Attachment style and family presence preference during invasive nursing procedures

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ABSTRACT

Introduction: The attachment style and family presence preference are important during the invasive medical procedures. Our aim was to analyze the effects of adult attachment styles of the patients which prefer presence of their family members during the invasive medical procedures in emergency departments.

Methods: We included 76 randomly selected patients who received the invasive medical procedures in the emergency department of the University hospital. The Patient Information Form and Relationship Scales Questionnaire were used to collect data.

Results: About 57.9% of the patients said that they preferred their relatives to stand by them during invasive nursing procedures. 56.6% of participants stated that they favor their relatives to support them at the time of such interventions. Average scores of adult attachment styles were 3.02 ± 0.63 for fearful, 3.57 ± 0.57 for dismissing, 2.87 ± 0.50 for preoccupied, and 2.79 ± 0.66 for secure attachment style. Adult attachment styles of participants were found to have no impact on preferring someone standing by them at the time of invasive nursing interventions (p > 0.05).

Conclusion: Adult attachment styles do not affect the patients’ need to have a family member stand beside them during an invasive medical procedure.

Key words: Attachment style; emergency department; family presence; invasive nursing procedures

INTRODUCTION

Emergency departments offer life-saving and therapeutic treatment responses. Thus, it is vital to have cooperative synergy and awareness within the team and it is required that the person as well as his family is assessed in an integrated manner. During the emergency hospitalization of patients, some unfavorable consequences can be sometimes seen as a result of medical care operations and interventions exercised. The ethical approach of making no harm is taken into account in due form in the exercise of such interventions, but it is needed that nurses endeavor more to decrease the negative impact of applied intervention. However, there have been few studies conducted on the presence of families at the time of invasive nursing interventions (1-3).
Family presence refers to the availability of the family in the spot so that they are able to contact the patient visually or physically at the time of invasive interventions and resuscitation in medical centers (4,5). A good deal of qualified medical institutions encourages the presence of family at the time of diagnosis, care, and treatment processes. They have issued directives related to the presence of family at the time of such procedures. The Emergency Nurses Association was the first to introduce such directive in 1994 and revise it in October 2005 with a view to approve family presence (6).

An integrative medical care incorporates patient as well as family (7,8). In pediatric literature, the presence of family during invasive interventions is usually underlined, but various studies conducted on other units that offer medical care to people from various ages have dealt with this issue as well (9).

Nevertheless, attachment is a sentimental connection between two people, and as part of this connection, it is expected that one or both of these people will offer care and shelter when necessary. Behaviors of people who are related to each other are influenced by the type of attachment. Attachment styles are influential on the behaviors of the individuals who are in relationships with one another; and also influential in obtaining satisfaction from their relationships, in the level with which the individuals are affected by the problems experienced in relationships, and in coping with these problems (10-12).

Still, the theory of attachment gives pedagogues, clinicians, and academicians a means to investigate the effect of past livings on later adaptation as it is useful in explaining personal differences in terms of emotional regulation, stress reactions, and interpersonal behavior. The attachment theory states that experiences that people have early with caregivers are turned into internal intellectual manifestations of attachment throughout the adulthood (13-16).

Bartholomew and Horowitz (10) have developed an adult attachment model consisting of four categories and it is partake of Bowlby’s original models on the self and others. Bartholomew and Horowitz (10) suggest that adult people with a positive model of other individuals as present and caring and themselves as deserving approval and care may be identified as securely attached. It is considered that people who are securely attached had a stable, caring, and conscious caregiving history and tend to establish aiding relationships successfully. Hence, these people conveniently use other individuals as a means of aid when necessary (12).

The other three types of attachment include a negative working model regarding the self or others, and therefore, they are all called “insecure” types of attachment. People who have insecure attachment style are inclined to be more concerned and show higher level of self-protective approach to avoid possibly supportive affairs. People who have “fearful” insecure attachment are tend to not trust others, avoid any affairs, and consider themselves as unpleasant and not worthy of aid. These “fearful” people may seem like to be driven by closeness with other people since it can make up for their perceived unfavorable image, and they escape from close affairs due to fear of rejection (10).

People who have a positive model toward others and a negative one toward themselves are considered as abstracted in insecure types of attachment. They are concerned with the requirements for attachment, and thus, they determinedly try to be accepted and approved by means of attached relationships. These preoccupied attachments are inclined to sentimentally unbalanced, with little self-esteem and insistent will to get approval (11).

On the other hand, dismissing style of attachment represents a positive model of the self but negative model of others. Individuals with such style are inclined to be very doubtful close affairs and have fear of letting themselves to trust others (12,17).

Our aim was to examine the effect of adult attachment styles regarding the fact that the patients prefer their family members or relatives or the people they care to stand by them during invasive nursing procedures.

METHODS

Research questions

- What are the demographic and disease variables of patients?
• What does the patient think about family presence preference at the time of invasive nursing procedures?
• What is the attachment style of patients?
• Do the attachment style of patients have an impact on their family presence preferences?

Study population and sample
This study was conducted in the observation unit of the internal medicine section located in the emergency department of a university hospital in Istanbul. The sample consisted of 76 patients who were selected by random sampling method. The following inclusion criteria were used:
• Being older than 18,
• Being open to communication and cooperation,
• Undergoing an invasive nursing procedure during hospitalization in the emergency unit, and
• Having given informed consent for participation in the study.
Those who developed complications during the intervention or were unaccompanied were excluded from the study.

Instruments
The Patient Information Form and the Relationship Scales Questionnaire (RSQ) were used to collect data.

The patient information form
It was created based on the existing literature (18,19) and information gathered on sociodemographic variables such as gender, age, marital status, living arrangements, educational status, occupation, and medical diagnosis. Questions were found which are given below:
• Would you like your family with you during nursing interventions?
• If your answer is yes, why you would?
• If your answer is no, why you wouldn’t?
• Is there anyone, especially you want during the process?
• If your answer is yes, who is this person?
• Who should decide that someone have to stay with you or not, during the interventional nursing practices? (Options: Me, my familiar, the nurse, doctor, etc., more than one response can be given.)

The RSQ
The questionnaire was utilized to find out attachment styles of patients and created by Griffin and Bartholomew (16). In 1999, Sumer and Gungor determined the validity and reliability of its Turkish version (20). The RSQ consists of 17 items, which are used to form continuous subscales of attachment style categories. These items include five-point Likert scales. These scales are used to measure the level of statements in each item to constitute respondent’s opinions about close interpersonal relationships. Regarding the relationship style domains, there are four attachment style domains, which are secure, fearful, preoccupied, and dismissing. The continuous scores represent such attachment styles and are gathered with questions intended to measure such styles and by means of division of this total score by the number of questions in each subscale. Therefore, the scores obtained from these subscales may differ from 1 to 5. To categorize the participants based on their attachment styles, continuous scores obtained through this method are utilized. In this grouping process, participants are allocated to the attachment group where they get the highest score (20).

Ethical consideration
A written consent was obtained after submitting an information form including the aim and scope of the study. The participants making up the sample were informed about its aim and benefits apart from their roles in the study under the principles of willingness and volunteerism, and their consent was gained.

Statistical analysis
To statistically analyze 76 participants, Statistical Package for the Social Sciences 22.0 for Windows program was used. Moreover, descriptive statistics (i.e., frequency, percentages, means, and standard deviations) were also determined. For the analysis of categorical data, Pearson’s Chi-square and Fisher’s exact tests were used. The independent samples t-test was used to compare the parametric data. The results were assessed at a confidence interval of 95%, and significance threshold for primary analyses was set at 0.05.
RESULTS

Table 1 shows the demographic and disease features of the participants. Accordingly, 56.6% of the participants were female, their average age was 47.83 ± 18.88, 65.8% of them were married, 65.8% of them had children, 56.6% of them were living with their families, 28.9% of them had university degree or higher education degree, 36.8% of them were state officials, 93.4% of them had general health insurance, and the other 6.6% of them had green cards.

Table 2 shows the opinions of participants regarding their family presence preference at the time invasive nursing interventions. Accordingly, 56.6% of participants stated that they favor their relatives to support them at the time of such interventions. 51.3% of patients said yes in response to the question of “Is there someone you would like him/her to stand by your especially during the intervention?” Regarding the persons they prefer to be with them during invasive nursing procedures, the participants said that they prefer their mother/father, child, spouse, sibling, relatives, and friends. 76.3% of participants answered the question of “who should decide that someone have to stay with you or not, during the interventional nursing practices?” as “me.”

Regarding the mean point of adult attachment styles of participants of the study, it was found that potential point distribution is between 1 and 5 in all styles, 3.57 in dismissing, 3.02 ± 0.63 in fearful, 2.87 ± 0.50 in preoccupied, and 2.79 ± 0.66 in secure (Table 3).

Adult attachment styles of participants were found to have no impact on the condition of preferring someone standing by them at the time of invasive nursing interventions ($p > 0.05$; Table 4).

DISCUSSION

According to a study, anxious as well as avoidant aspects of attachment are related to health risk behaviors (21).

Any association of curative connections with the patient’s agreeability or choice to establish relationships has not been proven, which indicates that therapeutic relationship and service attachment measurements assess a dimension that is noticeable regarding the experience of patients.

| TABLE 1. Distribution of demographic and disease variables of the patients ($n=76$) |
|---|
| Demographic and disease variables | $n$ (%) |
| Gender |  |
| Female | 43 (56.6) |
| Male | 33 (43.4) |
| Age categories |  |
| 18–31 | 26 (34.2) |
| 32–45 | 8 (10.5) |
| 46–59 | 18 (23.7) |
| 60–↑ | 24 (31.6) |
| Age (Minimum–Maximum) | (19–89) |
| Mean±SD | 47.83±18.88 |
| Marital status |  |
| Married | 50 (65.8) |
| Single/Widowed/Divorced | 26 (34.2) |
| Having children |  |
| Yes | 50 (65.8) |
| No | 26 (34.2) |
| Lived with |  |
| Alone | 9 (11.8) |
| Family | 43 (56.6) |
| Only spouse | 15 (19.7) |
| Relative | 4 (5.3) |
| Friend | 5 (6.6) |
| Educational status |  |
| Illiterate | 9 (11.8) |
| Literate | 10 (13.2) |
| Primary school | 14 (18.4) |
| Secondary school | 21 (27.6) |
| Higher education and above | 22 (28.9) |
| Occupation |  |
| Not working | 23 (30.3) |
| State official | 28 (36.8) |
| Worker | 6 (7.9) |
| Freelancer | 5 (6.6) |
| Retired | 14 (18.4) |
| Social security |  |
| General health insurance | 71 (93.4) |
| Green cards | 5 (6.6) |
| Medical diagnosis |  |
| Rheumatic diseases | 7 (9.2) |
| Endocrinologic diseases | 9 (11.8) |
| Hematologic diseases | 21 (27.6) |
| Cardiological diseases | 7 (9.2) |
| Infectious diseases | 9 (11.8) |
| Nephrologic diseases | 16 (21.1) |
| Lung diseases | 5 (6.6) |
| Neurologic diseases | 2 (2.6) |

SD: Standard deviation
Accordingly, measurement of team attachment and therapeutic relationship is corresponding to measurement of almost identical structures. The service users who have higher level of preoccupied attachment styles are likely to experience more frustration in establishing a positive attachment to departments that are modified again and again (22).

The rates of prevalence for secure, dismissing, preoccupied, and fearful attachment styles in 4095 primary care diabetes patients were found to be 44.2%, 35.8%, 7.9%, and 12.1%, respectively. In a comparison of secure attachment style, dismissing attachment style was found to be related with very low level of physical activity, foot care, diet, and conforming to oral hypoglycemic drugs and high level of smoking, and patient-provider relationship was used to intervene in such associations. It was also found that preoccupied attachment style which features overreliance on other people is correlated with very low risk of glycosylated hemoglobin rates >8%, by comparison with secure attachment. Therefore, self-management and outcomes of diabetes are

**TABLE 2. Distribution of thought about the patients’ family presence preference during invasive nursing procedures**

| Thoughts about patients’ family presence preference during invasive nursing procedures | n (%) |
|---|---|
| Requesting family during the invasive nursing procedures | |
| Yes | 43 (56.6) |
| No | 33 (43.4) |
| The reason why family is requested | |
| The patients who do not want their family (preference is no) | 33 (43.4) |
| They become a support and help to me | 20 (26.3) |
| I feel comfortable, and safe and makes me | 10 (13.3) |
| My pain decreases | 1 (1.3) |
| My fear/anxiety decreases | 8 (10.5) |
| They witness to procedures | 2 (2.6) |
| No reason | 2 (2.6) |
| The reason why family is not requested | |
| The patients who want their family (preference is yes) | 43 (56.6) |
| It does not matter/not necessary | 19 (25.0) |
| My family worries/gets upset | 5 (6.6) |
| I do not want make them see me during procedure/I get angry | 8 (10.5) |
| I trust nurses | 1 (1.3) |
| The presence of the person who is significantly requested by patient during procedure | |
| Yes | 39 (51.3) |
| No | 37 (48.7) |
| The person who is significantly requested by the patient during procedure | |
| Who responses no | 37 (48.7) |
| The parents | 5 (6.6) |
| His/her children/child | 9 (11.9) |
| Spouse | 20 (26.3) |
| Brother/sister | 3 (3.9) |
| Relative/friend | 2 (2.6) |
| The person who prefers who should stay with the patient during procedure* | |
| Me (the patient) | 58 (76.3) |
| The family | 26 (34.2) |
| The nurse | 15 (19.7) |
| The doctor | 8 (10.5) |

*Multiple responses are given
related with the attachment style to a significant extent (23).

Although medical care is used in interpersonal settings, the knowledge about the relevance of interpersonal choices or patterns of service users is limited. A few studies have been conducted to discover the connections between attachments, which is pattern of reliance on others and the style of benefiting from medical care.

In this report, examined how attachment characteristics predicted the frequency of digital rectal exam and prostate-specific antigen testing in a sample of African-descent men. 414 African-descent men who are aged between 45 and 70 performed measures of prostate screening and attachment as well as predictors of screening (demographics, insurance, family history, physician variables, knowledge, perceived risk, and accessibility). In line with the estimations, dismissiveness, which is seen most frequently as a relational pattern in the elderly, anticipated frequent prostate-specific antigen testing and digital rectal examination, while attachment security, which refers to contentment about close affairs, anticipated lower screening frequency. Identifying the interpersonal characteristics predicting screening may help identify men at risk of suboptimal health care use and guide the development of interventions suited to the normative relational preferences of current cohorts of older, African-descent men (24).

We found associations between psychological attachment anxiety on smoking and higher number of session use, independent of disease severity, which was more pronounced for women. After diagnosis of CP and AgP, individuals who have more attachment avoidance opted for periodontal treatment afterward. In terms of attachment avoidance and anxiety and number of teeth at the initial stage of treatment, differential connections were identified in men. Besides recognized psychosocial risk factors, psychological attachment styles can be used to explain periodontal disease (25).

In this study, the function that attachment insecurity has in cervical screening behaviors and obstacles in a group of 257 female undergraduates was examined. Information related to aspects of attachment and attachment patterns was gathered. Attachment anxiety and attachment avoidance were associated with decreased likelihood of having participated in cervical screening and positively associated with screening barriers. Furthermore, it was found that people who have attachment insecurity (preoccupied, fearful, and dismissing) tend to have higher level of screening obstacles and dismissing individuals avoided being involved in screening when compared with secure individuals. These findings prove that insecure attachment could pose a risk for

**TABLE 3. The patients’ attachment style scores according to RSQ**

| Attachment styles | Minimum–Maximum | Means±SD |
|------------------|-----------------|----------|
| Fearful          | 1.50–4.25       | 3.02±0.63|
| Dismissing       | 2.40–4.80       | 3.57±0.57|
| Preoccupied      | 2.00–4.50       | 2.87±0.50|
| Secure           | 1.40–4.60       | 2.79±0.66|

*RSQ: The Relationship Scales Questionnaire: Range 1–5. SD: Standard deviation

**TABLE 4. The patients’ family presence preference according to attachment styles scores**

| Attachment styles | Family presence preference | Means±SD | t    | p    |
|------------------|----------------------------|----------|------|------|
| Fearful          | Yes                        | 3.11±0.65| 1.532| 0.130|
|                  | No                         | 2.89±0.60|      |      |
| Dismissing       | Yes                        | 3.52±0.58| −0.816| 0.417|
|                  | No                         | 3.63±0.57|      |      |
| Preoccupied      | Yes                        | 2.93±0.50| 1.244| 0.217|
|                  | No                         | 2.79±0.48|      |      |
| Secure           | Yes                        | 2.71±0.75| −1.260| 0.212|
|                  | No                         | 2.91±0.51|      |      |

* Range 1–5. SD: Standard deviation
insufficient cervical screening and screening obstacles (26).

It was found that there is an important difference when it comes to being informed of surroundings for attachment patterns. Furthermore, a significant association was determined between attachment styles of patients (fearful, preoccupied, and dismissing) and intensive care experience. At the time of discharge from intensive care unit, secure attachment style points and Acute Physiology and Chronic Health Evaluation II score of the patients were found to be significantly associated. Therefore, in the course of planning and exercising nursing care and procedures for people in an intensive care unit, it is important to take note of attachment patterns (3).

According to the study, attachment to the caregiver could be a significant predictor of the therapeutic alliance. Based on the findings, attachment toward the caregiver could be of more significance compared to prior manifestations of attachment in the context of therapeutic alliance (27).

Participants who have medically unidentified symptoms generally exhibit insecure adult attachment styles, and for this reason, more attendance records could be classified as pathological behavior looking for care, which is associated with insecure attachment. Caregivers could handle patients in a different manner by considering constant visit as a pathological act shown with a view to get help (28).

Typical styles in terms of close affairs, sentimental regulation, having social support, behavioral descriptors, metallization, and narrative coherence characterize the four adult attachment styles (secure, preoccupied, dismissing, and fearful). They are associated with medical care affiliations and their results. Typical narrations of adult attachment styles could help doctors understand personal differences in interpersonal structure that affect the health of participants (29).

Attachment styles of patients could be a significant determinant in their demands for physician-assisted dying. Furthermore, a physician’s capability to have a productive relationship with his patient during the course of dying can be improved by understanding his attachment style (30).

According to the findings, there is a link between patients who have a hair loss that is not visible and the contradictory attachment style. Overall clinical effects and attachment indicators, including attachment security and the methods to deal with, have been found to be an important input to anticipate changes in the quality of life scales, “self-esteem” and “emotions.” Thus, attachment security is likely to be a basic instrument that reconciles with subjective health and the patients who have female alopecia are likely to have special attachment vulnerability. Future studies are needed to elaborate on the pertinence of attachment styles in doctor and patient relationship and on psychotherapeutic procedures (31).

Limitations
The current study was conducted on emergency department of a university hospital in Istanbul. In the context of our research, there had been a limited number of samples. Therefore, the results cannot be generalized. Further longitudinal research is, therefore, recommended to gather data from health-care members in the emergency department that can be compared and contrasted to explore changes in attachment and family presence preference.

CONCLUSION
In empirical terms, this study suggests that attachment pattern of patients had no impact on their family presence preference at the time of invasive nursing interventions. Based on these findings, it is possible to recommend the following:

- The patients themselves should choose family support at the time of invasive nursing interventions. It is better to have the family stand by the patient in case no obstacle exists at the time of such procedures. However, it is better to have the family outside depending on the preference of patient if he is not willing to have the family around him in the course of these procedures.
- Different departments should be used in future studies conducted on this topic.
- It is needed to conduct qualitative studies regarding the family presence at the time of interventional nursing procedures.

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