The Effect of an Educational Experimental Programme on Psychiatric Nurses' Knowledge and Attitudes towards Elderly

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Abstract:
This study was conducted with the aims of identifying knowledge and attitudes **of** psychiatric nurses towards elderly, and evaluating the effects of an educational experiential programme on their knowledge **and** attitudes. The sample consisted of 34 psychiatric nurses working at two psychiatric hospitals. They were recruited and participated in an educational experiential game called ''Into Aging". Through this simulation game, participants experienced the problems, losses, sensory deficits and discrimination that often accompany aging. Facts on Aging Quiz (FAQ) was used to measure knowledge about aging. Kogan's Attitude Toward old people scale was used to measure nurses' attitudes.
This tool was subjected to translation and back translation on techniques and were used twice, before and after participation in the game. The results have indicated a significant improvement in nurses' knowledge and attitudes toward elderly in post-test relative to p~-test. The study recommended further research in the area of exploring the attitudes of **nurses** working in long-term care facilities toward the **aged,** and how these attitudes affect the quality of nursing **care** and how education can be useful **in** altering attitudes **and** improving care. In addition, development of proper educational programs to improve nurses' knowledge and awareness about aging is recommended.

Introduction

Aging is a physiologic process, yet it increases the probability of health problems. As a first step to deal with the aged problems is to have enough knowledge about their health status physically, psychologically and socially to get a baseline data about them to provide effective care to elderly (Waters, 1993).

Nurses are the largest group of professional caregivers for the elderly. To be able to provide quality care to the aged, they should understand the aging process, common problems of aging, functional abilities associated with aging, and health maintenance and promotion. In addition, nurses need to be aware of **their** own attitudes about aging and how these attitudes affect nursing care and caring (Small, 1993).

There is notable consensus in the literature that attitude and quality of care are directly related (Wells, 1980, Fielding, 1986, Armstrong, Esther et al., 1989, Marte, 1991). Glass and Knott **(1982)** have proposed that there are three primary ways in which attitudes can be changed, through discussion with peers, through direct experience **with** attitude objects and through increased information or knowledge.

Simulation games and other experiential learning activities can be tailored to provide that personal experience. Well-designed activities can facilitate changes in attitude and behavior, and an increase in tolerance, approval, or empathy for the real-life. The player takes the roles of **the** real life in the game. Participants will be helped to integrate concepts **into** their

practice as well as formulate their value judgements (Ellinton, Addinall, and Percival 1981). Thus, nurses as caregivers are more likely to provide effective care if they are knowledgeable about aging and have positive attitudes towards the elderly. Though in recent years, there has been increasing attention devoted to the probiems of elderly and to the society's negative attitude towards old people. there are only few published studies of nurses attitudes toward elderly (Thomson, 1991) and non of these are Egyptian.

Therefore, it seemed important to clarify this problem area and to improve nurses' knowledge and attitudes toward elderly.

Aim of the Study

The aim of the study was to :

1- identify psychiatric nurses' knowledge and attitudes toward elderly, and

2-evaluate the impact of an educational experiential game called "Into Aging" on psychiatric nurses knowledge and attitudes toward elderly. The underlying research hypothesis is that participation in an educational experiential programme will improve psychiatric nurses' knowledge and attitudes toward elderly.

Material and Methods:

In this study, a quasi-experimental design to test the effectiveness of the experiential game, and to assess its outcomes was utilized.

Sample :

A sample of convenience of **34** psychiatric nurses working at two private psychiatric hospitals (Behman Psychiatric Hospital and El Nil Sanatorium of Mental Health) participated in the program. Purpose of the study, the game, and all about answering the questionnaire were discussed with the subjects before participating in the research.

Instruments :

1- The facts on Aging Quiz (FAQ), was used to measure knowledge about aging. It was designed by Plamore (1981) to cover basic physical, mental and social factors involved in aging. It is easily administered and easily scored, as true, false and do not know. It consists of **3** parts with **44** items. In the first part, **13**-items deal with physical changes of aging process. The second part contain 15-items about social influences due to aging process. The third part includes 16-items of mental changes expected during aging.

2- The Kogan's Attitude Toward Old people Scale (1961) was used to measure attitudes of psychiatric nurses toward old people. The scale seeks to assess how individual respondents feel about the elderly on such issues as their intellectual capacity, dependence, personality living arrangements, personal appearance, and influence on business and industry. Likewise, items that measure discomfort or tension in the presence of old people are also included in the scale.(Taylor and Harned, 1978).

The Kogan's Scale is a likert type scale consisting of 16 matched pairs of positive and negative statements about old people. Reactions in the statements are obtained on a 6-point likert format that ranges from "strongly agree" to "Strongly disagree".

The two instruments used in the study were double translated from English to Arabic and back to English.

Two additional translators were consulted (represented Arabic culture) to correct discrepancies between the back translated and the original English versions and to revise the Arabic version. The tools were assessed for cultural relevance and face validity by a group of experts.

Simulation Game: (IntoAging)

The object of the game is to remain as independent as possible and to retain personal identity despite the odds. The playing area consists of four tables, a space for the income grid, and an area designed as the cemetery.

Participants go to the Identity table to choose the identity of an elderly person, which they try to retain during the game. Identity consists of a name tag, an age over 65, a residence, three favorite possessions, an occupation symbol, chips symbolizing income, and chips symbolizing self-esteem. Players are asked to initiate relationships with each other based on their new identities. By rolling dice & drawing cards that represent various life events, the participants have experiences that force them from the area of "Independent lifestyle", the first table, to "Semidependent Lifestyle", the second table, to totally "Dependent Lifestyle", the third table.

The game requires about one & half hour to complete. Five to twenty players may play at one time and four more people are needed to run the game, (one person serves as the game director and the other three serve as facilitators at different tables). Directions are clearly written for facilitators, one for each aspect of the game. Several reusable props are necessary. These props include objects that represent various professions, and occupations, for example, a ruler representing a teacher, a thermometer for a nurse, or a tongue blade for a physician. Poker chips serve as money. Labels may be placed on players foreheads to reinforce common stereotypes attributed to the elderly. Sensory loss props such as ear plugs & taped eyeglasses are applied along with slings and splints to emphasize increasing dependency.

Throughout the game, players are deprived of their residence, possessions, income, & identity. The game overall directors respond to the players in a manner that reflects some of society's negative attitudes toward the elderly.

Debriefing Period

A discussion period immediately following the game should be planned by the game overall director. Participants are encouraged to talk about the degree of loss as they experienced during the game, to express their feelings & generate alternatives for influencing change.

3-Data Collection Procedure

Administrative arrangements were done and permission was taken from the directors of the hospitals to implement the study.

4-The intervention

The intervention consisted of four steps. First, the purpose of the study was explained to the nurses in their work places. They were reassured about confidentiality and anonymity, and the pre-tests were administered (Facts on Aging Quiz and Kogan's Attitude Toward Old People Scale).

The nurses were then introduced to the specific details of the game each in her work place followed by their participation in the total game.

The mind step was a short debriefing period where the researchers led the nurses in a discussion of their feelings about the game experience. After the game was completed. The Fourth and last step consisted of administration of the post-tests (Facts on Aging Quiz and Kogan's Attitude Toward Old People Scale).

Data Analysis:

Descriptive statistics and frequency counts were used to examine nurses' responses to items on the instruments and to evaluate demographic data. Mean

scores calculated for each variable were used to determine the significant differences of means. Paired t-test was used to assess the differences between variables before and after the implementation of the experiential game and evaluate the effectiveness of the intervention. The threshold of significance was fixed at the 5% level.

Results

I- Social demography of nurses

Sociodemographic characteristics of nurses showed that the majority were in the age group between 20-30 years (41.18%), their experience ranged between 11-20 years (38.24%) and half of them had an older person at home.(Table 1).

II- Nurses' knowledge and attitude toward old people:

The **findings** of this study revealed that there was a statistically significant increase in the total mean scores of nurses' knowledge and attitudes after participation **in** the educational experiential game ($t = 15.75$, $P < 0.0001$, & $t = 9.88$, $P < 0.0001$ respectively) Table (2)

There was a statistically significant increase in nurses' knowledge regarding physical factors related to old people in post-test relative to pre-test ($t= 9.21$ at $p= 0.0001$).

They recognized old people as having chronic illnesses that limit their activity, their physical strength height, lung vital capacity & five senses tended to decline **in** old age **(Table** 3).

As regards nurses' knowledge about social **factors** related to old age, it was found that there was a highly statistical significant increase in the post-test scores relative to pre-test. ($t= 7.50$ at $p= 0.0001$) Table **(4).**The highest mean scores was found **in** the first 2 items i.e. the majority **of** old people **would** like to have some kind of work to do ($x= 0.76$ S.D $\pm$ 0.43 in pre-test, and $x= 0.79$, S.D $\pm$ 0.41 in post-test), the aged are the most law abiding of all adult age groups ($x= 0.76$, S.D $\pm$ 0.43 in pre-test, and $x= 0.74$, S.D $\pm$ 0.45 in post-test.)

On the other hand, a highly significant increase in nurses' knowledge was found in their responses regarding the following 2 items, participation in voluntary organizations tends to decline in old age and the majority of old people are socially isolated. ($X=0.32$, S.D $\pm$ 0.47 in pre-test relative to $X=0.74$, S.D $\pm$ 0.45 in post-test.

In relation to mental factors, (table 5) it was found that nurses' knowledge was improved significantly after the experiential programme ($t=10.75$ at $p<0.0001$). They perceived that it is almost impossible for old people to learn new things ($X=0.41$, S.D $\pm$ 0.50 in pre-test $X=0.91$, S.D $\pm$ 0.29 in post-test), the majority of them are **seldom** bored ($X=0.21$, S.D $\pm$ 0.41 in pre-test, $X=0.71$, S.D $\pm$ 0.46 in post-test), old people tend to become more religious as they age ($X=0.71$, S.D $\pm$ 0.46 in pre-test, $X=0.97$, S.D $\pm$ 0.17 **in** post-test), and the majority of old people are seldom irritated or angry ($X=0.47$, S.D $\pm$ 0.51 in pre-test, and $X=0.62$, S.D $\pm$ 0.49 in post-test).

The effect of an educational experiential programme on nurses' attitude toward old people was evaluated **and** the difference was highly statistically significantly ($t=9.88$ at $p<0.0001$) (Table 6).

The findings of this study revealed that the majority of nurses described old people as being capable of new adjustments, grow wiser with the coming of old age, cheerful, agreeable and good humored, not different from any body else, clean & neat in their appearance, prefer to continue working as long as they can and they are very different from one another.

Table (1)
Percent distribution of nurses, age, years of experience and having an older person at home.

Item	No	%
1- Age Group		
20-30	14	41.18
31-40	11	32.35
41-50	9	26.47
2- Years of Experience		
1-10	12	35.29
11-20	13	38.24
21-30	9	26.47
3-Having an older person at home yes	17	50
No	17	50

Table (2)
Mean scores of total knowledge and attitudes of nurses, responses in pre-test and post -test.

Item	Pre-test		Post-test		t	p
	X	S.D	X	S.D		
Knowledge						
Physical	6.26	1.40	9.32	1.17	9.21	0.0001
Social	5.68	1.89	9.06	2.21	7.5	0.0001
Mental	6.88	1.34	10.18	1.75	10.75	0.0001
Total	18.82	2.84	28.56	2.9	15.75	0.0001
Attitude	17.65	3.59	23.71	3.41	9.88	0.001

Table (3)
Mean scores of total knowledge and attitudes of nurses, responses to Palmore's facts on ageing quiz as regards physical factors in pre-test and

Physical Factors	Pre-test		Post-test	
	X	S.D	X	S.D
1- More older persons have chronic illness that limit their activity than do younger persons.	0.94	0.24	1.0	0.0
2- Physical strength tends to decline in old age.	0.71	0.46	0.82	0.39
3- Older persons have more acute illness than do younger persons.	0.65	0.49	0.79	0.41
4- **A** person's height tends to decline in old age.	0.59	*0.50*	0.88	0.33
5- Lung vital capacity tends to decline in old age.	0.56	0.50	1.0	0.0
6- The five senses tend to weaken in old age.	0.53	0.51	0.74	0.45
7- Over three-fourths of the aged are healthy enough to carry out their normal activities.	0.50	0.51	0.76	0.43
8- Older workers usually cannot work as effectively as younger workers.	*0.50*	0.51	0.41	*3.50*
9- Most old people have interest in/ or capacity for sexual relations.	0.39	0.49	0.82	0.39
10- The proportion widowed among the aged is decreasing.	0.32	0.47	0.53	0.51
11- Aged drivers have fewer accidents than those under 65.	0.21	0.41	0.76	0.43
12- Older persons have more injuries in the home than younger persons.	0.18	0.39	0.35	0.49
senile (have defective memory, disoriented, or demented).	*0.02*	0.17	0.09	0.29

Table (4)
Mean scores of nurses, responses to Palmore's facts on ageing quiz as regards social factors in pre-test and post -test.

Physical Factors	Pre-test		Post-test	
	X	S.D	X	S.D
1- The majority of old people would like to have some kind of work to do.	0.76	0.43	0.79	0.41
2- The aged are the most law abiding of all age groups.	0.76	0.43	0.74	0.45
3- Pensions benefits automatically with inflation.	0.62	0.49	0.79	0.41
4- The rate of proverty among aged rurals is about three times as high as among aged urbans.	0.53	0.51	0.79	0.41
5- There are equal numbers of widows /widowers among the aged.	0.41	*0.50*	0.59	0.50
6- The health and economic status of old people will be about the same or worse in the future.	0.41	*0.50*	0.26	0.45
7-The majority of old people live alone.	0.38	0.49	0.32	0.47
8- Participation in voluntory organizations (churches and mosques) tends to decline among the aged.	0.32	0.47	0.79	0.41
9-The majority of old people are socially isolated.	0.32	0.47	0.74	0.45
10- The aged have higher rates of criminal victimizations than younger persons.	0.32	0.47	0.56	0.50
11- The aged have higher rates of poverty than the rest of population	0.29	0.46	0.88	0.33
12- The proportion of rurals among the aged is growing.	0.18	0.39	0.35	0.49
13- The majority of old people have low incomes compared with younger people.	0.12	0.33	0.65	0.50
14- At least one-tenth of the aged are living in long stay institutions.	0.09	0.29	0.18	0.39
15- Over 25% of the population are now aged 65 or over.	0	0	0.50	0.51

Table (5)
Mean scores of nurses, responses to Palmore's facts on ageing quiz as regards mental factors in pre-test and post -test.

Physical Factors	Pre-test		Post-test	
	X	S.D	X	S.D
1- Old people usually take longerto learn something new.	0.79	0.41	0.79	0.41
2- Older workers have fewer accidents than younger workers.	0.79	0.41	0.47	0.51
3- The aged are more fearful of ceime than younger persons.	0.74	0.45	0.82	0.39
4- Old people tend to become more religious as they age.	0.71	0.46	0.97	0.17
5- Older people tend to react slower than younger people.	0.62	0.49	0.71	0.46
6- The majority of old people are seldom, irritated or angry.	0.47	0.51	0.62	0.49
7-Older workers have less absenteeism than do younger workers.	0.44	0.50	0.71	6.46
8- The majority of old people feel miserablemost of the time.	0.44	0.50	0.41	0.50
9-Old people tend to be pretty much alike.	0.44	0.50	0.68	0.47
10- It is almost impossible for old people feel miserable most of time..	0.41	0.50	0.91	0.29
11- The majority of medical practitioners tend to give low priority to the aged.	0.26	0.45	0.65	0.49
12- The majority of old peoole are unable to adapt to change.	0.21	0.41	0.38	0.49
13- The majority of old people are seldom bored.	0.21	0.41	0.71	0.46
14-.Older persons who reduce their activity tend to be happier than those who do not.	0.18	0.39	0.59	0.50
15- More of the agedvote than any other age group.	0.15	0.36	0.35	0.49
16- The majority *of* parents have serious problems adjusting to their " empty nest".	0.03	0.17	0.41	0.50

Table (6)
Mean scores of nurses, responses to Palmore's facts on ttitudes towar-dold people scale in pre-test and post -test.

Items	Pre-test		Post-test	
	X	S.D	X	S.D
1- One seldom hears old people complaining about the behaviour of the younger generation.	1.53	0.56	1.03	0.76
2- Most old people tend to keep to themselves and give advice only when asked.	0.88	0.73	0.65	0.49
3- Most old people are capable of new adjustment.	1.09	0.67	0.53	0.56
4- Most old people need no more love and ressurance than any one else.	1.53	0.71	0.82	0.58
5- It would be better if old people lived in resdential units that also housed younger people.	1.38	0.85	1.5	0.66
6- People grow wiser with the com-ing of old age.	1.35	0.81	1.56	0.79
7-You can count on finding a nice residential neigjerhood when	0.91	0.75	1.32	0.81
8- Most old people are cheer-ful,agreeable and good humored.	1.91	0.29	1.97	0.17
9-Most old people are not different from any body else.	0.74	0.57	1.24	0.61
10- Most old people are clean & neat in their appearance.	1.62	0.60	1.71	0.46
11- They prefer to continue work-ing as long **as** they can rather than be dependant on any body.	0.94	0.78	1.41	0.50
12- Most old people are very relax-ing to be with.	1.32	0.91	1.91	0.29
13- most old people are generally becounted on to maintain a clean at-tractive home.	0.74	0.93	1.09	0.79
14- One of the most interesting qualities of old people is heir past experiances.	0.53	0.83	1.24	0.65
15- Old people havethe same faults as any body else.	1.09	0.62	1.68	0.48
16- It is evident that the most old people arevery different from one another.	0 88	0.59	1.06	0.24

Discussion

The expected growth of the population over 65 signals an expanding nursing role and opportunity to work with older people. Nurses frequently provide care to elderly and need to be aware of health concern of the elderly, the physiological changes of aging, and community resources

In Egypt, the increase in life expectancy is associated with an increased number of the aged from nearly one million people in the 1937 to more than 3 millions in the 1980. Among the sick, the elderly represented a greater percentage, around 15-20%. (Fekry, 1976, McGuire, 1993, Rosenburgh, 1993).

Nurses hold views toward the elderly that are congruent with those prevailing in society at large. Therefore, understanding nurses' knowledge and attitudes regarding the elderly is an important step in planning and implementing educational and career counseling programs that will cultivate interest and helps tomorrow's health care providers to meet the needs of this growing population cohort.

"Into Aging" is a simulation game developed by Hoffman and Reif (1984). It is intended to dramatize stereotypical attitudes and beliefs about the elderly. Participants experience the problems, losses, sensory deficits, and discrimination that often accompany aging. Plamore suggested several uses for the quiz, including; (1) Stimulation of group discussions, (2) measurement and comparison of different group's levels of information on aging, and (3) identification of the most frequently held misconceptions about aging.

This study demonstrated that psychiatric nurses exhibited a positive measured attitudinal disposition toward elderly after the program and this can be explained by their feelings and reactions to various losses experienced during playing the game. In the debriefing period, immediately following the game they were encouraged to talk about their feelings and reactions aroused from their exposure to these losses, as it was scary and painful to lose income, identity, autonomy oven residence, or sensory losses. So they felt helpless and incompetent and choose suicide as an option as some of them went really to the cemetery area.

The Kogan's Attitudes Toward Old People Scale was selected as a measurement of attitude toward elderly because of it's specificity in this area, its ease in scoring, and the little time involved for both respondents and researchers.

Results from this study indicate that participation in an educational experiential programme was found to have a positive effect on knowledge and attitudes of psychiatric nurses. Findings revealed that there was improvement in their knowledge and attitudes in post-test (table 2,3,4,5,6).

These findings were supported by authors such as Glass and Knott, (1982) Kazelskis, Jane and John (1986) and Castilla, et al., (1993) who emphasized that educational interventions may not only improve knowledge about elderly, but also improve attitudes toward them. Films, role playing, games guided fantasy and group discussions were identified as some of the most frequently used experiential methods.

Similarly, Smith, Jepson and Perloff (1986) found nearly the same result of the proposed study and concluded that positive attitude to the aged was related to nurses' knowledge of aging. As we noted in table 2,3,4 and 5 psychiatric nurses were knowledgeable about aging.

Conclusions and Recommendations

Nurses with a positive attitudes toward the elderly are required to provide pre-

ventive, therapeutic and rehabilitative nursing care to elderly. Results of this study suggest the need for assessing the attitudes toward the aged of nursing personnel in long-term care facilities As a profession, nursing must continue to explore the attitudes of nursing personnel toward the aged, how these attitudes affect the quality of nursing care and how education can be useful in altering attitudes and improving care. Test specific educational strategies designed to decrease negative bias formation concerning the aged. Investigations should be undertaken to explore those factors that may influence nurses' decision to work with elderly. The current game could be a valuable tool in improving nurses' knowledge and attitudes toward elderly.

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تأثير برنامج تجريبى تعليمى على المعرفة و الاتجاهات لدي الممرضات النفسيات نحو المسنين

تعد الممرضات من اكثر الفئات تعاملا مع المسنين و قد تتأثر قدرتهن على انجاز العمل بطريقة فعالة و ناجحة بمدى معرفتهن و اتجاهاتهن نحو المسنين.

لذلك تهدف هذه الدراسة الى تحديد مدي معرفة واتجاهات الممرضات النفسيات نحو المسنين و تقويم تأثير برنامج تجريبي تعليمى على معرفتهن و اتجاهاتهن تتكون العينة من ٣٤ ممرضة نفسية تعملن فى اثنين من المستشفيات النفسية في القاهرة (مستشفى بهمان بحلوان و مصحة النيل بالمعادى) و قد شاركن فى البرنامج التدريبي التعليمى الذى يتكون من لعبة يتم من خلالها تمثيل الاتجاهات و المعتقدات الشائعة نحو المسنين بالاضافة الى المشاكل الجسمانية و النفسية والاجتماعية التى تصاحب كبار السن و قد تم قياس مستوى المعرفة بأستخدام استبيان الذى يتكون من ٤٤ سؤالا عن المشاكل الجسمانية و العقلية و الاجتماعية المصاحبة لكبار السن و بالنسبة للاتجاهات تم قياسها نحو المسنين لكوجان و قد تم استخدام ادوات البحث مرتين قبل و بعد المشاركة فى البرنامج و اظهرت النتائج تحسنا ملحوظا لمعرفة و اتجاهات الممرضات نحو المسنين بعد البرنامج بدلالة احصائية كبيرة و يوصى البحث بتقييم اتجاهات الممرضات اللاتى يعملن فى مجال رعاية المسنين و دراسة تأثير الاتجاهات على جودة الرعاية التمريضية المقدمة لهم و كيف يمكن توظيف المعرفة لتحسين الاتجاهات و بالتالى تحسين الرعاية المقدمة للمسنين.