physical, social and national preparations to enable them to perform their duty towards God, their families, the nation and all humanity".\*

Admission qualifications include:

- (1) Certificate of accomplishment in the General Preparatory School.
- (2) Age not less than 15 or more than 21 the first of October of the year of entry into the school.  
(Exceptions are made if there are "Proper reasons" or "enough vacancies").
- (3) Agreement by parents and student that she will devote all her time for studying.
- (4) Single status and not permitted to marry during the study period.

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\* This description is derived from the actual decree and all quotations unless identified otherwise are taken directly from English copies of the Ministerial Decisions.

(5) Provision of an official certificate of good character and good reputation.

(6) Medical and personal examinations.

The duration of study is three years during which time the student is given 3 L.E. as a reward.

If the yearly courses is failed, the payment is stopped until the student passes.

Maximum class size is 50 students.

In the practice areas the number may not exceed 25.

Graduates of the program are eligible to complete their studies in higher institutions of nursing according to their established regulations and conditions.

The actual starting and finishing dates of the program are set by the Higher Council of Secondary Technical Nursing Schools but may not be less than 30 weeks.

Holidays are determined by a local council and given "only" on condition that it will not disturb the annual study". One-month vacation is given during summer.

The summer training period is 12 weeks long.

Upon completion of the program and successful passing of the 3rd year examination, a certificate called "the Secondary Technical Nursing School Diploma" is given by the Ministry of Education.

Faculty Affairs, Supervision and Administration

A Higher Council of Secondary Technical Nursing Schools composed of upper level management personnel in the MOH and MOE and representatives from the Red Crescent, Health Institutions and Medical Administration is vested with the authority to determine "efficiency level of the faculty, supervision and technical guidance". Other responsibilities are related to establishing new schools, budgetary requirements, modification/deviations from the program, acceptance of foreign students, regulations regarding the editing, publishing and use of study books, establishment of school administration council.

A Local Council is comprised of administration levels of personnel at the Governorate level in health affairs, medicine, curative treatment, preventive medicine, training, secondary education, local administration, technical education and nursing.

This council is said to meet once a month by invitation from the Chairman, the Director of the Administration of Health Affairs in the Governorate.

Responsibilities of this council include the establishment of new schools, determining location and number of student to be accepted; suggesting annual budget; suggesting modifications of the program determining all of teachers; studying and evaluating results of students intermediate examinations, approving student transfers from one school to another within the governorate; approval of publication decisions.

Ministerial Decision No.91 - 1975

This amendment increased membership in the Higher Council from its previous number of 12 physicians/doctors and 1 nurse to 16 with 2 nurses representatives.

New items allowed the admission of students with a preparatory school certificate (French language) to enter the program, and provided for meals for students during their working days (and nights). The curriculum content changes were made as follows:

	Total
Physicians increased, 1 hour weekly in 3rd year	6
Biology decreased, 1 hour/week in 2nd year	4
Bacteriology and Parasites introduced 1 hour/week 1st year	1

Hours of clinical practice in the hospital remained the same.

Regarding evaluation, marks given for religion exams were excluded from the total aggregate and thus not considered a possible "failing" subject. Minimum and maximum limits were set for points allotted for completion of each section of study.

Ministerial Decision No.99 - 1976

This decree amended the number of members of the Higher Council to 19 with three nursing representatives.

Ministerial Decision No.228 - 1976

This decree dealt with the system of examination in the Secondary Technical Schools for Nursing and outlined more specifically what proportion of final grades as allotted to class work, midyear exam, and final exam. Thus a student who might fail in the total aggregate but succeed in the examination would be permitted to retake the exam and choose another subject to be tested to acquire the minimum aggregate.

The procedure for failure in the total aggregate and one subject, or failure in two subjects are spelled out in detail.

Class study could be repeated one time, final exams twice.

Excellence can be rewarded by either monetary or honorary awards in accordance with policies set by the local council. The punishment is authorized by the Higher Council of Secondary Technical Nursing Schools for "disturbing the studying system, examinations, or others".

The actual theory of the program is decreed by name of subject, hours per week, and placement in the program. Additions or deletions are possible "according to educational development and conditions and requirements of schools, by a suggestion of higher councils and decision from us". (M.O.H. and M.O.E.). The number of practical study hours in hospitals are specified by hour/week/class.

Absence of 15 separate or continuous days without an "acceptable" excuse is grounds for dismissal with the possibility of reinstatement after approval by the school administration council and payment of 5 L.E.

Assessment of students is done through course examinations during the year and written, oral and practical examinations at the end of the educational year.

Eligibility for taking the exam requires 75% presence in the total lessons or 60% with an acceptable excuse for the absence - No less.

Repeat examinations after failure are possible within certain rules and regulations. A student can be dismissed from the school for exhausting her quota of permissible failures but may be reinstated with approval from the local council and payment of 5 L.E.

ANNEX V  
DISTRIBUTION OF THE DIFFERENT CATEGORIES OF  
NURSES ACCORDING TO THE ORGANIZATIONS PRESENT IN EGYPT\*

Organization	No. of Beds	HIN	HTI	O.D.	Nurses			Assistants				EXP	NUN	Total
					1	2	3	4	5	6	7			
<u>Ministry of Health</u>														
Curative		127	64	146	912	6,920	25	31	2,140	86	823	110	25	11,409
Preventive		29	10	174	201	1,521	18	1,358	987	20	2,486	61	2	6,867
Rural			28	17	62	2,807	20	831	401	16	3,518	2		7,712
Others		19	2	137	315	167		11	108	4	89			852
<u>Total M.O.H.</u>	<u>54,021</u>	<u>175</u>	<u>104</u>	<u>474</u>	<u>1,490</u>	<u>11,415</u>	<u>63</u>	<u>2,231</u>	<u>3,636</u>	<u>126</u>	<u>6,926</u>	<u>173</u>	<u>27</u>	<u>26,840</u>
Universities	10,486	145	22	314	371	2,440	1	4	599	44	28	5		3,973
<u>Teaching</u>														
Institutes and Hospital Org.	3,138	55	49	57	193	838	1	25	206		24	29	4	1,481
Curative Organization	3,445	74	16	32	158	519		14	173	16	128	152	51	1,333
Health Insurance	3,038	8	3	1	19	348			231		5	33		648
<u>Other</u>														
Ministry Organizations	1,774	1	12		31	160			57	4	2	48		315
<u>Total</u>		<u>458</u>	<u>206</u>	<u>878</u>	<u>2,262</u>	<u>15,720</u>	<u>65</u>	<u>2,274</u>	<u>4,902</u>	<u>190</u>	<u>7,113</u>	<u>440</u>	<u>82</u>	<u>34,590</u>

HIN: High Institute of Nursing  
HTI: Health Technical Institutes  
O.D. Old Diploma (five years)  
EXP: Experimental Nurses (Research)

1: Specialized Nurses  
2: Nurse  
3: Male Nurse  
4: Health Visitor  
5: Assistant Nurse  
6: Assistant Nurse (Male)  
7: Assistant Midwife

\*Ministry of Health figures circa 1978

ANNEX VI  
 CURRICULUM AND SYLLABUS PRESENT PROGRAM\*  
 SECONDARY TECHNICAL NURSE TRAINING  
 SUBJECT PLACEMENT - HOURS OF THEORY AND PRACTICE

PLACEMENT	Hours:	FIRST YEAR		SECOND YEAR		THIRD YEAR		TOTAL HOURS
		Theory	Lab	Theory	Lab	Theory	Lab	
<u>Subjects</u>								
Religion		30		30			30	
Arabic Language		120		120			120	
Foreign Language		180		180			180	
Social Study		30						
Physics		60		60			60	
Chemistry		60		60			60	
Biology		60		30				
Nutrition and Diet Therapy		30		30		P.H. and Public Health Nursing	30	
Anatomy and Physiology		60		30		Special Surgery and Nursing	30	
Bacteriology and Parasitology		30		30		Natural Physics	30	
Fundamentals of Nursing		30	100	30		Nursing Service		
History of Nursing		80		30		Administration	30	
First Aid		10		30		Statistics	30	
Public Health		30		60		Gynecology and Obstetric Nursing	60	
				60		Nursing	60	
				60		Pediatric and Pediatric Nursing	30	
				60		Psychiatry and Psychiatric Nursing	30	
				60		Forensic Medicine	30	
Clinical Training			570		510			600
Summer Training			540		540			540
<u>TOTAL HOURS</u>		<u>760</u>	<u>1,210</u>	<u>810</u>	<u>1,110</u>		<u>750</u>	<u>1,140</u>
								<u>3,360</u>

\*\*

\*Document received from Ministry of Health, Department of Nursing

\*\*Actual hours will be in excess of number stated as students work 12 hours night-duty for periods (varying by location)

ANNEX VI  
SUMMARY

First Year

School Year

160 hours = 25.3 hours theory per week  
670 hours = 22.3 hours clinical per week  
47.6 Total Hours

Second Year

School Year

810 hours = 27 hours theory per week  
570 hours = 19 hours clinical per week  
46 Total Hours

Third Year

School Year

750 hours = 25 hours theory per week  
750 hours = 20 hours clinical per week  
45 Total Hours

N.B. School Year = 30 weeks

Summer Training

540 hours = 45 hours clinical per week

Summer Training

540 = 45 hours clinical per week

Summer Training

540 = 45 hours clinical per week

ANNEX VII  
 SECONDARY TECHNICAL NURSE TRAINING PROGRAM\*  
 COURSES BY YEAR, NUMBER OF HOURS, INSTRUCTOR  
 NUMBER OF HOURS BY TEACHER

Subjects	Secondary School Teacher	Social Worker	Physician	Nurse
<u>First Year</u>				
Languages	300			
Religion	30			
Physical Sciences	120			
Nutrition	30**			
Social Study		10		
Public Health			30	
Biological Science	60		90	
First Aid			10	
Nursing Fundamentals				30
Nursing Practice				102
<u>TOTAL</u>	<u>540</u>	<u>10</u>	<u>130</u>	<u>152</u>
<u>Second Year</u>				
Languages	300			
Religion	30			
Physical Sciences	120			
Biological Science	30			
Nutrition	30			
Public Health Nursing			40	20
Medicine/Medical Nursing				16
Dermatology/Nursing			10	2
Surgery/Surgical Nursing			30	15
Anesthesia/OR/Nursing			10	30
Pharmacology			30	
<u>TOTAL</u>	<u>510</u>		<u>152</u>	<u>83</u>
<u>Third Year</u>				
Languages	300			
Religion	30			
Physical Sciences	120			
Biology	30			
PH/Public Health Nursing			20	10
Statistics			30	
Nursing Service Administration			30	
Forensic Medicine Gynecology			30	
Obstetrics/Nursing			40	10
Pediatrics/Nursing			20	10
Psychiatry/Nursing			12	18
ENT/Nursing			4	2
Orthopedics/Nursing			4	4
Ophthalmology/Nursing			6	2
Dentistry			6	
Urology/Nursing			4	2
<u>TOTAL</u>	<u>510</u>		<u>176</u>	<u>58</u>

SUMMARY:      150 hours taught by Secondary School Teacher  
                      10 hours taught by Social Worker  
                      458 hours taught by Physician  
                      293 hours taught by Nurse Teacher  
2 321 Total hours taught

\*Translation from documents received September, 1980  
 \*\*May be a Nutritionist for practical aspects of food service

ANNEX VIII  
DEFICIENCY IN CLINICAL SPECIALITY FOR STUDENTS  
BY THE OWNERSHIP OF SCHOOLS

Ownership of Schools	Total No. of Schools		Medical Nursing	Surgical Nursing	Gyn/Obst Nursing	Pedia. Nursing	Public Health Nursing	Psych. Nursing	Unknown
	No.	%							
Ministry of Health	No. 111		74	47	35	55	38	79	2
	%		66.67	42.34	31.53	49.55	34.23	71.17	1.80
Health Insurance	No. 5		4	5	3	5	5	5	-
	%		80.0	100.0	60.0	100.0	100.0	100.0	-
Curative Organization	No. 5		3	2	-	2	3	2	1
	%		60	40	-	40	60	40	20
University	No. 8		3	3	3	4	3	4	-
	%		37.5	37.5	37.5	50.0	37.5	50.0	-
Special	No. 1		1	1	-	1	1	1	-
	%		100.0	100.0	-	100.0	100.0	100.0	-
<b>TOTAL</b>	No. 130		85	58	41	67	50	89	3
	%		65.38	44.62	31.54	51.54	38.46	68.46	2.31

Of the total 130 schools surveyed, deficiencies in clinical experience existed as listed:

Medical Nursing	65% inadequate
Surgical Nursing	45%
Gynecological and Obstetric Nursing	32%
Pediatric Nursing	52%
Public Health Nursing	38%
Psychiatric Nursing	68%

Annex IX

PROJECT COST ELEMENTS

MODULAR FRAMEWORK

Module A - Teacher Training

Educator

Other Personnel: Secretary  
Financial Analyst  
Support Staff

Materials (Stationary, teaching aids, etc.)

Educational Stipend (teachers, travel costs, per diem)

Module B - Teacher Enrichment

Educator

Other Personnel: Secretary  
Coordinator

Materials

Transportation

Stipend (technical schools)

Module C - Facilities

Training Centers

Module D - Project Activities

Costs: Project Director  
Undersecretary  
Secretary  
Car and Driver  
Director of Nursing Education (Alexandria, Tanta, Upper Egypt)

Module E - Conceptual Framework

Director Labor: MOH  
Governorate  
Faculty  
Practitioners  
Clerical

Materials and other costs

Module F - Evaluation

Director Labor: MOH  
Governorate  
Faculty  
Practitioner  
Clerical

Materials and other costs

Module G - Image Modifier

Director Labor: MOH  
Governorate  
Faculty  
Clerical

Materials and other costs

Multi-media promotional campaign

Module H - In-Service Training

Director Labor: MOH/Governorate  
Faculty  
Practitioners  
Clerical

Materials and other costs

Transporation (trainers, trainees)

Module I - Treatment Protocols

Director Labor: MOH  
Governorate  
Faculty  
Practitioners  
Clerical

Materials and other costs

Module J - Commodities

Buses

Module K - Fellowships

Travel to U.S.: Airfare  
Ground transport  
Living Allowance  
Tuition Allowance

Module L - Technical Assistance

Director Labor: Consultants

Travel: Transportation  
Living Allowance

ADDENDUM TO THE MAIN REPORT

SOCIAL AND CULTURAL FACTORS AFFECTING THE NURSING  
PROFESSION IN EGYPT

EXPLANATORY NOTE

This study was undertaken during the months of September-October 1980, while the HSI team was on-site in Egypt.

## INTRODUCTION

The Secondary Technical Nursing (STN) Program was established as a quick solution to the nursing shortage in Egypt. The goal of the program was, and is to educate as many qualified nurses as possible during the three year program. Ideally, nurses trained through the STN program would be competent in performing the much needed nursing skills required by the different health care delivery programs throughout the country. Through the STN program, it was hoped that the nursing shortage in the country could be alleviated by the year 2000. The perceived urgency of the situation prompted the Ministry of Health (MCH) hastily to design, to implement, and to establish a program involving 120 schools. This task was accomplished within 6 months. As could be expected, the inadequate planning and the lack of careful study of all the factors impacting on such a monumental project resulted in a program that produces ineffective practitioners who are perceived negatively, both by the general public and other medical professionals as well as the nurses themselves.

These problems prompted the developers of the program to request US/HEW support to conduct a careful, thorough and systematic evaluation of the program. US/HEW undertook such an evaluation. The major purpose of the study was "to determine the relationship between the curriculum taught to students in Secondary Technical Program and the performance of new graduates in the various employment settings." More specifically the study was undertaken to determine the degree of congruence between what was taught in the program and the actual job performance of the graduates. The results of the study as well as the study team recommendations were carefully reviewed in the preparation of this paper. In fact the US/HEW study was used as a source document for the development of the interview protocol used in this study, as a data-gathering instrument.

The previous evaluation study assessed the technical aspects of the program, the technical competence of the teachers, the adequacy of the clinical settings, the technical competence of the graduates and the adequacy

of school facilities. It was not designed, though, to consider social and/or psychological variables that affect the teaching/learning situation in the STN program, and the impact of this situation on the job performance of the program graduates. These concerns became the focus of the present study.

### Purpose of the Study

The study was designed to explore the image of the nurse in general and the image of Secondary Technical Nursing program students and its graduates in particular. The study team was directed to provide data to help in understanding the socio-cultural context within which the role of the nurse evolves and professional identity is established. Students and graduates explore the perceptions of their role relative to the STN program with consideration given to the perceptions of others outside of nursing. The study explores the socio-cultural circumstances that are affecting the development of the student's occupational identity. Furthermore, the analysis considers the position and the status of the nursing professional within the health care delivery system and the occupational structure of Egyptian society.

Designing a program to improve the quality of education and/or health care in a country without understanding the socio-culture context within which such a program would operate could direct such a program to failure. Concern over this possibility prompted the inclusion of this addendum to the PID for the Secondary Technical Nursing program.

CONCEPTUALIZATION, ASSUMPTIONS AND  
RESEARCH QUESTIONS

A nurse's role can be viewed as a combination of technical skills and personal sensitivities. An analysis of nursing competency dictates a careful exploration and evaluation of the nurse's work performance.

The nurse, moreover, must first be seen as a social being working within a particular socio-cultural context. A socio-cultural viewpoint guides the exploration of the meaning of the professional role as perceived by the nurse and as perceived by others. Such a view relates the potential productivity and effectiveness of a human being to a variety of factors which include the mastery of a technical role as well as other social roles, a positive self concept, an effective functioning within the social network, a supportive image, rewards commensurate with behaviors, a defined position and an accepted professional situation. Productivity and effectiveness within the health care profession are strongly affected by the clarity of roles and expectations.

Several assumptions guide this study:

- Self images are reflections of cultural and social experiences.
- Self images evolve into a coherent basic self concept that guides individual actions.
- Role mastery and work identity development are possible when a person acquires self respect and possesses a positive self image.
- Negative images evolve into negative self concepts.
- A person with a negative self concept is not capable of caring, of being an effectual worker, and achieving job satisfaction.
- An individual's concept of self is correlated with the perceptions held by others.

Specific Research Questions:

The specific research questions explored are divided into several categories as follows:

a. Questions related to the student:

- 1) Who are the students and what are the major socio-cultural variables that characterize them?
- 2) Why do students select nursing?
- 3) How are schools selected?
- 4) What are their perceptions of their roles as students, as graduates, and as women?
- 5) What are their aspirations for the future?
- 6) What are their perceptions of the problems they are encountering as students?
- 7) What changes would satisfy them?
- 8) What are their perceptions of social expectations of nursing?

b. Questions related to the graduates:

- 1) What are their dilemmas?
- 2) What are their perceptions of their roles, position and status within the organizational structure of the health care system?
- 3) What is their perception of the effectiveness of the education they received in preparation for their present work?
- 4) What is their perception of the image of nursing?

c. Questions related the teachers:

- 1) Who are they?
- 2) What are their perceptions of their students?

d. Additional Questions

Additional questions used during the interviews centered around the following issues:

- 1) Biographical data
- 2) Career options
- 3) Future career plans
- 4) Perceptions of the roles vis-a-vis the expectations of others (Student roles and graduate roles)
- 5) Perceptions of the strengths and weakness of the profession as a whole and of the educational programs in particular

- 6) Perception of the image and the status of nursing as a profession
- 7) Perception and behaviours related to role mastery
- 8) Reference groups and significant others

In addition the study explores the status of nursing in Egypt through an assessment of the government's commitment towards nurses and nursing as well as society's views of nurses.

## METHODOLOGY

This study is a descriptive exploration carried out by utilizing a field methodology design. The primary instruments used in collecting data were interviews and observations.

### 1) Settings

Various settings were used to conduct the interviews and observations. Settings were selected by Ministry of Health officials based on criteria provided by the study team. Criteria were designed to facilitate the interviews.

Geographical settings included health centers in rural and urban areas in Upper as well as Lower Egypt. Further criteria considered in exploration were:

- The buildings allocated to Secondary Technical Nursing programs
- Dormitories for students
- Clinical practice settings
- Inpatient and outpatient settings
- Various inpatient settings

Interviews and observations were conducted in varied settings such as hospital rooms, school conference or lecture halls, on buses and in corridors. Interviews were administered to both individuals and groups.

### 2) Sample

Numerous interviews were conducted to depict as much of the actual situation as possible, the sample included a wide representation of individuals with whom nurses and nursing students can be expected to interact, as well as including the nurses themselves. The sample consisted of the following:

Students: Seven groups of students were interviewed, representing a number of schools. Numbers of students participating in group sessions ranged from 10-60, bringing the total number participating in group interviews to 160 students. In addition, 2 intensive interviews were conducted with students representing 4 schools.

Graduates: Four groups of nurses (mostly graduates of the Secondary Technical Schools) were interviewed. Groups ranged from 4-6 in number. In addition 3 intensive interviews were conducted.

Faculty Members. In addition to 2 intensive interviews with nursing faculty, all faculty members, nursing and medical, whose names are listed with this report were interviewed.

Administrators: Data provided here reflect the interviews conducted with administrators within the Ministry of Health and within Universities included in the study (undersecretaries, directors, headmistresses, directors of hospitals and other care centers).

The study has several limitations which should be considered:

1. The ceremonial nature of the visit placed a major constraint on obtaining meaningful, candid data. Observations made and reported were obtained in spite of the tremendous preparation that went on in an attempt to impress the visiting foreigners.
2. Respondents tended to guess what the interviewers would like to hear and to conform to such expectations.
3. The entire setting often resembled a stage on which actors were playing preplanned roles.
4. The actual study was short, (3 weeks in duration) and involved a great deal of traveling to meet the study criteria since it was essential to include subjects who came from various geographical locations and worked in a variety of health-care delivery systems.

The data should be carefully considered within the severe constraints of time and the formality of visits.

Strategies to minimize effect of limitations:

Several strategies were designed to enhance the quality and character of the findings:

- The utilization of field methodology.
- To minimize preparation of responses the investigator relied on surprise by changing routes and itinerary designated by the hosts as well as by subjects and location for interviews, revealing these just prior to the time of the actual interviews.
- To counteract response bias, the interviewer asked questions in a number of different ways and the same questions were addressed to a number of different subjects.
- The team reminded respondents of the team's mission and appealed to their integrity and honesty in helping the team identify the most significant projects for support by COE of US/AID.
- The interviewer gained the trust of the interviewees by displaying her knowledge of Egypt and its culture. This strategy served to put the interviewees at ease and elicited data that otherwise would not have been forthcoming.
- The investigator assured respondents that the interview data were to be treated with utmost care and confidentiality. Respondents were assured that they would not be identified by name or identifying characteristics in the published report.

## FINDINGS

The results of this investigation are divided into:

- Nursing students
- The school visit
- Student housing
- The faculty member
- The graduate
- The patient

Because a variety of data gathering techniques were used, ranging from interviews to personal observations, these topics are presented in a format comparable to the method by which the information was obtained. That is, information from interviews is presented as a discussion of responses while personal observations are expressed in a first person narrative form.

### Nursing Students: A Biographical Sketch

Students enter secondary technical school program in nursing for a number of reasons. Even though initial responses yield the proper community and religiously sanctioned answers such as "It is a humanitarian, altruistic service-oriented occupation and I like that", further probing produced a number of more pragmatic reasons.

Most students interviewed did not select nursing. Many could not complete their secondary school education due to poor scholastic performance and/or economic constraints. Therefore, it appears that the majority of secondary school nursing students would have preferred to complete high school in the usual secondary school tracks. A secondary school diploma increases the number of educational options as well as career options for its holder. More significantly, it is the key to an improved status in a society such as Egypt where education is highly respected.

Students whose grades do not qualify them for entry into an academic high school program are routed into technical education secondary school programs that include secretarial, drafting, business programs and other programs that are designed to grant both a high school certificate and a technical school certificate. So, instead of providing a student who has demonstrated a limited scholastic ability within the context of the Egyptian educational structure with an opportunity to master a limited number of skills - hence enhancing the potential for success and productivity in life - the system overloads the student with an intensive academic and technical program. To do both simultaneously appears to be an impossible task.

Within the secondary technical school program options, nursing ranks very low. Students prefer secretarial or teaching preparation programs. If they fail to qualify for these options - again, because of poor grades - they are rerouted through a central office for placement in the nursing program. In some governorates, an interview is conducted at this point but it is inconsequential. Once students are assigned to nursing school program, the personal face-to-face interview is immaterial. They are "locked into" the system.

The interviews revealed that some students prefer a nursing program because of its economic potential. Besides the meager monthly educational stipend throughout the school years, students look with anticipation to an appointment in a Gulf country, where wages are better than in Egypt, and they can establish themselves economically. This is one of the greatest incentives of nursing from the student's point of view. Other financial advantages of the nursing program are a shift allowance and a communicable disease allowance. Not only are there slight economic advantages to entering nursing, but there are also economic advantages against entering a regular academic secondary school program. Students who come from large families and/or lower socio-economic strata indicated that their families could not support them for further education, and therefore entry into nursing was a way of receiving education without placing a financial burden on the family.

A few students indicated that they entered the program because they were interested in the nursing profession. Many of these students either had a ill family member at home and therefore felt the need to learn about nursing to take care of that relative, or they had a relative in nursing. The latter students had a glamorized view of nursing and experienced disappointment upon discovering the reality.

Students enter the secondary technical school at an average of 16, and graduate at 19. This is a impressionable age during which ideals and values are formulated and life career commitments are made. It is an age when perceptions of identity are formed and life roles are adopted. If a negative professional identity is formed, it becomes incorporated in the graduates total self-concept.

Most students presented a very negative picture of themselves and their roles. They saw themselves through the eyes of others as uneducated servants. Many feared not finding a husband because of their association with nursing, and were apprehensive about the stigma that is attached to nursing as a profession and the potential consequences of such a stigma.

Like most Egyptians the students have strong ties with their families and prefer to go to a school that is within a reasonable commuting distance. When other options do not exist, however, they will sacrifice family ties and commute longer distances. The emotional consequences are often serious.

The family attachments and perceived social stigma were found to be strongest in Upper Egypt where most female students indicated that they would abandon all interest in education if the only available option is nursing, even if that option is within a reasonable geographical region. They would definitely not relocate geographically for such an option.

Therefore the concept of community based schools is basically congruent with Egypt's family structure and some of its cultural mores. Other values should also be considered such as the values of potential "educational mobility", "education abroad", "a respectable occupation", "society sanctions". An incorporation of such values in program planning will enhance its potential for success.

While students could possibly commute to other regions for educational opportunities, most will not do so for occupational opportunities. When faced with work in other geographical regions through the governmental central compulsory occupational allocation program, their work commitment and productivity decreased considerably.

Since the image of nursing in Upper Egypt is more negative than that in Lower Egypt, schools in Upper Egypt have few Upper Egyptian students and a decreasing pool of applicants. It is possible that the introduction of university education for nursing in Lower Egypt might have contributed to a changing image.

The predominantly female occupation of nursing might witness some changes in its gender identity beginning within this decade in Egypt. The government of Qena has just established an all male nursing school that has attracted approximately forty male students. This is a new educational option for Egyptian males. Other similar programs exist for training first aid workers. The reasons that men choose nursing, the issues that they are confronting, and role conflicts that they are experiencing is a significant experiment for the Egyptian health care system and might significantly influence the roles nurses play and the position and status of the occupation in the health care structure. Therefore it should be carefully studied.

#### The School Visit: A School Profile

Following is a composite narrative profile of the nursing schools visited during the preparation of this study.

"We were met at the doorway of the school by the headmistress and the faculty of the school, and ushered with a great deal of ceremony through the dark and gloomy corridors of the school. We were usually invited to one room where a faculty member was sitting at a desk with an open notebook. Her sole responsibility was to record the names of the teachers who lecture at the school, and to indicate whether they are absent or present. All names are recorded every day and their absence/presence is color coded."

"Going through the corridors and the rooms, we observed spare old furniture, well-kept and clean rooms, and personnel who jump up to an erect standing position to pay due respect to the headmistress and her guests. We also felt a sense of the student's and faculty's anxiety to impress the visitors and therefore gain the approval of the headmistress. After going through a few staged visits, we requested a place to sit and talk. "But we want you to see our students", said the headmistress, a statement which prompted a quick turn into a well-lighted corridor and a grand entry into a lecture hall. Jumping up to an erect position were 10 uniformed and well-groomed students, huddled together in one half of the front row of the lecture hall. Seeing them standing with their shoulders touching as if they are crowded in the lecture hall with hundreds of others, confirmed the notion of space perception of Middle Easterners. Their "bubbles" of personal spaces are practically nonexistent, and their needs for space are limited. The students appeared apprehensive and looked as if they were getting their strength from their closeness.

Sensing their tension, I decided it is time to dispense with ceremony and begin private group interviews with the students. Instantly many offers were made to have one of the faculty keep me company. As tactfully as possible, but with firmness, I told the group that I wanted to be alone with the students. Reluctantly the group left me alone. We were interrupted at least every 20 minutes with a gracious offer by faculty members to come in and "help" the students with their interview responses or to bring in something to drink. On each of those occasions the students instantly quit talking and resumed their erect positions. After each of these interruptions it took me a while to bring back the informal atmosphere and the relaxed easy-going dialogue.

After introducing myself and my mission as a social scientist, I assured the students of the confidentiality of our discussions. I then proceeded to interview them. My initial broad questions about the nature of the program, their perception of the problems inherent in their educational experience and their reasons for entering nursing brought a torrent of positive other-pleasing answers such as, "best program in the country", "best educational opportunity, most humane and loving teachers", "I know more than my colleagues in other secondary technical school programs", "I can have a decent living", "I entered by my personal choice", "I always wanted to be a nurse" etc. When the pleasantries were all dispensed with and the students began to trust me, the following themes evolved."

1. The students entered nursing because of a lack of other educational options; because the student stipend is substantial; because room and board is offered; because of the potential for work in the Arab Gulf countries; and because they liked their aunt or cousin who was a nurse. While economic need is the predominant reason for choosing a nursing career, the lack of other options precedes such considerations.
2. The students would have chosen medicine and business administration if they had had the grades to qualify them for such options. In fact a number of them still hope to earn enough money to complete secondary school education and enter medicine, while others hope to complete their nursing education at B.S. level.
3. In spite of their conviction that nursing is poorly regarded by society, and their doubts about any immediate improvement in nursing's status as a profession, they manifested a sense of enthusiasm about nursing and their future roles.
4. They repeatedly manifested a poor self-image. Typical comments were "No man would want to marry me because I am a nurse", "I will marry whoever wants to marry me, - after all my being a nurse will limit my options", "everybody from the physician to the door keeper treats us and screams at us because we are nurses, and we can't do anything".  
  
I asked, "why not?" "Because they can report us", they replied, I asked, "what would happen then?"... Typical answers: "we could get expelled because nobody will listen to us", "we will be punished by having our weekend leave cut off", "we could be failed", "I have no right to question other's orders or way of treatment of me, as a woman and a nurse." They have fits of crying because of their feelings of helplessness.
5. Their idealism is soon dispelled by reality. Typical quotes: "graduate nurses treat patients terribly, they scream at them, expose them and deprive them of medications for punishment, "Equipment is kept in drawers and closets because headnurses are worried about getting it out, having it lost or broken and then having to pay for it themselves" "Everybody

steals, the patient is the loser", "We use one syringe with one needle whole ward of patients; we just wipe the needles with cotton and alcohol in between patients. We know this is wrong and should not be done, but when we say that, the old nurses scream at us and say, "do you think you know more than I do? Just do as I tell you". "Everybody is mean to the next level down, we are at the very bottom.

6. Their initial general comments about the outpatient clinical teaching situation were replaced with details of such experience. Our discussion and a review of their daily diaries revealed the following:
  - a) They are part of service and not treated as students.
  - b) Clinical experiences are not selected for students based on educational objectives; rather they are assigned to units for monthly rotation.
  - c) They are considered the "messenger girls" in the unit.
  - d) Their clinical experience in the daily 5 hours includes some intramuscular injections, application of ointments and running errands.
  - e) They do not give individualized or patient-oriented care.
  - f) The clinical instructors review their diaries which consist an average of 4 to 5 short lines in a 6 x 4 notebook. The diaries include descriptions of checking in and out and errands performed.
7. Students had limited knowledge of personal hygiene and health maintenance.
8. Students use sickness to get out of their repetitive, boring and uninformative tasks.
9. There are no facilities for recreation in the schools. Typical comments are: "We wake up at 6:00 a.m., pick up our 24 hour's food ration, eat, study, and sleep," "Our only means of recreation is gossip and looking out of window". "Some of us get in trouble for throwing milk cartons on men and women passing by." "It is such behaviour that keeps and perpetuates the negative image of nursing, but what else can we do to change the pace, we never go on trips", "On weekends we just sit with our parents at home".

10. There are no books, magazines, T/V's or radios. There is not even a room where students can sit together and chat. They crowd in their rooms to be together.
11. The meager library is only for faculty. In fact the library (with only half a dozen required books) is used for meetings.
12. Students are interested in future education opportunities to improve their status. They all want to be able to speak English and discuss patients with physicians in English. They are willing to put in the time to do that. It really means a great deal to them.
13. Students enjoy modules and innovative approaches to teaching/learning. They request the following:
  - 1) Classes in English to strengthen their language capabilities.
  - 2) Recreational facilities and opportunities.
  - 3) Better food: "We can't buy canned foods".  
"Half the time we do not know what we are eating"
  - 4) To be treated as human beings.
  - 5) Better learning opportunities.
  - 6) An improved image in the community.

### Student Housing

Housing for students consists of small rooms about 6' x 13'. Two cots at each side leave very limited space. Personal belongings and clothes are kept in an extraordinary small locker-type cabinet about 15" wide at the foot of the bed. There is only one "writing desk" not more than 24" square; thus only one student can use the writing area. Two chairs are available. Outside rooms get light from a high window in the wall at the foot of the bed. Inside rooms are dark. Walls are grey concrete and dismal looking. Some students have tried to improve the rooms by covering the walls with hangings. One shelf above the bed is used for books. The housing situation is most depressing.

The bathroom is a large dark and damp room with open foot print type toilets, stained with age. Water from a sink ran continuously and the floor was covered with water. A water fountain was situated in one of the bathrooms.

Going through a school building, one becomes claustrophobic and gets a sense of imprisonment. Housing is designed to meet the minimum basic needs of students.

### The Faculty Member

The majority of the faculty members teaching students are either physicians or high school teachers. The few nursing faculty available are perceived as supervisors or inspectors. As previous studies indicate, they are often unqualified to teach. In addition several major characteristics of their role are:

1. They are outsiders to the health care system, and therefore are powerless to provide the appropriate clinical experiences for their students. Their students become more of an integral part of the role structure than faculty member. Some nursing faculty members were able to identify the inadequate clinical experience the students are receiving and the lack of supplies by which care could be provided. Their solutions, though, were related to the allocation of more clinical time and the assignment of more responsibility in clinical areas. They perceived nursing and clinical teaching that is laboratory-bound as adequate.
2. The teacher's mentorship and role modeling - essential in teaching - is manifested in an artificial clinical laboratory setting. Students never observe them interacting with patients, let alone giving patients care. In the clinical setting they are modeling "inspection", "discipline", "system management" "behaviour".
3. The student's informal role model is the headnurse or the nurse on the unit. Some are effective role models and others are ineffective role models.

4. When students were asked "who are your instructors?" they invariably listed physicians and high school teachers but never nurses. To them, nurses are not qualified to be instructors and therefore are called "Supervisors" or "Moshrefa".

Student's perceptions of themselves are usually mirror images of what their faculty present to them and they play the roles imputed to them. Therefore it was significant to explore the image the faculty has of students.

Faculty members perceive their attempts at educating students as difficult bordering on the impossible. They describe students as:

1. Coming from low-socio-economic status.
2. Low in educational background, low in cognitive abilities.
3. Able to learn only if disciplined properly and punished when needed.
4. Weak in character.
5. Having the potential to manifest immoral behaviour unless carefully monitored.

They see improvement in the selection criteria of students and a decrease in curricular requirement, as essential prerequisites for the increased competency of the graduate.

Faculty members further perceive themselves as poorly paid, lacking financial incentives, working with inadequate equipment and supplies and as having no clout in the health care system.

### The Graduate

The Technical Secondary School Nursing Student graduates with a minimum number of technical competencies mastered, with an inadequate knowledge base, with a negative image of nursing, with a poor self-concept and a sense of powerlessness and apathy. While representing the Ministry's hope for alleviating the nursing shortage and occupying an important position in the health care plans for Egypt, they graduate not meeting the performance expectations. An observer sees many behaviours resulting from inadequacies in work settings.

Having had a minimum number of skills taught in the curriculum and an inadequate clinical experience that is not competency-based, the graduate is at a loss in the new working environment. The competencies that have been mastered - message delivery, bedmaking and scrubbing, intramuscular injection - are often delegated to students. The graduate is left with even fewer competencies in the every day care of patients. Nurses who continue to work in inpatient hospital settings are better prepared than nurses who are assigned to health units, centers, family planning centers, rural health care units and all-out patient departments in these so planned outreach units. The basic competencies the nurses learned as students are either inapplicable (bedmaking), or impossible to perform correctly due to a number of variables (inadequate supplies, store-room rules, administrator's fear of equipment loss or damage and concern over replacement through salary cuts). This results in nursing care that ranges from poor to non-existent. Student competencies are manifested as housekeeping skills, inventory maintenance, and record keeping that is extensive and redundant in content and of minimal use in health care.

In the preparation of this study incompetence was amply observed. Nurses in rehydration programs did not know how to weight babies, what questions to ask of mothers, nor what advice to give. This was true with physicians also. Others in family planning programs were not able to decide which of the various methods should be recommended for a particular patient. Still others did not perform home-visits where they were appropriate often because they did not know what should be done on a home visit. Nonsterile techniques were used repeatedly in most agencies visited.

Numerous self-deprecating attitudes were detected. Graduates are dissatisfied with their work, they believe they are underpaid, overworked, and given very few incentives. They feel that if they do their work, they are unappreciated and not accorded by society or their superiors the status they deserve. They perceive their skills as adequate and their work as satisfactory even though unsatisfying.

A sociocultural consideration of nurses and nursing is incomplete without a special consideration to women and their dilemmas. As with many Egyptian women, nurses are committed to both a career and educational mobility. Because of Egypt's economic condition, most Egyptian women value economic independence through secure employment with opportunities to enhance their socioeconomic status. However, many are still fearful of laws (religious) that favor men which create vulnerabilities in marital situations. Some changes will be forthcoming in laws governing marriage and divorce, until then, economic security through employment is highly valued. Careers and employment also provide personal independence in some decisions. It is the role where a woman can experience a high level of independence in decision making.

Other social changes are beginning to have an impact on women's roles. Geographical mobility is fragmenting the extended family, who have in the past been an integral part of childrearing practices of the nuclear family. In addition, other resources are scarcely available. Servants, housekeepers and maids who were hired to help in childrearing have acquired other jobs with better pay and therefore a void exists in the family organization. Child care centers are scarce and slow in developing. Women who hold the major responsibilities in child care are beginning to experience role conflicts and an overload of expected duties. Nurses, who are women are experiencing new stresses in their roles. Nevertheless, the needs of women to enhance their socioeconomic status and occupational position are so predominant that they often inspire innovative ways to handle stress. Traveling to Gulf area countries is a quick way to achieve a better economic status.

### The Patient

The graduate of the secondary technical nursing program is not the only victim of an inadequate and ineffective program. The patient is often the ultimate victim. Patients require at least the minimum care and indeed often receive the minimum.

The Middle Eastern patient often comes into a health care center with a diffuse problem, nonspecific symptoms and a request for intrusive treatment (shots preferred over pills). Hours of waiting are common. Often they leave with one or two injections at best, or with package of white tablets at worst. Should they receive prepackaged colored pills or capsules, they will be reasonably satisfied. They perceive nurses in a variety of roles ranging from the physicians assistant, secretary, store keeper and junior physician. Patients often expect a high degree of human sensitivity from nurses. They are more dissatisfied with the condescending and indignant treatment that they receive than by the nurses' blatant incompetence. They cannot identify what competencies they would like the nurse to have.

## DISCUSSION

Following is a discussion of the student and the graduate within their social context. The profile evolved from synthesis and analysis of data collected from the students, themselves: graduates; teachers, supervisors, physicians; and family who are in immediate contact with students and graduates; and others.

As a typical scenario the future nurse after years of struggling with academic courses that do not appear at the onset to be of immediate value realizes that due to poor scholastic performance it is no longer possible to pursue education in the much desired regular high school track. All family dreams of entry into the schools of medicine, engineering, or even social sciences are shattered. The family, severely disappointed that their child will not be able to actualize the dreams of university education, begins to consider options. Parental values are often such that parents feel education ought to continue beyond junior high. It is also commonly an accepted value within Egyptian families that nursing ought to be a last resort and only an option when everything else fails. With such values and a sense of failure for being deprived from pursuing a regular high school degree, the student begins considering other options. Typically, the student submits her papers to a central office for administration of Technical Secondary School programs, indicating preferences by rank order of the available options--including teacher training, secretarial, commerce, agriculture and nursing. Students usually include nursing as a last option. Therefore, those students who finally enter Secondary Technical Nursing Schools have been rejected not only from regular secondary school education, but from other secondary Technical School programs as well. Very few select the program due to financial reasons and even fewer for altruistic reasons.

There are many reasons why nursing is an undesirable educational option for the Egyptian junior high school graduate. A nursing career does not help improve the socioeconomic status nor does it help them gain entry into the more "acceptable" strata of society. Nursing is linked to "loose morality" and to orphanages and by inference must only attract young girls

who espouse such values. Furthermore, the nature of the profession itself provides ground to further such unacceptable behaviours. Graduates work varied shifts and are away from the careful security and discipline of the home. Also, nurses associate and work closely with men on a regular basis. Such a working relationship may be regarded with much apprehension by families and with outright suspicion by friends and society at large.

Given these considerations the graduates of junior high school enters nursing at the vulnerable developmental age of 15-18, a most significant age for the development of a sense of self.

Having been pronounced unfit for all other programs the student is left with a negative perception of self and a sense of failure. Though reasons for rejection might lie in unclear educational objectives, in ineffective teaching/learning strategies or inappropriate testing and evaluation procedures, the only generally recognized reason for failure is low scholastic ability and performance. The possibility that the students actual capabilities might not have been accurately assessed is not considered.

Neither is the possibility considered that the student's aptitudes are more congruent with technical and vocational training. The image that remains undisputed is that the student "failed" to perform up to the standard designated to qualify for entering into a program of high prestige and/or of choice.

The perception of the student as a "failure" continues to be perpetuated all through the nursing program by faculty members and other practitioners. In addition, other conditions exist within the educational program to identify the student's low perceptions of self and enhance status deprivation. These conditions are described through the following observations:

- As observed and evaluated in numerous previous studies, the housing situation is poor in all aspects. Students are introduced to crowded quarters, they have poor lighting, and poor ventilation. Their quarters do not include facilities for study and recreation, nor space for leisure. They are provided with very little space to keep their belongings. In the few schools where there is a dining room, it is crammed and offers scarcely edible food.

- The students soon recognize that in the educational system they are in the lowest stratum. Not only are they responsible to supervisory faculty nurses and physicians, but also to door keepers who have to monitor their social activities. Even janitors supervise their work and offer criticism when beds and bedside tables are not washed properly.
- Assuming they are still willing to continue in the program so they confront their courses and program. Herein usually lie other even more severe constraints. They are placed in an untenable position by being expected to shoulder about 46 hours of classrooms or clinical involvement. Most of the academic information seems irrelevant to them because nobody bothers to point out its application to the health field. They "parrot" information and are expected to demonstrate knowledge through memorization, with no demonstration of understanding. Students are often unaware of the relationship between different subjects studied and of the potential application of subject knowledge to nursing. In brief, students who did not perform satisfactorily in junior high school are given a load of academic courses while shoulder the burden of a heavy professional training program.

Their teachers perpetuate the utilization of a low cognitive level of learning by relying on rote memorization as the principal means of instruction. Medical faculty read from books instead of lecturing, discussing or asking questions to stimulate cognitive abilities. Some, in fact, even ask students to conduct the readings. Learning by doing is utilized in nursing skills mainly focused on bed-making and injection-giving. Individuals learn competencies, values and norms expounded by mentors, role models and sponsors. The Secondary Technical Nursing School student does not appear to have access to these. Those most likely to set professional examples are the nursing faculty members. Such notions are quickly dispelled due to numerous factors. Faculty members often do not model any nursing competencies outside the nursing laboratory nor do students have the chance to observe them utilizing professional values in practice. Discipline is harsh. Many students stated that they are physically abused by their faculty members and furthermore were very concerned that should their faculty know that they have revealed any misgivings to the interviewer they would be further punished. Abuse also appears in other forms, such as deprivation of a much waited for holiday or a stipend.

Sponsorship behaviour is portrayed by nurses or headmistresses on units where the students are assigned, yet the behaviour patterns tend to be negative with detrimental consequences to the student's role development. Nurses who become sponsors characteristically delegate the most undesirable responsibilities to students. After a morning of bedmaking, bed and bedside table scrubbing, students are asked to run all the unit's errands. These range from administrative errands such as delivering messages to nursing administrators, to fetching medicine from the pharmacy. These errands are essential to the unit but do not provide learning experiences for the students. Performing these errands does little to bring students closer to achieving the goals of their education. Furthermore, the students perceive completing such errands as an indication of their low status, the insignificance of their roles, while merely tangential to the care of patients. After graduation they may delegate such responsibilities to other students thus perpetuating the same role behaviours and the sentiments attached to it. It is ironic that while mastery attained in the messenger and the housekeeping roles is essential for students during their education, they have very little need to display such mastery after graduation.

Since the student is deprived of the pleasure and fun associated with education, education is perceived as something to be avoided.

Their vitality, coupled with their age and developmental stage, prompt them to look elsewhere for a release of frustration. Though their energy is mostly drained because of a heavy educational load as human beings, they are in need of diversion, of variation in daily activities, of leisure and recreation. Those who are commuters spend much of their free time commuting and memorizing information, they rarely have a chance to be with family and friends. Those who have to live in dormitories live in a prison-like situation. Some of the dormitory supervision can be attributed to social norms requiring the protection of girls through strict rules and regulations, but much of it could be negotiated with parents through a student advocate.

Dormitory students live an empty, deprived and abused existence. They have no recreational facilities whatsoever nor recreational equipment. Students are disciplined and deprived from legitimate leaves if they hold parties or

attempt to celebrate special occasions. Libraries are non-existent and even daily news is unavailable. Not only are they isolated from outside news and events, but also - because of their low status - from local activities. The effects of stress and boredom are manifested in a variety of forms. The most common are gossip, unruly behaviour, immature behaviour, psychosomatic complaints or neurotic manifestations. Students are angry, hostile and ashamed of being nurses. Not only are they treated poorly by all, they are also imprisoned and psychologically abused.

It is often the case that students spend their education lacking fulfillment of personal and social needs under circumstances not supportive of human dignity. However many still graduate with some enthusiasm and hope for the future. Promptly the graduate faces a 3 month internship that is called "training". Slowly, the enthusiasm of the new graduate is dissipated and may be restored if the graduate is lured to a position in one of the Gulf countries with high financial reward.

Though in comparison to other graduates of similar programs the graduate is considered well paid, the pay is still not commensurate with the stresses sustained on the job. The nurse's daily problems are numerous, particularly in the working hours compared with acquaintances who graduated from other programs. Nurses tend to report to work earlier, and therefore require a relative for babysitting, or a nursery if one exists.

After finding transportation, still a major problem in Egypt, the nurse arrives to work and is expected to be active the entire duration of the shift. The nurse interacts with angry patients, frustrated physicians, unsympathetic bookkeepers and condescending directors.

In such an environment it should be expected that whatever professional values are inculcated in the school years become extinct and are replaced by bureaucratic ones. For example, realizing that all equipment and supplies should be ideally be used for patient care, it is also realized that this is impossible because whatever is broken must be replaced by the nurses at a price that is high considering their monthly salary. The consensus on keeping equipment locked for fear of loss or breakage is pervasive.

As a supplement to this scenario, special consideration should be given to where nursing fits in the economic organization structure of health care. The organizational fragmentation of nursing is placing further constraints on the occupation of nursing. Examples of such fragmentation are numerous:

- Nursing service and nursing education within the Ministry of Health do not have formal lines of communication.
- Nursing in some governorates is headed by the medical professions.
- Nursing education in Egypt is offered by three sectors:
  - a) Ministry of Health: Secondary Technical Nursing Program
  - b) The Ministry of Education: Oversees Secondary Technical Nursing Programs
  - c) The University: High Institutes of Nursing

Nursing Syndicate activities are inconsequential to policy making in the country.

## CONCLUSIONS

Many changes are needed in nursing practice in Egypt. Sociocultural inputs to such a change are the development of a new image of the nursing student as an educable social being and the establishment of a clear position and status for nursing as an occupation within the organizational structure of the health care system.

As a social being the nurse needs to be provided with a need-oriented, competency-based, curriculum, with teachers who are competent role models using innovative approaches in selecting clinical care situations, living and educational environments must be conducive to learning. The nurse's basic needs and the need to be treated as a social being should be considered, and a social milieu to enhance personal growth should be created. As an occupation, nursing needs to be clarified through the provision of clear job descriptions and the establishment of a supportive infrastructure to take over such non-nursing roles as housekeeping and clerical work.

The position of nursing in the health care delivery structure needs solidification through ministerial and governorate reorganization. Also, the status of nursing needs to be enhanced through better financial remuneration and performance rewards. Nursing's image needs to be improved through appropriate image modifiers. Nursing needs advocacy, an organized plan of action and the government's commitment to the utmost support.