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# Nurses' Fear of Missing Out on Social Media and Tendency to Make Medical Errors: A Descriptive Study

## Hemşirelerin Sosyal Medyada Gelişmeleri Kaçırma Korkusu ve Tıbbi Hata Eğilimleri: Tanımlayıcı Araştırma

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**ABSTRACT Objective:** This research was conducted to determine the tendency to make medical errors of nurses, their fear of missing out on social media, the factors affecting them, and the relationships between them. **Material and Methods:** The data of this descriptive research were collected face to face with the with the Sociodemographic and Descriptive Information Form, the Medical Error Tendency Scale, and the Fear of Missing Out Scale. **Results:** The total mean score of the participants on the Fear of Missing Out in Social Environments Scale was 22.03±8.17, and the Medical Error Tendency Scale was 230.19±16.91. The participants had an average of 2.94±2.10 hours of daily use of social media. The Fear of Missing Out levels are affected by marital status, fondness toward nursing profession and shift-work pattern. The Tendency to Medical Error levels are affected by gender, marital status, and shift-work pattern. As the total scores of the Fear of Missing Out Scale increase, the total scores of the Medical Error Tendency Scale decrease (r= -0.321, p=0.000). As age (r= -0.410, p=0.000) and total working time (r= -0.425, p=0.000) increase, total Fear of Missing Out Scale scores decrease. As age (r= 0.198, p=0.003) and total working time (r= 0.188, p=0.004) increase, the total scores of the tendency to medical error scale increase. **Conclusion:** As the Fear of Missing Out increases, the tendency to medical error also increases. In order to reduce the risk of medical error, caution should be exercised when using social media on cellphones during work.

**Keywords:** Nursing; medical error; social media; medication errors

**ÖZET Amaç:** Bu araştırma hemşirelerin tıbbi hata eğilimlerini, sosyal medyada gelişmeleri kaçırma korku düzeylerini, etkileyen faktörleri ve aralarındaki ilişkiyi belirlemek amacıyla uygulandı. **Gereç ve Yöntemler:** Tanımlayıcı türdeki bu araştırmanın verileri Sosyodemografik ve Tanıtıcı Bilgi Formu, Tıbbı Hataya Eğilim Ölçeği ve Sosyal Ortamlarda Gelişmeleri Kaçırma Korkusu Ölçeği ile yüzyüze toplandı. **Bulgular:** Katılımcıların Sosyal Ortamlarda Gelişmeleri Kaçırma Korkusu Ölçeği toplam puan ortalaması 22.03±8.17, Tıbbı Hataya Eğilim Ölçeği toplam puan ortalaması ise 230.19±16.91'di. Katılımcıların günlük ortalama 2.94±2.10 saat sosyal medya kullanım süreleri mevcuttu. Araştırmada sosyal ortamlarda gelişmeleri kaçırma korkusunun medeni durum, mesleği sevme durumu ve çalışma şeklinden (nöbetli çalışmak); tıbbı hataya eğilimin ise cinsiyet, medeni durum ve çalışma şeklinden (nöbetli çalışmak) etkilendiği saptandı. Sosyal Ortamlarda Gelişmeleri Kaçırma Korkusu Ölçeği toplam puanları arttıkça Tıbbı Hataya Eğilim Ölçeği toplam puanları azalmaktadır (r= -0.321, p=0.000). Yaş (r= -0.410, p=0.000) ve toplam çalışma süresi(r= -0.425, p=0.000) arttıkça Sosyal Ortamlarda Gelişmeleri Kaçırma Korkusu ölçeği toplam puanları azalmaktadır. Yaş (r= 0.198, p=0.003) ve toplam çalışma süresi(r= 0.188, p=0.004) arttıkça Tıbbı Hataya Eğilim Ölçeği toplam puanlari artmaktadır. **Sonuç:** Bu araştırmada hemşirelerin sosyal ortamlarda gelişmeleri kaçırma korkusu arttıkça tıbbi hataya eğilimlerinin de arttığı saptandı. Tıbbi hata riskini azaltmak için çalışma saatlerinde akıllı telefon ile sosyal medya kullanımında dikkat edilmelidir.

**Anahtar Kelimeler:** Hemşirelik; tıbbi hata; sosyal medya; ilaç hataları

The use of smartphones has provided many people access to the internet from anywhere. By 2021, the average time spent on the internet per day was 7 hours and 57 minutes. People maintain constant communication with their families and friends via social media applications. In Türkiye, by January 2021, the number of social media users was 70.8%.[1] However, the prolonged use of social media can cause the fear

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of missing out (FoMO). The phenomenon called "FoMO, which is commonly observed on social networking sites, is defined as a pervasive concern regarding the possibility of others enjoying positive experiences in environments where the person is not included".[2] The use of the internet can lead to an increase in FoMO levels.[3] FoMO is associated with negative affection, depression, and anxiety.[4,5] Furthermore, the social isolation due to coronavirus disease-2019 (COVID-19) pandemic has increased the levels of FoMO.[6] FoMO among nurses and nursing students, has also been reported to be moderate.[7-9] An increase in FoMO may be associated with distraction and may increase tendency to medical error (TMME).

The World Health Organization has described medical errors as incidents caused by the deviation from the method of standard care, causing harm to patients.[10] A study conducted in Türkiye reported that 19.4% of nurses made medical errors.[11] In contrast, Kwon et al. reported that 23% of nurses made medical errors.[12] The most medication errors made by nurses were Wrong time (38.6%), wrong assessment (27.5%), and wrong evaluation (26.1%).[13] In a recent systematic review, it was reported that nurses encountered too many errors in drug administration, but they did not report any errors.[14]

Nurses are responsible to prevent the undesirable consequences of the procedures and treatments administered to patients and to protect patients from any harm at their work environment.[15] Some studies have reported that the level of TMME among nurses is low.[15,16] However, medical errors might be made by nurses due to adverse conditions, such as excessive workload, low staff numbers, and long shift hours.[17] Recently, nurses have been using smartphones at their workplaces to mostly access social media. Moreover, a recent study reported that as the duration of work in the profession increases, the level of FoMO also increases.[7] Unfortunately, the use of social media at work can be distractive, and it may adversely affect patient safety.[18,19]

Increased use of social media via smartphones in clinical settings may increase the incidence of medical errors and pose a risk to patient safety. In the literature, the FoMO the TMME in nurses have been investigated but there are no studies investigating the relationship between nurses' FoMO levels and TMME. Our research results will reveal the effect of FoMO on TMME and will guide in taking the necessary measures to reduce the rate of medical errors in clinical settings. Therefore, we believe that our study will contribute to the literature as a pioneering study for new research in this field. Our study aimed to determine the relationships between the TMME, the level of FoMO, and the contributing factors among nurses.

The research questions of the study were as follows:

1. What are the FoMO levels of nurses?

2. What is the TMME level of nurses?

3. Do nurses' sociodemographic and working-status characteristics affect the TMME and levels of FoMO?

4. Is there a relationship between nurses' FoMO levels and TMME levels?

## MATERIAL AND METHODS

### DESIGN AND PARTICIPANTS

This study was conducted in a descriptive and relational design at a university hospital. The population of the study consisted of nurses working at a university medical faculty hospital (intensive care unit, internal medicine, surgical, oncology, emergency, pediatric clinics). The sample size was calculated based on the data on the TMME among nurses from a study by Korhan et al. 2017.[20] The study sample consisted of 226 nurses (error: 0.05, power: 0.90, and effect size: 0.391). G*Power 3.1.9.2 program (ComputerSoft., Düsseldorf, Germany) was used to calculate the sample size.[21] The study was completed with the participation of 227 nurses.

### INCLUSION CRITERIA

Nurses who were ≥18 years old and working for at least one year were included in the study.

### EXCLUSION CRITERIA

Nurses who were staff members at the hospital but were not actively working because of leave or illness were excluded from the study.

## DATA COLLECTION AND INSTRUMENTS

### Sociodemographic and Introductory Information Form

Sociodemographic and introductory information form is the form in which the characteristics of the participants, such as working duration, age, gender, education, fondness toward the nursing profession, working unit, marital status, and the use of social media applications were questioned. The researchers developed this form in accordance with some studies in the literature.[4,6,18]

### FoMO Scale

The scale was developed to measure the FoMO levels by Przybylski et al.[2] Gokler et al. conducted the Turkish validity and reliability study of the scale in 2016.[22] The scale consists ten items and a five-point Likert-type. Each item is scored from 1 to 5 (1="Not at all true for me" and 5="Extremely true for me"). The scores of the participants range from 10 to 50, and the increased scores indicate an increase in the FoMO levels. The scale does not have a cut-off point, and as the scale score increases, the likelihood of experiencing the FoMO increases. Notably, the Cronbach's alpha coefficient is 0.95 for the original scale, and it was calculated as 0.81 for the Turkish adaptation.[2,22] In this study, the Cronbach's alpha coefficient was 0.88.

### Medical Error Tendency in Nursing Scale

The scale was developed to measure medical error tendency of nurses. Özata and Altunkan developed Medical Error Tendency in Nursing Scale (METNS) to measure the TMME by nurses who are directly concerned with patient care in 2010.[23] The scale consisted of 49 items in five sub-dimensions (drug and transfusion practices, hospital infections, patient monitoring and material safety, falls, and communication). The variance explained by 49 items in 5 subdimensions constitutes 52.15% of the total variance. Moreover, the sub-dimension of drug and transfusion practices consists of 18 items, hospital infections consists of 12 items, patient monitoring and material safety consists of 9 items, falls consists of 5 items, and communication consists of 5 items.[23] The increase in the total score indicated that the nurse's TMME was low, whereas the decrease in the score indicated that the TMME high. The Cronbach's alpha internal consistency coefficient of the scale is 0.95.[23] In this study, Cronbach's alpha was 0.95.

## DATA COLLECTION

The data of the study were collected between May 2022 and June 2022 after obtaining the ethics committee and the institution approval. The nurses were given questionnaires and asked to answer them. Answering the questionnaire took approximately 10-15 minutes. Nurses answer the questionnaires in their convenient spare times. Necessary measures were taken to ensure the confidentiality of the participants' data. Moreover, the participants were informed that they could opt-out of the study at their will. Given the COVID-19 pandemic situation, necessary precautions were taken during the meetings.

## ETHICAL DIMENSION OF RESEARCH

Permission to conduct the research was obtained from a Necmettin Erbakan University Health Sciences Scientific Research Ethics Committee (date: April 06, 2022, approval number: 2022/210). Moreover, written permission for the study was obtained from the Medical Faculty Hospital Chief Physician (April 18, 2022 E-14567952-900-181090). Verbal and written informed consent was obtained from all participants. Permission to use the scale was obtained from the authors who developed the scale. The research was prepared, implemented, and reported in accordance with the Strengthening the Observational Research Reporting Criteria (STROBE) guidelines and the Declaration of Helsinki.

## STATISTICAL EVALUATION OF DATA

Data analysis was performed using the SPSS 22.0 package program (Chicago, USA). During the analysis of the data, Cronbach's alpha reliability analysis was used, the percentile distribution was used to determine the descriptive features, arithmetic mean was used to determine the total score averages of the scales, and Spearman correlation analysis was used for the comparison between the scales. Regarding the comparison of the scores obtained from the scales, the Mann-Whitney U test was used for data that did not show normal distribution for paired groups, whereas the Kruskal-Wallis test was used for data

that did not show normal distribution for more than two independent groups. A p-value of <0.05 was considered statistically significant. The margin of error was 0.05 and the confidence interval was 95%.

## RESULTS

When the findings obtained from the research are examined; It was determined that 85% of the participants were women, 68.3% had a bachelor's degree and 81.9% liked their profession. Participants mean age was 31.56±7.96 years, mean working experience was 9.48±8.52 years, they spent 2.94±2.10 hours on social media in a day (Table 1).

**TABLE 1:** Socio-demographic and clinical characteristics of the nurses (n=227).

| | | n | % |
|---|---|---|---|
| Gender | | | |
| Male | | 34 | 15 |
| Female | | 193 | 85 |
| Marital status | | | |
| Married | | 130 | 57.3 |
| Single | | 96 | 42.3 |
| Educational background | | | |
| High school | | 9 | 4 |
| Associate degree | | 29 | 12.8 |
| Bachelor's degree | | 155 | 68.3 |
| Postgraduate | | 34 | 15 |
| Income status | | | |
| High | | 65 | 28.6 |
| Medium | | 148 | 65.2 |
| Low | | 14 | 6.2 |
| Clinic | | | |
| Intensive care unit | | 72 | 31.7 |
| Internal medicine | | 44 | 19.4 |
| Surgical | | 50 | 22.0 |
| Oncology | | 8 | 3.5 |
| Emergency | | 17 | 7.5 |
| Pediatric | | 13 | 5.7 |
| Other | | 23 | 10.1 |
| Fond of their profession | | | |
| Yes | | 186 | 81.9 |
| No | | 41 | 18.1 |
| Working type | | | |
| Continous day time | | 93 | 41 |
| Shift type | | 134 | 59 |
| | **X̄±SD** | **Minimum** | **Maximum** |
| Mean age (year) | 31.56±7.96 | 21 | 58 |
| Working experience (year) | 9.48±8.52 | 1 | 40 |
| Time spent on social media (hour/day) | 2.94±2.10 | 0 | 16 |

SD: Standard deviation.

The mean METNS total score is 230.19±16.91. The mean FoMO total scale score is 22.03±8.17 (Table 2).

In the study, significantly higher FoMO Scale mean scores were observed in single nurses than in married nurses (p=0.000), in nurses who stated that they did not like their profession than in those who liked their profession (p=0.011), and in nurses with a shift system than in those working as daytime nurses (p=0.000) (Table 3).

It was found that female nurses had a significantly higher mean score on the sub-dimension of falls than male nurses (p=0.013), married nurses had significantly higher mean scores on the hospital infection sub-dimension than the single nurses (p=0.025). Nurses who works with continuous day time had significantly higher mean scores on the sub-dimensions of drug and transfusion practices (p=0.000), hospital infections (p=0.000), patient monitoring and material safety (p=0.000) and METNS total (p=0.000) than nurses who works shift type (Table 4).

There was a negative moderate correlation between FoMO and METNS total score (r=-0.321, p=0.000), Hospital infection (r=-0.314, p=0.000). There was a negative weak correlation between FoMO and drug and transfusion practices (r=-0.249, p=0.000) patient monitoring and material safety (r=-0.281, p=0.000), and communication (r=-0.283, p=0.000).

There was a negative moderate correlation between working experience and FoMO (r=-0.425, p=0.000). There was a positive weak correlation between the number of working years and the total score on METNS (r=0.188, p=0.004), including drug and transfusion practices (r=0.167, p=0.012), hospital infections (r=0.226, p=0.001), and patient monitoring and material safety (r=0.168, p=0.011) sub-dimension scores.

There was a negative moderate correlation between the age of the participants and their FoMO levels (r=-0.410, p=0.000). There was a positive weak correlation between age and METNS score (r=0.198,

**TABLE 2:** Nurses' mean scores of FoMO Scale, METNS total and METNS sub-dimension mean scores.

| | Scales | X̄+SD | Minimum | Maximum | Cronbach alpha |
|---|---|---|---|---|---|
| | METNS total | 230.19±16.91 | 152 | 245 | 0.95 |
| METNS Subscale | Drug and transfusion practices | 85.57±6.28 | 55 | 90 | 0.92 |
| | Hospital infections | 56.28±5.23 | 30 | 60 | 0.90 |
| | Patient monitoring and material safety | 41.22±4.37 | 27 | 45 | 0.84 |
| | Falls | 23.50±2.16 | 14 | 25 | 0.82 |
| | Communication | 23.61±2.18 | 11 | 25 | 0.75 |
| | FoMO Scale total | 22.03±8.17 | 10 | 50 | 0.88 |

FoMO: Fear of Missing Out; METNS: Medical Error Tendency in Nursing Scale; SD: Standart deviation.

**TABLE 3:** FoMO Scale total mean scores according to nurses' socio-demographic and clinical characteristics (n=227).

| | Med (Minimum-Maximum) | Test value |
|---|---|---|
| Gender | | |
| Male | 20 (10-36) | U=3215.50 |
| Female | 21 (10-50) | p=0.853 |
| Marital status | | |
| Married | 18 (10-50) | U=4362.50 |
| Single | 23 (10-43) | **p=0.000** |
| Educational status | | |
| High school | 23 (15-31) | KW=5.166 |
| Associate degree | 18 (10-36) | p=0.122 |
| Bachelor's degree | 21 (10-46) | |
| Postgraduate | 19 (10-50) | |
| Income status | | |
| High | 21 (10-50) | KW=1.636 |
| Medium | 20 (10-46) | p=0.441 |
| Low | 26 (10-37) | |
| Working clinic | | |
| Intensive care unit | 22 (10-50) | KW=11.106 |
| Internal medicine | 22 (10-41) | p=0.088 |
| Surgical | 19 (11-46) | |
| Oncology | 19 (10-34) | |
| Emergency | 24 (14-42) | |
| Pediatric | 18 (14-33) | |
| Other | 15 (11-37) | |
| Fond of their profession | | |
| Yes | 20 (10-50) | U=2831 |
| No | 24 (11-46) | **p=0.011** |
| Working type | | |
| Continous day time | 17 (10-38) | U=4145.50 |
| Shift type | 22 (10-50) | **p=0.000** |

FoMO: Fear of Missing Out; U: Mann-Whitney U; KW: Kruskal-Wallis.

p=0.003), including medication and transfusion (r=0.189, p=0.004), hospital infections (r=0.231, p=0.000), and patient monitoring and material safety (r=0.164, p=0.014) sub-dimension scores.

There was a positive weak correlation between time spent on social media and FoMO total scale scores (r=0.264, p=0.000) (Table 5).

## DISCUSSION

In this study, the nurses' TMME, FoMO levels, and contributing factors were examined. The total FoMO score of the nurses was found to be 20.00±7.46. In the literature, FoMO among nurses and nursing students, has also been reported to be moderate.[7-9] In the present study, more than 90% of the participants use at least one social media application and there was a positive weak correlation between time spent on social media and FoMO. Spending more time on social media leads to high FoMO levels.[24] In particular, with the increased use of smartphones, the time spent on social media has increased, which in turn affects FoMO.[7,8] Similar to our results it has been reported that as FoMO increases, internet usage also increases.[25] However there are also areas where social media and smart phone use are necessary and used in a positive way. According to the research findings, nursing students think smart phones are useful for theoretical and applied courses.[26.]

In this study, FoMO levels of single nurses, those who do not like their profession, and those who work with the shift system were found to be significantly higher. Casale and Flett stated that FoMO is higher in females than in males.[6] Moreover, a previous study emphasized that FoMO, which may be caused by spending more time on smartphone use, affects care behavior.[8] The higher tendency to use smartphones and the internet to spend time in clinical environments may have contributed to the increase

**TABLE 4:** METNS total mean scores and sub-dimension mean scale score according to some sociodemographic characteristics of nurses.

| | Drug and transfusion practices Med (Minimum-Maximum) | Hospital infections Med (Minimum-Maximum) | Patient monitoring and material safety Med (Minimum-Maximum) | Falls Med (Minimum-Maximum) | Communication Med (Minimum-Maximum) | METNS total Med (Minimum-Maximum) |
|---|---|---|---|---|---|---|
| Gender | | | | | | |
| Male | 88 (64-90) | 57 (38-60) | 40 (29-45) | 23.5 (14-25) | 24 (18-25) | 231 (171-245) |
| Female | 88 (55-90) | 59 (30-60) | 43 (27-45) | 25 (15-25) | 25 (11-25) | 236 (152-245) |
| | U=2908.50 | U=2837 | U=2684 | U=2480.50 | U=2740.5 | U=2612 |
| | p=0.278 | p=0.190 | p=0.083 | **p=0.013** | p=0.090 | p=0.057 |
| Marital status | | | | | | |
| Married | 89 (67-90) | 59 (38-60) | 43.5 (23-45) | 25 (14-25) | 25 (15-25) | 236.5 (171-245) |
| Single | 88 (55-90) | 58 (30-60) | 42 (29-45) | 25 (18-25) | 25 (11-25) | 223.25±18.85 |
| | U=5604 | U=5249.50 | U=5933.50 | U=6183.5 | U=6000 | U=5731.5 |
| | p=0.141 | **p=0.025** | p=0.436 | p=0.786 | p=0.490 | p=0.238 |
| Educational status | | | | | | |
| High school | 89 (84-90) | 59 (48-60) | 43 (35-45) | 25 (20-25) | 25 (16-25) | 232 (212-245) |
| Associate degree | 89 (67-90) | 60 (38-60) | 45 (29-45) | 25 (14-25) | 25 (20-25) | 241 (171-245) |
| Bachelor's degree | 88 (55-90) | 58 (30-60) | 43 (27-45) | 25 (15-25) | 25 (11-25) | 235 (152-245) |
| Postgraduate | 89.5 (73-90) | 59 (47-60) | 43 (32-45) | 25 (19-25) | 25 (19-25) | 237.5 (203-245) |
| | KW: 3.67 | KW=5.81 | KW=0.359 | KW=0.582 | KW=1.505 | KW=1.947 |
| | p=0.299 | p=0.121 | p=0.949 | p=0.900 | p=0.681 | p=0.584 |
| Income status | | | | | | |
| High | 89 (57-90) | 58 (38-60) | 43 (27-45) | 25 (15-25) | 25 (11-25) | 238 (172-245) |
| Medium | 88 (55-90) | 59 (30-60) | 43 (29-45) | 25 (14-25) | 25 (15-25) | 235 (152-245) |
| Low | 88 (76-90) | 58 (47-60) | 41 (31-45) | 25 (20-25) | 24.5 (16-25) | 234 (203-245) |
| | KW=1.82 | KW=0.675 | KW=0.809 | KW=1.058 | KW=5.091 | KW=0.668 |
| | p=0.402 | p=0.714 | p=0.667 | p=0.589 | p=0.078 | p=0.716 |
| Working clinic | | | | | | |
| Intensive care unit | 87 (64-90) | 57 (42-60) | 42 (30-45) | 25 (18-25) | 25 (16-25) | 233.5 (184-245) |
| Internal medicine | 89 (55-90) | 56 (30-60) | 43.5 (27-45) | 25 (15-25) | 25 (15-25) | 235 (152-245) |
| Surgical | 89 (67-90) | 59 (45-60) | 44 (31-45) | 24 (18-25) | 25 (20-25) | 238 (195-245) |
| Oncology | 89 (73-90) | 59 (50-60) | 43 (35-45) | 25 (20-25) | 25 (21-25) | 234 (216-245) |
| Emergency | 86 (57-90) | 56 (38-60) | 40 (35-45) | 25 (19-25) | 25 (11-25) | 229 (172-245) |
| Pediatric | 86 (67-90) | 51 (38-60) | 40 (29-45) | 24 (14-25) | 23 (19-25) | 227 (171-244) |
| Other | 89 (69-90) | 60 (47-60) | 44 (34-45) | 25 (20-25) | 25 (20-25) | 242 (192-245) |
| | KW=10.081 | KW=17.78 | KW=4.392 | KW=8.221 | KW=5.640 | KW=9.278 |
| | p=0.121 | **p=0.007** | p=0.624 | p=0.222 | p=0.465 | p=0.159 |
| Fond of profession | | | | | | |
| Yes | 88 (57-90) | 59 (38-60) | 43 (27-45) | 25 (15-25) | 25 (11-25) | 235 (172-245) |
| No | 88 (55-90) | 59 (30-60) | 43 (29-45) | 25 (14-25) | 25 (15-25) | 238 (152-245) |
| | U=3686 | U=3486 | U=3713 | U=3781 | U=3384 | U=3610 |
| | p=0.732 | p=0.371 | p=0.788 | p=0.927 | p=0.211 | p=0.591 |
| Working type | | | | | | |
| Continuous day time | 89 (55-90) | 60 (30-60) | 44 (27-45) | 25 (14-25) | 25 (15-25) | 241 (152-245) |
| Shift type | 86.5 (57-90) | 57 (36-60) | 41 (30-45) | 25 (18-25) | 25 (11-25) | 231 (172-245) |
| | U=4312.50 | U=4343 | U=4557 | U=5650.50 | U=5569 | U=4467 |
| | **p=0.000** | **p=0.000** | **p=0.000** | p=0.191 | p=0.131 | **p=0.000** |

METNS: Medical Error Tendency in Nursing Scale; U: Mann-Whitney U; KW: Kruskal-Wallis H.

**TABLE 5:** The correlation between some sociodemographic variables, the FoMO Scale mean scores and METNS total and sub-dimensions scale mean scores.

| | | FoMO | | Working experience (year) | | Age | | Time spent on social media (hour/day) | |
|---|---|---|---|---|---|---|---|---|---|
| | | r | p | r | p | r | p | r | p |
| | FoMO | - | - | -0.425 | **0.000** | -0.410 | **0.000** | 0.264 | **0.000** |
| | METNS total | -0.321 | **0.000** | 0.188 | **0.004** | 0.198 | **0.003** | -0.099 | 0.137 |
| METNS sub-dimensions | Drug and transfusion practices | -0.249 | **0.000** | 0.167 | **0.012** | 0.189 | **0.004** | -0.049 | 0.461 |
| | Hospital infections | -0.314 | **0.000** | 0.226 | **0.001** | 0.231 | **0.000** | -0.110 | 0.099 |
| | Patient monitoring and material safety | -0.281 | **0.000** | 0.168 | **0.011** | 0.164 | 0.014 | -0.106 | 0.103 |
| | Falls | -0.097 | 0.165 | 0.056 | 0.403 | 0.067 | 0.312 | -0.008 | 0.901 |
| | Communication | -0.283 | **0.000** | 0.098 | 0.140 | 0.085 | 0.204 | -0.075 | 0.263 |

FoMO: Fear of Missing Out; METNS: Medical Error Tendency in Nursing Scale; r: Spearman correlation.

in FoMO, given that single nurses have fewer responsibilities than married nurses and that those who dislike their profession reluctantly perform their professional practices. As the age and number of working years of the participants increased, the FoMO level decreased. Our study results are similar to those of some studies in the literature.[7]

In this study, the total mean score METNS of nurses' was 225.42±16.76. Similar to the results of the present study, some studies have reported that nurses' TMME is low.[27] A low TMME is crucial in nursing practice as it reduces the risk of malpractice. According to our study, daytime nurses are less prone to make medical errors. Similarly, it has been reported that daytime and female nurses are less prone to make medical errors.[11,16] Working during the night shift can negatively affect the circadian rhythm, resulting in fatigue, lack of attention, and poor performance.[16] In this study, although there was no significant relationship between the fondness toward the profession and the TMME, some studies have reported that nurses who love their profession have a lower TMME.[11] Our study reported that as the age and work experience of the nurses participating in the study increased, their TMME decreased. These findings are consistent with those of the literature.[16] We concluded that as nurses gets older and spends more time working, they gain professional experience and skills, which improves critical thinking abilities and lessens the likelihood of making medical error. In the present study married nurses had significantly lower TMME. Since marriage can increase the sense of responsibility, it is thought that it affects the tendency to medical errors in a positive way.

Nosocomial infections are one of the sub-dimensions of METNS.[23] Nosocomial infections, especially surgical site infections, increase mortality and morbidity, and hospitalization time.[28] In order for nursing practices to be carried out correctly, patients should be cared for with a nursing process approach.[29] It is thought that the nursing process has an important role in reducing medical errors. Medical error rates are also one of the quality indicators of hospitals. Institutional policies are important in reducing medical errors. Nurses should take an active role in reducing medical errors and planning corrective and preventive actions. Administrator nurses with effective problem-solving and decision-making skills are an important resource for the quality of the institution.[30]

In the present study, as the FoMO level increased, the TMME increased. FoMO is associated with negative affect assessments.[31] As almost all participants (96.9%) used at least one social media application and the average time spent on social media was 2.94±2.10 hours, we believe that the use of social media may increase the risk of making medical errors. Inaccurate smartphone use may increase the possibility of making mistakes as it distracts the employees.[32] Social media use may lead to negative results, such as procrastination of duties and decreased

job performance.[33] In addition, FoMO is found to be associated with sleep problems.[34]

### LIMITATIONS

This study had two limitations. First, the data were collected from only one hospital; hence, the results of the study cannot be generalized. Not being anonymous was the second limitation.

## CONCLUSION

Nurses' FoMO levels are moderate and their TMME is low. FoMO is influenced by marital status, fondness toward the profession, and working pattern (working with shifts), whereas the TMME is affected by gender, marital status, and working pattern (working with shifts). As FoMO increases, the TMME increases. The level of FoMO and the TMME decrease with increasing age and total working experience.

Nurses cannot be expected to stay away from the internet or social media in their social or professional lives. However, to reduce the risk of medical errors, it is recommended to be careful when using smartphones and social media during working hours. External stimuli, such as the smartphone, can increase the TMME, particularly in processes that require attention, such as the drug preparation. Hence, nurses should be educated about the impact of FoMO on work life and patient safety. Necessary orientation programs should be effectively planned and implemented, particularly to avoid medical errors among new nurses. Hospital managers should organize working hours and work environments in a way that reduces the risk of medical errors. Because shift work increases the likelihood of medical errors, working hours should be reduced and appropriate work schedules should be established; moreover, training and supervision activities should be reinforced to reduce the likelihood of medical errors, particularly among nurses working during night shifts.

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### *Conflict of Interest*

*No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.*

### *Authorship Contributions*

*All authors contributed equally while this study preparing.*

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