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# Investigating the level of respect for human dignity and its related factors in providing care for the elderly with COVID-19 in shahid Beheshti Hospital, Kashan, 2021

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**Abstract:**

**BACKGROUND:** Patients' dignity includes the feelings of being valuable, maintaining their respect, and respecting their physical and spiritual privacy. Coronavirus disease of 2019 (COVID-19) is one of the life-threatening diseases that affect the dignity of the elderly. Therefore, the aim of this study was to investigate the level of respect for human dignity and its related factors in providing care for the elderly with COVID-19 in Shahid Beheshti Hospital in Kashan, 2021.

**MATERIALS AND METHODS:** This cross-sectional study investigated 250 nurses caring for the elderly with COVID-19 and 300 elderly with COVID-19 in Shahid Beheshti Hospital of Kashan in 2021. A sampling of the elderly with COVID-19 was performed continuously based on the inclusion criteria and sampling of nurses by census method. The research tools included the questionnaire on background variables of nurses and the elderly, the questionnaire on respect for human dignity from the perspective of nurse and patient, and the job stress questionnaire. Then, the results were analyzed using Pearson's correlation coefficient tests, t-tests, and multiple regression in SPSS 21 software.

**RESULTS:** Based on the results, the mean and standard deviation of patient dignity was 132.13 ± 71.52 and 129.14 ± 06.44 from the perspective of the nurses and the elderly, respectively. The results revealed that the level of respect for human dignity from the nurses' perspective was significantly related to gender and job stress ($P < 0.05$). Moreover, a significant relationship was found between the human dignity score from the elderly's perspective and the elderly's marital status and education ($P < 0.05$). According to the results of regression, the variables of nurses' gender and job stress explained about 8.7% of the variance of the patient's dignity observed by the nurses (Adjusted R-Square = 0.087). Finally, the variables of marriage and education of the elderly explained about 4% of the variance of their dignity observed by the nurses (Adjusted R-Square = 0.040).

**CONCLUSION:** The results showed that with the increase of job stress in female nurses, their human dignity toward the patient decreases. Elderly people who are married and have a high school diploma have a better understanding of respect for human dignity. Since respect for human dignity is important from the point of view of nurses and the elderly, it is suggested to teach nurses how to respect patient dignity.

**Keywords:**

COVID-19, dignity, elderly, nurse



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## Introduction

The elderly population of the world is increasing from 800 million to two billion people by 2050, of which 23% live in developed countries and 9% in developing countries.[1] According to Tracy (2007), regardless of whether the interventions performed by caregivers for the elderly are physical or psycho-social, one of the most fundamental principles that must be observed in caring for the elderly is their human dignity. In the ethics codes of nursing also, an emphasis is placed on the patient's dignity.[2] Defined by some researchers, a patient's dignity refers to the feelings of being valuable, maintenance of one's respect, and physical privacy.[3] Dignity includes the four attributes of respect, autonomy, empowerment, and communication.[2] Accordingly, it is essential to maintain the dignity of the elderly.

As shown in some studies, illness and care needs can threaten the dignity of the elderly.[3,4] Thus, one of the most important principles that must be observed by nurses during the process of care for the elderly is to preserve their dignity.[4] COVID-19 is a life-threatening disease that can affect the dignity of elderly patients. Following the outbreak of COVID-19 and the hospitalization of many elderly patients, attention was paid to their human dignity.[5,6] As such, according to several studies, during the pandemic and because of the high occupational stress and anxiety of nurses regarding the contagion of the disease, less attention has been paid to the human dignity of patients, especially the elderly.[7,8]

Chochinov *et al*.[7] (2020) argued that the anxiety of nurses and patients with COVID-19 together with the high prevalence of deaths decreased attention to human dignity. They maintained that human dignity was neglected in these patients because of the criticality of the situation, lack of facilities and equipment for dealing with the new coronavirus, hospitalization of the patient, lack of nursing staff, stigma of the disease, high stress and anxiety of patients and nurses, and the possibility of the treatment staff's getting infected through the patients.

Constituting more than 75% of the treatment team, nurses are the main part of this team and the first group on the front line of facing the COVID-19 pandemic.[8] The results of a study have indicated that nurses who provide care for patients with COVID-19 pay less attention to the human dignity of the elderly as they believe that younger people with this disease are more important than elderly patients.[5]

According to the studies, different factors are involved in respecting the human dignity of patients. Dhungana (2020) suggested that as COVID-19 is highly contagious, nurses are under high anxiety and stress in providing care for patients, which can decrease the efficiency of care and maintain the human dignity of patients.[9] Gordon (2018) indicated that the level of respect for human dignity depends on the age, gender, and mental state of patients.[10] A qualitative research by Henderson *et al*.[11] (2009) found that two factors of preserving the physical environment and the nurse's communication style can affect human dignity. They argue that these two factors are not properly observed. Mason *et al*.[12] (2014) referred to occupational stresses of nurses, such as patient mortality rate, long illness, side effects of drugs, and pain and suffering of patients as factors leading to the nurses' fatigue and lack of attention to human dignity. Webster *et al*. (2009)[13] investigated the views of elderly patients about dignity and its promotion in hospitals. Based on their results, maintenance of autonomy and effective communication were considered by the elderly as factors affecting patients' dignity. However, a review of the available sources shows that there is little information on the level of respect for human dignity and its related factors. Moreover, based on the studies conducted in different countries on patient dignity, the concept of dignity is a global concern for nurses. Most of these studies express a need for conducting more research to identify the factors that maintain and improve dignity in different patient and hospital wards.[14] Also, according to studies, nurses had high anxiety and job stress due to the fear of COVID-19 pathogenicity, which had a negative effect on their care of patients.[6,15,16]

The elderly population is growing quickly in Iran and the incidence of COVID-19 is dramatically high in this group of people. Moreover, no research has hitherto investigated the level of respect for human dignity and its related factors in the elderly suffering from this disease, and hence, human dignity has been overlooked with regard to this disease. Accordingly, this study was conducted to determine the level of respect for human dignity and its related factors in the elderly with COVID-19 from the perspective of the nurses and the patients.

## Materials and Methods

### Study design and setting

This cross-sectional study was conducted in 2021 on 250 nurses caring for the elderly with COVID-19 and 300 elderly patients aged 60 years and more, whose PCR test was positive, their infection was confirmed by an infectious disease doctor, and were hospitalized in Shahid Beheshti Hospital in Kashan, Iran. Data were collected from August to November 2021.

### Study participants and sampling

Continuous and census sampling methods were used for the elderly and the nurses, respectively. The sample size was calculated based on the following formula and

according to the study of Karimi *et al*.,[17] the standard deviation of 17.43, d = 0.12, and z = 1.96. The number of elderly patients was calculated to be 266 but 300 samples were selected for more accuracy. The sample size of the nurses was determined using the census method and included all nurses who were in charge of caring for patients with COVID-19 and met other inclusion criteria. Thus, the sample size of the nurses was determined to be 250 subjects.

$$n = \frac{z^2_{1-\frac{\alpha}{2}}\sigma^2}{d^2}$$

Inclusion criteria for the nurses were having a bachelor's or master's degree in nursing, 4 weeks of work experience in caring for a COVID-19 patient, and informed consent for participating in the research. The inclusion criteria for the elderly were the age of 60 years and older, informed consent for participating in the research, being aware of the time and place (by asking them about the time and place), at least 3 days of hospitalizing, a definite diagnosis of COVID-19 according to the PCR test and confirmation of the infectious disease specialist, and no other cognitive impairment based on the mini-mental state examination (MMSE) questionnaire (score of >20 based on the questionnaire). The exclusion criteria for the elderly and nurses included incomplete answers to questions.

## Data collection tool and technique

First, the researcher went to Shahid Beheshti Hospital and selected eligible nurses and hospitalized elderly patients. Accordingly, the elderly with COVID-19 completed the MMSE questionnaire for the elderly, and those with no cognitive problems based on this questionnaire (scored 20 and above), who also met the other inclusion criteria, were included in the study. After obtaining written informed consent from them, the eligible nurses were asked to meticulously complete the questionnaires of demographic variables, health and safety executive (HSE) job stress, and the questionnaire on respecting the human dignity of the elderly from the perspective of nurses. The elderly participants also completed the questionnaire on demographic variables for the elderly and the questionnaire on respecting the human dignity of the elderly from their perspective. Questionnaires related to the elderly were completed at the time of discharge in the form of an interview (researcher with the elderly) at the bedside of the patient and through observing their privacy and health protocols. Data were collected during the weekdays between 8 am and 8 pm for the hospitalized elderly and the nurses with the presence of the first researcher in different shifts. Finally, the data were entered into the statistical software and analyzed.

## Measurements

The data were collected using the following questionnaires: The questionnaires of demographic variables in nurses which included age, sex, education, marital status, work experience, ward, number of work shifts per month, overtime per month, type of employment, and work shifts. The questionnaire of demographic variables in the elderly included age, sex, occupation, education, hospitalization duration, marital status, underlying diseases, and bed position.

The two-part questionnaire of respecting the human dignity of the elderly from the perspective of nurses and the elderly: This study used the questionnaire of respecting the human dignity of the elderly from the perspective of nurses and the elderly designed by Karimi *et al*. (2019).[17] This questionnaire examined the respect for the dignity of the elderly based on a 4-point Likert scale ranging from "not at all" (1) to "completely" (4) in different dimensions including personal privacy (27 items), the interaction between the nurse and the elderly patient (10 items), and the autonomy of the elderly patient (4 items) from the perspective of the nurses and the elderly. The total scores obtained in the domains of each part were between 65 and 159, which were classified into four levels: weak (lower than 112), medium (112-122), good (122-132), and very good (greater than 132). In the study conducted by Karimi *et al*.,[17] the content validity ratio (CVR) and content validity index (CVI) of the questionnaire were calculated to be 0.84 and 0.88 from the perspective of nurses, and 0.80 and 0.80 from the perspective of the elderly. In their study, the reliability of the questionnaire was calculated by Cronbach's alpha test to be 0.83 and 0.72 from the perspective of nurses and the elderly, respectively. In the present study, Karimi *et al*.'s[17] questionnaire was revised and its questions were modified according to the level of respect for dignity in the hospitalized elderly with COVID-19 from the perspective of nurses and elderly. In the present study, the CVR and CVI values of the modified human dignity questionnaire were obtained to be 0.82 and 0.84, respectively, from the perspective of the nurses. Moreover, the reliability of the questionnaire was calculated to be 0.80 by using Cronbach's alpha. Additionally, in the present study, the CVR and CVI values of the modified human dignity questionnaire were calculated to be 0.79 and 0.81, respectively, from the perspective of the elderly. The reliability of the questionnaire was also calculated to be 0.78 through using Cronbach's alpha.

The HSE occupational stress questionnaire had 35 questions based on a 5-point Likert scale, and the range of scores was between 35 and 175. While a higher score indicated lower levels of stress, the lower the score, the more one's job stress.[18] The validity of the questionnaire

by Azad Marzabadi and Shaharaki (2009) was reported to be 0.78 using Cronbach's alpha.[19] Cronbach's alpha was calculated to be 0.78 in the present study.

The Iranian questionnaire for investigating the cognitive status of the elderly was completed by the older adult. The total score of this questionnaire was 30. A score lower than 20 was considered a cognitive impairment. The reliability of this questionnaire was calculated to be 0.94 by Foroughan *et al*.[20] Its Cronbach's alpha was calculated to be 0.81 in the present study.

## Data analysis

The data were entered into SPSS16 software (SPSS Inc., Chicago, IL, USA) and the normality of quantitative variables was checked using the Kolmogorov–Smirnov test. Descriptive statistics (mean, standard deviation, and frequency percentage) were used to describe the status of demographic variables and respect for dignity from the perspective of the nurses and the elderly. An independent *t*-test was used to compare the views of the nurses and hospitalized elderly regarding respect for dignity. One-way ANOVA and independent *t*-test were used to investigate the relationship between qualitative contextual variables and the mean score of respect for dignity. In addition, Pearson's correlation was used to check the correlation of quantitative background variables with the average score of respect for dignity. Step-by-step regression test was used to predict the explanatory variables of human dignity. The significance level was considered to be 0.05.

## Ethical considerations

Permission to conduct the present study was obtained from the Vice-Chancellor of Research of Kashan University of Medical Sciences with the code of ethics of IR.KAUMS.NUHEPM.REC.1399.092. After introducing herself and explaining the objectives of the research to the patients who had the inclusion criteria, the researcher obtained their written consent.

# Results

Based on the results, the mean and standard deviation of patient dignity were 132.13 ± 71.52 (in the range of very good) and 129.14 ± 06.44 (in the range of good) from the perspective of the nurses and the elderly, which were significantly different ($P = 0.01$) [Table 1]. As indicated by the results, the level of respect for human dignity from the perspective of the nurses, the gender of the nurse (female), and the occupational stress score were significantly correlated ($P < 0.05$). By contrast, the dignity score from the perspective of the nurses, work experience, and overtime hours per month were not significantly correlated ($P > 0.05$) [Table 2]. As shown in Table 3, there was a significant relationship between

**Table 1: The score of the nurses' respect for human dignity in caring for the elderly with COVID-19 from the perspective of the nurses and the elderly in Shahid Beheshti Hospital in 2021**

| Human dignity | Min | Max | Mean±SD |
|---|---|---|---|
| From the perspective of nurses | | | |
| Patient privacy | 60 | 107 | 88.10±83.99 |
| Patient interaction | 21 | 40 | 31.4±74.46 |
| Patient autonomy | 7 | 16 | 12.2±17.31 |
| Total score | 100 | 161 | 132.13±71.52 |
| From the perspective of the elderly | | | |
| Patient privacy | 59 | 105 | 88.10±33.40 |
| Patient interaction | 16 | 38 | 29.4±46.46 |
| Patient autonomy | 5 | 16 | 11.2±45.08 |
| Total score | 89 | 17 | 129.14±44.06 |
| Comparison of the dignity score | | | |
| Statistical test | | | 0.01 |

**Table 2: Correlation between the score of respect for human dignity from the perspective of the nurses caring for the elderly with COVID-19 and their qualitative background variables in Shahid Beheshti Hospital in 2021**

| Background variables of nurses | No. (%) | Human dignity | Statistical test |
|---|---|---|---|
| Gender | | | |
| Male | 54 (18) | 127.13±27.01 | *t*=-3.57, **P*=0.00 |
| Female | 196 (65) | 134.13±28.19 | |
| Marital status | | | |
| Single | 79 (26.3) | 133.13±69.16 | *t*=0.778, **P*=0.43 |
| Married | 171 (57) | 132.13±26.70 | |
| Education | | | |
| Bachelor's degree | 195 (65) | 132.13±36.35 | *t*=-0.774, **P*=0.44 |
| Master's degree | 55 (18.3) | 133.14±96.16 | |
| Ward of service | | | |
| Internal ward | 53 (17.7) | 133.12±24.54 | *F*=0.691, ***P*=0.63 |
| ICU | 92 (30.7) | 132.13±96.62 | |
| Infectious disease ward | 13 (4.3) | 131.15±30.78 | |
| Emergency | 20 (6.7) | 135.12±35.02 | |
| Surgical ward | 29 (9.7) | 134.13±20.39 | |
| Other | 43 (14.3) | 129.14±72.69 | |
| Employment type | | | |
| Regular employment | 168 (56) | 132.14±77.01 | *F*=0.355, ***P*=0.70 |
| Contractual | 49 (16.3) | 133.13±61.14 | |
| Internship | 33 (11) | 131.11±58.06 | |
| Working shift | | | |
| Fixed morning shift | 17 (5.7) | 134.12±75.00 | *t*=0.405, **P*=0.68 |
| Rotational shiftwork | 233 (77.7) | 132.13±62.59 | |
| Age (year) | | | |
| Under 30 | 68 (22.7) | 132.12±72.33 | *F*=0.239, ***P*=0.78 |
| 30–40 | 139 (46.3) | 133.14±100.33 | |
| Above 40 | 43 (14.3) | 131.12±46.79 | |
| Job stress score of nurses | | 119.11±77.22 | ****r*=0.224, *P*=0.00 |
| Working experience | | 11.5±16.43 | ****r*=0.016, *P*=0.80 |
| Overtime hours per month | | 41.18±67.90 | ****r*=-0.063, *P*=0.32 |

*Independent *t*-test, **ANOVA, ***Pearson correlation coefficient

the human dignity score from the elderly's perspective and their marriage and education ($P < 0.05$) [Table 3].

A multiple regression model was used to examine and present the regression model of the dependent variable of dignity from the perspective of the nurses and the predictor or independent variable of individual and clinical factors. Factors significant in univariate analysis or the factors whose significance level was lower than 0.2 (the gender and job stress of the nurses) were included in the model as independent variables. According to the results, from the total variables included in the variable model, gender and job stress of the nurses were identified as related variables, which explained about 8.7% of the variance of the patient dignity observed by the nurses (Adjusted R-Square = 0.087) [Table 4].

Similarly, a multiple regression model was used to examine and present the regression model of the dependent variable of dignity from the perspective of the elderly and the predictor or independent variable of individual and clinical factors. Factors that were significant in univariate analysis or the factors whose significance level was lower than 0.2 (marriage and education level of the patient) were included in the model as independent variables. Based on the results, from the total variables included in the variable model, the marriage and education level of the patients were identified as related variables, which explained about 4% of the variance of the patient dignity observed by the nurses (Adjusted R-Square = 0.040) [Table 5].

**Table 3: Correlation between the score of respect for human dignity from the perspective of the elderly with COVID-19 and their qualitative background variables in Shahid Beheshti Hospital in 2021**

| Investigated factors | No. (%) | Human dignity | Statistical tests* |
|---|---|---|---|
| Gender | | | |
| Male | 207 (69) | 128.14±89.39 | 0.72* |
| Female | 93 (31) | 129.14±53.63 | |
| Age (year) | | | |
| 60–70 | 182 (60.7) | 129.14±90.41 | 0.20** |
| 71–80 | 60 (20) | 126.15±11.67 | |
| Above 80 | 58 (19.3) | 129.13±63.01 | |
| Marital status | | | |
| Single | 101 (33.7) | 132.13±06.42 | 0.011* |
| Married | 199 (66.3) | 127.14±58.74 | |
| Occupation | | | |
| Self-employed | 46 (15.33) | 128.14±43.47 | 0.28* |
| Employee | 58 (19.3) | 132.14±15.92 | |
| Retired | 128 (42.7) | 129.14±39.05 | |
| Worker | 36 (12) | 125.13±44.63 | |
| Housewife | 32 (10.7) | 128.14±78.43 | |
| Education | | | |
| Under diploma | 239 (79.7) | 127.14±96.33 | 0.007* |
| Diploma and academic | 61 (20.3) | 133.14±52.14 | |
| Underlying diseases | | | |
| Yes | 168 (56) | 128.14±85.65 | 0.74* |
| No | 132 (14) | 129.14±23.40 | |
| Bed position | | | |
| Walled room | 104 (34.7) | 129.14±66.10 | 0.84 |
| Fixed wall and curtain | 58 (28.3) | 127.13±94.92 | |
| With paravan | 43 (14.3) | 129.14±83.75 | |
| Without paravan | 68 (22.7) | 129.14±20.75 | |
| Hospitalization duration of the elderly patient | | | |
| Mean±SD | 6.1±78.65 | ***$r$=-0.052, $P$=0.37 | |

*Independent *t*-test, **ANOVA, ***Pearson correlation coefficient

**Table 4: Factors related to the level of dignity from the perspective of the nurses in caring for the elderly with COVID-19 in Shahid Beheshti Hospital in 2021 using multivariate analysis (multiple linear regression)**

| Variable | *B* | Standard error | β | *t* | *P* |
|---|---|---|---|---|---|
| Fixed value | 89.74 | 9.31 | - | 9.63 | 0.00 |
| Job stress of the nurse | 0.256 | 0.073 | 0.212 | 3.49 | 0.001 |
| Gender of the nurse | 6.92 | 1.99 | 0.21 | 3.47 | 0.001 |

$r$=0.308, $R^2$=-0.095, Adjusted $R^2$=-0.087

## Discussion

The results indicated that the total score of patient dignity was 132.13 ± 71.52 (in the range of very good) and 129.14 ± 06.44 (in the range of good) from the perspective of the nurses and the elderly, which were significantly different. Sabeghi *et al*. (2014)[21] also reported a good level of respect for human dignity from the perspective of the elderly and nurses. The difference, however, is that the sampling in the present study was performed during the COVIDovid-19 pandemic and among the elderly with a definite diagnosis of COVID-19, but in the study of Sabeghi, the sampling was among all the elderly hospitalized with any type of disease. In the present study, the mean score of human dignity in providing care for the elderly was higher from the perspective of the nurses than that of the elderly. Bäck *et al*.[22] investigated the attitude of nurses and patients toward patient privacy. The results revealed a significant difference between the attitude of nurses and that of the patients, that is, the nurses had a more positive attitude toward protecting the patient's privacy. In other words, the nurses believed that patient privacy was more important than the patients themselves, which was in line with the results of our study. Contrary to the results of the present study, Ebrahimi *et al*. (2012)[23] showed that almost no patient was satisfied with the quality of the services provided with regard to preserving their dignity. According to them, different cultural backgrounds, age differences, and different needs of the subjects were among the reasons for their dissatisfaction with the maintenance of their human dignity. In the study of Tadd *et al*. (2010),[24] dignity and respect were vitally significant

**Table 5: Factors related to the level of dignity from the perspective of the elderly with COVID-19 in Shahid Beheshti Hospital in 2021 using multivariate analysis (multiple linear regression)**

| Variable | *B* | Standard error | β | *t* | *P* |
|---|---|---|---|---|---|
| Fixed value | 33.77 | 3.84 | - | 33.77 | 0.00 |
| Being married | −4.526 | 1.73 | −0.148 | −2.61 | 0.009 |
| Education of the patient | 5.60 | 2.03 | 0.156 | 2.76 | 0.006 |

$r$=0.215, $R^2$=-0.046, Adjusted $R^2$=-0.040

for all age groups and the outstanding concerns of the elderly. The culture that governs any society and the type of illness of the elderly seem to be effective in changing their attitude toward respect for human dignity. In the study of Karimi *et al*. (2019),[17] the importance of dignity was high and very high from the perspective of many elderly people, whereas it was moderately and lowly significant from the perspective of nurses. According to these researchers, the high workload of nurses and their limited knowledge in caring for the elderly was the main reason for the low significance of human dignity from the perspective of nurses. Like our study, the study of Karimi *et al*.[17] was also conducted in Kashan city, but the two studies were different in terms of the type of illness of the hospitalized elderly patients, that is, in our study, only the hospitalized elderly patients with COVID-19 were investigated.

According to the results, the demographic variables of the nurses such as their marital status, ward, type of employment, work shift, age, work experience, and overtime hours per month were not significantly correlated with the human dignity score from the perspective of the nurses. However, there was a significant relationship between the degree of respect for human dignity from the perspective of female nurses and the occupational stress score. Similar to the present study, in the study of Karimi *et al*. (2019),[17] gender was also identified as a factor related to the level of nurses' respect for patient dignity, which explained 2.8% of the variance. To explain this finding, it can be argued that the conduction of this study during the pandemic, the concern of the nurses about the health of their own and their families, and the mortality of the elderly with COVID-19 caused job stress in nurses, which affected the rate of respect for patient dignity among them. Similar to our study, Karimi *et al*. (2019)[17] and Dehghani *et al*. (2015)[25] maintained that female nurses care more about patient privacy and ethical issues than male ones. In the study conducted by Rayat Dost *et al*. (2018),[26] the score of human dignity from the perspective of nurses was not significantly correlated with their sex, marital status, and education. Except for the variable of sex, the results of the present study are in line with the results of Rayat Dost's study. Accordingly, unlike Rayat Dost's study, there was a significant relationship between female gender and human dignity score in the present study. One of the reasons is perhaps the personality type of women. Female nurses seem to be more morally sensitive and compassionate in caring for the elderly with COVID-19 and, hence, there is a positive correlation between the female gender and human dignity score. Hossain and Clatty (2021) suggested that during the COVID-19 pandemic, nurses experience a lot of stress which is caused by the death of their patients, fear of being infected, and transmitting the disease to their families. As such, they become morally distressed which makes respect for human dignity difficult for them. In their research, they referred to measures such as counseling, strengthening nurses' financial resources, and motivations such as increasing their well-being and incentive leave as solutions for this problem.[27] Sperling *et al*. (2021)[28] indicated in their study that nurses with lower levels of job stress during the COVID-19 pandemic respected the patient's privacy and dignity more. It seems that public vaccination against COVID-19 has reduced the job stress of nurses, thereby promoting their respect for human dignity in patients with COVID-19.

Based on the results, there was a significant relationship between the human dignity score from the perspective of the elderly and their marriage and education. However, the human dignity score from the perspective of the elderly was not significantly correlated with the age, sex, occupation, underlying diseases and hospitalization duration, and the patient's bed position. Unlike the present study, in the study of Karimi *et al*. (2019),[17] the human dignity score from the elderly's perspective was significantly correlated with age, gender, occupation, and bed position. Thus, in their research, the score of human dignity was higher from the perspective of the female elderly hospitalized in an isolated room. In the study of Dehghan Nayeri and Aghajani (2009), there was no significant relationship between gender and the level of respect for privacy in the emergency department.[29] In the study of Kohn *et al*. (2006)[30] in the internal and surgical wards, men believed that their privacy was respected more than women. In in the study of Bäck and Wikbald (1988),[22] female clients mentioned a higher degree of need for privacy than men. The discrepancy between the results of the present study and other studies could be due to different cultural background. As the present study showed, single elderly patients with higher education degrees reported a higher score of respect for human dignity. Unmarried/single patients had a higher score of respect for human dignity than married ones, which could be due to the higher sensitivity of married people to privacy or the greater attention of employees to respect the privacy of single people. In the study of Kalagri *et al*. (2007),[31] illiterate people reported a higher level of respect for physical privacy than people with

elementary, high school, and university education, which is not consistent with the present study. This may be due to the fact that people with higher education are more aware of their rights. The level of education can affect individual expectations and the extent they are fulfilled from their perspective. These contradictory results may be due to different demographic variables of the research subjects, including cultural differences, the understanding of nurses in different cities, and the physical structure of the wards. Moreover, lack of proper space in the wards to separate men and women can also be a reason for the violation of the patient's privacy. The limitations of the research included sampling during the fourth peak of COVID-19, which affected the findings of the research due to the large workload of nurses. Also, the view of human dignity is a subjective matter that varies from person to person.

## Conclusion

Based on the results of the present study, the total score of the patient's dignity from the perspective of the nurses and the patients was in the range of very good and good, respectively, and was significantly different. In other words, the nurses believed that they respect the dignity of the patients with COVID-19. The results showed that with the increase of job stress in female nurses, their human dignity toward the patient decreases. Elderly people who are married and have a high school diploma have a better understanding of respect for human dignity. It is suggested to conduct a qualitative study explaining the experiences of observing human dignity and related factors from the perspective of nurses and the elderly.

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### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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### Conflicts of interest

There are no conflicts of interest.

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