



Research Article

**NURSES' RETIREMENT PLANS: A CROSS-SECTIONAL AND COMPARATIVE STUDY WITH FINANCIAL, LIFESTYLE, PSYCHOSOCIAL AND HEALTH DIMENSIONS FROM TÜRKİYE†**

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**Abstract:** *This descriptive, cross-sectional, and comparative study examined the retirement planning of nurses in Türkiye. The research was conducted between May and October 2022 in Türkiye with 262 nurses who agreed to participate in the study. Data were collected using a Descriptive Information Form and the Process of Retirement Planning Scale and analyzed with descriptive statistics and comparative tests. As a result of the research, it was seen that the nurses' made plans for the lifestyle the most, and that they made financial plans the least. In addition, the levels of retirement planning of nurses who were male, who were aged between 40-59, who had a bachelor's or master's degree, who had an extended family, who had 3 or more children, who were employed in the private sector, who had a professional and institutional experience of 20 years or over, who had willingly chosen the profession, and who had a chronic disease were higher. In this study, it was revealed that the level of retirement planning of nurses in Türkiye was not high and that the levels showed differences, especially in terms of age, the number of cohabitants, working schedule, and the presence of chronic disease. Nurses should make a conscious retirement plan and be supported, especially in financial planning. To this end, primarily, wage policies should be developed in order to increase monthly income levels and factors such as economic concerns and health problems should be eliminated.*

**Keywords:** *Nursing, nurse, retirement plan, Türkiye*

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## 1. Introduction

### 1.1. Background of the Study

As the country's population ages, the manpower of that country ages and the number of manpower who leave business life and retire increases. Retirement, which refers to the end of active working life, is an important process in human life since it is a turning point that continues until the end of life and determines the transition from middle age to old age [1]. In the world, the average life expectancy differs according to the country and usually varies between 75-85 in men and 81-85 in women [2-3]. The

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average retirement age for men and women who started to work at the age of 22 is 66-66 in Australia, 65-65 in Finland, 64.5-64.5 in France, 62-62 in Italy, 65-65 in Japan, 62-62 in Korea, 67-67 in Norway, 66-66 in England, 66-66 in America, 60-55 in China, and 52-49 in Türkiye, respectively [4]. According to these data, women live longer compared to men and people are expected to live an average of 10-15 years after retirement. These years constitute an important period in a person's life and it is necessary to plan how to spend these years. Some people approach the decision of retirement with fear, avoidance, and rejection whereas others elaborately plan this process and get prepared for retirement. However, it is often not planned until the last time, and the years missed are not noticed [5]

Transition to retirement is important and requires careful planning [6]. If retirement is not well-planned, it may become a difficult process that causes feelings such as uselessness, anxiety, social isolation, and self-abandonment over time [6] and impairment of health due to cognitive dysfunctions and depression [7]. For this reason, retirement planning, which is the first stage of the retirement process and is necessary for a satisfactory retirement, should be well-made in several aspects such as financial, health, social, work/career, and mental [8-10].

According to the data from the World Health Organization, nurses constitute an important group of the international health labor force and there are 27.9 million nurses working worldwide. The nurse shortage is around 5.9 million and the rate is 89% in low- and middle-income countries. By 2030, the nursing labor force is expected to increase to 36 million [11]. It was stated that nurses work until old age due to the nurse shortage in European countries [12]. It was reported that the retirement age has been increased and that the compulsory retirement age has been abolished in some countries such as England, America, and Australia [13-15]. It was emphasized that the number of elderly employees is increasing in some countries such as Japan, Korea, and China [16-17].

Türkiye is one of the countries with an aging population. Nurses, who have an important role in the delivery of health services in the country, have a tiring, risky, stressful, and exhausting working life. There is no problem in terms of nurse manpower in Türkiye; however, nurses retire at a younger age, when productivity and efficiency continue, compared to other countries. The highest rates of working after retirement among nurses in various countries are seen in Iceland (83%), New Zealand (78.8%), Sweden (76.4%), and Japan (74.1%). However, Türkiye ranks last in this list with 35.6% [18].

The conscious planning of the retirement period will enable nurses to be productive and prosperous, continue to work, not worry about the future individually, reduce their fears, and reduce all kinds of support they may need as healthy individuals. Furthermore, it allows nurses to continue to benefit from the experiences, knowledge, and abilities of retired nurses and have the opportunity to take advantage of them as counselors, mentors, and guides [19-21].

In recent years, more importance has been attached to the retirement plans of nurses worldwide and the number of studies on this subject has begun to increase [12,19,22,23]. However, no study has been conducted on nurses' retirement plans in Türkiye, which is one of the countries that professionally emigrated people to European countries in recent years, especially during the COVID-19 pandemic. Based on this need, it is predicted that the results of this study, which was conducted after the pandemic, will provide important data about nurses' retirement status and will be effective in the future decisions of health politicians about nurses.

## 1.2. Research Questions

Accordingly, answers were sought to the following questions.

- 1) What is the retirement planning status of nurses?
- 2) Do nurses' retirement plans differ according to their descriptive characteristics and retirement status?

## 2. Materials and Methods

### 2.1. Study Design

This descriptive, cross-sectional, and comparative study was carried out to reveal the retirement planning of nurses in Türkiye.

### 2.2. The Study Area

The research population consisted of nurses (N= 227292) working all over Türkiye [24].

### 2.3. Study Population

All nurses aged over 20 who could be reached online and volunteered to participate in the study were included in the study using random sampling. A total of 262 nurses voluntarily participated in the study and filled out the data collection tool.

### 2.4. Sample Size Estimation

A power analysis was performed to test the sufficiency of the sample size and the power was calculated as 0.964 with a confidence interval of 95%, an error margin of 5%, and an effect size of 0.5. It was calculated that the sample size should be 244. These values show that our sample size (n=262) is sufficient for this study.

### 2.5. Data Collection Tools

An online survey including the “Demographic Information Form” to determine the characteristics of nurses and the “Process of Retirement Planning Scale” was used for data collection.

***Demographic Information Form:*** The form was prepared by the researchers in accordance with the purpose of the research and consists of 25 questions to determine the demographic characteristics of nurses and their retirement status.

***The Process of Retirement Planning Scale:*** The Process of Retirement Planning Scale (PRePS) was developed by Noone et al. [25] in order to evaluate the planning processes of individuals regarding benefitting from increased spare time during the retirement years, maintaining healthy social relations, having sufficient income, protecting health, and maintaining positive family relations. The scale consists of 4 subscales (financial planning process-FPP, lifestyle planning process-LPP, psychosocial planning process-PPP, and health planning process-HPP) and 48 questions that are ranked on a five-point Likert-type scale (1- Absolutely untrue of me, 2- Untrue of me, 3- Not sure if it is true of me, 4- True of me, and 5- Absolutely true of me). The scale was adapted to Turkish by Günay [1]. The factor loads of the scale range from 0.46 to 0.91; the Cronbach alpha value ranges from 0.52 to 0.79 for the subscales and is 0.88 for the overall scale. The scale is evaluated over the mean subscale scores. High scores indicate that the individual makes a plan to prepare for retirement life whereas low scores indicate that there is no planning behavior for retirement life [1].

### 2.6. Data Collection

After receiving the necessary permissions, the data were collected between May to October 2022. The research data were collected online since the pandemic process has not yet ended. The link to the prepared online survey was sent to nurse groups through social media and applications that provide group communication. The nurses were informed about the research and the volunteers filled out the survey.

## 2.7. Data Entry, Analysis and Presentation

The data were evaluated at a confidence interval of 95% and a significance level of  $p < 0.05$  using statistical package software in the computer environment. G-Power was used to determine the sufficiency of the sample size. Frequency and percentage distribution were used for the evaluation of the data. When the data fit the normal distribution, the Student T-test and One-Way ANOVA were used from the parametric tests. When the data did not fit the normal distribution, Mann Whitney U and Kruskal Wallis were used from nonparametric tests. The dependent variable of the study was the PRePS scores of the nurses and the independent variable was the descriptive characteristics and retirement status of the nurses.

## 2.8. Ethical Considerations

Prior to the research, ethical approval (Date: 04.14.2022; Number: 2022-40) was taken from the ethics committee of the institution where the research was conducted. The participants were informed in line with the informed consent form and the voluntary participants were given the opportunity to fill in the survey. For the use of PRePS in data collection, permission was taken from the author, who adapted the scale into Turkish, via e-mail.

## 3. Results

The majority of the nurses who participated in the study were female (93.5%), were aged between 40-49 (49.6%), had a bachelor's degree (76.7%), were employed in the public sector (98.9%), worked as service nurses (29.8%), worked sometimes at night and sometimes during the day (56.8%), worked 41-50 hours per week (47.7%), had 16 years or more of professional experience (62.6%), and had 0-10 years of institutional experience (71.8%). Most of the nurses were married (77.9%), had a nuclear family (95.0%), lived with a maximum of 3 people at home (56.8%), and had 2 children (48.1%). The participants stated that they had willingly chosen the profession (49.6%) and did not have a chronic disease (68.3%).

According to the characteristics of nurses regarding their retirement status, it was determined that the majority of the nurses did not reach the retirement age yet (79.0%), that those who reached the retirement age wanted to retire (52.7%), that those who did not reach the retirement age wanted to retire immediately when the retirement age comes (83.6%), that they considered it important to plan retirement (91.2%), and that they made plans for retirement (80.2%).

Nurses who were of retirement age and wanted to retire mostly wanted to retire because of burnout (31.1%) and the desire to spare time for their family/themselves (31.1%). Those who did not plan to retire despite reaching retirement age did not want to retire mostly due to economic concerns (47.2%). It was determined that nurses wanted to spend time with their family (24.0%), travel (23.3%), spend time on their hobbies (22.2%), and rest (21.7%). The nurses defined the concept of retirement generally as freedom (23.4%), family (21.0%), and spare time (18.5%).

**Table 1.** The mean scores of the nurses on the subscales of PRePS

| Subscales                          | N   | Min  | Max  | Mean | SD   | Cronbach's Alpha |
|------------------------------------|-----|------|------|------|------|------------------|
| Financial planning process- FPP    | 262 | 1.50 | 4.14 | 2.92 | 0.48 | 0.64             |
| Lifestyle planning process- LPP    | 262 | 1.00 | 4.45 | 3.24 | 0.52 | 0.64             |
| Psychosocial planning process- PPP | 262 | 1.00 | 4.92 | 2.95 | 0.61 | 0.79             |
| Health planning process- HPP       | 262 | 1.73 | 4.55 | 3.20 | 0.50 | 0.58             |

The mean scores of the nurses on the subscales of PRePS were above average. The mean highest score was taken on the lifestyle planning process subscale (M= 3.24±0.52) and the lowest mean score was taken on the financial planning process subscale (M= 2.92±0.48) (Table 1).

**Table 2.** The mean scores of the nurses on the subscales of PRePS according to their descriptive characteristics

| <b>Descriptive characteristics</b>       | <b>PRePS subscales</b> | <b>FPP</b><br><b><math>\bar{X} \pm SD</math></b> | <b>LPP</b><br><b><math>\bar{X} \pm SD</math></b> | <b>PPP</b><br><b><math>\bar{X} \pm SD</math></b> | <b>HPP</b><br><b><math>\bar{X} \pm SD</math></b> |
|--|------------------------|--|--|--|--|
| <b>Gender</b>                            |                        |  |  |  |  |
| Female (n=245) (%93.5)                   |                        | 2.91±0.48  | 3.23±0.53  | 2.94±0.62  | 3.20±0.51  |
| Male (n=17) (%6.5)                       |                        | 3.09±0.52  | 3.34±0.44  | 3.14±0.50  | 3.18±0.32  |
| Test                                     |                        | Z= -1.581  | Z= -1.101  | Z= -1.421  | Z= -0.285  |
| p-value                                  |                        | p=0.110  | p=0.270  | p=0.150  | p=0.770  |
| <b>Age</b>                               |                        |  |  |  |  |
| 20-39 years (n=107) (%40.8) <sup>a</sup> |                        | 2.95±0.44  | 3.20±0.58  | 2.84±0.61  | 3.10±0.50  |
| 40-59 years (n=155) (%59.2) <sup>b</sup> |                        | 2.90±0.51  | 3.27±0.48  | 3.03±0.60  | 3.27±0.49  |
| Test                                     |                        | t=0.820  | t= -0.986  | t= -2.392  | t= -2.645  |
| p-value                                  |                        | p=0.413  | p=0.325  | p=0.017*<br>(b>a)                                | p=0.009*<br>(b>a)                                |
| <b>Education level</b>                   |                        |  |  |  |  |
| High school graduate (n=11) (%4.2)       |                        | 2.74±0.63  | 3.15±0.49  | 2.85±0.54  | 2.96±0.48  |
| Bachelor's degree (n=201) (%76.7)        |                        | 2.93±0.49  | 3.25±0.53  | 2.99±0.63  | 3.21±0.50  |
| Master's degree (n=48) (%18.3)           |                        | 2.96±0.46  | 3.22±0.51  | 2.83±0.54  | 3.23±0.49  |
| Doctorate degree (n=2) (%0.8)            |                        | 2.78±0.10  | 2.95±0.57  | 2.58±0.47  | 2.63±0.25  |
| Test                                     |                        | X <sup>2</sup> =1.197                            | X <sup>2</sup> =1.624                            | X <sup>2</sup> =4.811                            | X <sup>2</sup> =5.204                            |
| p-value                                  |                        | p=0.754  | p=0.654  | p=0.186  | p=0.157  |
| <b>Marital status</b>                    |                        |  |  |  |  |
| Married (n=204) (%77.9)                  |                        | 2.93±0.48  | 3.24±0.50  | 2.94±0.58  | 3.20±0.48  |
| Single (n=58) (%22.1)                    |                        | 2.91±0.51  | 3.07±0.60  | 2.99±0.70  | 3.22±0.58  |
| Test                                     |                        | t= 0.318   | t= 0.093   | t= -0.473  | t= -0.269  |
| p-value                                  |                        | p=0.751  | p= 0.926   | p=0.638  | p=0.788  |
| <b>Family type</b>                       |                        |  |  |  |  |
| Nuclear family (n=249) (%99.5)           |                        | 2.92±0.49  | 3.23±0.53  | 2.95±0.61  | 3.21±0.50  |
| Extended family (n=13) (%0.5)            |                        | 2.95±0.37  | 3.33±0.39  | 3.00±0.61  | 2.98±0.47  |
| Test                                     |                        | Z= -0.180  | Z= -0.558  | Z= -0.297  | Z= -1.668  |
| p-value                                  |                        | p=0.857  | p=0.577  | p=0.767  | p=0.095  |
| <b>Number of cohabitants</b>             |                        |  |  |  |  |
| 1 (n=28) (%10.7) <sup>a</sup>            |                        | 2.97±0.49  | 3.30±0.56  | 2.84±0.60  | 3.14±0.45  |
| 2 (n=52) (%19.8) <sup>b</sup>            |                        | 3.10±0.41  | 3.38±0.49  | 3.13±0.61  | 3.36±0.57  |
| 3 (n=69) (%26.3) <sup>c</sup>            |                        | 2.91±0.49  | 3.10±0.54  | 2.83±0.62  | 3.14±0.47  |
| 4 and more (n=113) (%43.1) <sup>d</sup>  |                        | 2.84±0.50  | 3.25±0.49  | 2.97±0.59  | 3.18±0.49  |
| Test                                     |                        | X <sup>2</sup> =11.072                           | X <sup>2</sup> =10.968                           | X <sup>2</sup> =6.540                            | X <sup>2</sup> =4.583                            |
| p-value                                  |                        | p=0.011*<br>b>d                                  | p=0.012*<br>b>c                                  | p=0.088  | p=0.205  |
| <b>Number of children</b>                |                        |  |  |  |  |
| 0 (n=54) (%20.6)                         |                        | 2.94±0.48  | 3.25±0.55  | 2.82±0.57  | 3.13±0.45  |
| 1 (n=27) (%21.8)                         |                        | 2.99±0.41  | 3.23±0.55  | 3.04±0.74  | 3.30±0.53  |
| 2 (n=126) (%48.1)                        |                        | 2.88±0.50  | 3.21±0.50  | 2.97±0.57  | 3.17±0.51  |
| 3 and more (n=25) (%9.5)                 |                        | 2.91±0.56  | 3.40±0.49  | 2.97±0.59  | 3.34±0.51  |
| Test                                     |                        | X <sup>2</sup> =1.966                            | X <sup>2</sup> =4.585                            | X <sup>2</sup> =4.807                            | X <sup>2</sup> =3.951                            |
| p-value                                  |                        | p=0.579  | p=0.205  | p=0.187  | p=0.267  |

Table 2. Continued

| <b>PRePS subscales</b>  | <b>FPP</b><br><b><math>\bar{X} \pm SD</math></b> | <b>LPP</b><br><b><math>\bar{X} \pm SD</math></b> | <b>PPP</b><br><b><math>\bar{X} \pm SD</math></b> | <b>HPP</b><br><b><math>\bar{X} \pm SD</math></b> |
|---|--|--|--|--|
| <b>Descriptive characteristics</b>  |  |  |  |  |
| <b>Monthly income level</b>   |  |  |  |  |
| 5.000-10.000 TL between (n=27) (%10.3)                                    | 2.84±0.60  | 3.22±0.64  | 2.99±0.94  | 3.23±0.62  |
| 10.000-15.000 TL between (n=73) (%27.9)                                   | 2.88±0.47  | 3.20±0.57  | 2.94±0.57  | 3.17±0.52  |
| 15.000-20.000 TL between (n=80) (%30.5)                                   | 2.94±0.45  | 3.22±0.46  | 2.88±0.50  | 3.20±0.45  |
| 20.000 TL and more (n=82) (%31.3)   | 2.98±0.50  | 3.30±0.49  | 3.03±2.62  | 3.23±0.49  |
| Test  | $X^2=2.166$                                      | $X^2=1.534$                                      | $X^2=4.110$                                      | $X^2=2.230$                                      |
| p-value   | p=0.539  | p=0.674  | p=0.250  | p=0.526  |
| <b>Working sector</b>   |  |  |  |  |
| Public sector (n=259) (%98.9)   | 2.92±0.48  | 3.24±0.52  | 2.95±0.61  | 3.20±0.50  |
| Private sector (n=3) (%1.1)   | 3.09±0.57  | 3.45±0.86  | 3.02±0.71  | 3.30±0.50  |
| Test  | Z= -0.537  | Z= -0.921  | Z= -0.253  | Z= -0.530  |
| p-value   | p=0.591  | p=0.357  | p=0.800  | p=0.596  |
| <b>Professional experience</b>  |  |  |  |  |
| 5 years and less (n=30) (%11.5) <sup>a</sup>                              | 3.05±0.44  | 3.39±0.47  | 3.00±0.57  | 3.23±0.44  |
| 6-10 years (n=34) (%13.0) <sup>b</sup>                                    | 2.96±0.46  | 3.10±0.67  | 2.70±0.72  | 3.01±0.57  |
| 11-15 years (n=34) (%13.0) <sup>c</sup>                                   | 2.94±0.49  | 3.18±0.55  | 2.84±0.49  | 3.07±0.41  |
| 16-20 years (n=34) (%13.0) <sup>d</sup>                                   | 2.83±0.37  | 3.15±0.43  | 3.00±0.62  | 3.16±0.47  |
| 21-25 years (n=37) (%14.1) <sup>e</sup>                                   | 2.85±0.44  | 3.20±0.46  | 3.11±0.66  | 3.25±0.59  |
| 26-30 years (n=68) (%26.0) <sup>f</sup>                                   | 2.89±0.59  | 3.34±0.49  | 3.01±0.62  | 3.26±0.48  |
| 31 years and more (n=25) (%9.5) <sup>g</sup>                              | 3.24±0.46  | 3.23±0.54  | 2.96±0.46  | 3.45±0.42  |
| Test  | $X^2=6.943$                                      | $X^2=8.953$                                      | $X^2=7.387$                                      | $X^2=15.804$                                     |
| p-value   | p=0.326  | p=0.176  | p=0.287  | p=0.015*<br>g>c                                  |
| <b>Institutional experience</b>   |  |  |  |  |
| 0-20 years (n=240) (%91.6)  | 2.92±0.49  | 3.23±0.53  | 2.95±0.62  | 3.20±0.51  |
| 21 years and more (n=22) (%8.4)   | 2.97±0.49  | 3.38±0.45  | 3.04±0.45  | 3.21±0.39  |
| Test  | Z= -0.402  | Z= -0.942  | Z= -0.625  | Z= -0.031  |
| p-value   | p=0.688  | p=0.346  | p=0.346  | p=0.925  |
| <b>Position</b>   |  |  |  |  |
| Family health worker (n=26) (%9.9)  | 2.98±0.49  | 3.19±0.52  | 3.02±0.60  | 3.21±0.55  |
| Service nurse (n=78) (%29.8)  | 2.95±0.43  | 3.27±0.49  | 2.95±0.60  | 3.17±0.51  |
| Intensive care nurse (n=14) (%5.3)  | 2.96±0.38  | 3.28±0.38  | 2.97±0.63  | 3.07±0.41  |
| Emergency nurse (n=39) (%14.9)  | 2.82±0.51  | 3.13±0.67  | 2.77±0.67  | 3.08±0.46  |
| Outpatient nurse (n=21) (%8.0)  | 3.00±0.66  | 3.45±0.51  | 3.17±0.48  | 3.44±0.39  |
| Operating room nurse (n=4) (%1.5)   | 2.92±0.43  | 3.52±0.43  | 3.22±0.48  | 3.40±0.31  |
| Head nurse (n=22) (%8.4)  | 3.00±0.55  | 3.22±0.47  | 2.87±0.49  | 3.19±0.38  |
| Supervisor (n=4) (%1.5)   | 2.96±0.66  | 3.25±0.42  | 3.08±0.15  | 3.20±0.20  |
| Health care services manager or assistant (n=2) (%0.8)                    | 2.96±0.65  | 2.77±0.44  | 2.33±0.11  | 3.09±0.51  |
| Other (vaccine unit, endoscopy etc. ) (n=52) (%19.8)                      | 2.86±0.46  | 3.20±0.52  | 3.00±0.70  | 3.28±0.59  |
| Test  | $X^2=6.002$                                      | $X^2=9.209$                                      | $X^2=12.465$                                     | $X^2=11.970$                                     |
| p-value   | p=0.740  | p=0.418  | p=0.188  | p=0.215  |
| <b>Working schedule</b>   |  |  |  |  |
| Constantly at night (n=6) (%2.3) <sup>a</sup>                             | 2.85±0.39  | 3.39±0.35  | 2.40±0.12  | 2.87±0.30  |
| Constantly at day (n=108) (%41.2) <sup>b</sup>                            | 2.92±0.52  | 3.25±0.54  | 2.99±0.63  | 3.26±0.57  |
| Sometimes at night, sometimes during the day (n=148) (%56.5) <sup>c</sup> | 2.93±0.46  | 3.22±0.51  | 2.95±0.60  | 3.17±0.44  |
| Test  | $X^2=0.271$                                      | $X^2=0.570$                                      | $X^2=7.592$                                      | $X^2=6.872$                                      |
| p-value   | p=0.873  | p=0.752  | p=0.022*<br>b>a. c>a                             | p=0.032*<br>b>a                                  |

Table 2. Continued

| <b>Descriptive characteristics</b>                    | <b>PRePS subscales</b> | <b>FPP<br/>X̄ ±SD</b>      | <b>LPP<br/>X̄ ±SD</b> | <b>PPP<br/>X̄ ±SD</b> | <b>HPP<br/>X̄ ±SD</b> |
|---|------------------------|----------------------------|-----------------------|-----------------------|-----------------------|
| <b>Weekly working hours</b>                           |                        |                            |                       |                       |                       |
| 40 hours and less (n=88) (%33.6)                      |                        | 2.86±0.53                  | 3.20±0.50             | 2.88±0.62             | 3.15±0.51             |
| 41-50 hours (n=125) (%47.7)                           |                        | 2.95±0.47                  | 3.24±0.56             | 3.00±0.63             | 3.24±0.51             |
| 51 hours and more (n=49) (%18.7)                      |                        | 2.98±0.43                  | 3.31±0.45             | 2.98±0.54             | 3.20±0.43             |
| Test  |                        | F=1.198                    | F=0.709               | F=1.031               | F=0.722               |
| p-value   |                        | p=0.303                    | p=0.493               | P=0.358               | p=0.487               |
| <b>The state of choosing the profession willingly</b> |                        |                            |                       |                       |                       |
| Yes (n=130) (%49.6) <sup>a</sup>                      |                        | 3.00±0.48                  | 3.26±0.52             | 3.00±0.60             | 3.24±0.50             |
| No (n=37) (%14.1) <sup>b</sup>                        |                        | 2.77±0.58                  | 3.24±0.49             | 2.97±0.68             | 3.07±0.51             |
| Partially (n=95) (%36.3) <sup>c</sup>                 |                        | 2.88±0.44                  | 3.21±0.54             | 2.88±0.60             | 3.20±0.49             |
| Test  |                        |                            |                       |                       |                       |
| p-value   |                        | F=3.815<br>p=0.023*<br>a>b | F=0.303<br>p=0.739    | F=1.195<br>p=0.304    | F=1.543<br>p=0.216    |
| <b>Presence of chronic disease</b>                    |                        |                            |                       |                       |                       |
| Yes (n=83) (%31.7) <sup>a</sup>                       |                        | 2.94±0.52                  | 3.38±0.51             | 3.08±0.63             | 3.38±0.50             |
| No (n=179) (%68.3) <sup>b</sup>                       |                        | 2.92±0.47                  | 3.17±0.51             | 2.90±0.59             | 3.12±0.48             |
| Test  |                        | t= 0.368                   | t= 3.058              | t= 2.216              | t= 3.966              |
| p-value   |                        | p=0.713                    | p=0.002*<br>a>b       | p=0.028*<br>a>b       | p=0.000*<br>a>b       |

FPP= Financial planning process, LPP= Lifestyle planning process, PPP= Psychosocial planning process, HPP: Health planning process, Z= Mann Whitney U, t= Student T, F= One Way Anova, X<sup>2</sup>= Kruskal Wallis, M= Mean, SD= Standart Deviation, \*p<0.05

When the mean scores of the nurses on the subscales of PRePS were evaluated according to their descriptive characteristics, it was determined that those who were male, who were aged between 20 and 39, who had a bachelor’s or master’s degree, who were married, who had an extended family, who lived with 2 people at home, who had 1 child, who had a monthly income of 15.000 TL or over, who were employed in the private sector, who had 31 years or more of professional experience, who had 21 years or more of institutional experience, who worked in the day and night shifts as an outpatient nurse or head nurse, who worked 51 hours or over per week, who had willingly chosen the profession, and who had a chronic disease had higher mean scores on the “financial planning process” subscale than others. It was also determined that there were significant differences between the groups in terms of the number of cohabitants at home and the status of willingly choosing the profession (p<0.05) (Table 2).

According to the mean scores of nurses on the “lifestyle planning process” subscale, it was seen that those who were male, who were aged between 40 and 59, who had a bachelor’s or master’s degree, who were married, who had an extended family, who lived with 2 people at home, who had 3 children, who had a monthly income of 15.000 TL or over, who were employed in the private sector, who had professional experience of 21 years or more or less than 5 years, who had 21 years or more of institutional experience, who worked as an outpatient nurse or operating room nurse, who constantly worked at night shifts for 51 hours or over per week, who had willingly chosen the profession, and who had a chronic disease had higher mean scores on the LPP subscale compared to other nurses. It was also determined that there were significant differences between the groups in terms of the number of cohabitants at home and the presence of a chronic disease (p<0.05) (Table 2).

According to the mean scores of nurses on the “psychosocial planning process” subscale, it was determined that those who were male, who were aged between 40-59, who had a bachelor’s or master’s degree, who were single, who had an extended family, who lived with 2 people at home, who had 1 child, who had a monthly income of 20.000 TL or over, who were employed in the private sector, who

had 21-25 years of professional experience, who had 21 years or more of institutional experience, who worked as an outpatient nurse or operating room nurse, who constantly worked at day shifts for 41-50 hours per week, who had willingly chosen the profession, and who had a chronic disease had higher mean scores on the PPP subscale compared to other nurses. In addition, it was determined that there were significant differences between the groups in terms of age, working schedule, and presence of a chronic disease ( $p < 0.05$ ) (Table 2).

According to the mean scores of nurses on the “health planning process” subscale, it was determined that those who were female, who were aged between 40-59, who had a bachelor’s or master’s degree, who were single, who had a nuclear family, who lived with 2 people at home, who had 3 children, who had a monthly income of 20.000 TL or over, who were employed in the private sector, who had 31 years or more of professional experience, who had 21 years or more of institutional experience, who worked as an outpatient nurse or operating room nurse, who constantly worked at day shifts for 41-50 hours per week, who had willingly chosen the profession, and who had a chronic disease had higher mean scores on the HPP subscale compared to other nurses. In addition, it was determined that there were significant differences between the groups in terms of age, duration of employment in the profession, working schedule, and presence of a chronic disease ( $p < 0.05$ ) (Table 2).

**Table 3.** The mean scores of the nurses on the subscales of PRePS according to their retirement characteristics

| Retirement characteristics   | PRePS subscales | FPP<br>$\bar{X} \pm SD$ | LPP<br>$\bar{X} \pm SD$ | PPP<br>$\bar{X} \pm SD$ | HPP<br>$\bar{X} \pm SD$ |
|--|-----------------|-------------------------|-------------------------|-------------------------|-------------------------|
| <b>Have you reached retirement age? (n=262)</b>  |                 |                         |                         |                         |                         |
| Yes (n=55) (%21) <sup>a</sup>  |                 | 2.95±0.50               | 3.21±0.54               | 3.01±0.66               | 3.38±0.57               |
| No (n=207) (%79) <sup>b</sup>  |                 | 2.92±0.48               | 3.25±0.52               | 2.94±0.60               | 3.15±0.47               |
| Test   |                 | t=0.362                 | t= -0.460               | t= 0.789                | t= <b>3.053</b>         |
| p-value  |                 | p=0.718                 | p=0.646                 | p=0.431                 | p= <b>0.003*</b><br>a>b |
| <b>Are you thinking of retiring if you are of retirement age?(n=55)</b>  |                 |                         |                         |                         |                         |
| Yes (n=26) (%47.3)   |                 | 3.04±0.50               | 3.28±0.44               | 3.00±0.55               | 3.35±0.44               |
| No (n=29) (%52.7)  |                 | 2.86±0.50               | 3.15±0.61               | 3.02±0.75               | 3.41±0.61               |
| Test   |                 | Z= -0.836               | Z= -0.465               | Z= -0.059               | Z= -0.752               |
| p-value  |                 | p=0.403                 | p=0.642                 | p=0.953                 | P=0.452                 |
| <b>If you have not reached retirement age, how many years are left on average until your retirement? (n=207)</b> |                 |                         |                         |                         |                         |
| 0-5 years (n=46) (%22.3)   |                 | 2.95±0.53               | 3.39±0.44               | 3.09±0.52               | 3.25±0.42               |
| 6-10 years (n=26) (%12.6)  |                 | 2.79±0.51               | 3.30±0.38               | 2.86±0.59               | 3.26±0.46               |
| 11-15 years (n=39) (%18.8)   |                 | 2.95±0.37               | 3.10±0.50               | 3.03±0.47               | 3.07±0.41               |
| 16 years and more (n=96) (%46.3)   |                 | 2.93±0.49               | 3.22±0.58               | 2.85±0.67               | 3.11±0.51               |
| Test   |                 | X <sup>2</sup> =2.098   | X <sup>2</sup> =5.889   | X <sup>2</sup> =6.490   | X <sup>2</sup> =6.547   |
| p-value  |                 | p=0.552                 | p=0.117                 | p=0.090                 | p=0.088                 |
| <b>If you were of retirement age, would you want to retire immediately?(n=207)</b>                               |                 |                         |                         |                         |                         |
| Yes (n=173) (%83.6)  |                 | 2.92±0.47               | 3.26±0.53               | 2.92±0.58               | 3.15±0.46               |
| No (n=34) (%16.4)  |                 | 2.90±0.54               | 3.20±0.45               | 3.01±0.69               | 3.20±0.53               |
| Test   |                 | t=0.239                 | t= 0.556                | t= -0.810               | t= -0.563               |
| p-value  |                 | p=0.811                 | p=0.579                 | p=0.419                 | p=0.574                 |
| <b>Do you think planning retirement is important? (n=262)</b>  |                 |                         |                         |                         |                         |
| Yes (n=239) (%91.2) <sup>a</sup>   |                 | 2.94±0.49               | 3.27±0.52               | 2.97±0.61               | 3.22±0.50               |
| No (n=23) (%8.8) <sup>b</sup>  |                 | 2.80±0.46               | 2.96±0.49               | 2.77±0.63               | 3.03±0.45               |
| Test   |                 | Z= -1.569               | Z= -2.731               | Z= -1.850               | Z= -1.625               |
| p-value  |                 | p=0.117                 | p= <b>0.006*</b><br>a>b | p=0.064                 | p=0.104                 |

Table 3. Continued

| Retirement characteristics                    | PRePS subscales | FPP<br>X̄ ±SD | LPP<br>X̄ ±SD          | PPP<br>X̄ ±SD          | HPP<br>X̄ ±SD |
|---|-----------------|---------------|------------------------|------------------------|---------------|
| <b>Do you have a retirement plan? (n=262)</b> |                 |               |                        |                        |               |
| Yes (n=208) (%79.4) <sup>a</sup>              |                 | 2.94±0.49     | 3.29±0.48              | 3.02±0.59              | 3.22±0.50     |
| No (n=54) (%20.6) <sup>b</sup>                |                 | 2.85±0.47     | 3.04±0.61              | 2.70±0.62              | 3.12±0.49     |
| Test  |                 | t= 1.195      | t= 2.717               | t= 3.391               | t= 1.264      |
| p-value                                       |                 | p=0.233       | <b>p=0.008*</b><br>a>b | <b>p=0.001*</b><br>a>b | p=0.207       |

FPP= Financial planning process, LPP= Lifestyle planning process, PPP= Psychosocial planning process, HPP= Health planning process, Z= Mann Whitney U, t= Student T, F= One Way Anova, X<sup>2</sup>= Kruskal Wallis, M= Mean, SD= Standard Deviation, \*p <0.05

When the mean scores of the nurses on the subscales of PRePS were evaluated according to their retirement characteristics, it was seen that the nurses who were of retirement age and considered retiring, who had less than 5 years to retire, who wanted to retire immediately if they reached retirement age, who thought that retirement planning was important, and who made a retirement plan had higher mean scores on the “financial planning process” subscale than the other nurses but there was no significant difference between the groups (p> 0.05) (Table 3).

The nurses who were not of retirement age, who considered retiring, who had less than 5 years to retire, who thought that retirement planning was important, and who made a retirement plan had higher mean scores on the “lifestyle planning process” subscale than the other nurses and there were significant differences between the groups in terms of making a retirement plan (p< 0.05) (Table 3).

When the mean scores of the nurses on the “psychosocial planning process” subscale were examined, it was determined that those who were of retirement age but did not consider retiring, who had less than 5 years to retire, who did not want to retire immediately if they reached retirement age, who thought that retirement planning was important, and who made a retirement plan had higher mean scores than the other nurses and that there were significant differences between the groups in terms of making a retirement plan (p< 0.05) (Table 3).

Finally, it was determined that those who were of retirement age but did not consider retiring, who had less than 5 years to retire, who did not want to retire immediately if they reached retirement age, who thought that retirement planning was important, and who made a retirement plan had higher mean scores on the “health planning process” subscale compared to the other nurses and that there were significant differences between the groups in terms of retirement age (p< 0.05) (Table 3).

#### 4. Discussion

Retirement is the last stage of working life and can also be considered a period opening up to a new life. It is important for nurses, who are an important component of health institutions, to have a planned retirement after both professionally and organizationally challenging work life for their health and welfare levels. In this study, it was found that the majority of nurses were in the age group of 40-49 who had not yet reached the retirement age, were employed in the public sector, worked on shifts and over 40 hours a week, had 16 years or more professional experience, were married and had a nuclear family with 2 children, had chosen the profession willingly, and did not have a chronic disease. These findings showed that the working conditions of nurses were difficult and that they were likely to retire in the next 10 years. This thought is supported by the findings regarding the retirement status of nurses.

It was revealed that nurses who reached the retirement age wanted to retire, that those who did not reach retirement age wanted to retire immediately if they reached the retirement age, that they thought retirement planning was important, and that they made retirement planning. It was revealed that those who wanted to retire mostly experienced burnout and wanted to retire since they wanted to spare

time for their family/themselves, and that those who did not plan to retire although they were of retirement age did not want to retire mostly because of economic concerns. Nurses stated that they wanted to spend time with their families, travel, spend time on their hobbies, and rest after retirement and that the concept of retirement generally meant freedom, family, and spare time for them. These results show that nurses do not want to work after retirement due to reasons such as difficult working conditions, professional exhaustion, and burnout and that they will turn to social life. However, it was seen that economic concerns were also an important factor in retirement planning. The low level of retirement planning among nurses with low monthly incomes also supports this idea. The results of this study are consistent with the results of another study on the subject. Likewise, in the study conducted by Öztürk et al.[26], it was determined that nurses with retirement qualifications wanted to retire mostly because they wanted to spend more time with their children and family and that those who did not want to retire despite having retirement qualifications did not want to retire mostly because of economic problems. In addition, it was revealed that the concept of retirement meant “comfort, spending time on oneself and hobbies and financial difficulties” for nurses.

It was observed that the level of retirement planning of the nurses was above average, that they made lifestyle plans the most, and that they made financial plans the least. These findings are considered to be consistent with the lifestyle plans made by nurses such as sparing time for family and themselves and taking a rest during retirement. It is thought that the low level of planning of the nurses in financial issues was due to the low monthly income levels among the majority of them and the social culture. In our country, which has a more traditional and patriarchal culture, men are more interested in financial issues in the family. The majority of the nurses participating in the study were women and the male nurses had a high level of financial planning, supporting this idea. Furthermore, the levels of health and psychosocial planning of the nurses were not very high. This is thought to be due to the fact that the majority of the nurses did not have a chronic disease and were in a younger age group who did not reach retirement age.

Studies in the literature have shown that retirement planning is insufficient among nurses [12, 22, 27-28]. Similar to the results of the research, it was reported that female nurses were more aware of health care and social relations but they neglected saving and financial issues [29], that women were less financially prepared for retirement planning [30-31], and that poor wages given to women negatively affected their retirement planning [32] and that women spent less time on retirement planning [33].

In general, it was seen that the nurses who were male, who were aged between 40-59, who had a bachelor's or master's degree, who had an extended family, who had 3 or more children, who had a monthly income of 20.000 TL or over, who were employed in the private sector, who had a professional and institutional experience of 20 years or over, who worked more than 40 hours a week as an outpatient nurse or operating room nurse, who had willingly chosen the profession, and who had a chronic disease had higher levels of retirement planning.

The finding that the levels of retirement planning of nurses who had a long professional experience, therefore, were close to retirement age, who had a large family, who had a high monthly income, who had long working hours, and who had a chronic disease were high can be considered an expected finding. Nurses' willingness to spare time for themselves and their families was in line with the finding that those who did not have economic concerns and those who experienced burnout wanted to retire. Likewise, in the literature, it was stated that nurses aged over 40 and those with a long duration of employment had better retirement planning [34]. However, in another study, it was reported that the duration of employment and age did not influence retirement planning [13].

In this study, the findings regarding the higher levels of retirement planning among those with extended families and those with 3 or more children, planning for lifestyle and planning for spending

time with the family support each other. These findings suggest that nurses want to compensate for the time and attention, that they cannot spend on their families and children during their working life, during the retirement period. Liu et al. [13] stated that nurses have to support their families and continue to take care of their children after retirement and that nurses who have lost a family member have higher levels of retirement planning.

The finding that nurses who had a master's degree and had willingly chosen the profession had a high level of retirement planning is considered interesting. This suggests that although nurses had willingly chosen the profession and had a good education level, they either could not meet their expectations or they acted more consciously due to their education levels, revealing that the effect of education on retirement should be examined in detail. On the other hand, employees in the private sector are thought to make retirement plans to feel safe due to the lack of sufficient employment security throughout their working lives. It is thought that outpatient nurses and operating room nurses wanted to retire due to the content of their work. It can be suggested that nurses may become monotonous after a while and maybe bored with their work due to limited interaction with patients in these units, a more monotonous working schedule, doing the same job all the time as in the production sector, and the lack of development opportunities for nurses. Similarly, it was determined that nurses with higher education levels had better retirement planning [34].

The lifestyle planning of the nurses who worked constantly at night, the health and psychosocial planning of the nurses who worked constantly during the day, the fact that the nurses who worked for 40 hours or over made more planning in these dimensions, and the fact that the nurses had a challenging and exhausting working life although they had willingly chosen the profession suggest that they want to meet their needs, which they cannot meet in terms of lifestyle, psychosocial status, and health status, during retirement. The high level of retirement planning of nurses who had willingly chosen the profession and who had a chronic disease can be considered as findings that reveal the importance of this need. Studies showed that working schedule and the presence of a chronic disease affected the decision to retire before the retirement age [19], that the health status of nurses affected their retirement planning [22, 28] that working at night did not affect the retirement planning of nurses [12] and that nurses who did not work at night had better retirement planning [34].

It was expected that the levels of retirement planning were high among nurses with high monthly incomes and this finding is consistent with other studies. Accordingly, it was reported that income status was effective on nurses' continuation to work [13] and that nurses with higher wages had better retirement planning [34].

It was seen that the levels of retirement planning of the nurses who reached retirement age, who had less than 10 years to retire, who thought that retirement planning was important, and who made a retirement plan were higher. Li et al. [22] stated that nurses found it important to plan retirement even though they did not have retirement planning.

### **Limitations**

The research data were collected online, not face-to-face, since the pandemic process has not yet ended, causing a limited number of individuals in the study. The results of the study are limited to the self-reports of the participants.

### **5. Conclusion and Recommendations**

A well-planned retirement period will enable nurses to have a better quality of life in old age after their professional life. For this, it is important to know the retirement planning of nurses and the affecting factors in each country. As a result of this study conducted in Türkiye, it was revealed that nurses' levels of retirement planning were not high, that their levels of lifestyle planning were high and their levels of

financial planning were low, and that they showed differences, especially in terms of age, the number of cohabitants, working schedule, and presence of a chronic disease. Furthermore, it was seen that nurses who were male, who were aged between 40 and 59, who had a bachelor's or master's degree, who had an extended family, who had 3 or more children, who had a monthly income of 20.000 TL or over, who were employed in the private sector, who had a professional and institutional experience of 20 years or over, who worked more than 40 hours a week as an outpatient nurse or operating room nurse, who had willingly chosen the profession, and who had a chronic disease had higher levels of retirement planning.

For nurses to make a more conscious retirement planning, a counseling service should be provided in institutions and they should be supported especially in financial planning. For this purpose, health politicians should develop new wage policies to increase the monthly incomes of nurses and eliminate their economic concerns. In addition, working conditions should be improved to eliminate factors that are effective in the retirement planning of nurses such as working schedule, and health problems.

#### **Ethical Statement:**

Before the research, ethical approval (Date: 04.14.2022; Number: 2022-40) was taken from the ethics committee of the institution where the research was conducted. The participants were informed in line with the informed consent form and the voluntary participants were given the opportunity to fill in the survey. For the use of PRePS in data collection, permission was taken from the author, who adapted the scale into Turkish, via e-mail.

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The authors declare no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

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#### **Data availability statement:**

The datasets generated during and/or analysed during the current study are not publicly available as respondents were assured raw data would remain confidential and would not be shared.

#### **Author's contributions:**

N.T.: Conceptualization, Methodology, Acquisition of data for the study, Formal analysis, Writing - Original draft preparation

S.A.: Conceptualization, Methodology, Formal analysis, Writing - Original draft preparation

All authors read and approved the final manuscript.

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