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# From the editor



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This is the third issue of the journal and the editorial board are pleased with the increase of the flow of the paper. We are looking forward for that journal to serve as one of the leading resources for the nursing field in the area. In this issue a review paper dealt with the need for Innovative Curriculum in Iraqi medical and Nursing colleges. The author stressed that despite the fact that the Curriculum is the heart of the educational process, yet, to find the answer to the question: What is a curriculum? might require hours and days of literature search without getting a definite answer or a universal agreement.

A paper from Tehran looked at the legal knowledge of Midwives. The authors stressed that midwives who had been employed in hospitals have an important role in the reproductive health and must be aware of the legal

aspects of their occupation in order to prevent any problem in the course of their professional life. The authors concluded that it is recommended to revise the syllabus of the course "Midwifery Ethics and Regulations" in order to include topics discussed in this study and enhance the level of medico-legal knowledge of the midwives. In this study we selected our study group from hospitals in Tehran city, it is better to carry out the same study with the midwives work in other areas in Tehran and other cities too and compare the results.

A comparative study investigated the Relationship of women's health beliefs about mammography with its performance. The authors stressed that Breast cancer is one of the life threatening problems in women's life. Data collection tool was questionnaire, with questions that were on the basis of health belief model . Research findings indicated a relation between health belief and performance of mammography. Results also showed that occupation level of education and marital status had relation with susceptibility to breast cancer. The authors stressed that as self - breast examination is one of the early diagnostic methods in detection of breast cancer, It is recommended further researches be done in relation to health beliefs and self breast examination

A study from Iran compare the Body consciousness and social norms between Iran and Japan. The author stressed that body consciousness is greatly influenced by the social norms, therefore , it would be interesting to see whether such consciousness is more prevalent in individualistic or collectivist societies. Body Consciousness Questionnaire (BCQ) were administered to Iranian and Japanese subjects.

Subjects belonging to both cultures were found similar in respect to their type of body consciousness (such as, public as against private). These two groups however did differ in their level of awareness, with Iranian subjects were found to have more public consciousness about their body as compared to that of Japanese.

A case study from Bangladesh attempted to investigate the socio-economic conditions of the migrants of katakhali paurashava in Rajshahi district. Using the information from 1500 ever-married women of Rajshahi district within the reproductive span (15-49 years), it was found that the maximum migrants have migrated in the age range of 20 to 34. The authors concluded that this study helps in understanding to observe the socio-economic characteristics of the female married migrants and may be used as a benchmark to evaluate how migration can change the life style of individuals, the families as well as the regional and national.

The social cultural factors affecting remarriage was discussed by Kalfi AR & Abedi M. This research was conducted to evaluate socio-cultural factors affecting remarriage, and obstacles of remarriage for men and women have been taken into consideration. In this survey research, data was collected by questionnaire. The results show that there is relationship between marital status of women and men (divorced and widowed) and remarriage, which is significant. It also shows the relationship between gender and remarriage. The findings of this research indicate that men remarry because of loneliness and having family, while women remarry because of solving social and financial problems.

# BODY CONSCIOUSNESS AND SOCIAL NORMS: CROSS-CULTURAL EVIDENCE FROM IRAN AND JAPAN

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**Key words:** Body consciousness, cross-  
cultural evidence, Iran, Japan

## ABSTRACT

According to Schilder (1950), body image can be defined as “the mental picture that we have of our bodies” or, in other words, “the way our bodies appear to us”, and expanding on Schilder’s idea, Allamani (1990) refers to body consciousness as “a complex psychological organisation which develops through the bodily experience of an individual and affects both the schema of behaviour and a fundamental nucleus of self-image. Since body consciousness is greatly influenced by the social norms, it would be interesting to see whether such consciousness is more prevalent in individualistic or collectivist societies.

Iranian and Japanese subjects (collective society) were administered the language equivalents of Body Consciousness Questionnaire (BCQ), which was developed by Miller, Murphy, & Buss in USA (individualistic society), BCQ-Persian, BCQ-Japanese. Subjects belonging to both cultures were found similar in respect to their type of body consciousness (such as, public as against private). These two groups however differed in their level of awareness, with Iranian subjects found to have more public consciousness about their body as compared to that of Japanese.

## Introduction:

A number of studies make reference to concepts and theories related to body such as “body consciousness”, “body percept”, “body image”, “body concept”, “body schema” and “body values”. According to Schilder, body image can be defined as “the mental picture that we have of our bodies” or, in other words, “the way our bodies appear to us” (Schilder, 1950). Expanding on Schilder’s idea, Allamani (1990) refers to body consciousness as “a complex psychological organisation which develops through the bodily experience of an individual and affects both the schema of behaviour and a fundamental nucleus of self-image”. How one thinks and feels about one’s body will influence one’s social relations and one’s other psychological characteristics.

Body consciousness refers to an awareness arising out of the information of kinesthetic, tactile, and visual origin (Kinsbourne, 1995, 2002). “The mental operations that result in the conscious awareness of the body are guided by a person’s knowledge about the relationships between his body parts, not by a separate fixed egocentric representation of the body” (Kinsbourne, 1995, p. 219). When a particular event or stimulus violates the information present in the body, the information itself becomes accessible at a conscious level (Baars, 1988). This facilitates the process of modification and, by means of the mediation of the self (which tries to integrate and maintain the consistency of the different representations of the body), also makes it possible to influence body consciousness.

There are individual differences in consciousness of the public and private aspects of oneself (Fenigstein, Scheier, & Buss, 1975). “Public body consciousness involves a chronic tendency to focus on and be concerned with the external appearance of the body, while the private body consciousness is the disposition to focus on internal bodily sensation” (Miller, Murphy, & Buss, 1981, p. 404).

A number of devices were constructed to measure the different subjective

components of body consciousness. The most widely used devices are: Body-Self Relations Questionnaire (Butters & Cash, 1987), Body Shape Questionnaire (Cooper, Taylor, & Fairburn, 1987), Body Image Anxiety Scale (Reed, & Thompson, 1990), Body Esteem Scale (Mendelson & White, 1982), Self Consciousness Inventory (Fenigstein, Scheier, & Buss, 1975), and Body Consciousness Questionnaire (Miller, Murphy, & Buss, 1981). Out of these, Body Consciousness Questionnaire (BCQ) measures the private and public aspects of the body in neutral (non-affective) states. Although a great number of studies were conducted on clinical populations for determining the level of body consciousness, few studies were conducted to examine the universality of such a concept. Examination of such a concept requires validation of the construct in diverse cultures, as envisaged by the authors of BCQ.

The aim of the present study was to (a) adapt BCQ into Persian and Japanese languages, and (b) ascertain the level of body consciousness in samples drawn from Iran (West Asia) and Japan (East Asia). The degree to which a person’s identity is defined by personal achievement and personal preferences, or, on the other hand, by the imperative of maintaining the profile of the community to which the individual belongs. Since body consciousness is greatly influenced by the social norms, it would be interesting to see whether such consciousness is more prevalent in individualistic (as in U.S.A., see Miller, Murphy, & Buss, 1981) or collectivist societies like Iran or Japan.

## Method:

**Subjects and procedure** Altogether 170 subjects were considered in the process of adaptation and cross-cultural validation of BCQ (Iran: N=85, male 45, female 40, M age 27.0 yr, SD 5.48 yr, M education 12.0 yr of academic study, SD 2.03; Japan: N=85, male 47, female 38, M age 28.1 yr, SD 5.1, M education 13.5 yr of academic study, SD 1.87). All subjects volunteered during the different stages in the study and none of them had a history of psychiatric illness.

These subjects were selected from a relatively heterogenous population in the respective countries.

The original BCQ was translated into Persian and Japanese languages by the language experts. These translated equivalents of BCQ were submitted to bilingual experts (N=10, each in Iran and Japan) to examine the purpose, goal, and concept of the original questionnaire. Special attention was paid to true psychological meaningfulness and wording of each item in the questionnaire. The items which did not carry the psychological meaning were changed. Due attention was also paid to cultural-specific items in the translated equivalents of BCQ.

After obtaining a satisfactory version of translated equivalents for BCQ-Persian (BCQ-P) and BCQ-Japanese (BCQ-J), these questionnaires were back-translated into English. An identical procedure was followed for obtaining the back-translated equivalents. The translation equivalents (BCQ-P to English, BCQ-J to English) were submitted to bilingual experts to assess the purpose, goal, and concepts of the questionnaire. For reliability purposes (test-retest), the translated equivalents were administered to 25 subjects in each culture. Following the development of the questionnaires (BCQ-P, BCQ-J), a group of 50 subjects were administered these for their judgment.

## Results:

Mean judgment for the items of BCQ-P and BCQ-J are given in Table 1. The correlation between the BCQ-P (Body Consciousness Questionnaire - Persian) and the original English version of BCQ was significant (Pearson's  $r = .79$ ; Kendall's  $\tau = .83$ ;  $p < .001$ ) in the bilingual sample (English - Persian). The correlation between the original English version of BCQ and back-translated English from the Persian version was (Pearson's  $r = .73$ ). Test-retest reliability of BCQ-P was (Pearson's  $r$ ) was  $.64$ . Principal Component Factor Analysis was done of the BCQ-P items (15 x 15 inter-correlation matrix) with Varimax rotation. The analysis yielded a three factorial structure with eigenvalue set at 1.50. Factor I (% variance = 19.3, eigenvalue 2.89) had high loadings on the items 6, 10, 11, 14, 15; Factor II (% variance = 13.6, eigenvalue 2.03)

had high loadings on the items 3, 4, 13; and items 1, 7, 8, 9 were loaded highly on Factor III (% variance = 12.7, eigenvalue 1.90). See Table 2. Three items (2, 5, 12) were found redundant (for items see Table 1).

The correlation between the BCQ-J (Body Consciousness Questionnaire - Japanese) and the original English version of BCQ was significant (Pearson's  $r = .73$ ; Kendall's  $\tau = .76$ ;  $p < .001$ ) in the bilingual sample (English - Japanese). The correlation between the original English version of BCQ and back-translated English from the Japanese version was (Pearson's  $r = .69$ ). Test-retest reliability of BCQ-J was (Pearson's  $r$ ) was  $.75$ . Identical Factor Analysis of the BCQ-J also yielded a three factorial structure with the eigenvalue set at 1.50. Factor I (% variance = 24.0; eigenvalue 3.60) had high loadings on the items 6, 7, 8, 9, 10, 11, 13. Four items (5, 12, 14, 15) were highly loaded on Factor II (% variance 13.9, eigenvalue 2.08). The first two items in the questionnaire were highly loaded on Factor III (% variance = 13.0, eigenvalue 1.95). Two items (3, 4) were found redundant in the analysis, see Table 2 (for items see Table 1).

Because the factor structures of BCQ-P and BCQ-J did differ, a 2 (Groups: Persian, Japanese) x 15 (items) mixed factorial design with repeated measures in the last factor was done. The main effect of Group was significant,  $F(1,98) = 55.15$ ,  $p < .001$ . The main effect of Item was also significant,  $F(14,1372) = 6.96$ ,  $p < .001$ . Since the interaction of Group x Item was significant,  $F(14,1372) = 5.38$ ,  $p < .001$ , the main effects were not discussed. The significant interaction of Group x Item suggested that Iranian subjects who gave responses to BCQ-P (Mean = 2.95) were more body conscious compared to Japanese subjects who gave responses to BCQ-J (Mean = 2.30). The group difference was reflected in their judgments for items 5, 6, 7, 8, 9, 13, 14, and 15, see Fig. 1.

## Discussion:

The study suggested that (a) the factorial structure (Factor Analysis) of BCQ-P and BCQ-J were different and (b) the two cultures did differ in their level of body consciousness, as evident from the factorial ANOVA. With regard to the first finding, it was

apparent that the factorial structures of both cultures did not resemble the original factor structure proposed by Miller et al. (1981). Miller and co-associates indicated a three factorial structure of BCQ - private, public and body competence. In the Iranian sample, items belonging to public body consciousness and body competence were loaded highly in the first factor, reflecting the primacy of those items in this culture. Items belonging to public body consciousness were also loaded in Factor 3. Private body consciousness did not emerge as a factor. Two items of BCQ were found redundant in the factorial structure of BCQ-P. Overall the factorial structure suggested that Iranian subjects were more aware of their public body consciousness.

With regard to Japanese sample, the factorial structure of BCQ-J did resemble the Iranian sample. Public consciousness was emerged as the primary factor (Factor 1) in the analysis, followed by body competence (Factor 2) and private body consciousness (Factor 3).

When these two samples (Iran and Japan) were compared for their level of body consciousness, Iranian subjects were found to be more conscious (see Fig. 1) as compared to Japanese subjects, especially in the items that reflected public consciousness. Iranian subjects were more conscious for those items which were attached to their social values (for example, items 6, 7, 8, 9) in this respect.

Considering how the cultural orientations of individualism and collectivism can influence the ways in which people view themselves and others, the similarity between the two cultures reveals somewhat a common social structure prevailing in these societies, which are collectivist in norm. In the original questionnaire, private body consciousness was found to be the most important factor (Factor 1). It is probably due to the reason that the subjects on which the questionnaire was developed (U.S.A.) were more individualistic in nature. These findings also substantiate the earlier notions of Triandis (1972, 2000b, 2002), Cole (2005), Miller (2002) and Matsumoto (1990) about the social norms and consciousness prevailing in individualistic and collective societies.

**Table 1.** Mean judgment of Persian & Japanese versions of BCQ\*1,\*2,\*3

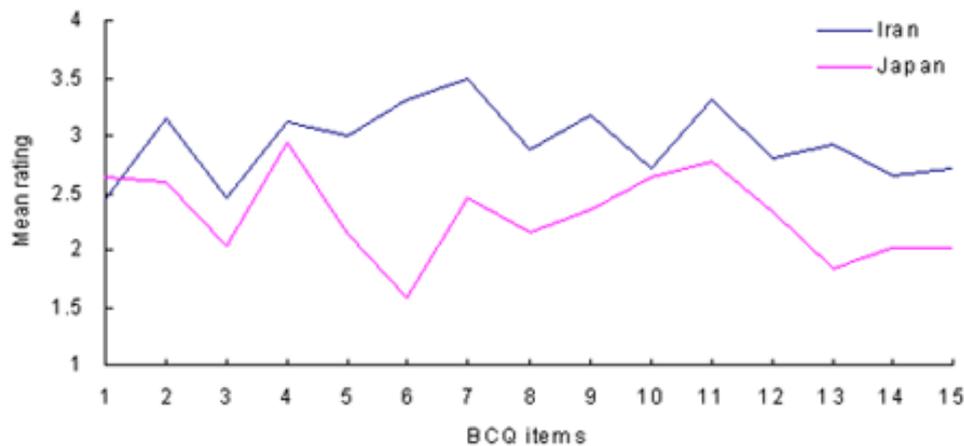
	Persian	Japanese
	M	M
<b>Private Body Consciousness</b>		
1. I am sensitive to internal bodily tensions	2.44	2.64
2. I know immediately when my mouth or throat gets dry	3.15	2.6
3. I can often feel my heart beating	2.46	2.04
4. I am quick to sense the hunger contractions of my stomach	3.12	2.94
5. I'm very aware of changes in my body temperature	3.00	2.14
<b>Public Body Consciousness</b>		
6. When with others, I want my hands to be clean and look nice	3.32	1.60
7. It's important for me that my skin looks nice, e.g. has no blemishes	3.50	2.46
8. I am very aware of my best and worst facial features	2.88	2.16
9. I like to make sure that my hair looks right	3.18	2.36
10. I think a lot about my body build	2.72	2.64
11. I'm concerned about my posture	3.32	2.76
<b>Body Competence</b>		
12. For my size, I'm pretty strong	2.80	2.34
13. I'm better coordinated than most people	2.92	1.84
14. I'm light on my feet compared to most people	2.66	2.02
15. I'm capable of moving quickly	2.72	2.02

\*1Item source: Miller, L. C., Murphy, R., & Buss, A. H. (1981). *Consciousness of body: private and public*. *Journal of Personality and Social Psychology*, 41, 397-406. American Psychological Association

\*2 The higher the score, the greater the consciousness

\*3 Maximum score = 4, Minimum score = 0

**Fig. 1.** Interaction of Groups X Items



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**Table 2.** Rotated Factor matrices for BCQ-P and BCQ-J

Items	Factor 1		Factor 2		Factor 3	
	BCQ-P	BCQ-J	BCQ-P	BCQ-J	BCQ-P	BCQ-J
1	-.03	-.021	-.24	.07	-.62	.78
2	.31	.18	.33	-.03	-.20	.81
3	.07	.16	.73	-.33	.01	.44
4	.03	.13	.61	.41	.15	-.04
5	-.34	-.21	.11	.45	.41	.45
6	.65	.46	-.06	-.36	.35	-.34
7	.18	.73	.37	.06	.53	-.02
8	.01	.59	.21	.16	-.61	.26
9	-.04	.69	-.04	.09	.70	.44
10	.44	.73	.12	.13	.46	-.02
11	.71	.54	-.31	.09	.25	-.04
12	.35	.19	.07	.45	-.09	-.35
13	-.11	.59	.79	.54	.08	-.01
14	.50	.26	.47	.78	-.05	.07
15	.77	.06	.14	.83	-.09	.05

\* For items, see Table 1

# SOCIO-ECONOMIC CHARACTERISTICS OF THE FEMALE MARRIED MIGRANTS: A CASE STUDY OF KATAKHALI POURUSOVA OF RAJSHAHI DISTRICT IN BANGLADESH

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**Key Words:** narcotics, addiction, pain.

## ABSTRACT

The aim of this paper is to investigate the socio-economic conditions of the migrants of Katakhal Paurashava in Rajshahi district. Using the information from 1500 ever-married women of Rajshahi district within the reproductive span (15-49 years), it was found that the maximum migrants have migrated in the age range of 20 to 34. It was also seen that most of the migrants are illiterate. This study also envisages that most migrants do not earn money, so they depend on their husbands. Our study also reveals that those women who engage in non-agricultural works, service and business have a greater chance of migration compared to women who are housewives. This study helps observe the socio-economic characteristics of the female married migrants, in the interests of better understanding, and may be used as a benchmark to evaluate how migration can change the lifestyle of individuals, and the families, regionally and nationally. Actually people migrate to a certain place with hopes of improving their social and economic status.

## Introduction:

Migration is purely a socio-economic phenomenon, which is a result of a complex mechanism involving social, psychological, economic, political, institutional and other determinants.

The process of migration is complex. It not only affects the size and growth of population of an area but can also produce remarkable alterations in the structure and distribution of population (D. Misra, an Introduction to the Study of Population, Second edition).

Migration is a flexible and dynamic phenomenon that encompasses territorial mobility of people and involves movements such as commuting, absence from home place for periods from a couple of days to several years, seasonal migration and permanent relocation. Although diversified in forms, it involves a certain degree of commitment on the part of migrant to the place of origin<sup>1</sup> and of destination<sup>2</sup> which occurs due to the perception of spatial differential of opportunities, the idea that different geographical locations offer different level of potential well being, to various sections of the human population. The study of population migration has been a rapidly developing branch of several academic disciplines such as economists, sociologists, historians, psychologist, demographers and geographers who all find the residential movements of the human population to be of importance to their respective subjects. For this reason the study of migration is both a multidisciplinary as well as an interdisciplinary field (White and Woods, 1980).

Migration is a form of geographical or spatial mobility involving a change of usual residence between clearly defined geographical units (UNO, 1958).

Migration is a relatively permanent moving a way of a group collectively called migrants, from one geographical location to another and proceeded by decision making on the basis of hierarchical order (Mangalam, 1968). Migration is conveniently defined as a change in the usual place for another, for a considerable time (Fortes, 1971; Du Toit, 1975).

Internal migration<sup>3</sup> is an integral part of the development process. It is influenced by development (such as the building of roads, economic activities and employment opportunities in certain areas) and it influences development (destination areas gain in skills and capital while areas of origin lose out) (Chandra and Chandra, 1998:60). There are relationships between and among migration, urbanization and socio-economic development. According to Skeldon (1992) "At a very simple level, there is a clear relationship between economic variables of development."

Population migration reflects people's responses to many different factors such as social and economic inequalities, social and cultural conditions and constraints, and other infrastructure and accessibility aspects at places of origin and destination. Studies have generally indicated that migration occurs mainly for marriage purposes (Parera, 1993; Thadani and Todaro, 1984; Todaro, 1989, 1994 and Young, 1994). In our study; we found that, marriage is the most general cause of migration of people from Katakhal Pourusova of Rajshahi district, but it is generally caused by the norms of male or female exogamy. Thus it relates to the normative system that prevails in the community.

Internal Migration<sup>3</sup> Internal signifies the movement within the boundaries of a given nation.

1. **Place of origin:** The place which the migrant leaves is called place of origin.

2. **Place of Destination:** The place where the migrant arrives is known as place of destination.

3. **Internal Migration:** Internal signifies the movement within the boundaries of a given nation.

Under village exogamy, marriage migration can also result from sex-imbalance in a particular status group of people where custom prescribes that marriage partners are of same status or from sex-imbalance across groups where one party (either male or female) must be of higher status. Alamgir (1993) also indicated in one study that the vast majority of female migration occurred due to marriage and was directed towards other villages.

The factors influencing the decision to migrate are varied and complex. As migration is an elective process, affecting an individual with certain economic, social, educational and demographic characteristics, the relative influence of economic and non-economic factors may vary not only between nations and regions but also within defined geographic areas and populations. In our study an attempt has been made to investigate the socio-economic characteristics for female marriage migrants. The basic findings are that migration takes place due to change in the lifestyle of individuals, the families as well as the region and nation. Actually people migrate to a certain place with hopes of improving their social and economic status. Different authors reveal the information in different ways and they have some limitations. In our study an attempt has been made to observe the socio-economic condition of female married migrants.

## Data and Methods:

### Data

The data were collected from a field survey conducted under the project of UNFPA entitled "Strengthening the Department of Population Science and Human Resource Development". The pattern of data has been obtained in three sections, namely, fertility, mortality and migration, along with socio-economic characteristics of the respondents in Katakhalī Poursova of Rajshahi district, by interview method using a set questionnaire. In this case data have been used from couples where the females belong to a fertility age group (that is age group 15–49 years) listed in the voter list as a population frame. In this area, there was found to be 1376 migrants and 124 non-migrants.

### Methods

Data analytic method used in this paper is percentage distribution and logistic regression analysis. A brief discussion on these methods has been incorporated in the following subsections.

#### Percentage Distribution

Percentage distribution is used in this study for getting the real picture of the migration behavior of Katakhalī Poursova of Rajshahi district.

#### Logistic Regression Analysis

Logistic regression, also called logit regression is used when the response variable may be quantitative, categorical, or a mixture of the two.

In logistic regression, just as in linear regression, the codes for the independent variables must be meaningful. We must decode the values of the independent variables by creating a new set of variables that correspond, in some way, with the original categories. When we have a

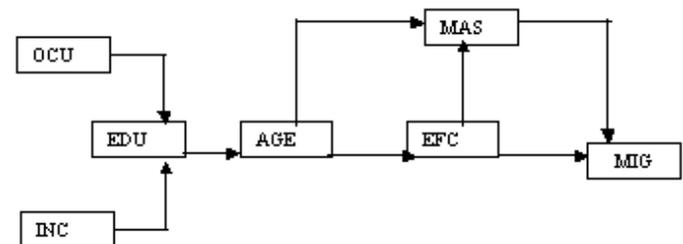
variance with more than two categories, we must create a new variable to represent the categories. The number of new variables required to represent a categorical variable is one less than the number of categories. For example, if instead of the actual values for education of the respondents, we had values of 0, 1 depending on whether the value was 'no education', and 'some education'. The value 'no education' would be represented by codes of 0 and it is called reference category. If we use indicator variable for coding, the coefficient for the new variables represents the effect of each category compared to a reference category. The coefficient for 'some education' is the change in log odds when the lower primary is compared to no education. The coefficients for no educations are necessarily zero, since it does not differ from itself. The logistic regression procedure will automatically create new variables for categorical variables.

### Conceptual Framework

In our study, those who migrate for marriage purposes, is the dependent variable. Migration as the dependent variable is influenced by a number of factors that could be social, economic, cultural and demographic. Social background has a moderate yet significant effect upon the person's decision to migrate, but it seems that education also has a strong influence on decision to migrate. Higher education provides women with status or opportunities that reduces the propensity to live in rural areas.

In lieu of these factors the migration can be analyzed by using a simple framework (See fig-1).

**Fig.-1: A Conceptual Framework to Study Migration**



**Key:** OCU = Occupation, EDU = Education, AGE = Current Age, MAS = Marital Status, EFC = Effect of Cultivate land, NC = Income, MIG = Migration

The socio-economic and demographic factors are perceived as determining the reason for the person's decision to migrate. Education is closely related for the cause of migration study. Students for purpose of education in urban areas, undertake a great deal of migration. Better educational opportunities exist in urban areas. The occupation is the most important factor for the cause of migration. People in rural areas want to migrate to urban industrial areas. In general there is a positive relationship between income and migration, and a number of studies indicate that migration is positively correlated with the level of income.

## Analysis and Results:

### Socio-economic Differentials of Migration

The socio-economic factors that will be analyzed in this study include current age, education, marital status, income, occupation and effect of cultivated land.

Age is the most important variable for the description and analysis of any kinds of research and for the evaluation of the quality of the survey counts of population. From Table-1 it can be seen that in our study area most of the respondents migrate in the age range of 20-34 (60.9 percent).

Marital status and cause of migration is closely related. Table-1 shows that the maximum number of migrants are currently married (98.0percent) and a few are 'others' (i.e., divorce, separation, widowhood). So we can say that most of the migrants are married. Education is the most important indicator of the socio-economic status of a person or any respondent, which affects almost all aspects of human life. Moreover, the propensity to migrate increases with the increase in educational level. In our study, we found that a vast majority of the migrants were illiterate (32.8 percent), on the other hand 39.2 percent of the migrants were found to have secondary and higher levels of education ( Table-1).Brigg (1971) suggests that migrants tend to be of high educational standard, relative to the population of their place of origin, if they are moving primarily in response to positive factors at the destination; whereas they are of lower educational standard if they are responding to negative factors at their place of origin.

**Table-1:** Socio-economic Characteristics of Female Married Migrants of Katakhalī Pourusova of Rajshahi District

Variable	Frequency	%
<b>Age of Respondents</b>		
<20	51	3.7
20-34	838	60.9
35-49	483	35.1
50+	4	0.2
Total	1376	100.0
<b>Marital Status</b>		
Currently Married	1348	98.0
Divorce	7	0.5
Separation	8	0.6
Widowhood	13	0.9
Total	1376	100.0
<b>Education of Respondents</b>		
No Education	452	32.8
Incomplete Primary	105	7.6
Complete Primary	275	19.9
Secondary and Higher	540	39.2
Total	1376	100.0
<b>Occupation of Respondents</b>		
Housewife	1312	95.3
Business	9	0.7
Service	26	1.9
Others	29	2.2
Total	1376	100.0
<b>Amount of Land</b>		
No Land	507	36.8
<2 acres	458	33.3
2+ acres	411	29.8
Total	1376	100.0
<b>Income</b>		
<1500	124	9.1
1500-2000	219	15.9
2000+	1033	75.0
Total	1376	100.0

Economical requirement and human life is interrelated. For this reason people employ themselves in various jobs, to have a better living standard. Four distinct categories of occupation were surveyed at rural and sub-urban locations. These categories were housewife, service, business and others (miscellaneous). From each category, a 10 percent sample was taken to represent the entire group. Table-1 also elucidates that the maximum number of migrants have no land (36.84 percent). Some of the migrants in rural area have below 2 acres of land, which is 33.28%. Finally we can say that there is not a lot of land belonging to migrants in this study area. It is claimed that modernization of agriculture increases the area of land under cultivation, yield of crops and employment opportunities of agricultural laborers. But till now traditional methods of land cultivation are prevailing in this village of Rajshahi District and the farmers grow only Amon crop annually. As a result, the scope of employment for the agricultural laborers becomes less than in the high agricultural growth area, which pushes the laborers to migrate to other places for employment. Moreover, small farm families cannot earn a livelihood from the small parcel of land.

From Table-1 we also observe that migrants in this area had a lower income. After migration 9.1 percent of the surveyed migrants had an income in the range of taka, less than 1500 per month. But a very high section of migrants in this study area earn this high range. In this situation the rural unemployed laborers and the members of kin households migrate from their native villages to urban areas seeking employment.

**Determinants of the Migrants: A Logistic Regression Analysis**

Migration is the effect of various phenomena. It is interesting to find which phenomena are more responsible for migration.

The logistic model is fitted by considering the relative risk that a women had migrated which we dichotomized by assigning 1 if the respondent did and 0 if she did not. Odd ratios are shown in place of regression coefficients for the easy interpretation of results. A statistically significant odd ratio below 1.00 means a negative effect of an independent variable, while a statistically significant odds ratio above 1.00 means a positive effect. The variables considered as independent in the model are shown in Table -2.

**Table-2:** The Variables Used in the Logistic Regression Analysis

Variable	Status	Description & Category
Education of Respondents	Independent variable	No Education Incomplete Primary Complete Primary Secondary & Higher
Land Ownership	Independent variable	No Land <2 acres 2+ acres
Occupation of Respondents	Independent variable	Housewife Services Business Others
Income for female migrant	Independent variable	<1500 1500-2000 2000

From results of logistic regression analysis (Table-3), it appears that, respondents who did not complete primary level of education are 0.60 times less likely to migrate than those respondents who had no education, on the other had respondents who had secondary and higher level of education are 1.9 times more likely to migrate than those who had no education.

Landholding of a household, plays an important role in determining rural in-migration in an agrarian economy where the people are mostly dependent on land for their livelihood. However, studies conducted in developing countries on the relationship between landholding and propensity to move, have shown dissimilar results. It should be mentioned here that, Hill (1972) found that the poorer and landless have a greater propensity for migration than richer and big landowners. The findings of this study do not support strongly any of the above propositions. Respondents who had 2 acres or more land are 0.19 times less likely to migrate than those respondents who had no land and this relationship is found to be statistically significant.

Table-3: Logistic Regression of Relative Risk of Migrants in Katakhalī Poursuva

Variable	Coefficient of	Standard Error of	Odd Ratio Exp of
<b>Education of Respondents</b>			
No Education	--	--	1.000
Incomplete Primary	-1.654	140.9116	0.60168
Complete Primary	-0.0052	140.9116	0.84756
Secondary & Higher	2.508	140.9109	1.9948
<b>Land Ownership</b>			
No Land	--	--	1.000
<2 acres	-1.1423	1.0797	0.3191
2+ acres	-1.6218	1.0682	0.197588
<b>Occupation of Respondents</b>			
Housewife	-	-	1.0000
Services	-6.1008	99.6325	0.0022
Business	-0.2420	140.9046	0.7851
Others	-6.7325	144.2695	0.0012
<b>Income for female migrant</b>			
<1500	-	-	1.0000
1500-2000	5.3738	24.3731	2.1023
2000+	7.7841	24.3742	3.356888
Constant	22.3018	185.5315	

Here: \*\*\*indicates  $p < 0.001$ , highly significant, \*\* indicates  $p < 0.01$ , significant and \* indicates  $p < 0.05$ , less significant and  $p > 0.05$  indicates insignificant

It was found that households with occupations such as service, business and other livelihoods have less chance of migration as compared to migrants who were housewives. The risk of migration has been found to be 0.0022, 0.7851 and 0.0012 times lower for migrants belonging to occupations such as service, business and others respectively as compared to migrants who were housewives.

Agriculture is the main sector for employment of the rural households. They earn most of their income from this sector. Respondents whose income in was in the range of 1500-2000tk are 2.1 times more likely to migrate

than those whose income is below 1500 tk. and 3.3 times more for respondents having secondary and higher levels of education and this relationship is statistically highly significant.

## Conclusion:

By observing the whole study we may say, it is a traditional system in our society that all the women have to migrate after their marriage. Most of the migrants have to migrate in the age ranges 20-34, and most of them are educated and many of them do not earn money and consequently they depend on their husbands.

## Policy Implication:

From the forgoing analysis, it appears that it is difficult to make any easy and good solutions in solving the destitute problems. The following recommendations are suggested according to my own views:

- Need to invest resources for the improvement of rural economy through different rural development projects and by creating job opportunities in the rural areas.
- Emphasis on rural industrialization. This rural industrialization will be an instrument of employment and income generation for the rural landless poor; present or pre-employment migration has already burdened urban centers.
- Encourage the rural people on more scientifically sound agricultural production.
- Institute proper policy and programmes of integrated rural development.

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## ABSTRACT

**Background:** Breast cancer is one of the life threatening problems in women's lives. One of its early diagnostic methods is mammography which determines masses even less than 0.5 cm in diameter. In order to encourage women to have mammography performed, we have to change their attitude and behaviour, so knowledge about health beliefs is an important issue to be considered.

**Objective:** To determine the relationship of health beliefs about mammography and its performance.

**Methodology:** this was a comparative cross sectional study. Data collection tool was a questionnaire, with questions that were on the basis of health belief model about four issues: (benefits and barriers of mammography performing) and (severity and susceptibility to breast cancer). Two communities were studied. The first contained Iranian women above 35 years old, who attended the hospitals, that had been considered for research. For mammography performing, the second study group contained Iranian women above 35 years old who came to the above-mentioned hospitals for performing, other kinds of Para clinical services, except mammography.

**Sample:** 360 people that were classified into two groups (180 with mammography and 180 without mammography) were studied. The sampling method in both groups was non-probability and continuous. The number of samples in every hospital was dependent on the number of mammography investigations performed in that hospital. Acceptance standard was negative history of mammography and elimination standards were being affected by cancer and other difficult to cure disease, chemotherapy and drug-taking because of mental illness.

**Results:** Findings showed a significant statistical difference ( $P < 0.0001$ ) between women's health beliefs, about (benefits and barriers of mammography performing) and (severity and susceptibility to breast cancer) in two groups (with mammography and without mammography).

**Conclusion:** Research findings indicated a relationship between health belief and performance of mammography. Results also showed that occupation, level of education and marital status had a relationship with susceptibility to breast cancer. As self-breast examination is one of the early diagnostic methods in detection of breast cancer, it is recommended that further research be done in relation to health beliefs and self-breast examination

## RELATIONSHIP OF WOMEN'S HEALTH BELIEFS ABOUT MAMMOGRAPHY WITH ITS

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**Key words:** Health belief, mammography, breast cancer

### Introduction

Health is an undeniable right of humans who should not be deprived of it, and all efforts must be made to deliver appropriate healthcare for all people.(1) Health is not motionless but is an active and changeable phenomenon. Human health is always influenced by many diseases.(2) One of the important problems that threatens the health, specially in nowadays, is cancer. Breast cancer is still the most frequently diagnosed cancer in women in the western world and the cause of a large amount of suffering. (4) 21600 women are newly diagnosed with breast cancer each year and 19,000 die of their disease. The incidence rate continues to rise and an increasing number of young women are affected. (5)

Breast cancer is the third most prevalent cancer in Iranian women, hence one of the leading causes of death. What makes it different in Iran is the early onset of the disease. Breast cancer starts earlier in Iranian women and it takes longer for them to seek medical treatment (3).

Screening for breast cancer has been show to reduce breast cancer mortality by approximately 35% for participants in randomized studies. Thus screening has the largest overall effect of any intervention on mortality from this frequent disease. Mammography is the only screening method that has been thoroughly evaluated and shown to have positive results.(6)

Mammography screening for breast

cancer is a well established method with a body of evidence and experience supporting it.(7)

Mammography screening not only leads to a reduction in breast cancer mortality,

It also contributes to a shift towards earlier breast cancer stages upon presentation. Breast cancers detected by screening will be smaller and mostly node - negative (8).

As breast cancer has a high incidence and because of specificity of mammography for breast cancer diagnosis, encouragement of women to mammography performing is necessary. But for encouragement of women to use mammography, their attitude and behavioral trends must alter, as well as alteration of behavioral trends, about health and disease. The Potter & Perry's health belief model contains four components:

1. benefits of a health behavior being performed
2. barriers of a health behavior being performed
3. susceptibility to a disease
4. Severity of a disease (Glanz & colleagues).

By having knowledge about women's health beliefs, nurses are able to use methods for correct education and if necessary with desired change in these beliefs, they promote level of women's health.

According to significant role of beliefs in women's functions and because of the importance of mammography

in women above 35 years old, as the most effective and available method for early diagnosis of breast cancer, and the direct relationship between early diagnosis and women's health, it is necessary to explore women's beliefs, who have had mammography performed and those of women who have not had mammography performed. Because of the above-mentioned causes, the researcher decided to inspect women's health beliefs about mammography. Consequently, this research was done to determine the relationship of women's health beliefs about mammography and its performance in women who came to hospitals, related to medical universities, in Tehran.

The hypotheses of this research comprised of:

1. Women's health beliefs about mammography in relation to its performance.
2. Women's health beliefs about barriers against having mammography performed.
3. Women's health beliefs about severity of breast cancer have in relation to mammography performance.
4. Women's health beliefs about susceptibility of breast cancer in relation to mammography performance.

## Materials and methods

This research was a comparative cross sectional study that the researcher conducted between women's health beliefs about mammography with its performance in two groups, With having mammography performed and without having mammography performed). The research society contained Iranian women above 35 years of age who came to the hospital, under consideration for this research, for mammography performance or for receiving other kinds of pre-clinical services except mammography.

For data collection, the researcher came to the above mentioned hospitals (the hospitals related to medical universities in Tehran) and used continuously for sampling. In this research 360 people that

were classified into two groups 180 with mammography performed and 180 without it) were selected. Data collection tool was a questionnaire, containing two parts. The first part contained questions about individual, social and economical characteristics, for example age, marital status, level of education occupation, level of income, and history of breast cancer. In the group with mammography having been performed, The percentage of ages between 34-35, were more than other ages (44%) and in the group without mammography performed percentage of ages between 35-45 was 76.7%. Average age in the group with mammography performed was  $47.41 \pm 7.57$  and in another group was  $42.34 \pm 6.95$ . In the group with mammography performed the biggest percentage of level of education was respectively 28.3 in diploma holders and 20.6 in women who study in guidance school. In the group without mammography performed the percentage of diploma holders was 35 and the percentage of women with bachelor's degree and higher was 20.6. From the viewpoint of income, 51.7% in the group of mammography performed and 53.3% in another group had an income between 600000- 1449000 Rials. More than 50% of women were housewives in the both groups, with the percentage of 57.8 in the group with mammography performed and 59.7 in the other group. Also in both of groups, the age of the first pregnancy in the majority of women was between 13-20, with average and standard deviation of  $20.98 \pm 40.4$  in the group with mammography performed and  $21.54 \pm 4.02$  in the other group. Regarding familial history of breast cancer 7.2% of women in the group with mammography performed had a grandmother, affected by cancer and 5.6% of women in the other group had an aunt affected. In both groups, familial history of breast cancer was positive in the majority of women.

The second part of the questionnaire contained questions about women's health beliefs about performance of mammography, were based on four issues: benefits of mammography performing, barriers of mammography performing, severity of breast cancer and susceptibility to breast cancer.

The questions about health belief were on the basis of Potter & Perry's health belief model and Five choices on the scale of Likert. Those choices were : completely agreeing, without viewpoint, opposed and completely opposed. In the questions, related to health belief components about mammography, excluding questions about barriers, all answers of completely agreeing, had a score of 5 and completely opposed had a score of 1. In the questions about barriers, answer of, completely agreeing, had a score of 1 and completely opposed had a score of 5.

For determining of scientific credibility of data collection tool, content credibility manner, and for determining its scientific reliance, renewed trial methods were used for doing the aforesaid research, the researcher at first selected women who came to the hospital and were according to acceptance standards, informed of the research goals, method of questionnaire filling and of keeping the written information confidential After their agreement for participating in the research, the questionnaires were given to them. In this study, the data collection method was self-reporting. Because 13.9% of women were illiterate and 25% were only able to read and write, the questionnaires of these groups were filled out by the interviewers. All of questionnaires were filled out during official working hours, over 2 months.

In order to analyse the information from this research, SPSS statistical program was used. For inspecting of people's characteristics and describing them, descriptive statistical methods contained, tables, charts, central and variance indexes, in this study. For inspecting of homogeneity between the two groups  $\chi^2$ , and fissure free tests were used. For analysis of dates, related to health belief components, Manwitney nonparameterial test was used. Relationship between health belief grades and variables of occupation, level of education and marital status, was studied using valis crosal analysis test.

Mentel-henzel test was used for inspecting interventional variables, in this study.

## Results

About the first special goal of study determining and comparing women's health beliefs about benefits of mammography performing in the group with mammography performing and in the group without performing it, on the basis of age, level of education and marital status," information of table fig.1 shows that, regarding grade of health belief about benefits of mammography performing, the two groups had a meaningful statistical difference, ( $Z:9.066$  &  $P<0.0001$ ), in such a manner that, the average of grades of health belief about benefits of mammography performed in the group with mammography performed ( $= 27.19$ ) was more than the average number in the group without performing it, ( $= 23.52$ ). Therefore, performance of mammography has a relation with health belief grades. It seems that, the women of the group with mammography performed, accepted that, this method was an early diagnostic method of breast cancer and they had faith in this belief. Those women believed more in the advantages of mammography- performing.

The result obtained from Lager Lund and colleague's research (9). And according to their research, women's knowledge about advantages of mammography is one of the most important factors for it's performance.(9) Also according to their research, increasing the level of women's information about mammography was a very important and effective factor for forming their beliefs.

About the second special goal of research "determining and comparing women's health beliefs about barriers of mammography performing in the group with mammography performing and in the group without performing it on the basis of occupation, level of education and marital status", information of table fig.2 show that, regarding the grade of health-belief about barriers of mammography performing, the two groups had a meaningful statistical difference ( $z=6.862$  &  $p>0.0001$ ), in such a manner that the average of grades of health-belief about barriers of mammography performing in the group with mammography performing ( $= 28.24$ ) was more than the average of them in the group

without mammography performing ( $= 24.99$ ). It seems that the higher grade is because of women's higher information about barriers of performing this method in the group with mammography performing as compared with the group without performing it. Therefore the women's health beliefs about barriers of mammography had a relationship to its performance.

The results of this table's information show that the women's health beliefs about barriers of mammography have a relationship with its performance. In most studies, a reversed relationship between having a perception about barriers of mammography, with it's performance, has been shown, in such a manner that, according to Champion & colleague's study(10), the women, who consider more barriers for performing of mammography, don't have tendency for performing it.(11) Also, Frank & colleagues wrote: women's health beliefs about barriers of mammography has a reversed relation with it's performance.(11) The women, who believe there are less barriers for mammography, perform it less than the others. These barriers include: pain, worry, fear of X-ray, needlessness of performing mammography if there is no sign of breast-cancer and , shortage of knowledge about indications for it. With determining of these barriers, the health and care framework, are able to better program for participating women in mammography performing, better.

About the third special goal of research " determining and comparing of women's health beliefs about severity of breast cancer, in the group with mammography performing and in the group without performing it , on the basis of occupation, level of education and marital status "informations of table fig.3 show that, regarding grade of health belief about severity of breast cancer, the two groups had a meaningful statistical difference ( $Z= 7.431$  &  $P<0.0001$ ), in such a manner that the average of grades of health belief about severity of breast cancer in the group with mammography performing ( $= 33.68$ ) was more than the average of those in the group without performing it ( $= 28.62$ ) , therefore women's, health beliefs about severity of breast

cancer had a relationship with performance of mammography. According to Smith & Maurer's work (11): "when we talk about a severe disease or damage, people's tendency to follow medical orders and cares, and engaging in preventive efforts increases". Therefore on the basis of Lagerland & colleague's statement (9), "stronger women's – beliefs about the severity of breast cancer and when they believe that the breast cancer is incurable or has no possibility of cure, their participating in the mammography performing program decreases. The results of this study confirm the results of Lagerland's research.

Regarding the fourth special goal of research " determining and comparing of women's health – beliefs about susceptibility to breast cancer in the group with mammography performing and in the group without performing it, on the basis of occupation, level of education and marital status, the information in table fig.4 shows that, regarding grade of health belief about susceptibility to breast cancer, the two groups had a meaningful statistical difference ( $Z= 6.034$  &  $P< 0.0001$ ), in such a manner that the average of grades of women's health beliefs about susceptibility to breast cancer in the group with mammography performing ( $= 21.89$ ) was more than the average of them in the group without performing it ( $= 19.49$ ). This result shows performance of mammography has a relationship with grade of health belief about susceptibility to breast cancer. It seems that, the women in the group with mammography performing considered themselves more susceptible to breast cancer and, they had more information about predisposing factors of breast cancer, for example age, marital status and positive familial history. According to Alken's work (13), women's health beliefs about susceptibility to breast cancer have a direct relationship with acceptance of mammography performing. Because of having a greater perception of susceptibility to breast cancer, the women, who have a mother or sister affected by breast cancer, or the women , who have a history of benign breast mass, have more tendency toward mammography performance.(12) According to the work of Clanz & colleagues's " if

people feel themselves exposed to a severe disease and believe that there is a way for decreasing entanglement and severity of diseases, they participate in health programs.(13)

## Conclusion

At last, after access to research goals, the results, obtained from this research, discuss our research hypotheses.

The first hypothesis in this research was "women's health beliefs about benefits of mammography has a relationship with its performance; the results of research showed that the average grades of health beliefs about benefits of mammography performing had a meaningful statistical difference ( $P < 0.0001$ ) between the group with mammography performing and the group without performing it. It means that mammography performing, had a relationship with grades of women's health beliefs about benefits of mammography. On the basis of Walsh's belief, recognition of benefits of a health behaviour, encourage people to do that behaviour.(14)

About the second hypothesis, mooted in this research, "women's health beliefs about barriers of mammography has a relationship with its performance," the results of research showed that the average grades of women's health beliefs had a meaningful statistical difference between the group with mammography performing and the group without performing it. ( $P < 0.0001$ ). It means that women's health beliefs about barriers to mammography had a relationship with performing it.

According to Champion & colleagues's statement (10), women, who consider more barriers for mammography performing, don't have a tendency to use this method. About the third hypothesis mooted, in this research, "women's health beliefs about severity of breast cancer has a relationship with mammography performing", the results of our research showed that, the average grades of health belief about severity of breast cancer had a meaningful statistical difference ( $p < 0.0001$ ) between the group with mammography performing and the group without performing it. It means that, women's health beliefs

about the severity of breast cancer had a relationship with mammography performing, so that, obtaining higher grade in the group with mammography performing in comparison with the group without it, and confirms that issue.

According to the work of Smith & colleagues's [11] when an issue like a severe disease or perilous damage is mooted, people will have more tendency to follow medical orders and advice, and the performing of preventive efforts. About the fourth hypothesis of research "women's health beliefs about susceptibility to breast cancer has relation with mammography performing", the results of this research showed that, the average grades of health belief about susceptibility to breast cancer had a meaningful statistical difference ( $P < 0.0001$ ) between the group with mammography performing and the group without mammography performing, in such a manner that the grade of health belief in the group with mammography performing was more than the other group and this issue confirms an existing relationship between women's health belief about susceptibility to breast cancer and the performance of mammography.

According to Ganz & colleague's belief, when people feel themselves exposed to a severe disease and believe that there is a way to decrease the entanglement or to decrease the severity of diseases, they participate in health programs.(13)

The results of this research, to access the main goal of the research, "determining relationship of women's health beliefs about mammography with its performance in women, who came to hospitals related to the medical universities of Tehran" showed that the group with mammography performing and the group without mammography performing are different in women's health beliefs about performance of mammography. This difference in beliefs, has led to performance of mammography (health behaviour) in one group and no performance of mammography in another group. According to Bolander's work about the above mentioned issue, in order to execute health behaviors, people in addition to having

knowledge about these behaviors and the manner of executing them, must believe that health behaviors, lead to their better health and protection from diseases.(14)

Education is an important part of nursing duties. A nurse can work as a health counselor, and can teach people health-issues individually or via participation in health education classes as a teacher. The nurses are able to intervene in all primary and secondary prevention of diseases related to breast cancer, and they can teach women about early diagnosis of breast-cancer. This matter causes elimination of incorrect women's beliefs and informs them about their health needs. Therefore according to the important role of nurses in the field of education, it is recommended that they consider higher importance for education and consultation of women because, the most prevalent cancer in Iranian women is breast cancer, and it is recommended that, the importance of early diagnosis of this disease becomes mentioned in mass media. (TV- radio- newspapers and scientific magazines can introduce the topic of mammography to women of society as the best method for early diagnosis of breast cancer.

The researcher, by using the health belief model, could inspect women's beliefs about mammography as a diagnostic method for breast cancer. But, because self-examination of breast is a simple and nonexpenditure method for early diagnosis of breast cancer performing other research on the grounds of "inspection of relation between women's health beliefs about self-examination of breast and its performance in women above 20 years" is recommended.

**The table fig 1:** Distribution of frequency and grade percentage of health belief about benefits of mammography performing in the group with mammography performing and in the group without doing it. Tehran

Grade of health belief about benefits of mammography performing	Women with mammography performing number (%)	Women without Mammography performing number (%)
6-13	1(0.6)	6(3.3)
14-22	11(6.1)	68(37.8)
23-30	168(93.3)	106(58.9)
± SD	27.19±3.28	23.25±4.53
The result of Manwitney test	P<0.0001 and	Z= 9.066

**The table fig 2:** Distribution of frequency and grade percentage of health belief about barriers of mammography performing in the group with mammography performing and in the group without doing it. Tehran

Grade of health belief about benefits of mammography performing	Women with mammography performing number (%)	Women without Mammography performing number (%)
8-18	3(1.7)	17(9.4)
19-29	100(55.6)	137(76.1)
30-40	77(42.8)	26(14.4)
± SD	28.24±4.37	24.99±4.72
The result of Manwitney test	P<0.0001 and	Z= 6.862

**The table fig 3:** Distribution of frequency and grade percentage of health belief about severity of breast cancer in the group with mammography performing and in the group without doing it. Tehran

Grade of health belief about severity of breast cancer	Women with mammography performing number (%)	Women without Mammography performing number (%)
6-13	1(0.6)	6(3.3)
14-22	6(3.3)	28(15.6)
23-30	173(96.1)	146(81.1)
± SD	33.68±5.30	28.62±7.13
The result of Manwitney test	P<0.0001 and	Z= 7.431

**The table fig 4:** Distribution of frequency and grade percentage of health belief about susceptibility to breast cancer in the group with mammography performing and in the group without performing it. Tehran

Grade of health belief about susceptibility of breast cancer	Women with mammography performing number (%)	Women without Mammography performing number (%)
8-18	27(15)	72(40)
19-29	150(83.3)	103(57.2)
30-40	3(1.7)	5(2.8)
± SD	21.89±4.08	19.49±4.08
The result of Manwitney test	P<0.0001 and	Z= 6.034

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# THE NEED FOR INNOVATIVE CURRICULUM IN IRAQI MEDICAL AND NURSING COLLEGES (REALITY AND ASPIRATION)

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## Introduction & curriculum outline:

Despite the fact that the curriculum is the heart of the educational process, yet, to find the answer to the question: What is a curriculum? may require hours and days of literature search without getting a definite answer or a universal agreement. As stated by Posner (2004), this is something inherent in the field of curriculum, and something inescapable about education. Although Posner added that we have to deal with the lack of absolute certainty in a field like education, and to accept the fact that the experts in our field are in fundamental disagreement, he suggested choosing the option of reflective eclecticism.

If we follow this reasonable suggestion, then, the most reasonable definition of curriculum among the seven famous alternatives is; The Planned Experience, which in a broad sense means that the curriculum comprises the totality of the learning experiences planned by the schools for the students to pass through during a given period of time. It includes a written document that describes the intended learning outcomes, the content, instructional strategies to achieve these outcomes, the ways the students will be assessed and the system of the evaluation of the curriculum, besides the actual process of implementation.

Innovative curriculum is essentially needed in Iraqi medical colleges for the sake of responding to public agreement towards strengthening health care providers clinical reasoning skills, providing them with basic clinical competencies that enable them to provide primary health care services in the community safely and efficiently, and developing their professional and communication skills that allow them to assume their leadership role in the

promotion of community healthy habits and prevention of major community health problems..

The needs assessment indicated clearly that there is a gap between what graduates of Faculty of medicines learn, and the competencies they need to provide the health care services required in their primary employment sites.

Enhancing medical and nursing education was one of the priorities in the educational reform plan of action.

Among the many changes that have evolved in the world with the process of globalization, educational reform became a priority in many countries, both in the developed and developing world. However, the challenges and risks are much more intensified in developing countries.

Experts have realized the intense need for higher educational reform since the beginning of the new millennium.

## Curriculum Outline:

The reason for choosing core curriculum in pediatrics (the curriculum is similar in almost all Iraqi medical colleges) is because it is intended as a guide for the departments of pediatrics in the Iraqi Faculties of Medicine to help them develop their complete curriculum to meet their departmental, faculty, local and or regional needs.

The educational program in most of the Iraqi Faculties of medicine is discipline-based. This course curriculum is intended for the teaching learning process of the subject of Pediatrics for the undergraduate students in the 4th and 5th grade of medical schools. The number of students studying this course ranges from 80-150 students.

The curriculum needs to be started with an introduction that highlights the mission and vision of undergraduate

medical education in Iraq, with emphasis on the importance of applying quality national and international academic standards. The introduction should include also, the rationale and background of the curriculum, which is based on the philosophy that child health care is a basic requirement for achieving community health standards and welfare. The curriculum needs to clearly identify the major health problems that cause the great burden of infants and childhood morbidity and mortality with its adverse effects on the community health and national economy and to give approaches to the solution of these problems through a curriculum that should aim mainly toward providing the students with the necessary knowledge skills and attitudes to recognize, prevent, and manage these problems in primary health care.

Therefore the statements of intent including the goals and intended learning outcomes, need to be clearly described in the curriculum which should also be preceded by a list of the foundation skills the students must acquire before joining the course of Pediatrics. The contents are to be outlined as a topics list with a distribution of the time allocated for teaching/learning of each topic, as both theoretical and practical clinical classes. Few have mentioned that the curriculum allocates only 80% of the total time of the course, leaving for each department the freedom to allocate the remaining 20% of time according to the learning needs.

The curriculum needs to describe clearly the intended teaching strategies and outline of the students' assessment methods besides listing the methods to monitor teaching and the basis to evaluate and upgrade the curriculum.

All these points are not clearly stated in the current curriculum. Documentation and origin of curriculum:

- As described fully in the introduction, the current curriculum will be analyzed based on documents that provide information about scope, learning objectives, the rationale behind objectives, teaching strategies, and evaluation.
- As defined, the scope lists intended learning outcomes (ILOs) in each level, and are listed in sequence. ILOs are grouped according to topic or theme.
- Each category should have its own ILOs to cover the 3 domains of learning, cognitive, psychomotor and attitudes. To explore in more detail the rationale why these objectives are important for each topic, the ILO's should emphasize the importance of building knowledge on previously acquired parts, and starting from simple understanding to more complex intellectual skills, with the emphasis on helping the students to develop knowledge networks and clinical reasoning and problem solving skills.
- According to ILOs, contents need to be outlined clearly and key points to be listed to help teachers prepare for their teaching sessions in accordance with the overall aim of the curriculum.
- As for teaching strategies, the curriculum does not state in detail the instructional strategy in relation to each group of ILO's and the corresponding contents nor provide a guide for the instructional strategies recommended to be adapted by the departments for each instructional unit according to the objectives. It also need to provide one sample of a course syllabus for a topic (instructional unit) that includes teaching methods, learning materials, and students assessment.
- Student assessment and curriculum evaluation; formative and summative students' assessment tests are recommended in the curriculum for both knowledge and skills. Objective student assessment in written and clinical/practical exams is to be emphasized and suggestions on different methods are encouraged.

Kamien M (1993) has analyzed the situation in many of the "old" medical

schools. He stated that if these schools were to implement educational reform they will continue to graduate doctors who are on the whole, largely adequate but who could be so much more, as these medical schools were facing many problems and suffocations related to many factors, among which, related to educational issues, are teacher-centered schools, the fact that the student is passive and completely dependant on lectures given without any positive interaction, busy schedules (lectures mainly), absence of creation and research that student should require. Paying less attention to skills and attitude aspects, these curricula are not properly organized to meet intended outcomes, focusing in examination on knowledge aspects mainly and ignoring the community health needs.(5)

The current curriculum is suffering from the same points mentioned above, besides there are many general and local changes occurring which make the need for change mandatory. Among these is the change in the concept of health after the WHO declaration in AL Maata, which stated health for all as a target and adopting the concept of PHC services. Also the Adenbara announcement in August 1988 which was held by the international union of medical college's. This was supposed to encourage the development of new curricula that would suit and cover the health needs of the communities.

Additionally there were local causes where the higher authorities and experts in this field tried to realize and follow the importance of revising and recreating the learning processes in order to be relevant and capable of participating in the progress and revolution in information in other parts of the world; but the end results were not very encouraging.

The objectives which are statements that describe what the students will know and be able to do after completing the study, i.e. what knowledge, skills and attitudes should students acquire, or in other words the students cognitive learning, the psychomotor learning domain and the affective learning domain, should be considered in the curriculum very clearly and in details.

These objectives should be included:

- To support acquisition of basic knowledge of normal and abnormal growth and development (physical, physiological and psychological) all clinical application from birth through to adolescence,
- to enable students to provide basic health care for individuals in the pediatric age group (neonate, children and adolescents),
- to provide students with appropriate background covering important and common pediatric emergencies and diseases and
- to enable the development and application of professional attitudes, communication and problem solving skills.

The students are to acquire the necessary knowledge, attitude and skills regarding pediatric medicine to become competent primary care physician. Students will have the opportunity to participate in the clinical activities of pediatric services putting into consideration that the services are focused on basic issues and common illnesses important for the education of primary care physician.

The knowledge objectives in this curriculum should emphasize (listing, identifying and assessing, interpreting, analyzing etc...) the skills objectives (performing, inserting and demonstrating), while attitudinal objectives should cover (demonstrating, counseling and obtaining) relevant and comprehensive information about topics mentioned in the curriculum.

The rational and educational philosophy behind the curriculum should be stated, mainly as regards the vision and goals in which to produce a graduate able to function competently and thoughtfully according to the accepted national and international standards in primary health care considering community health needs, researchers and teachers capable of applying national and international standards of medical care and follows its ethics, besides promoting outstanding programs of medical care to serve the society and promote environmental development in an atmosphere of cooperation, peer relation and mutual respect.

The curriculum should cover successfully the content issues regarding skills (professional, clinical and therapeutic), also the content to be mentioned and sequenced in logical order.

Each schedule has to define hours for teaching which is supposed to be outlined in the curriculum clearly. A sample course syllabus is to be included as a guide to the use of the topics teaching outline given in the curriculum. This includes topics title and description, intended outcomes, description of the teaching methods and learning materials (lectures with discussion, brainstorming, case studies, clinical simulation and drills, demonstrations and role play).

Guidelines for evaluation of students to be considered and includes: assessment of knowledge (objective written examination, objective structured oral exam, case studies and project report)

The common skill assessment, which included (structured clinical exam (OSCE), direct observation with check list, structured feedback reports, portfolio and structured practical examinations).

Monitoring of teaching (what teachers need to know and be able to do and be committed to do) is to be described in this curriculum beside the resources required both to conduct monitoring activities and to implement necessary changes in teaching in addition to the methods used for collecting in formations about teaching process, résumé student evaluation and feedback from faculty members will guarantee the curriculum dynamics.

Financial constraints must be addressed clearly in this curriculum according to our understanding; also the relationship to other parts of the curriculum and how it will relate to other subjects, should be addressed.

The current curriculum should stress on the means end reasoning. Also, the ILO's are to be classified clearly into those that help the development of knowledge and understanding, those that foster the development of clinical reasoning and problem solving, and ILO's to enhance the development of clinical competencies, and profes-

sional attitudes. The curriculum should stress also on the importance of providing the students enough chances to master the clinical competencies required for them to provide health care services. This will ensure that the curriculum has both behavioral and constructive perspectives at least in its statement of intents.

Still we think that this curriculum needs to represent in one aspect the structure of the disciplines perspective as it will deal with the gap between school subject matter and the scholarly disciplines from which they derive i.e. view teaching as the induction of novices into community of scholars(1). Part of thinking in this way is the need for professor's involvement in this creation of curriculum that is mainly in the academic disciplines.

### Basic Concepts:

We need to identify the meanings of terms commonly used in describing the curriculum components with as much certainty as possible.

The very first step in analyzing the purpose of the curriculum is to identify aspects of the curriculum that are intended for training and what are those intended for education. Learning contexts are either defined as training or education. When we can predict with some confidence the situations in which people will use what they learn, then this is termed "Training" (1). In other words, when students use the knowledge they learned in their learning experience in the form and context that closely resembles the situation in which they learned it, then they are replicating and applying the knowledge (2). This means that this learning experience is training. Meanwhile, when the situations in which learners will use what they learn cannot be predicted with any degree of specificity or certainty, this learning experience is termed "Education".(1) Again, according to Broudy et al, this is equivalent to situations when the learner uses the knowledge he learned associatively and interpretatively(2). It is to be noted that this distinction does not mean that one of the 2 contexts is inherently more valuable than the other, but curricula should provide both training and educational contexts of variable proportions.

The core curriculum of Pediatrics should contain aspects for both training and education. The emphasis is generally to be laid on training when the part of the curriculum deals with clinical and management skills..

On the other hand, educational aspects are emphasized when the context is to learn fundamental principles and concepts as well as to solve problems. An example is when the students are learning the principles of nutrition of infants and children, the nutritional disorders that result from various nutritional deficiencies and their effects on body functions, as well as how to apply this, and the related knowledge to solve patients' problems. In this context, the students need to use this knowledge associatively and interpretatively, and we cannot predict with certainty in which situations they are going to use this knowledge.

### Curriculum Purposes; Aims, Goals and Objectives:

The levels of educational purposes should take into consideration; societal goals, administrative goals, educational aims, educational goals, and learning objectives.

Societal goals are broad goals that express what citizens and policy makers want their political, economic, social and educational institutions to accomplish. Thus, the outcomes of these goals are not only the result of education, but education contributes to its accomplishment with influence on other societal organizations.

Administrative goals intention is to maximize the utilization of the available departments and faculty recourses to meet the educational goals without increasing the financial expenditure in face of the economic constraints of the country. Or, alternatively, to find out other sources of financial support to the university in addition to the limited budget available from the government. These goals in our opinion are essential in determining the ways schools will implement the curriculum in view of the limited available recourses.

Thus, the absence of explicit or implicit societal and administrative goals in the current curriculum can

be considered as blind spots of the curriculum.

Educational aims are again broad aims that express what citizens and policy makers want the educational institutions to accomplish, described in terms of the desired characteristics of a graduate who has been well educated. These aims are influenced by many factors, one of them is the educational process itself.

Educational aims are classified into 4 related categories:

- Personal development: includes self-cultivation or self-actualization.
- Socialization, includes citizenship and interpersonal relationship
- Economic productivity
- Further learning including the acquisition of basic skills and other requirement for continuous and independent learning.

The personal development aspect should be presented at least in the aim: as to develop an outstanding and honorable clinician, practitioner, researcher and teacher capable of applying national and international standards of medical care and following medical ethics. This aim will involve both educational and training contexts since it describes the individual after learning in specific situations, where he/she is going to use what they have learned. Meanwhile, applying standards of medical care indicates that the learner has also to use the knowledge they learnt associatively and interpretatively (i.e. education) to be able to solve patients' problems as an honorable clinician and practitioner.

The same will be with respect to the socialization aspect, which should be stated; as to promote outstanding educational programs of medical care to serve the society and promote environmental development in an atmosphere of cooperation, peer relation and mutual respect. This aim emphasizes the importance of serving the society, as individuals, as well as in cooperation with other members (peer relation and mutual respect). We believe that this aim will also include training: (communication and teamwork skills), and education (principles of community health care services, preventive aspects of common health problems etc.) These

2 aims implicitly involve an economical aspect, which is to increase job opportunity for graduates by equipping them with the competencies that enable them to perform up to the national and international standards. Thus they will be able to get better jobs on the national and international level.

Educational goals: are the educational institute's translations of the educational aims into accomplishments. They are formulated as characteristics that the learner will acquire over the period of learning in the educational program (or course).

In order to implement the aims of basic medical education, the core curriculum in pediatrics has to put forward 4 broad goals that describe the characteristics of the graduates after learning the course.

These goals emphasize;

- The acquisition of knowledge of normal and abnormal growth through infancy, childhood, and adolescence as a basic concept unique to pediatrics, its implications on health and disease of these particular age groups.
- The ability to provide basic health care needs for the pediatric age groups.
- The ability to recognize and perform initial management of common pediatric emergencies.
- The development and application of appropriate professional attitudes, communication and problem solving skills.

The current curriculum does not take into consideration all these educational aims.

## Learning Objectives:

Learning objectives are defined by Posner (2004) as the intended educational consequences of course or unit of study. (1)

Objectives are also described as SMART; Specific, Measurable, Achievable, Relevant, Time-bound. (3)

Though published as early as 1956, Blooms taxonomy stands till now as one of the popular and widely acceptable classification of learning objectives. This Taxonomy classifies

learning objectives according to the three domains of learning into; Cognitive, Psychomotor, and Affective. Bloom further classified the cognitive objectives into 6 major classes (5). Although Bloom and his colleagues gave a similar classification for the affective objectives, they did not publish a similar classification for the psychomotor objectives. Harrow A (1972) had given an acceptable classification of the psychomotor objectives. Blooms' taxonomy of cognitive objectives received some critics that argued mainly on 2 points. One is that it is not hierarchical, since one can learn a higher level of cognition without learning the corresponding lower level. The 2nd point of criticism is about trivializing the concept of knowledge to mere "recall of facts".

Nevertheless, Blooms' Taxonomy had a great impact on education since it had drawn attention to the fact that most of the education systems are aimed at low level objectives.

Other classifications of objectives include; Gagne (1977) five classes: Cognitive, intellectual, verbal information, motor skills, and attitudes, Ryle (1949), Knowledge classification: Knowing what and knowing how, and Broudy (1977) who added the "know with" category of knowledge.

Regardless of the classification of objectives the curriculum designers use, the important issue is that the curriculum should state its objectives in a clear and comprehensive way that is intended to demonstrate the outcomes the students will achieve through the designed learning experiences.

The general objectives of the core curriculum of Pediatrics should be classified into 3 categories: Knowledge and understanding, Clinical skills and Intellectual skills.

This classification if used by the curriculum designers will help in guiding the teachers to plan their instructional strategies and learning environments appropriately to facilitate achievement of the learning outcomes. Again, they will reflect the specific outcomes that will result in the accomplishment of the educational aim and goals. The community care aspect should be clear in objectives such as: Demonstrate an

understanding of the impact of congenital and inherited diseases on children and their families, and Describe appropriate measures for health promotion as well as prevention of diseases and injury in children.

The above point, as well as the lack of a clear distinction of objectives that are specific for affective domain or attitudes might be considered as a blind spot in the current curriculum, because one of the major defects we are suffering from in our medical education curricula is the lack of training or education to develop positive and professional attitudes.

Contents are considered by some people as the 'heart of the curriculum'. Posner (2004) decided to treat contents as a curriculum topic separate from the objectives. He based his decision on the fact that; the same contents could be taught for different purposes, and any objective could be pursued, by a range of different contents. (1) Although this point of view sounds logical with the given justifications, yet, many other educationists prefer to use the objectives as the core of the curriculum and base all other curriculum components on them. (3)

We also believe that this approach to the curriculum contents, particularly in disciplines that contain large amounts of knowledge and requires the learners' acquisition of a lot of basic fundamental motor skills like medicine, to guide the choice and presentation of the contents by the clear objectives. This helps to determine with certainty the emphasis that must be given to each part of the contents. In other words, it serves as the determinant of the conception of subject matter, which is one corner of focus in the pedagogical view of the contents expressed by Posner.

## Curriculum Standards:

After this comprehensive discussion on the purpose and contents of the curriculum, one must think carefully of how we can assess the curriculum alignment with the national and international standards of the discipline. Standards are broadly defined as: the facts, skills and processes the students are expected to learn. (1) In medical education, the standards are defined as: A model

design or formulation related to various aspects of medical education and presented in a manner that enables the assessment of graduates' performance in compliance with generally accepted professional requirements. They are set up by consent of experts or by decision of educational authority.(7) Generally the standards place a great priority on higher level thinking, and in the case of medical education, emphasis is also placed on competencies the graduates must exhibit to be able to practice their profession. Standards address all the four categories of the educational

## Aims:

In order to analyze the curriculum in terms of its provision with the standards, we must look to the curriculum objective and find out whether it translates the standards into measurable behavioral outcomes of the process of learning. We also need to find out how the curriculum will assess whether the students have achieved these standards at the end of the course.

Although the Iraqi national standards of medical education are supposed to be set before, the current curriculum should have a set of well-defined core competencies the students must demonstrate their ability to perform by the end of the course in pediatrics. These competencies are to address many of the domains as the acceptable standards for undergraduate programs of medical schools. However, no focusing on the area of professional values and attitudes as well as no information management are noted. This deficiency can also be seen all through the contents of the curriculum, and has been highlighted partly in the previous discussion.

The curriculum must also demonstrate how the assessment of students will be adjusted to verify that they have achieved the standard outcomes. In other words, it must clearly define the methods of assessment that will be used to confirm that the students demonstrate each of the required competencies. In the core curriculum of pediatrics, no general outline of the assessment of students is given. Detailed description of student assessment that should be used to carefully assess students' performance according to the standards must be shown in the sample course syllabus of the unit, which is supposed to include both formative

and summative; class room and final examinations, in addition to Tests that include written and clinical examinations.

Success in clinical test is considered if the student performs the clinical skill up to the standard. However, it is not indicated in the curriculum what are the criteria for performing the skill successfully. It should have been mentioned clearly that this must be done through the use of standardized clinical check lists. It is clear that the success criterion needs to be modified to ensure the alignment of the assessment with the standards.

Although there are five perspectives that shape the curriculum purposes and contents, two are in common use by educational psychologists and are still receiving a lot of debate between their proponents. These are the behavioral and the constructivist perspectives. Both agree that the purpose of education is to promote learning. However, they differ in their views about what learning is, how it takes place, how the teacher facilitates learning, how to formulate objectives that express the intentions for learning outcomes, and how the curriculum will be planned according to these objectives.

The basic concept in the Behavioral perspective is that; "learning is a change in behavior". According to Socket S (1976), the principles of the curriculum that follows this perspective are:

- A curriculum that consists of a set of stated objectives that are expressed in specific, observable and measurable terminal behaviors.
- The purpose of the instruction is to change the behavior. The change is from the entry behavior to the terminal one.
- Both the content taught and the methods used are means to the terminal behavior.

On the other hand, the constructive perspective focuses on the internal mental structures and processes, sometimes called schemata or cognitive operation.

The perspective proponents are interested in thinking, reasoning, decision-making and perception rather than behavior and performance. The constructivists believe that objectives must describe the changes in the students that are not directly observable.

These changes are described using schematic diagrams that are called concept maps, or a list of cognitive operations or concepts. In the latter, the objectives are also described as statements that start by an action verb, which describes levels of cognitive functions. Two models for the teaching learning process are derived from constructive perspective; conceptual change approach and cognitive apprenticeship. Both approaches focus attention on helping the students to think more effectively, and make sense of the world.

When we look carefully at the two perspectives; behavioral and constructive, one does not find fundamental discrepancy. The behavioral perspective is required for subject areas that deal with psychomotor skills. Here training becomes the main context of the curriculum; objectives must be strictly behavioral, instructions must focus on modeling, with opportunities for students to practice under supervision and receive constructive feedback until the teacher is confident that they can practice independently without making major mistakes. On the other hand, the constructive perspective dominates when the required competencies/ outcomes are concerned with development of cognitive abilities including problem solving, critical thinking and reasoning. In medicine, the graduate must master a lot of essential psychomotor skills as well as be able to build a network of illness patterns (scripts), analyze the patient's problem and identify its similarity to the scripts, synthesize, the diagnosis and plan the patient management. Obviously any curriculum in medical disciplines must consist of both behavioral and constructive aspects and the objectives must describe the both types of outcomes.

The pediatric curriculum should take into consideration the assumption that effective education offers a balance of theoretical and practical experiences that will allow students to develop the competencies necessary to enter a health care profession and to continue their professional development throughout their careers. The curriculum outlines the cognitive abilities that students will acquire and the practical skills that students will be able to perform after studying the designed course in a balanced way. Looking to the ILO's of the current curriculum, one can see clearly that there is an overlap

between behavioral and constructivist perspectives as the objectives were categorized into 3 main subdivisions; knowledge and understanding; clinical skills and intellectual skills & attitudes.

The cognitive apprenticeship model described by Resnick and Klopfer (1989) is important and needed for the following reasons:

- Students need to be confronted with real tasks (real patients or simulated ones), challenged with case problems to solve and, are requested to interpret radio-imaging and laboratory results.
- Students need to be offered opportunity to observe instructors or tutors demonstrating clinical skills they are expected to perform, and get feedback on their performance (be praised or corrected).
- Meanwhile, the students are expected to perform certain clinical and therapeutic skills properly according to checklists and to receive structured feedback from their teachers, which is the part of the behavioral perspective of the curriculum.

Lessons that a hidden curriculum teaches include lessons about sex roles, importance of being neat, orderly, and on time, the distinction between work and play, who has the right to make decisions for whom, and what kinds of knowledge are considered legitimate (Posner, 2000). Examples of such hidden curriculum in medical schools are connected to what students perceive during their faculty study from the common attitudes and behaviors of the professors and teaching staff. Believing that doctors know everything about human body functions and diseases, while people do not know, thus doctors give orders and people must obey; similarly, doctors education is higher and superior than the education of other members of the medical team, are among the lessons students commonly learn through the hidden curriculum in medical schools. Again, social inequity represents an important lesson students sometimes learn after passing through oral exams that depend largely on the opinion of the examiner and are influenced to a great deal, by personal relationships of the examiners with the students and their families.

The current curriculum cannot show such aspects as this requires also active observation of the teaching process and knowledge about the rules of

the school/department implementing the curriculum.

Critical theorists consider that one of the main disadvantages of the technical discussions about objectives, is that it diverts the attention away from the hegemonic effects likely to be exerted through the curriculum purposes. When curriculum objectives represent the educational intent of the institution board of administration that is planned for the group of students, then it might become an indirect means for controlling, at least, their study. This effect becomes a direct hegemonic role for the curriculum, if the dominating group (Institution board) is from a different social class, ethnic group, race or gender than the dominated group (students), enforced also by the authority of student assessment that the institution teachers have. However, this direct hegemonic role of the objectives will be clear if the objectives include racial, social or ethnic directives that might serve the interests of those in power.

The objectives of the curriculum of Pediatrics do not embody any of these directives. On the other hand, the objectives should stress more than the importance of serving the community as a whole, but, for better recognizing and effectively managing the prevailing health problems among rural as well as urban parts of the country equally. Diseases such as acute diarrhea, respiratory infections, and malnutrition, which are more prevalent in lower socio economic classes, are given more weight in the curriculum contents, more time for teaching, and greater percentage of assessment questions.

Organization means: to bring together separate elements into a whole that consists of interdependent and coordinated parts. If we apply this general definition to the curriculum, then curriculum organization would reflect the process of bringing together the elements of the curriculum (programs, levels, courses and subjects) into an integrated coordinated structure.

Curriculum organization includes 2 levels: macro and micro, and 2 dimensions; horizontal & vertical.

In its very specific meaning, curriculum organization at the micro level refers to the organization of a course or a unit, while at the macro level one refers to organization of courses to form a program. On the

other hand, dimensional organization refers to the organization of the curriculum elements along a time line. This includes organization of curriculum contents that are studied concurrently i.e. within a semester or an academic year, (horizontal organization), and the organization of contents taught following each other i.e. sequence of contents, (vertical organization). The levels and dimensions of organization are independent and thus we can organize the elements in either dimensions at a macro, or micro level.

If we examine the "core curriculum" of pediatrics from the organizational aspect, we must re-emphasize that this is a course curriculum of a discipline that is taught to 4th and 5th grade undergraduate medical students who must have studied in the previous years all basic biomedical sciences.

The curriculum should identify course prerequisites and list it under the title of: Foundation skills, which include clinical and therapeutic skills as well as professional conduct and attitudes that the students must master before they study the course of Pediatrics. The student is expected to acquire such skills from his/her previous courses in the preclinical and clinical phase. The current course curriculum does not even specify the type or titles of the courses the student must have before he/she starts the course of pediatrics.

Identification of the prerequisite courses is a form of vertical organization of the curriculum.

It is difficult to describe the horizontal organization of the pediatrics curriculum at a macro level as it is not mentioned within its document its relation to the courses concomitantly taught. However, in all of the Faculties of medicine, the pediatrics curriculum is taught concurrently with the junior level medicine curriculum. Yet, the organization of the concomitant topics in both course curricula - medicine and pediatrics, so that they complement each other e.g. concomitant teaching of nutritional disorders, cardiovascular diseases, infectious diseases etc., is lacking so far in most of these faculties' programs.

Depending upon the degree of horizontal and vertical organization and the configuration of the curriculum contents, we can recognize 4 types:

**1. Discrete:** where all the courses/ top-

ics within the course are independent; the student can begin his study at any segment and does not require any pre or co- requisite.

- 2. Linear (Vertical):** Each single concept and skill of the content must be mastered by the students before the next concept or skill is introduced. The students' practice the concept/skill repeatedly with the subsequent one, until all are mastered by the end of the course. This approach is based on the mastery-learning concept of Bloom (1971).
- 3. Hierarchical:** Multiple concepts and skills are taught together and all are necessary for learning the subsequent concepts and skills.
- 4. Spiral:** This organization is based on the cognitive developmental assumption that learners internalize concepts they learn in different modes (ways) at different ages and learning levels. Thus, important concepts and skills must be taught to learners repeatedly with increasing level of sophistication and abstraction, and not only once but forever.

Media structure refers to the organization of the instructional strategies (materials and methods of teaching) in relation to the other elements of the curriculum.

Parallel media organization implies the use of selected media for facilitating the learning of specific ILO's e.g.: Clinical practice in a simulated and real environment for development of clinical skills of history taking, physical examination etc.

Convergent organization entails the use of a variety of methods to help students acquire limited ILO's as students differ in their ability to learn from one medium. Thus, the acquisition of knowledge and conceptual skills is facilitated through a variety of methods including lectures, group discussions, case studies, assignments and students self-learning activities through essays and projects, as well as during clinical training with a real patient encountered.

Organizational principles state why the curriculum is organized in a particular way. These principles apply to both vertical and horizontal dimensions.

Organizational principles can be categorized into 4 common places (Schwab): the subject matter, the

learners and the learning process, the teachers and teaching process and the milieu of education. Most of the curricula are organized at the macro and even the micro level around the subject matter. One must always bear in mind that the process of curriculum organization at both macro and micro levels is a difficult one and that trial to organize according to more than one of the common places is much more difficult.

### **1. Subject Matter:**

Organization of the curriculum on the basis of the subject matter entails sequencing the curriculum according to the way the subject matter is organized. This follows one of 3 principles: world related, concept related and inquiry related principles. The world related principle arranges the curriculum according to the way the subject exists in the real world.

### **2. Learners & learning:**

Here, curriculum organization depends on the learners' interests, needs, abilities, previous experiences and developmental or conceptual level. These characteristics may be used as point of start of the curricular activities, a focus around which the curricular elements are organized or a basis of content order. An extreme form of learner based curriculum organization is the program curriculum in which the entire curriculum is centered on the students' needs and interests. This is planned cooperatively between the students and teachers. The subject matter is used as a means to solve the problems which were identified as the students needs rather than being the end by itself (goal).

### **3. Teachers and teaching:**

Although it might not be stated explicitly in the curriculum, many of the organizational decisions might be based on the teacher's characteristics and the tasks the teacher faces. Teacher's characteristics can influence the starting point, the focus or the emphasis of the course (curriculum). Meanwhile, teachers who are teaching large numbers of students against their will and in crowded places have to accomplish predefined tasks. In order to achieve the organizational goals, the teachers will apply pragmatic organizational principles that enable them to achieve the tasks within the constraints described.

#### 4. Milieu:

Can affect curriculum organization through 5 factors: social, economical, political, organizational and physical. Probably the most relevant of these factors in determining the pediatrics core curriculum organization are the organizational and the physical factors.

- The influence of the institutional organization here will be the effect of the department structure on organizing the curriculum elements. If the department organizes topics following the department organization into subspecialties, thus, teaching of each unit goes separately, this leads to compartmentalization of knowledge, and a discrete type of curriculum ensues.
- One of the important milieu of factors that influence organization is the physical facilities. This is probably the main factor that governs a lot of organizational activities in our situation. Owing to the limited physical facilities and with the large student numbers, the clinical training sites cannot accommodate the number of students. Instead of organizing the clerking activities and clinical training exclusively with real patients, some of these activities are substituted by theoretical teaching.
- Again, sequencing of clinical training in correlation with the relevant knowledge learned in lectures and group activities sometimes become difficult because of the effect of seasonal variation on disease incidence.

These are 2 concepts that describe the social organization of Knowledge. Stratification means the degree of the social value that is differentially given to the subject. According to the degree of stratification, selection and exclusion of curricular contents will be done. Stratification also defines the degree of distinction between the teacher on one hand and the parents and students on the other. According to this stratification, the subjects will be accorded different levels of status. Status will determine whether or not academic credit is assigned to the subject, whether the subject is a major or an elective one, and the time allocated for its study. One can see such type of organization in discipline based undergraduate medical programs in the stratification of basic biomedical sciences on one hand and clinical disciplines on the other hand.

The latter are stratified higher than the former. Accordingly, Professors of clinical sciences are much more difficult to be approached by the students and sometimes even by the faculty administration than the basic sciences' professors. Again, within the clinical sciences, medicine and surgery have long been stratified at a higher level than pediatrics, and community medicine. However, in the last decade, this stratification has been modified, based on the increasing social and political importance of the latter 2 subjects being the basis of community based medicine together with obstetrics and gynecology

**Tracking:** In multicultural communities, tracking in education means the provision of different types of curricula to learners of different ethnic or socio-economic background. The rationale is to direct minority and less privileged students to the low ability education with less academic and more vocational types of curricula.

The program offered in undergraduate medical education is one and the same for all students who are admitted to the faculties of medicine according to their degrees in the final high school examination, regardless of their ethnic or socio-economic status.

#### **Curriculum Organization Perspectives; Epistemological and Psychological assumptions:**

It is time to begin to unpack assumptions underlying pediatric curriculum's organization by examining 3 contrasting patterns, termed the "top-down", the "bottom-up", and the "project" approaches.

**The top-down Approach:** Simply stated, a top-down view is based on the assumption that the curriculum is organized around fundamental themes, concepts or principles, and from understanding of these concepts or themes, students can derive particular facts and applications. In other words this perspective is also termed the hypothetical deductive approach.

This epistemological basis of the approach was laid by Karl Popper (1959) and further modified by Schwab (1962, 1964), who identified 2 structures that form the body of knowledge of any discipline; the substantive and the syntactical. The substantive structures are formed by basic concepts or themes that from which more specific facts in

the discipline can be deduced. The syntactical structure of a discipline is what counts as evidence for a claim or the way scholars establish truth and validity.

The psychological principle of this approach assumes that when learners understand the fundamental concepts of the disciplines they can, at any age or level of learning, deduce other facts and concepts of the discipline through a process of inquiry similar to that adopted by the scholars of the discipline and following the same rules. Accordingly, the process of curriculum development must be dominated by the subject experts (scholars).

The content of the curriculum must be organized in a spiral configuration where the knowledge is studied by the students at increasing level of sophistication and abstraction with advancement of the students in the levels of education. Students play the major role in learning the applications of the discipline through the process of inquiry. While in the Bottom-up approach and in contrast with the hypothetical deductive assumptions, this approach is supported by the epistemological assumptions of David Hume (1975, 1976) and Gagne (1965, 1970), who believed that knowledge originates in experience, and that complex learning, even problem solving, is achieved by successively linking together previously learned simple behaviors. Educational psychologists assumptions are based on the way learners learn rather than the way knowledge is organized in the discipline (Gagne, Esumbul, and Bloom).

According to their assumptions, learning occurs through a hierarchy that starts with the most basic, simple skills which must be mastered, before the learning of the related higher order skills. Curriculum development requires the construction of carefully sequenced objectives where each objective builds on the prerequisite one.

This curriculum is called a behavioral one only if the objectives are carefully designed to describe a specific behavior, and the whole curriculum is organized around these objectives. Curriculum development requires the active participation of behavioral psychologists.

The project approach; encourages students to bring their interests,

psychological needs, and previous experience to active study i.e. student-directed experience. It is also called an experiential approach. The curriculum is organized around student's activities that are planned cooperatively between students and teachers and are based upon experiences in the real world particularly the social life of the community. The educational activities are thus interdisciplinary, since the projects approach social problems as wholes using information and skills from different disciplines. The epistemological foundations of this approach are laid out by Dewey (1916) including his elaboration of the scientific method and elevation of the social knowledge. Dewey elaborated the scientific method as a cycle of thought-action and reflection. The interdisciplinary project approach allows students to gain knowledge, skills and attitudes necessary to participate in a democratic society. It also enforces group and team-work and interaction between group members. The curriculum does not follow certain sequencing principles. Most important is the developmental organizing principle, in which the students are given increased responsibilities in their projects with progress in their activities. The contents are organized to allow such student growth through experiential activities by following a general guidance which entails the progression through increasingly complex type of knowledge, skills and attitudes as the students progress in their projects; a spiral type of configuration. The best example of project based (experiential) approach in medical education is seen in problem-based curricula.

An official curriculum is meaningless unless it is translated by teachers into an operational curriculum. To put life into it, the teacher must take many factors into account; physical, cultural, temporal, economic, organizational, political-legal, and personal. These factors either make or break a curriculum.

Implementation of curriculum in teaching must take realities into consideration. These realities of teaching include coping with five tasks; coverage, mastery, management, positive affect, and evaluation.

Teachers must cover certain topics, contents, skills, and objectives. The students must learn the material at least at some minimal level of mastery or depth. These two tasks present

a dilemma facing every teacher, the coverage/mastery dilemma. The teacher has to manage the classroom; to maintain some semblance of order in a crowded room full of very different students. To accomplish the latter task, teachers must develop at least a minimal degree of positive feeling on part of students toward the subject matter, the teacher, or the class. The teacher is also responsible for evaluating students to decide what aspects of curriculum are to count and to hold students accountable for.

Frame factors function as limitations or constraints on teaching, and thus on curriculum implementation. Meanwhile, the same frame factors might function as the resources that make teaching possible. Proximal frame factors act directly on interactions between teachers, subject matter and students, for example availability of textbooks and content knowledge of teachers, time availability, space and equipments. Distal or higher-order frames include those factors like budget size, laws and regulations, and demands for accountability. Those factors function as boundary conditions for proximal factors.

Regarding temporal requirements, Time is the most precious resource of teacher. Quantity and difficulty of content, and the audience expected to master it, all affect time necessary to teach curriculum. Time is the most influential factor in the content/mastery dilemma, a competition between coverage of topics (breadth) and going into the depth of the contents. In addition, temporal factors include time needed by teachers to prepare for teaching, to support, and to provide feedback to students (1).

There are no special scheduling requirements mentioned in the curriculum under analysis.

The physical space (built environment of classroom; lighting, aeration, class layout) in which teachers teach and the stuff (materials provided for teaching as mannequins, instruments, apparatuses, instructional materials) with which they teach, are the most obvious and tangible commodities. Skills laboratories that are required to coach students while practicing and enough number of classes that accommodate large number of students are physical constraints to implement the pediatrics curriculum. In some faculties, there are initiatives to construct pediatrics skills labs with

the help of some national projects. However, this is not achieved yet in all faculties that will or will be implementing the curriculum; a physical constraint that is hindering the implementation of an essential component of the curriculum. The increase in the number of students per clerkship rotation that was mandated by the extension of the time allotted to each rotation, is posing another physical constraint due to the relative inadequacy of class rooms and lecture halls that can accommodate this number. However, these physical constraints can be managed through departmental efforts to collect budget for the required physical extensions.

Regarding the political-legal requirements, correspondence with national tests, licensing and standards requirements, the range of possible classroom events is always circumscribed by prior decisions at higher governmental levels.

Since the faculties that will or will be implementing the core curriculum in pediatrics are governmental, the implementation of the curriculum is largely governed by the hierarchical system of administrative decisions and the relative lack of faculties and departmental autonomy in this system. Standards have much to say about the nature of the curriculum and work of teachers. As we need standards that lay emphasis on practical competencies and clinical reasoning skills the graduates must exhibit the ability to practice their profession. The curriculum should be in congruence with these standards, thus, its implementation would help the faculties to achieve the accreditation standards. However, the faculties are facing the challenge of limited economic resources in face of the physical requirements that are necessary to achieve these competencies, a constraint to the proper implementation of the curriculum. Unless faculties could find a source for funding them, the implementation of the curriculum according to the required standards might be impeded.

At the same time, the departments need to modify the student assessment methods they use, to be able to objectively evaluate the students' degree of achievement of these standards using objective standardized tools. This requires sincere efforts from the department staff to revise and adjust the assessment methods according to the standards. The expected resistance

to change from some of the faculty staff must be dealt with in a judicious, planned way.

Regarding organisational requirements and regardless of the previously mentioned political/authoritarian factors, it is the organizational unit, which in practice, significantly determines the extent to which a new curriculum will flourish or wither. As a subject (course) curriculum, the organizational unit for implementing the pediatrics core curriculum is the Faculties' Pediatrics Departments. Whether a factor is proximal (class size, ability groupings) or distal (school size) does not necessarily determine its impact as a constraint or resource for curriculum change. The main influence is exerted by the organizational unit itself (the departments and their members and administration) who can make the implementation possible through maximizing the use of the available resources, or on the other hand, create obstacles to prevent proper implementation of the curriculum through magnifying the deficiencies and preventing trials of adjustments. Accordingly, the relative inadequacy of physical places for teaching and training due to the larger number of students can be managed by the departments' members and administration through extending the time for teaching along the day if the staff are willing to do so. On the other hand, this inadequacy might become a big problem that prevents the proper implementation of the curriculum if the departments' staff and administration decide not to try to manage the situation with alternative solutions.

The costs and benefits change cannot be expressed only at the bottom line expenditure and income generated or saved, but it must extend to include such factors as: staff and student morale, student learning; time and effort needed for teaching, learning and administration, community and parent relations, and the "ripple effect" of the change. A change in staff or student morale might be considered as a cost if morale appears to get worse or as a benefit if it appears to improve.

The teachers play a highly significant role in determining the success and direction of curriculum change. Although in the analysed curriculum, teachers do not need much more knowledge compared to what they had before; some of their teaching and training skills however, may still need to be changed and developed.

These development programs can greatly help to increase teachers' skills and knowledge, but are less likely to alter their attitudes fundamentally. Teachers' attitude, in our belief, is a cornerstone of successful implementation of the curriculum, especially their willingness to change. Unless the process of change is preceded by, and accompanied with efforts to motivate the faculty staff to participate actively and positively in implementing the curriculum, there will be great difficulty towards achievement of curricular goals. Students are the second cornerstone on which successful implementation of the curriculum depends. The extent to which students possess academic skills, computer skills, interpersonal skills and the prerequisite skills and knowledge, together with motivation are essential for successful implementation of the curriculum.

The curriculum depends on two different sets of cultural factors; the culture within the school (faculty) and the culture of the community in which the faculty exists. A faculty itself represents a culture that is, a set of accepted beliefs and norms governing people's conduct. One of the potential problems, which might face the implementation of the innovative core curriculum of pediatrics, is the large number of faculty professors who will implement it within each faculty. Inevitably, though coming from nearly one culture, some of their values concerning university undergraduate education are different, and are conflicting with the curriculum in some areas. The curriculum embodies the main task of offering primary health care services to the vast majority of children in the community aiming at decreasing the morbidity and mortality in this vulnerable group. To achieve this goal, the curriculum lays much less emphasis on covering the depth of other diseases that are prevalent in developed communities as well as ignoring descriptions of higher technological approaches to rare diseases. The concept is to equip the graduates with the fundamental knowledge and skills to serve their primary functions while allowing the graduate to upgrade his/her competencies with self learning and post graduate studies according to his/her personal directives.

The conflicting values come from the belief of some professors that the duty of academic schools, include mainly uncovering the depth of the subject matter

to the students and mandating them to learn the recent advances in the field.

On the other hand, and despite of the great efforts required to design and develop a curriculum, what determines the success of a curriculum is how it is implemented. The perspective that influences curriculum development extends to affect its way of implementation. Out of the five theoretical perspectives of the curriculum, two main perspectives appear to exert the greatest influence; the behavioral and the experiential. In the process of implementation, these two perspectives are seen as two approaches to curriculum change; the Research, Development and diffusion, (RD&D) and the Collaborative approach. The RD&D approach manifests behavioral assumptions and features. It is based on the assumptions that technologies like behavioral objectives, competency based teaching and programmed instructions together with educational research would improve teaching practices.

Accordingly, the process of curriculum change would go in a linear manner starting with; Research that establishes the principles of teaching and learning, Development which applies the results of the research in the production of materials to be used in the process of teaching & learning, Diffusion of these materials for use by teachers and learners, and adoption of the material by teachers in the actual process of curriculum implementation. According to the RD&D approach, the knowledge and skills necessary for implementing the curriculum are explicit tacit knowledge that can be developed in the teachers through training, demonstration by experts, and reading self learning manuals, all prepared by experts who are in this role, behavioral scientists. This is similar to the behavioral approach to curriculum content development, which depends on subject experts.

The focus of development efforts in the RD&D approach is the production of such material to be used by the teacher for his/her self-development as well as for use in teaching the curriculum to the students. The process of implementation is directed by the objectives that are strictly behavioral, thus the assessment of success depends upon psychometric tests that measure the behavioral outcomes of the curriculum implementation.

In contrast to the RD&D, the collaborative approach considers that teachers are active shapers of the curriculum change to meet the local needs, that, although some skills needed to be implemented the curriculum can be specified and learned, and much of skills and knowledge of good teaching is tacit knowledge of the teaching craft. The focus of development effort is the professional growth of the teacher through reading, observing other teachers and discussing ideas. The curriculum change is directed by teacher's beliefs. The process of curriculum evaluation depends on class room observations, semi structured interviews and examination of student class work; ethnographic methods.

Teaching in class rooms, as well as clinical training, did not follow any systematic schemes. Rather, it was dependant totally on professors' views. The number of students is increasing, however, the number of teaching staff is also large and consequently the views are diverse and a minimum degree of standardization is lacking. According to these and other relevant data, there emerged a great need to achieve an acceptable degree of standardization especially for training of students in essential clinical skills, as well as for their assessment during examination.

Although these activities represent one of the disadvantages of the behavioral approach; pushing teachers to adopt rather than adapt the curriculum, in our view, this is required to a certain degree. To balance this, we find in favour of the introduction of the curriculum document.

The core curriculum is supposed to comprise approximately 80% of the department's entire curriculum. Are self assessment, feed back from students, peer review, and analysis of student examination results undertaken.

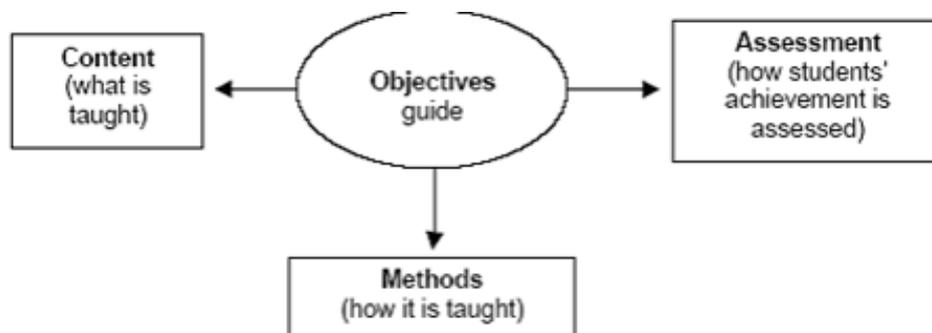
### Conclusion:

The current pediatrics core curriculum (Iraqi medical colleges in general), being a course curriculum, is organized at the micro level. The remaining 20% is to be designed and implemented by the departments themselves, including the allocation of more time to specific topics and/or the addition of new topics to the curriculum. The core curriculum is intended as a guide. Using it and adding to it, departments will develop their complete curriculum to meet their departmental, faculty, local, and /or regional needs. This statement clearly demonstrates that the previous national curriculum committee, though adopting minor rules of the behavioral perspective in designing the curriculum and of the characteristics of the RD&D approach in implementation, yet still, there are major disadvantages of this approach; differences between teachers and developers goals and expectations, and cultural blind spots. That is why we should try to ensure a reasonable degree of freedom and creativity for teachers during the process of implementation, and an approach that implies some of the characteristics of a collaborative one.

The core curriculum should consider monitoring of teaching as a process that is continual, cyclical, including collecting information about teaching, and reviewing this information to identify changes

needed. In order for the curriculum to be effective, there should be an open organizational culture that encourages a commitment to student learning, self-awareness, constructive feedback, reflection and professional development. In addition, monitoring requires a clear understanding of the course goals and objectives, and the responsibilities of different teachers and administrators. The common methods recommended by the innovative curriculum for monitoring as discrete units (horizontal dimension), the topics within each unit are organized in a hierarchical pattern (vertical dimension).

The instruction methods must be used both in parallel as well as convergent with the organization. The media use is not very clear in the document. Printed materials which were mentioned include only lecture notes, no video illustration and simulations, and there is no mention of computer software programs and internet web sites as learning resources. The curriculum contents are organized mostly according to the subject matter organization in the real world. The inadequacy of some physical facilities in the faculties, sometimes leads to a shift from organizing clinical training with real patients to theoretical teaching. The status of the subject at present is not high and the curriculum is not given enough time for teaching and reasonable weight in student assessment. There is no evidence of tracking in the curriculum. The curriculum organization from the epistemological and psychological views, follows the bottom-up (behavioral) approach, with more attention toward carefully designed objectives needed; still they are arranged in a hierarchical fashion.



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# TEHRAN HOSPITALS MIDWIVES' KNOWLEDGE ABOUT PROCEEDING TRIAL FOR DISCIPLINARY VIOLATIONS AND FORUM OF TRIAL FOR OCCUPATIONAL CRIMES, YEAR 2003-2004

## ABSTRACT

**Background:** Midwives who had been employed in hospitals have an important role in reproductive health and must be aware of the legal aspects of their occupation in order to prevent any problem in the course of their professional life.

**Aims:** To evaluate the knowledge of midwives working in Tehran government hospitals about:

- 1) the proceeding trial for disciplinary violations,
- 2) forum of trial for occupational crimes.

**Methodology:** This is a cross sectional study. We randomly selected 128 hospital midwives to fill in the questionnaire. The descriptive and ANOVA, T student, Toki tests were used.

**Results:** The total average of samples' knowledge in the fields of proceeding trial for different disciplinary violations (37.57+ 20.92) and forum of trial for occupational crimes (38.56+ - 22.06) was weak. Referring to the proceeding trial for different disciplinary violations, there was a correlation between years of working and the questions in the fields of: care of delivery stage (P=0.002), and prescribing of drugs (P= 0.016). Also there was significant difference between the knowledge of samples with less than 5 years experience and 5-9 years experience (P < 0.05)(Toki test). There was significant difference between the knowledge of samples in the field of reproductive care, with having a second job in private midwifery office (P: 0.031).

**Conclusion and discussion:** It is recommended to revise the syllabus of the course "Midwifery Ethics and Regulations" in order to include topics discussed in this study and enhance the level of medico-legal knowledge of the midwives. In this study we selected our study group from hospitals in Tehran city. It is better to carry out the same study with the midwives' work in other areas in Tehran and other cities as well, and compare the results.

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**Key words:** Proceeding trial for disciplinary violations, Forum of trial for occupational crime, Malpractice, Midwife.

## Introduction:

As health care rapidly evolves medico legal issues play an increasingly important role.

1. The potential for errors is great in a complicated endeavour such as medicine and in complex settings such as hospitals.
2. Since the societies information about law and ethics has increased many institutions support patients and help them recognize their rights.
3. The incidence of complaints by clients is increasing.
4. Being accused and going to the court is a big crisis and can cause distress, depression and physical ailment for the medical groups.
5. There are different organizations to look into malpractice cases, and all Medical groups should know these organizations to save time.
6. In Iran despite the fact that the Ministry of Health and Medical education and Cure has paid much attention to Medical ethics and law, there is very little research in this field. Issues involving human reproduction have many interfaces between medicine and law.
7. As basic coordinators between families and health centers, midwives have an important role in the reproductive health of the community. Especially midwives who are employed in hospitals where they have a big responsibility. They must be aware of the legal aspects of their occupation in order to prevent any problem in the course of their professional life. Therefore being familiar with the organizations and systems, which clients can take their complaints to, will prevent malpractice, and waste of time,
8. Midwives need to get to know their rights and related punishment. Najafie Abarandie emphasises the effect of knowledge in the field of proceeding trial for disciplinary violations and forum of trial for occupational crime, as they can prevent malpractice.
9. A study which assessed the knowledge of 400 nurses employed in Mashed Medical Sciences University hospitals in year 1998 showed that only 1% of the samples had high knowledge in the above mentioned subjects and unfortunately 43.5% of samples' knowledge was weak and very weak.

10. According to the above mentioned facts it seems that there should be a survey with the aim of assessing the knowledge of midwives who work in Tehran public hospitals about proceeding trial for disciplinary violations and forum of trial for occupational crime.

### Methodology:

This is a cross sectional study. In Iran, Ministry of health, Medical education and cure have Medical Sciences Universities in many big cities and each of these universities has some teaching and non-teaching public hospitals. In Tehran, there are three big Medical Science Universities (Tehran, Iran and Shahid Beheshtie University of Medical Sciences). Each of these universities covers 10-14 hospitals in which midwives offer their services. There were 251 employed hospital midwives. In this study we used multistage methods for choosing the samples during year 2003. Observing all ethical points finally 128 samples filled out the questionnaires. The questionnaires were valid and reliable and consisted of two main parts. Part one was personal characteristics and part two contained questions in the field of proceeding trial for disciplinary violations and forum of trial for occupational crimes. 24% of correct answers was named very weak, 24-49% weak, 50-74% medium, and 75%-100% was good. No one in the samples' family had law related professional education. We didn't include midwives with a PHD degree; M.Sc nurse midwives and midwives with less than two years training courses. The descriptive statistics and ANOVA, T student, Toki test were used. Final data were put in 44 tables and then analyzed in year 2004.

### Results:

The results of the study showed that the mean knowledge of the employed midwives was weak about proceeding trial for different disciplinary violations and only 2.2% of the sample had a good knowledge (Total average= 37.57+ - 20.92). It was weakest in the field of delivery stage care (31.78+ - 22.57) and midwifery ethics (26.55+ - 26.46). There was no significant difference knowledge of M. Sc midwives and B. Sc midwives.

Using ANOVA the following results were obtained. There was correlation between averages of samples' knowledge with various job experience, in the field of delivery stage care (P=0.002) and prescribing drug rules. (P=0.016) Also there was significant difference between the knowledge of samples with less than 5 years experience and 5-9 years experience (P < 0.05)(Toki test was used). The knowledge of 5 years experience was lowest and knowledge of 5-9 years was highest. There was significant difference between samples' knowledge in relation to having a second job in the private office with the questions in the field of reproductive age care (P=0.031). The knowledge of the group which had a second job in the private office was weaker. Referring to the knowledge of midwives in the field of forum of trial for occupational crimes the average samples' knowledge was weak and only 1.8% of the sample had a good knowledge (Total average= 38.56+ - 22.06). It was weakest in the field of having a second job in the private office (19.76+ - 17.48). There was no significant difference in knowledge of M. Sc midwives and B. Sc midwives. There was not any correlation in the field forum of trial for occupational crimes.

### Conclusion & discussion:

According to the Survey questions we found only 2.2% of the sample had a good knowledge of the proceeding trial for different disciplinary violations respectively. Pakdel and Madarshahian's results during their same survey in the field of nurses' knowledge were close to our results. (10) Jameison found lack of Medical students' Medico legal knowledge as well. (11) In this study we only found some correlations between averages of samples' knowledge in the field of proceeding trial for different disciplinary violations. There were correlations with various job experiences, in the field of delivery stage care and prescribing drug rules. Also there was significant difference between the knowledge of samples with less than 5 years experience and 5-9 years experience, (the highest one) and between samples' knowledge in relation to having second job in a private office, with the questions in the field of reproductive age care.

Based on the findings of this study it is recommended to revise the syllabus of "Midwifery History, Ethics and Regulations" subjects to increase the level of medico-legal knowledge of the midwives. Also noting that the knowledge of M. Sc midwives, in the mentioned field was not higher than B. Sc, we suggest that at least 18 hours (one unit) in the above mentioned field to be added to their curriculum. It is also suggested that, the subjects of "rules' and regulations' " be instructed to the employees repeatedly. We didn't include midwives with a PHD degree; or M. Sc nurse midwives and midwives with less than two years training course in this study because there were not enough samples for comparing. We selected our study group from university public hospitals in Tehran; we suggest that similar study be done in other fields in Tehran and other cities for comparing of the results.

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