

Ethical attitude towards patients, its dimensions and associated factors in nurses working in Saudi Arabia

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ABSTRACT

Background: Ethical attitude comprises of altruism, empathy, holistic approach and respect for autonomy. There are a few researches on the ethical attitude towards patient care, its' dimensions and their determinants in nurses.

Methods: A sample of nurses (n=376) selected by simple random process and working in three cities of Saudi Arabia participated in this cross-sectional study. The Scale of Attitude towards the Patient (SAAtP), Likert scales for memory and attention complaints, and semi-structured questionnaire to record social, demographic and emotion related information were used.

Result: The mean of the SAAtP total score and its dimensions, i.e., altruism, empathy, holistic approach and respect for autonomy were above their mid-values, implying good level ethical attitude towards patients. Attitudes towards patient (SAAtP total score), and its dimensions score namely altruism, respect for autonomy, and empathy had a positive association with stress because of recent death, major accident or diagnosis with terminal disease of a family member or a close friend, and a recent report of marriage, and a negative association with memory related complaints. Holism was also positively associated with stress because of recent death, major accident or diagnosis with terminal disease of a family member or a close friend.

Conclusion: Nurses attitude towards patients, and its dimensions are increased by recent personal incidences of trauma, and change in marital status. Personal memory complaints negatively affect nurses' attitude towards patients, and its related aspects like altruism, empathy, and respect for patient autonomy.

Keywords: Empathy; Altruism; patient care; patient autonomy

INTRODUCTION

There are multitudes of approaches to define ethics and good ethical practices in the clinical domain¹. One of the important and most widely used conceptualization of a good medical ethical practice is based on the four principles approach initially propounded by Beauchamp and Childress^{1,2,3}. This four-principle approach provides a comprehensive theoretical construct of the ethical code that can be implemented in the health professionals' practice^{1,3,4}. The advantage of this universally applicable framework of the good ethical practice is evident by the fact that it can be applied irrespective of the socio-cultural, theological, and philosophical differences of the health professionals¹. Based on this this four-principle approach Pawlikowski et al, 2012 developed a tool to assess ethical attitude towards patients; this is called the Scale of Attitude towards the Patient (SAAtP)³. The SAAtP was used to identify religious determinants of these four dimensions of the ethical practice in Polish physicians³. As the ethical code and its framework is similar for all the healthcare professionals, therefore, the SAAtP is also expected to provide a reliable measure of the ethical attitude towards patients and its dimensions in nurses as well.

The four-principle approach or the four dimensions of the ethical attitude comprises of altruism, empathy, holistic approach and respect for autonomy^{2,3}. There are a few researches on the aspect of these dimensions of ethics of care and their relationship with socio-demographics characteristics of the nurses, stress or recent events of stress, traumatic experience, parental/physical abuse, cognitive deficits such as attentions and memory complaints.

Though, pieces of evidence suggest that these aspects need research attentions. For instance, low empathy is usually associated with burnout and low resilience among nurses and primary care physicians⁵. Higher emotional exhaustion is associated with stress, anxiety and traumatic experience⁶. Therefore, after taking careful appraisal of the lack of research in this area and the accumulating evidences, this study investigated ethical attitude towards patients and its determinants in nurses working in Saudi Arabia.

MATERIAL AND METHODS

Participants and Procedures: This was a cross-sectional study on simple randomly selected nurses working in Saudi Arabia. Participants were nursing professionals working in the three cities of Dammam, Riyadh, and Majmaah, Saudi Arabia. Inclusion criteria was a valid registration with the Saudi Commission for Health Specialists. No other criterion for exclusion of nurses was employed. The number of initially enrolled nurses was 425, out of which n=376 (male: 64; female: 312) finally completed the study. Therefore, the response rate was 88.5%. The participating nurses were both Saudi nationals and expatriates.

An information booklet with brief summary in simple English language about the study was provided to the participants. The booklet contained this information: (i) aim and study method, (ii) voluntary nature of participation, (iii) statement indicating no exposure to health risks, (iv) no incentives for participation, and (v) freedom to withdraw/discontinue at any stage. The data collection procedure ensured complete confidentiality of the personal details. Informed written consent to participate and publish were secured. The study procedures were in compliance

with Helsinki declaration, 2002. The participants were required to complete these (i) Scale of Attitude towards the Patient (SAAtP), (ii) Likert scales for assessing self-reported memory and attention complaints, and (iii) a semi-structured tool of socio-demographic, and emotional characteristics. All the questionnaires were in English because all participants were professional nurses with adequate level of proficiency for the language.

The Scale of Attitude towards the Patient (SAAtP): SAAtP is a questionnaire tool with seven items to assess ethical attitude towards patients in medicine and allied health professionals. The responses for all the items are recorded on Likert scales; where '1' indicate 'strongly disagree', and '5' denote 'strongly agree'. All the individual item scores are added to generate a global score (range: 7 to 35). Higher scores indicate a better attitude towards patient. SAAtP has four dimensions; altruism, empathy, respect for autonomy, and holism. Pawlikowski et al 2012 developed the SAAtP and employed it to measure attitude towards patients in Polish physicians. Internal reliability of the SAAtP in this study was very good as determined by the Cronbach's alpha of 0.86³.

Likert scales for memory and attention complaints: Two Likert items with 100 nm scale with a score range of 0 to 10 were used to record self-reported problems in memory and attention. Higher scores indicated increasing level of memory and attention complaints.

Semi-structured questionnaire to record social, demographic and emotion related information: A semi-structured questionnaire was used to record participants information related to sex, age, nationality, civil status, highest qualification, experience in years, recent stress-related events, recent incidence of change in marital status, physical abuse and parental abuse, etc.

Statistical analysis: All the statistical analysis in this study was done by the SPSS version 26.0. Participant's characteristics and the distribution of the SAAtP total and its dimensions scores are presented using descriptive statistics measures. Multiple linear logistic regression was performed using the SAAtP total and its dimensions scores as dependent variable(s), participants characteristics, i.e., age, nationality, civil status, highest qualification, experience in years, recent stress-related events, recent incidence of change in marital status, physical abuse and parental abuse, and self-reported complaints of memory, attention, as independent variables.

RESULT

Participants' characteristics: More than 2/3rd of the participating nurses (83.0 %) were females. Majority of the nurses were married (64.9 %), reported Bachelors as their highest level of qualification (64.6 %), and recorded non-Saudi/expatriates as their country of origin and nationality (53.5 %) (Table 1). The percentage of participating nurses reporting stress because of recent death, major accident or diagnosis with terminal disease of a family member or a

close friend, a recent change in marital status, a recent incidence of physical abuse, and a recent incidence of parental abuse were 71.0 %, 23.9 %, 8.8 %, and 4.0 %, respectively. The mean of age, experience in years, self-reported memory complaints (Likert scale 0-10), and self-reported attention complaints (Likert scale 0-10) were 32.74 ± 6.99 years, 9.2±6.3 years, 3.16±2.39, and 3.01±2.40, respectively (Table 1).

Distribution of the SAAtP and its dimensions in the participating Nurses: Table 2 shows the descriptive pattern of the SAAtP and its dimensions' scores in the participating Nurses. The mean scores of all the SAAtP total score and its dimensions, i.e., altruism, respect for autonomy, empathy, and holism were more than their mid-values, indicating that the participating nurses had good level of SAAtP and its dimensions.

Associated factors of the SAAtP score: In multivariate analysis, a multiple linear regression model was used to determine associated factors of the SAAtP total score. Increasing level of the SAAtP score was associated with reported incidence of recent death, major accident or diagnosis with terminal disease of a family member or a close friend ($\beta=.303$, $p<.001$), a recent change in marital status ($\beta=.201$, $p=.01$), and lower level of self-reported attention complaints ($\beta=-.211$, $p=.016$) (model adjusted $R^2=.078$, $p<0.001$) (Table 3).

Associated factors of altruism: Increasing level of altruism was associated with reported incidence of recent death, major accident or diagnosis with terminal disease of a family member or a close friend ($\beta=.252$, $p=.003$), a recent change in marital status ($\beta=.184$, $p=.021$), a recent incidence(s) of parental abuse ($\beta=.111$, $p=.044$) and a lower level of self-reported attention complaints ($\beta=-.211$, $p=.017$) (model adjusted $R^2=.046$, $p=0.004$) (Table 4).

Associated factors of respect for autonomy of the patients: Increasing level of respect for autonomy of the patients was associated with increasing level of experience ($\beta=.236$, $p=.012$), reported incidence of recent death, major accident or diagnosis with terminal disease of a family member or a close friend ($\beta=.252$, $p=.002$), a recent change in marital status ($\beta=.172$, $p=.028$), and lower level of self-reported attention complaints ($\beta=-.206$, $p=.018$) (model adjusted $R^2=.080$, $p=0.004$) (Table 5).

Associated factors of empathy: Increasing level of empathy for patients was associated with increasing level of experience ($\beta=.189$, $p=.045$), reported incidence of recent death, major accident or diagnosis with terminal disease of a family member or a close friend ($\beta=.265$, $p=.002$), a recent change in marital status ($\beta=.171$, $p=.030$), and a lower level of self-reported attention complaints ($\beta=-.180$, $p=.041$) (model adjusted $R^2=.064$, $p<.001$) (Table 6).

Associated factors of holism: Increasing level of holism for patients was associated with reported incidence of recent death, major accident or diagnosis with terminal disease of a family member or a close friend ($\beta=.238$, $p=.005$) (model adjusted $R^2=.031$, $p=.028$) (Table 7).

Table 1 Characteristics of the participating nurses

Characteristics	Mean \pm SD/ Number (Percentage)
Gender	
Male	64 (17.0)
Female	312 (83.0)
Age In years	32.74 \pm 6.99
Nationality	
Saudi	166 (44.1)
Expatriate	201 (53.5)
Did not report	9 (2.4)
Civil Status	
Single	125 (33.2)
Married	244 (64.9)
Divorced	6 (1.6)
Widowed	1 (0.3)
Highest qualification	
Diploma	90 (23.9)
Bachelors	243 (64.6)
Masters	41 (10.9)
Ph.D.	2 (0.5)
Experience in years	9.2 \pm 6.3
Self-reported Memory complaints (Likert scale 0-10)	3.16 \pm 2.39
Self-reported attention complaints (Likert scale 0-10)	3.01 \pm 2.40
Self-reported stress because of recent death, major accident or diagnosis with terminal disease of a family member or close friend	
No	109 (29.0)
Yes	267 (71.0)
A recent change in marital status	
No	286 (76.1)
Yes	90 (23.9)
Recent incidences of physical abuse	
No	343 (91.2)
Yes	33 (8.8)
Recent incidences of parental abuse	
No	361 (96.0)
Yes	15 (4.0)

SD: standard deviation

Table 2: The distribution of the descriptive pattern of the Scale of Attitude towards the Patient (SAtP) and it's dimensions scores in the participating Nurses

Dimension/ Scale	Mean
Altruism	3.87 \pm 0.88
Respect for autonomy	7.85 \pm 1.41
Empathy	7.66 \pm 1.52
Holism	7.61 \pm 1.61
SAtP total score	26.99 \pm 4.5

SAtP: Scale of Attitude towards the Patient; all these scores are based on the SAtP scale

Pawlikowski J, Sak JJ, Marczewski K. Physicians' religiosity and attitudes towards patients. *Annals of Agricultural and Environmental Medicine*. 2012;19(3).

Table 3: Associated factors of the Scale of Attitude towards the Patient (SAtP) in the participating Nurses

Independent variable	Beta Coefficient	Standard error	T values	P values
Gender	-.063	.733	-1.027	.305
Age	-.113	.060	-1.206	.229
Civil status	.008	.499	.136	.892
Nationality	.061	.580	.940	.348
Highest qualification	.041	.419	.764	.446
Experience in years	.152	.065	1.635	.103
Self-reported stress because of recent death, major accident or diagnosis with terminal disease of a family member or a close friend	.303	.812	3.655	<.001
A recent change in marital status	.201	.818	2.575	.010
Recent incidences of physical abuse	.063	.937	1.065	.288
Recent incidences of parental abuse	.083	1.214	1.536	.125
Self-reported Memory complaints	-.015	.163	-.171	.864
Self-reported attention complaints	-.211	.160	-2.430	.016
Intercept	26.845*	1.870	14.355	<.001

Model unadjusted R2; adjusted R2; P value 109; .078; <.001

*Unstandardized beta coefficient for intercept, for all other independent variables standardized beta coefficient are shown.

Table 4: Associated factors of the Scale of altruism in the participating Nurses

Independent variable	Beta Coefficient	Standard error	T values	P values
Gender	-.006	.145	-.103	.918
Age	-.062	.012	-.651	.516
Civil status	.031	.099	.535	.593
Nationality	.035	.115	.532	.595
Highest qualification	-.047	.083	-.852	.395
Experience in years	.069	.013	.728	.467
Self-reported stress because of recent death, major accident or diagnosis with terminal disease of a family member or a close friend	.252	.161	2.988	.003
A recent change in marital status	.184	.162	2.316	.021
Recent incidences of physical abuse	.029	.186	.471	.638
Recent incidences of parental abuse	.111	.240	2.017	.044
Self-reported Memory complaints	.023	.032	.258	.797
Self-reported attention complaints	-.211	.032	-2.389	.017
Intercept	3.788*	.370	10.229	.000

Model unadjusted R²; adjusted R²; P value .077; .046; .004

* Unstandardized beta coefficient for intercept, for all other independent variables standardized beta coefficient are shown.

Altruism was measured as a factor score of the Scale for Attitude towards the Patient (SAAtP)

Table 5. Associated factors of the Scale of respect for autonomy in the participating Nurses

Independent variable	Beta Coefficient	Standard error	T values	P values
Gender	-.032	.230	-.532	.595
Age	-.140	.019	-1.496	.136
Civil status	.017	.157	.300	.765
Nationality	.027	.182	.419	.675
Highest qualification	.059	.132	1.100	.272
Experience in years	.236	.021	2.540	.012
Self-reported stress because of recent death, major accident or diagnosis with terminal disease of a family member or a close friend	.252	.256	3.048	.002
A recent change in marital status	.172	.257	2.210	.028
Recent incidences of physical abuse	.034	.295	.575	.565
Recent incidences of parental abuse	.075	.382	1.381	.168
Self-reported Memory complaints	-.028	.051	-.318	.751
Self-reported attention complaints	-.206	.050	-2.369	.018
Intercept	7.867*	.588	13.373	<.001

Model unadjusted R²; adjusted R²; P value .110; .080; <.001

* Unstandardized beta coefficient for intercept, for all other independent variables standardized beta coefficient are shown.

Respect for autonomy was measured as a factor score of the Scale for Attitude towards the Patient (SAAtP)

Table 6: Associated factors of the Scale of empathy in the participating Nurses

Independent variable	Beta Coefficient	Standard error	T values	P values
Gender	-.114	.248	-1.859	.064
Age	-.225	.020	-2.385	.018
Civil status	.023	.169	.400	.689
Nationality	.125	.196	1.920	.056
Highest qualification	.015	.142	.273	.785
Experience in years	.189	.022	2.011	.045
Self-reported stress because of recent death, major accident or diagnosis with terminal disease of a family member or a close friend	.265	.274	3.176	.002
A recent change in marital status	.171	.277	2.178	.030
Recent incidences of physical abuse	.049	.317	.822	.411
Recent incidences of parental abuse	.036	.410	.666	.506
Self-reported Memory complaints	.002	.055	.019	.985
Self-reported attention complaints	-.180	.054	-2.049	.041
Intercept	8.447*	.632	13.368	<.001

Model unadjusted R²; adjusted R²; P value .094; .064; <.001

* Unstandardized beta coefficient for intercept, for all other independent variables standardized beta coefficient are shown.

Empathy was measured as a factor score of the Scale for Attitude towards the Patient (SAAtP)

Table 7: Associated factors of the Scale of Holism in the participating Nurses

Independent variable	Beta Coefficient	Standard error	T values	P values
Gender	-.036	.270	-.573	.567
Age	.052	.022	.543	.588
Civil status	-.032	.184	-.543	.588
Nationality	.010	.213	.147	.884
Highest qualification	.074	.154	1.342	.180

Experience in years	.003	.024	.033	.973
Self-reported stress because of recent death, major accident or diagnosis with terminal disease of a family member or a close friend	.238	.299	2.803	.005
A recent change in marital status	.149	.301	1.862	.063
Recent incidences of physical abuse	.085	.345	1.392	.165
Recent incidences of parental abuse	.072	.447	1.296	.196
Self-reported Memory complaints	-.031	.060	-.350	.727
Self-reported attention complaints	-.126	.059	-1.411	.159
Intercept	6.743*	.688	9.798	<.001

Model unadjusted R²; adjusted R²; *P* value .063; .031;.028

*Unstandardized beta coefficient for intercept, for all other independent variables standardized beta coefficient are shown.

Holism was measured as a factor score of the Scale for Attitude towards the Patient (SATP)

DISCUSSION

To the best of my knowledge this is the first study to investigate about ethical attitude towards patient care, its dimensions and their associated factors in nurses. The study findings were: (i) there was high level of self-reported ethical attitude towards patients and its dimensions, i.e., altruism, respect for autonomy, empathy, and holism, in nurses working in Saudi Arabia, (ii) recent traumatic events such as death, major accident or diagnosis with terminal disease of a family member or a close friend; recent change in marital status, and lower level of attention problems were associated with self-reported ethical attitude towards patients and its dimensions of empathy, and respect for autonomy, (iii) recent traumatic events such as death, major accident or diagnosis with terminal disease of a family member or a close friend; recent change in marital status, and recent incident of parental abuse were associated with altruism, and (iv) recent traumatic events such as death, major accident or diagnosis with terminal disease of a family member or a close friend was associated with holism.

The findings are significant because patients and/or his family members perceive altruism and empathy among top two desirable characteristics among nurses and physicians⁷. The findings are similar to those reported in Iranian nurses; commitment to ethics was one of three most important aspects of spiritual development among them⁸. In summary, the participating nurses had good level of medical ethical practice as determined by four principles approach initially propounded by Beauchamp and Childress^{1,2,3}.

The finding of recent traumatic events being positively associated with the self-reported ethical attitude towards patients and its dimensions, i.e., altruism, respect for autonomy, empathy, and holism is supported by the theoretical propositions of Vollhardt, 2009. He proposed that suffering may increase the motivation for prosocial behavior⁹. This may express in the willingness and readiness to help those in need and disadvantaged groups^{9,10}. Similar to this trend, even incidences of parental abuse in nurses were positively associated with their altruism. Staub and Vollhardt, 2008 emphasized that the altruism is the basis of caring and helping attitude developed after victimization¹¹. Furthermore, such potentially altruistic influence of the suffering/victimization may develop concurrently with such events or after them. Now, the first explanation does suggestively explain the relationship in this study which was a cross-sectional in design with one measure. So, our findings do provide evidence of a

concurrent altruistic expression of a victimization/suffering (traumatic events, parental abuse)¹¹.

The finding that low attention problem (good attention level) was associated with ethical attitude towards patients and its dimensions of respect for autonomy and empathy. This finding is supported by the generalizations of two recent interventional studies^{12,13}. Dean et al 2017 found that the mindfulness practice, i.e., an intervention to improve attention increased empathy in Australian healthcare students over a 12-week period¹². Gozalo et al 2019 reported that an 8-week mindfulness program significantly decreased emotional exhaustion, and increased self-compassion in a sample of Spanish physicians, nurses and nursing assistants¹³. Furthermore, a recent systematic review also favored that brief mindfulness interventions improve well-being of the healthcare professionals¹⁴.

Some of the limitation of the study are low level of variance explained by the regression models that were used to investigate the relationships. This is possibly because some of the important independent variables were not recorded and measured. Future studies should investigate this aspect. Another limitation was the way in which change in marital status was recorded during the study. It was difficult to make out from the items structure and associated participants response that participant got married or got divorced. Nevertheless, the findings of this observational cross-sectional study is supported by some of the previous interventional studies and a systematic review of interventional studies¹²⁻¹⁴; all this highlight the strength of the present study.

In summary, recent traumatic events, incidents of parental abuse and good attention level were associated with prosocial behavior of ethical attitude towards patients and its dimensions, i.e., altruism, respect for autonomy, empathy, and holism, in nurses working in Saudi Arabia.

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