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The aim of this study was to identify the facets influencing job satisfaction and intention to quit of nurses employed in Turkey. Using a non-probability sampling technique, 417 nurses from 6 large private hospitals were surveyed from March 2014 to June 2014. Nurses' demographic data, their job related satisfaction and turnover intention were recorded through a self-administered questionnaire. In this study, descriptive statistics, regression analyses, correlation analyses, ANOVA, and post-hoc tests were applied to examine the data. Nurses' job satisfaction was found at a moderate level. While about 61% of the nurses intended to leave the existing employment. Nurses conveyed a high satisfaction level with work environment, supervisors, and co-workers among the selected nine facets of job satisfaction. They also reported a low satisfaction level with contingent reward, fringe benefit, and pay among the facets. The impact of demographic characteristics on job satisfaction and intention to quit was also examined. The study revealed a negative relation between job satisfaction and intention to quit the existing employment. The implications for nurse management were also described for increasing nurses' job satisfaction and retention. So, this study seems to be beneficial for hospital management to ensure proper nursing care improving their professional facilities; that would lead to a better-quality healthcare service .

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Abstract

The aim of this study was to identify the facets influencing job satisfaction and intention to quit of nurses employed in Turkey. Using a non-probability sampling technique, 417 nurses from 6 large private hospitals were surveyed from March 2014 to June 2014. Nurses' demographic data, their job related satisfaction and turnover intention were recorded through a self-administered questionnaire. In this study, descriptive statistics, regression analyses, correlation analyses, ANOVA, and post-hoc tests were applied to examine the data. Nurses' job satisfaction was found at a moderate level. While about 61% of the nurses intended to leave the existing employment. Nurses conveyed a high satisfaction level with work environment, supervisors, and co-workers among the selected nine facets of job satisfaction. They also reported a low satisfaction level with contingent reward, fringe benefit, and pay among the facets. The impact of demographic characteristics on job satisfaction and intention to quit was also examined. The study revealed a negative relation between job satisfaction and intention to quit the existing employment. The implications for nurse management were also described for increasing nurses' job satisfaction and retention. So, this study seems to be beneficial for hospital management to ensure proper nursing care improving their professional facilities; that would lead to a better-quality healthcare service.

Keywords: Intention to quit; job satisfaction; nurse; nursing; Turkey

1. Introduction

Worldwide, the present shortage of nurses is a problematic agenda among the health care sectors. Consequently, the quality of the patient care services is decreased (Van Bogaert, Clarke, Roelant,

42 Meulemans, & Van de Heyning, 2010). So, ensuring high level of job satisfaction among nurses
43 and taking proper precaution for not to leave their profession are prime concerns
44 (Sabanciogullari & Dogan, 2014). European Commission expected that, by the year 2020, there
45 will be a scarcity of 590,000 nurses in Europe (Flinkman, Isopahkala-Bouret, & Salanterä, 2013).
46 According to recent report of OECD (Organization for Economic Co-operation and
47 Development), there are 16.6 nurses for 1000 persons in Switzerland, 10.1 in Australia, 8.8 in the
48 OECD countries, 8.6 in UK, and it is simply 1.7 in Turkey (OECD, 2013). In the contemporary
49 studies, researchers acknowledged that the quality of patient care is allied with higher staffing
50 levels in nursing. And, patient satisfaction for healthcare service is related to nurses' job
51 satisfaction (Flinkman, Leino-Kilpi, & Salanterä, 2010; Hyrkas & Morton, 2013; Meeusen, Van
52 Dam, Brown-Mahoney, Van Zundert, & Knape, 2011). Moreover, nurses' higher levels of
53 dissatisfaction leads to turnover from nursing profession (Banaszak-Holl & Hines, 1996). Which
54 generally creates staff shortage, increases overtime and job stress, increases burnout, longer
55 patient waiting lists, and finally, as a consequence, increased displeasure among patients. The
56 turnover of nurses also increases recruitment and orientation costs (Murrells, Robinson, &
57 Griffiths, 2008).

58 Job satisfaction is the level of serenity that someone feels for work and this feeling influences the
59 performance. In case of nurses' Job satisfaction, earlier research have revealed that it is
60 negatively connected with nurses' intention to quit the workplace, even to quit their nursing
61 profession (Applebaum, Fowler, Fiedler, Osinubi, & Robson, 2010; Cowin, Johnson, Craven, &
62 Marsh, 2008). So, proper understanding of factors of nurses' job satisfaction is essential for
63 proactive managers to take necessary actions. Scholars identified individual characteristics, work
64 requirements and policies, professional status, pay, working environment, coworker support,
65 administrative style as important factors that influencing nurse' job satisfaction (Han & Jekel,
66 2011). Reviewing the past literature, it is explicit that there are additional influential job
67 satisfaction factors for nursing. These are age, gender, marital status, organization itself,
68 employment type, work duration, level of responsibility, payments, financial benefits, and
69 recognition (Kacel, Miller, & Norris, 2005; Mrayyan, 2005). Moreover, Heinen et al. (2013)
70 acknowledged that characteristics of the work setting, professional identity, job satisfaction, and
71 burnout are the most persuasive factors that influence nurses' decision to remain or to quit their
72 job. Earlier research shows that turnover in nursing is a logical consequence of nurses' job
73 dissatisfaction. Initially, nurses quit the unit, then the hospital, and lastly the occupation
74 (Iliopoulou & While, 2010).

75 In the Turkish healthcare system, there is acute shortage of nurses owing to extended working
76 hours, inadequacy opportunities of on the job training, dearth of chances to work autonomously,
77 and deficiency of care from their superintendents (Gök & Kocaman, 2011; Top & Gider, 2013).
78 Besides, patient load has adverse impact on work settings and the psychological or/and physical
79 health of the Turkish nurses (Arslan Yurumezoglu & Kocaman, 2015). To enhance nursing
80 service quality, all influential factors of nurses' job satisfaction, dissatisfaction, and turnover
81 intention sholud be disclosed for strategic managerial decision (Flinkman et al., 2013). To the
82 best knowledge of the authors, studies on nurses' job satisfaction and their intent to quit the
83 existing employment is very narrow in Turkey setting. The main thrust of this study was to
84 scrutinize the level of job satisfaction of nurses, and to investigate the effects of
85 sociodemographic characteristics on job satisfaction of nurses' employed in Turkish private
86 hospitals. In addition, nurses' intention to quit from existing job position was also inspected in
87 this study. The findings of the study should contribute to setting up new strategies to enhance

88 work related satisfaction of nurses and to retain them in the nursing profession as well as to
89 improve the Turkish health care system.

90 **2. Overview of the literature**

91 In this section, we briefly describe the factors of job satisfaction, job dissatisfaction and,
92 intention to quit of nurses from the present workplace. Some keywords are examined including
93 nurses, nursing, job dissatisfaction, job satisfaction, intent to quit, turnover intention, and Turkey
94 in different combinations. On the basis of preceding research, the factors of job satisfaction
95 among nurses and their intention to leave the existing position or occupation are influenced by
96 individual attribute (e.g., gender, age, marital status, education qualification, and experience) and
97 organizational factors (e.g., pay, promotion, different types of benefits, co-worker/supervisor
98 support, and work environment).

99 **2.1 Factors related to nurses' job satisfaction**

100 Job satisfaction is defined as the emotional feelings as well as, sometimes, the behavioral
101 expression for a job. The feeling is influenced by some job related factors such as pay, different
102 types of benefits, recognition, working condition, relation with coworker and supervisors, and
103 others (Cowin et al., 2008; Yilmazel, 2013). Similar to other professions, it is acknowledged that
104 nurses' job satisfaction is inversely linked with their intention to quit their profession
105 (Applebaum et al., 2010). Researchers discovered that highly satisfied nurses do not leave the
106 existing job (Flinkman, Laine, Leino-Kilpi, Hasselhorn, & Salanterä, 2008). A review report on
107 nurses' job satisfaction expressed that job satisfaction of nurses is positively associated with job
108 stress, depression, and organizational commitment (Lu, Barriball, Zhang, & While, 2012). In
109 addition, they identified that job satisfaction had a moderate relationship with some determinants
110 e.g., role ambiguity, recognition, supervisor support, and coworker cooperation. They found a
111 weak association with nurses' personal characteristics, for example, gender, age, years of
112 experience, education level, and deal with strategies. They also revealed an inconsistent impact
113 on job satisfaction for same determinants across nations. For instance, job satisfaction was
114 strongly correlated with individual characteristics (e.g., age) among Turkey and US nurses
115 (Çimen & Şahin, 2000; Kavanaugh, Duffy, & Lilly, 2006), but no correlation was found among
116 nurses in China (Lu, While, & Louise Barriball, 2007). Van Bogaert et al. (2010) reported that
117 job stress was positively associated with job satisfaction among nurses in Belgium, though no
118 relationship was found among nurses in USA (Packard & Motowidlo, 1987).

119 Studies on nurses' job satisfaction in different countries exposed that job satisfaction is usually
120 moderate or low in nursing profession (Akgöz et al., 2005; Asegid, Belachew, & Yimam, 2014;
121 Sabanciogullari & Dogan, 2014; Yilmazel, 2013). Sizeable research is reported on nurses' job
122 satisfaction and job dissatisfaction in various settings. For example, a survey on job satisfaction
123 of 98110 nurses from nine countries conducted by Aiken et al. (2011) reported that job
124 satisfaction was in peak in Germany (83%) after that USA (78%), New Zealand and Canada
125 (67%), South Korea (64%), UK (63%), China (54%), and Japan (40%). Researchers argued that
126 levels of nurses' job satisfaction may vary across samples and countries. They also stated that
127 similar factors may not affect the level of job satisfaction in different countries (Zhu et al., 2012).
128 In Greece, a study on cardiac certified clinical nurses revealed that 38% of nurses were unhappy
129 with their supervisors and 34% with their colleagues (Iliopoulou & While, 2010). They also
130 reported that 34% of them were satisfied with their hospital management, and 81% nurses

131 expressed payment/salary as a significant job satisfaction dimension. In addition, researchers
132 explored some factors that lead to job dissatisfaction. These are low public appreciation for
133 nursing profession or poor image of the profession, low wages, inadequate social opportunities,
134 poor relationship with the management, lack of job security, inadequate involvement in decision-
135 making processes, and inflexible working hours (Aiken, Sloane, Bruyneel, Van, & Sermeus,
136 2013; El-Jardali, Dimassi, Dumit, Jamal, & Mouro, 2009).

137 **2.2 Nurse turnover determinants**

138 Currently, turnover issue among the nurses is one of the prime concerns in healthcare sector.
139 Keeping this in mind, researchers explored some significant factors that prompting nurses'
140 decision to retain or to quit their profession. Applebaum et al. (2010) asserted that turnover
141 intention of nurses is positively associated with nursing workload, stress for work, and burnout.
142 Similarly, Meeusen et al. (2011) stated that emotional and psychological fitness of nurses are
143 deteriorated because of excessive workload and lack of coworker and supervisor support.
144 Consequently, turnover intention is increased. A survey on job satisfaction of healthcare
145 professionals and their intention to quit the job reported that length of professional experience is
146 an important factor for nurses' job satisfaction and their intent to quit from the profession
147 (Kavanaugh et al., 2006). In addition, they found that individual characteristics (e.g., gender, age
148 educational level, and race) are not liable for variances in job satisfaction. Recent studies indicate
149 that nurse turnover or their intention to quit is associated with transformational leadership style
150 (Raup, 2008) and participative governance in hospital (Gormley, 2011). Furthermore, Leiter,
151 Price, and Spence Laschinger (2010) and Delobelle et al. (2011) described that nurses are
152 inspired for their turnover intention more by managers/supervisors than by coworkers.

153 A myriad of research show that demographic characteristics are allied with nurses' turnover
154 intention. In the recent works, researchers discovered an inverse relationship between turnover
155 intention and individual's age in nursing profession (Chan, Luk, Leong, Yeung, & Van, 2009;
156 Ma, Lee, Yang, & Chang, 2009). It is observed that nurses of Ireland reported a greater tendency
157 of premature retirement because of being female, kinship responsibilities, high workload, and
158 lack of training opportunities in the workplace (McCarthy, Tyrrell, & Lehane, 2007). Moreover,
159 Delobelle et al. (2011) found that turnover intention of nurses is inversely related with years of
160 nursing experience in South Africa, while, in Jordan, job satisfaction of nurses is positively
161 correlated with years of nursing experience and their age (Mrayyan, 2005). Similarly, Chan et al.
162 (2009) reported that fresh graduates are highly interested to leave the current position within
163 their first year of nursing practice. However, Beecroft, Dorey, and Wenten (2008) argued that
164 fresh graduate nurses feel committed to the organization, and turnover intention is lower being
165 happy with their professions and pay. Some recent works show that turnover intention of nurses
166 is positively associated with higher levels of nursing education (Delobelle et al., 2011; Stewart et
167 al., 2011). Besides, Chan et al. (2009) revealed that educational level of nurses is strongly
168 correlated with their turnover intention or intention to stay in the organization. They reported that
169 the higher level of education, the higher level of turnover in current position. On the contrary,
170 Borkowski, Amann, Song, and Weiss (2007) stated that greater professional commitment in
171 nursing is correlated with higher education of nursing (e.g., Bachelor/master's degree/PhD.).
172 They also expressed that a highly educated nurse bears lower intention to quit the profession.

173 In a contemporary study, Meeusen et al. (2011) reported that lack of fairness, politics, threats to
174 personal safety, and the risk of possible layoffs are causes of increased job dissatisfaction among

175 nurses. In a recent study, researchers explored that job satisfaction has a moderate relationship
176 with supervisor support, coworker support and recognition in nursing (Lu et al., 2012). Also,
177 they reported that pay, fringe benefits, and contingent rewards are associated with nurses' job
178 satisfaction, and these factors are highly related with turnover intention. Some research show that
179 pay and financial benefits are considered as the most significant factors for job satisfaction in
180 case of male nurses compared to that of female nurses (Borkowski et al., 2007; Chan et al.,
181 2009). In addition, Leiter et al. (2010) stated that intention to leave the nursing profession is
182 associated with support of nursing staff and manager's ability. In the same way, Tourangeau and
183 Cranley (2006) concluded that nurses are more likely to continuing work in current position who
184 perceived their team members as cohesive and supportive.

185 **2.3 Nursing in Turkey**

186 Past studies have identified, in generally, nurses' job satisfaction is at a moderate level in Turkey
187 (Akgöz et al., 2005; Sabanciogullari & Dogan, 2014; Yilmazel, 2013). However, in a study on
188 job satisfaction of Turkish health employees, Cimete, Gencalp, & Keskin (2003) explored job
189 satisfaction is at the lowest among the professional groups in Turkey. Erdem et al. (2008) also
190 revealed a similar result. A recent study indicates that the main reasons of nurses' turnover
191 intention is poor working conditions and adverse perception of nursing profession in Turkish
192 society (Gök & Kocaman, 2011). Similar to that, a survey on 397 Turkish nurses at health
193 application and research center of Uludag university explored low level of job satisfaction in
194 nursing (Akgöz et al., 2005). In that study, the majority of nurses (68%) perceived a low job
195 satisfaction level. Moreover, Sabanciogullari and Dogan (2014) conducted a research on 2122
196 nurses in Turkey. They explored a strong positive correlation between nursing professional
197 identity and nurses' job satisfaction. In addition, collectively 15.5% of the nurses informed that
198 they are intent to leave their job because of professional identity crisis and lower job satisfaction.

199 A recent work on 195 medical secretaries and 677 nurses conducted by Top and Gider (2013)
200 assessed job satisfaction in Turkey. They revealed that organizational commitment has a strong
201 positive correlation with nurses' job satisfaction. They also reported that demographic
202 characteristics of nurses, for example, gender, age, level of education, marital status, salary,
203 years of experience in the hospital, and type of hospital ownership influence the job satisfaction
204 of nurses. As well, Çimen and Şahin (2000) stated that the job satisfaction level of nurses is
205 increased in parallel with the increasing age. Similarly, Aslan and Akbayrak (2002) reported that
206 the more the nursing experience the more the satisfaction in nursing profession. Paşaoğlu and
207 Tonus (2014) identified nurses' job satisfaction at low level during first 5-years. They also stated
208 that nurses' job satisfaction usually increase along with their increased working experience in
209 hospitals. Furthermore, Yıldız, Ayhan, and Erdoğan (2009) identified a positive effect of
210 sociodemographic characteristics, level of job satisfaction, and motivation on nurses' turnover
211 intention in Turkey. They also found supervisory support as an important determinant among the
212 organizational factors of nurses' turnover intention. Besides, they revealed working hours as a
213 significant factor of nurses' intent to quit the existing job in Turkey. In this work, the job
214 satisfaction facets were scrutinized in nursing profession. The impact of sociodemographic
215 characteristics on job satisfaction was also examined along with the intention to quit among
216 nurses at the healthcare sector in Turkey.

217

218

219

220 3. Objectives of the study

221 Evaluating nurses' job satisfaction at private hospitals of Turkey and scrutinizing their intent to
222 quit the existing employment are the prime objectives of this study. Besides, there are some
223 specific objectives:

- 224 • To identify the elements of job satisfaction among nurses;
- 225 • To quantify the level of nurses' job satisfaction;
- 226 • To measure the level of intention to quit among the nurses;
- 227 • To investigate the association between nurses' job satisfaction and their intent to quit the
228 existing workplace;
- 229 • To examine the effects of sociodemographic variables (e.g., as gender, age, marital status,
230 education level, and years of nursing experience) on job satisfaction and intent to quit.

231

232 4. Methods

233 4.1 Sample and data collection procedures

234 In this study, a cross sectional survey was employed since this type of survey is suitable to
235 describe relationships between variables. Six private hospitals of Kocaeli – a province of Turkey
236 were selected to conduct the survey. It was a face-to-face survey. The questionnaire contained a
237 cover letter, a permission form, and the purpose of the research with brief description, and
238 guidelines on how to fill up the questionnaire. The sample comprised of nurses employed in the
239 pediatric ward, general ward, intensive care, and day ward settings. Non-probability sampling
240 technique was employed. Usable questionnaire was 417. A total of 552 nurses participated in the
241 study, representing 13.98% (417/2982) of the total population from the six hospitals. The fitness
242 criteria of the participants were ensured in all the hospitals. These six hospitals were selected
243 because of their state-of-the-art medical facilities for large numbers of patients from different
244 socio-economic levels. In this study, public hospitals were not included owing to the prolonged
245 requirements to have permission granted for data collection.

246 4.2 Instrumentation

247 A structured questionnaire was developed from the literature of earlier studies on nurses' job
248 satisfaction. The questionnaire was divided into three segments. The first segment was composed
249 of demographic characteristics such as gender, age, marital status, education level, working
250 position/title, years of nursing experience, working schedule, etc. The second segment included
251 36 items that are related to job satisfaction developed by (Spector, 1985). These items are
252 acknowledged as the Job Satisfaction Survey (JSS). In this study, these 36 items measured job
253 satisfaction among nurses. The items were addressed nine factors; pay, promotion, contingent
254 rewards, fringe benefits, operating procedures, work environment, coworkers, supervision, and
255 communication. The nurses were requested to opine using a 6-point Likert scale (where, 1 =
256 strongly disagree to 6 = strongly agree). Nearly one fourth of the items were described in an
257 affirmative manner and the rest of items were in a negative manner. So, the scores of items in
258 negative manner required to be inverted before analysis. The last segment contained 1 item.

259 Nurses were asked to rate a 4-point Likert scale (Where, 1= very unlikely to 4 = very likely) to
260 express their intent to quit the present workplace in the coming year.

261

262 **4.3 Reliability and Acceptability estimates**

263 Cronbach's coefficient (α) for each selected facet of the JSS ranged from 0.73 to 0.92 (normally
264 0.6 and above is acceptable), which specifies the internal consistency of data (Spector, 1985).
265 Firstly, a pilot test was conducted to validate the questionnaire with 30 nurses who were not
266 incorporated in the sample. The instrument is acceptable as response rate was appreciable.
267 Acceptability was considered in terms of missing responses rates and refusal rates (Fitzpatrick,
268 Davey, Buxton, & Jones, 1988). Finally, the modified questionnaire was served to 650 nurses in
269 six Turkish private hospitals. 552 nurses filled up the questionnaires and response rate was
270 84.92%. The response rate of each hospital varied from 90% to 98%. After analyzing missing
271 data, we found that 87% respondents have no missing values for the entire set of 54 items.

272 **4.4 Ethical Considerations**

273 Ethical approval was provided by Marmara University ethics committee, and all study works
274 were accomplished compliant with the national ethics regulations of Turkey. The questionnaire
275 completion was deliberate and anonymous. The privacy of data was assured and maintained. All
276 participants provided their written consent to participate in this study.

277 **4.5 Data analysis**

278 For data analysis, SPSS (Statistical Package for the Social Sciences; version 22; Chicago, IL,
279 USA) was used as statistical software. In this study, both descriptive and inferential statistical
280 analyses such as regression analyses, correlation analyses, ANOVA, and post-hoc tests were
281 performed to achieve objectives. For statistical significance, a level of $p < 0.05$ was used as a cut-
282 off.

283 **5. Findings**

284 A total 417 questioners were completed and returned by the respondents which represent 75% of
285 targeted nurses (total 552). Among them, male respondents were 155 and remaining 262 were
286 female nurses working at 6 private hospitals. The age range among the participated nurses was
287 21 to 60 years (mean: 31.58 and SD: 6.0). The average experience of these nurses were 12.7
288 years (SD: 6.3) with a range from zero to 36 years. The descriptive statistics of these nurses are
289 shown in table 1.

290 The JSS items along with their subscales (facets) were listed in table 2 in an ascending order. In
291 order to focus on their magnitude to respondents' job satisfaction, mean and standard deviation
292 for each item was also presented accordingly. If the mean value for any item is more than or
293 equal to four, this means that the respondents are satisfied for that particular item. Again, if an
294 item scores less or equal to 3, it appears that the respondents were dissatisfied with that particular
295 item. A mean value in between 3 and 4 show ambivalence; thereby the calculation is the
296 percentage of mean value divided by the mean of maximum possible total (that is 6) specifies
297 respondents' level of satisfaction for that item. Table 2 also incorporates the percentage of nurses

298 who gave responses of “moderately agree” or “strongly agree”, with the purpose of determining
299 the factors that are allied with the highest level of satisfaction.

300

301

[Insert Table 1]

302

303

[Insert Table 2]

304 From table 2, it is seen that the mean satisfaction level for the respondents was 3.46 out of 6 (SD
305 = 0.42), which means that the average satisfaction level is 58%. From the table, it is also evident
306 that higher scores were assigned by respondents to specific items such as “I like my work
307 environment”, “my coworkers are comfortable to me”, and “I enjoy the administration of my
308 supervisor”. However, lower scores were assigned to the items i.e. “I feel my efforts are not
309 rewarded properly”, “I feel heavy workload pressure”, and “I am not satisfied with my salary”.
310 According to the results from table 2, the highest satisfactory facets were “work environment”
311 “supervision”, and “coworkers”, while “fringe benefits” and “contingent rewards” were the least
312 satisfactory facets among nurses.

313 We also tested nurses’ intention to quit the existing job settings with relation to present job
314 satisfaction by asking “Considering your career aims, do you want to change your present
315 workplace in the coming year?”. The results for this single statement are shown in table 3. It is
316 seen that the mean intent to quit score was 2.81 out of 4 (SD = 0.62), which means that 60.9%
317 nurses reported that they want to leave the present workplace within one year. So, in the table 3,
318 it is observed that 24.4% nurses were reported that they “very likely” to leave their present
319 workplace in the next year. Similarly, 36.5% respondents reported that they are “likely” to leave
320 their present job settings in the next year. Moreover, the linear regression test revealed a
321 significant relationship between the level of nurses’ job satisfaction and their intent to quit the
322 existing employment within one year ($F = 28.2$, $p < 0.001$). Moreover, It is revealed that job
323 satisfaction of nurses was strongly and negatively associated with turnover decision ($r = -0.723$,
324 $p < 0.01$).

325 Scheffé's method was run for examining the relationship between job satisfaction of nurses on
326 their promotion and work unit. It was found that Scheffé' F score 6.71 ($p = 0.03$) with the
327 correlation $r = 0.22$ ($p = 0.01$). While testing post-hoc for the possible interaction (family alpha =
328 0.05), the results revealed that General Ward nurses’ satisfaction level was higher than that of
329 Pediatric Ward, Incentive care, and Day Ward. This result was significant since $p = 0.045$. The
330 correlation between nurses’ fringe benefit and work unit was also found significant ($r = -0.25$,
331 $p = 0.001$) and the Scheffé' F score was 11.68 with $p = 0.03$. While testing post-hoc for the
332 possible interaction (family alpha = 0.05), the results revealed that Day Ward nurses’ fringe
333 benefits were higher than that of Pediatric Ward, General Ward, and Incentive care ($r = -0.18$,
334 $p = 0.001$). Now, Scheffé' F score for contingent rewards and work unit was 10.59 ($p = 0.001$) with
335 correlation $r = -0.19$ ($p = 0.001$). The mean satisfaction for contingent rewards was found higher
336 among the General Ward nurses, than that of Pediatric Ward, Incentive care, and Day Ward
337 nurses ($p = 0.001$). This was tested for the post-hoc testing of the possible interactions at a family
338 alpha of 0.05.

339

[Insert table 3]

340 The differences of study results between the two main study variables (job satisfaction and intent
341 to quit of nurses) with relations to major demographic variables were also examined. First,
342 independent t-test was run to examine whether there is any differences based on “gender” of the

343 nurses. The results revealed that male participants ((mean = 3.44, SD = 0.52), $t = 0.63$, $p =$
344 0.002) were scored slightly, but not significantly, lower than the female respondents (mean =
345 3.48, SD = 0.31) in terms of their present job satisfaction level. However, an opposite result was
346 found in case of nurses' intent to quit the present workplace, where female participants ((mean =
347 2.98, SD = 0.62), $t = 0.54$, $p = 0.03$) were scored higher than their counterpart (mean = 2.64, SD
348 = 0.51).

349 Next, the differences in job satisfaction and intention to leave was determined with respect of
350 respondents' marital status. The results from sample t-test were revealed a significant difference
351 in job satisfaction; married participants ((mean = 3.82, SD = .41), $t = -2.21$, $p = 0.000$) were
352 scored significantly higher than single participants (mean = 3.10, SD = 0.32). Moreover, a
353 significant difference in intent to quit based on respondents' marital status; single participants
354 (mean = 2.90, SD = 0.63), $t = 0.72$, $P = 0.003$) were scored moderately higher than married
355 participants (mean = 2.72, SD = 0.52).

356 In order to test the differences in job satisfaction and intention to leave based on different
357 educational backgrounds of nurses, we used Scheffé's method. It is seen that nurses' job
358 satisfaction and educational level ($r = -0.35$, $p < 0.001$) with Scheffé' F score 11.58 ($p < 0.001$). In
359 post-hoc testing of the possible interactions at a family alpha of 0.05, the mean satisfaction of
360 nurses with diploma degree was higher than nurses with bachelor degree and master degree
361 holders ($p < 0.001$). On the other hand, it is observed that nurses' intent to quit and their
362 educational level ($r = 0.26$, $p = 0.01$) with Scheffé' F score 5.76 ($p < 0.001$). In post-hoc testing of
363 the possible interactions at a family alpha of 0.05, the mean intent to quit of nurses with Master
364 degree holder was higher than nurses with diploma degree, and bachelor degree holders
365 ($p < 0.001$).

366 Additionally, the Pearson correlation was tested to examine the relationships within respondents'
367 demographic variables; job experience and age with job satisfaction. A similar test was run with
368 intent to quit and same variables. Job satisfaction was significantly and positively correlated with
369 age ($r = 0.601$, $p = 0.02$); and experience ($r = 0.661$, $p = 0.02$). Intent to quit was significantly
370 and negatively correlated with age ($r = -0.17$, $p = 0.02$), the older nurses reported less intent to
371 quit than younger nurses, and positively correlated with experience ($r = 0.35$, $p = 0.02$).

372 In summary, a statistically-significant negative relationship is revealed from the results between
373 the two main study variables job satisfaction and intent to quit among the nurses. A significant
374 positive rapport is found between nurses' job satisfaction and age. Similar result also explored
375 for nursing experience. But, a significant negative relationship with intent to quit is found for age
376 and nursing experience. Female nurses and married nurses were scored to possess greater job
377 satisfaction than unmarried nurses, and male nurses. For intent to quit, male nurses and
378 unmarried nurses were found to have higher score than female nurses and married nurses. Nurses
379 with diploma were found to have the highest level of job satisfaction in comparison to others and
380 the nurses with master degree were found to be the lowest. While, considering intent to quit, the
381 nurses with master degree were found to have the highest level possibilities, while the nurses
382 with bachelor degree were scored the lowest.

383 6. Discussion

384 This study occupied a significant gap in the existing knowledge of nurses' job satisfaction and
385 their intent to quit in Turkey setting. This study explored that nurses' job satisfaction score was

386 3.46 (out of 6) i.e. the average satisfaction level was 58%. So, the job satisfaction of Turkish
387 nurses was at moderate level. This result is consistent with earlier studies on Turkish nurses
388 (Akgöz et al., 2005; Sabanciogullari & Dogan, 2014; Yilmazel, 2013). However, this result is
389 contrasted with the study of Erdem et al. (2008), who revealed that most Turkey nurses were
390 dissatisfied with their profession. Besides, the present study concluded that job satisfaction
391 among nurses is significantly and negatively associated with intent to quit. The finding is similar
392 to survey of Turkey nurses (Gök & Kocaman, 2011), study focusing on nurses working in
393 American (Applebaum et al., 2010), study of Greek nurses (Iliopoulou & While, 2010), and
394 survey of English nurses (Frijters, Shields, & Price, 2007). In addition, 60.9% of nurses reported
395 their strong intention to quit their existing job place in the next year.

396 Among the nine faces of job satisfaction, nurses collectively expressed high level of satisfaction
397 with work environment, supervisors, and coworkers. However, contingent rewards, fringe
398 benefits, and pay were reported with low satisfaction; that were highly related to their intent to
399 quit. Similarly, Iliopoulou and While (2010) identified supervisor support as an important factor
400 of nurses' job satisfaction that is congruent with this study. Moreover, they stated lower pay and
401 financial benefits are causes of dissatisfaction among nurses that are consistent with this study.
402 In addition, the recent study supported that nurses' intent to quit the existing workplace is
403 influenced more by managers or supervisors than by coworkers (Delobelle et al., 2011).
404 Likewise the present study, a study on general nurses conducted by Chan et al. (2009) and
405 Heinen et al. (2013) found high satisfaction with coworkers, but dissatisfaction with their
406 extrinsic rewards and professional opportunities. Moreover, Leiter et al. (2010) stated that
407 nurses' intentions to continue the current employment was related to manager's capability and
408 care of nursing staff. The results of present study supports the finding of Tourangeau and
409 Cranley (2006), who identified that nurses felt more satisfaction and more likely to stay in
410 hospitals when they perceived their coworkers as cohesive and supportive. In the contemporary
411 research on Turkey, conducted by Yıldız et al. (2009), also showed supervisory support as the
412 third major impact on the nurses' intention to quit.

413 The recent studies on nurses' job satisfaction indicate that pay, promotion, contingent rewards,
414 and fringe benefits play a significant role in job satisfaction (Han & Jekel, 2011; Top & Gider,
415 2013) that are consistent with the present findings. In the present study, nurses of general ward
416 reported a higher satisfaction level in terms of promotion and contingent rewards than nurses
417 who working in other units, and nurses of day ward reported higher satisfaction in term of fringe
418 benefits than nurses who working in other shifts. So, most of nurses were not satisfied in terms
419 of promotion and fringe benefits. Interestingly, Seo, Ko, and Price (2004) reported that Korean
420 nurses would become very unhappy if they perceived that nurses in same position elsewhere
421 were being better rewarded. In the same way, Frijters et al. (2007) revealed that Chinese nurses
422 were displeased with pay and promotions. In contrast, Chan et al. (2009) revealed an
423 insignificant relation between pay and nurses' job satisfaction. They also stated nurses were
424 displeased because of unfair promotion policy, lower career advancement opportunities, and less
425 chances of liberated work that highlights decision making, critical thinking, autonomy, and
426 delegation proficiency aspects of nursing.

427 It is discovered that nurses' job satisfaction and their intent to quit the present workplace are
428 signally influenced by personal characteristics of nurses. In this study, nurses conveyed that job
429 satisfaction was positively associated with age. The results are congruent with the past research
430 of Çimen and Şahin (2000), that indicates the job satisfaction level of Turkish nurses increases

431 in parallel with the increasing age, while Chinese nurses reported very weak relationship
432 between job satisfaction and age (Lu et al., 2007). Usually, one's expectations become more
433 realistic along with his/her maturity. The present study found a significant and negative
434 correlation between nurses' intent to quit and nurses' age, which is consistent with recent
435 research (Delobelle et al., 2011; Ma et al., 2009). Furthermore, female and married nurses
436 reported higher job satisfaction, while male and single nurses expressed higher intent to quit the
437 current workplace. These findings are congruent with prior research (Top & Gider, 2013;
438 Torkelson & Seed, 2011). In terms of intent to quit, it is revealed that financial benefits are
439 imperative factors of intent to quit for males nurses compared to females (Borkowski et al.,
440 2007; Kacel et al., 2005) that supports the present findings. Similarly, Lu et al. (2012) identified
441 male nurses, particularly single, are more exposed to burnout than married nurses.

442 Nurses reported that professional experience is positively correlated to their job satisfaction i.e.
443 nurses with less work experience are more dissatisfied with their job compared with experienced
444 nurses, which is congruent with the earlier research of Kavanaugh et al. (2006). Past researchers
445 claimed that years of nursing experience and age are related variables for one's job satisfaction
446 that is also consistent with the present results. Usually, younger nurses who have not as much of
447 professional experience are more displeased with their workload, pay, financial benefits,
448 promotion, professional support, and the opportunity to continue their education (Torkelson &
449 Seed, 2011). It is reported that the experienced nurses (more than 15 years) conveyed less intent
450 to quit from the existing workplace compared with younger nurses. Similarly, some
451 contemporary studies stated that young nurses, especially new graduate, have a higher intent to
452 quit the existing workplace within the first year of practice (Beecroft et al., 2008; Chan et al.,
453 2009; Delobelle et al., 2011). However, the present findings are not similar to earlier results of
454 Mrayyan (2005). Also, Lu et al. (2012) stated that the intent to quit of nurses is weakly
455 associated with year of age and years of job experience.

456 Chan et al. (2009) revealed that nurses' educational levels are not strongly related to job
457 satisfaction and intent to quit. The present study reveals a opposite results. Nurses with master's
458 degree were the most dissatisfied nurses with their job than nurses with diploma and bachelor
459 degrees. In addition, nurses with master's degree have a higher level of intent to quit the current
460 employment than others. Similarly, some prior research explored that highly educated nurses are
461 more likely to leave the existing workplace. They are conscious for their career advancement,
462 and seek alternative employment opportunities because of inadequate work opportunities and
463 benefits in their current organization (Delobelle et al., 2011; Stewart et al., 2011). However, the
464 present study rejects the finding of Borkowski et al. (2007), who stated that higher education
465 level (for example, master's degree in nursing) is correlated with enhanced professional
466 commitment, and it declines possibility of intent to quit the existing employment as well as the
467 nursing profession. In the same way, Liu et al. (2012) did not found any strong relation between
468 nures' job satisfaction and their educational qualification.

469 The job satisfaction factors of Turkish nurses were examined carefully to develop a strategic plan
470 to enhance their satisfaction in organizations. Consequently, the likelihood of intent to quit
471 among nurses will be reduced. The present findings are consistent with previous research
472 conducted in other nations. The significant difference among the nations seems to be the ranking
473 of certain job satisfaction variables over others and cultural dissimilarities which is innate in the
474 healthcare delivery systems of different nations.

475 7. Implications for the nurse managers

476 Implementation of proper motivation programs would enhance job satisfaction and decrease
477 intent to quit of Turkish nurses, which ultimately may increase healthcare service quality.
478 Nursing managers can practice co-management models for nurses. Nurses can take part in
479 professional activities such as contribution in decision making in nursing practices to rise their
480 sense of belonging in the organization (Aiken et al., 2013; Flinkman et al., 2010). Also, proper
481 steps for nurse education that provides confidence in nursing practice. Consequently, their job
482 satisfaction is increased. So, it is important that nursing administrators and employers should
483 inspire and allocate adequate resources for development of nurses, thus they can avail and take
484 part in instructive programs and meetings (Aiken et al., 2013; Asegid et al., 2014).

485 Retaining the qualified nurses is a challenge in all organizations. To retain nurses, managers
486 should take initiatives to identify and assess the job satisfaction factors of nurses. Managers
487 ought to routinely screen for indications of dissatisfaction by conducting job satisfaction surveys.
488 Sometimes, nurses' intent to apply positions on different units or hospitals; it may be the first
489 signs of their job dissatisfaction. For increasing job satisfaction and retention, the managers
490 ought to ensure professional opportunities such as working with skilled peers, providing
491 unceasingly support to nurses, endorsing collaborative nurse–physician relationships, securing
492 adequate staffing, advocating and helping control over nursing practice, increasing clinical
493 autonomy, and promoting nurse education (Hayes, Bonner, & Pryor, 2010).

494 Highlighting the factors of nurses' job satisfaction, the present study suggests a suitable and
495 strategic plan for Turkish nurses thus the probability of intent to quit may be minimized from
496 their existing workplace as well as nursing profession. The present study provides a guideline for
497 hospital management to identify the positive and negative factors of job satisfaction among
498 nurses. Identifying the positive factors of job satisfaction, management will ensure its
499 continuance. Addressing negative factors, healthcare policy makers and hospital management
500 will be able to take necessary measures to improve nurses' job satisfaction, thus nurses' intent to
501 quit will be reduced.

502 8. Conclusion

503 Job satisfaction is a noteworthy issue for ensuring proper nursing care in healthcare sector.
504 Furthermore, job satisfactions of nurses confirm quality healthcare services and enhance their
505 professional commitment. The present study was explored the important factors of job
506 satisfaction among the nurses who were employed in Turkey. This study was highlighted the
507 testimony of the rapport between nurses' job satisfaction and their intention to quit from existing
508 workplaces. Nurses collectively expressed their job satisfaction at a moderate level. The findings
509 of this study was underlined the significance of fair promoting opportunity, fringe benefits, and
510 contingent rewards as a due footstep in improving job satisfaction and retention among nurses.
511 Amongst the nine job satisfaction factors, nurses reported a higher satisfaction level with their
512 work environment, supervisors, and coworkers. It indicates that the work environment is very
513 favorable to the nurses; nurse mangers are cooperative and following effective leadership style;
514 all nurses are bearing responsive and helpful attributes for coworkers. Moreover, this study was
515 indicated the impact of demographic variables on nurses' job satisfaction and retention. The
516 findings of this study were compatible with comparative studies in different nations. According
517 to the earlier research, the job satisfaction is negatively interrelated with intention to quit among

518 the nurses which is congruent with the contemporary studies. So, low satisfaction hampers the
519 quality of healthcare services and builds intent to quit the organizations. Consequently,
520 organizations might suffer from different direct and indirect harms.

521 9. Limitations and future research

522 In this study, the sample size was relatively small and limited to nurses who were employed
523 among the private hospitals, province of Kocaeli, Turkey. Thus the findings are applicable to this
524 sample only. For future research, a larger and representative random sample of nurses from both
525 private and public hospitals can be recruited. Although the findings of this study are congruent
526 with past studies, caution is required in drawing any firm conclusions for other nations. Further
527 examination is encouraged owing to the multidimensional nature of the both concepts - job
528 satisfaction and intention to quit. An ethnographic qualitative research approach would be better
529 addressed, in which nurses can express their experiences and needs. This approach should permit
530 the academics to achieve a comprehensive understanding of both cultural and individual nursing
531 points of view.
532

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Table 1 (on next page)

tables

Table 1. Demographic characteristics of the nurses (n = 417) Table 2. The means and standard deviations for all items of nine facets of the job satisfaction survey Table 3. Descriptive values for nurses' intention to quit the present workplace

1 Tables:

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Table 1. Demographic characteristics of the nurses (n = 417)

Particular	Percentage (%)	Frequency
<i>Gender</i>		
Male	37	155
Female	63	262
<i>Age Group</i>		
21-25	23.5	98
26-30	30.7	128
31-35	19.6	82
36-40	14.0	58
41-45	7.6	32
≥ 46	4.6	19
<i>Marital status</i>		
Single	32.8	137
Married	55.4	231
Widowed	7.2	30
Divorced	4.6	19
<i>Education level</i>		
Diploma/ Associate degree	58	242
Graduate (Baccalaureate)	35.3	147
Master of science	6.7	28
<i>Working experience</i>		
≥ 5 year	23.5	98
6 – 15 year	32.6	136
16 – 25 year	26.9	112
26 – 35 years	10.1	42
≤ 36 years	6.9	29
<i>Unit</i>		
General Ward	25.7	107
Pediatric Ward	7.2	30
Incentive care	24.2	101
Day Ward	42.9	179
<i>Schedule</i>		
Permanent morning	24.2	101
Permanent night	18.5	77
Rotating day	57.3	239

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Table 2. The means and standard deviations for all items of nine facets of the job satisfaction survey

Subscale	Items	Mean	Standard deviation	Rating nurses with opinion as strongly agree or moderately agree (%)	Satisfaction ranking (descending)	Facet Mean of satisfaction	Facet standard deviation
Pay	Pay1	2.79	1.60	18.7	30	3.25	0.16
	Pay2	3.26	1.53	16.2	34		
	Pay3	3.28	1.31	23	23		
	Pay4	3.45	1.61	31.9	11		
Promotion	Pro1	3.01	1.35	18.7	31	3.34	0.25
	Pro2	3.30	1.30	26.3	15		
	Pro3	3.52	1.64	23.7	20		
	Pro4	3.54	1.48	28	13		
Supervision	Sup1	3.79	1.58	40	4	3.87	0.15
	Sup2	3.79	1.47	34.4	9		
	Sup3	3.81	1.52	35	7		
	Sup4	4.17	1.53	43.2	3		
Fringe benefits	Fri1	2.64	1.23	12.4	35	3.20	0.28
	Fri2	3.20	1.40	21.9	24		
	Fri3	3.21	1.51	19	28		
	Fri4	3.53	1.36	23.7	21		
Contingent rewards	Con1	3.01	1.47	18.7	33	3.14	0.12
	Con2	3.08	1.44	18.7	32		
	Con3	3.19	1.45	21.9	26		
	Con4	3.29	1.38	21.9	25		
Operating conditions	Ope1	2.69	1.24	11.2	36	3.25	0.46
	Ope2	3.34	1.46	24	18		
	Ope3	3.44	1.58	25.6	17		
	Ope4	3.64	1.39	24.4	19		
Coworkers	Cow1	3.28	1.44	26.3	16	3.84	0.59
	Cow2	3.39	1.33	21.2	27		
	Cow3	4.27	1.39	43.9	2		
	Cow4	4.21	1.67	52.7	1		
Work environment	Nat1	3.67	1.46	30.7	12	3.89	0.15
	Nat2	3.90	1.63	34.4	10		
	Nat3	3.95	1.43	35.7	6		
	Nat4	4.23	1.47	38.8	5		
Communication	Com1	3.13	1.65	23.7	22	3.35	0.31
	Com2	3.13	1.42	19.3	29		
	Com3	3.33	1.33	27.5	14		
	Com4	3.79	1.59	35	8		

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Table 3. Descriptive values for nurses' intent to quit the present workplace

Level	Frequency	Percentage (%)
Very unlikely	93	22.3
Unlikely	70	16.8
Likely	152	36.5
Very likely	102	24.4

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