

RESEARCH ARTICLE

JOB SATISFACTION AMONG INTENSIVE CARE UNIT AND EMERGENCY DEPARTMENT NURSES IN GREECE

Ioanna Kontogeorgou¹, Christos Varounis², Georgios Vasilopoulos³, Martha Kelesi⁴, Georgia Fasoi⁴, Areti Stavropoulou⁵

1. RN, MSc, Second Department of Intensive Care Unit, Attikon University Hospital, Athens, Greece
2. MD, MSc, PhD, Second Department of Cardiology, Attikon University Hospital, Athens, Greece
3. Assistant Professor, Department of Nursing, Technological Educational Institute of Athens, Athens, Greece
4. Associate Professor, Department of Nursing, Technological Educational Institute of Athens, Athens, Greece
5. Assistant Professor, Department of Nursing, Technological Educational Institute of Crete, Heraklion, Greece

DOI: 10.5281/zenodo.1165374

Abstract

Introduction: A number of factors are positively or negatively related to the degree of satisfaction of nurses from their work. The **purpose** of this study was to explore the level of satisfaction of nurses working in Intensive Care Units (ICU) and in Emergency Departments (EDs) in Greece. **Material and method:** The sample of the study consisted of 151 nurses and nursing assistants working in ICUs and in EDs. Data was collected by completing the 'Measure of Job Satisfaction' scale. **Results:** Out the 151 nurses, 95(62.91%) were working in the ICU while 56 (37.09%) in the EDs. Also, 97(64.24%) participants declared that they would change their job if they had the opportunity while 98(64.90%) reported they wanted a change in their occupation activity. Also, the results showed that 151 participants had a lower satisfaction score in "wage satisfaction and prospects" while the opposite was observed in the "personal satisfaction" option. **Conclusions:** Although nurses were generally satisfied, the high trend of leaving the profession shows the need for measures to improve working conditions and working life in general.

Keywords: Job Satisfaction, Nurses, Intensive Care Unit, Emergency Department

Corresponding Author: *Ioanna kontogeorgou, Attikon University Hospital, Athens, Greece, E-mail address: joannakont@hotmail.com*

ΕΡΕΥΝΗΤΙΚΟ ΑΡΘΡΟ

ΙΚΑΝΟΠΟΙΗΣΗ ΝΟΣΗΛΕΥΤΩΝ ΑΠΟ ΤΗΝ ΕΡΓΑΣΙΑ ΣΤΗ ΜΟΝΑΔΑ ΕΝΤΑΤΙΚΗΣ ΘΕΡΑΠΕΙΑΣ ΚΑΙ ΕΠΕΙΓΟΝΤΩΝ ΠΕΡΙΣΤΑΤΙΚΩΝ

Ιωάννα Κοντογεώργου¹, Χρήστος Βαρούνης², Γεώργιος Βασιλόπουλος³, Μάρθα Κελέση⁴, Γεωργία Φασόη⁴, Αρετή Σταυροπούλου⁵

1. RN, MSc, Μονάδα Εντατικής Θεραπείας, ΠΓΝΑ "Αττικών", Αθήνα, Ελλάδα
2. MD, MSc, PhD, Β' Καρδιολογική Κλινική, ΠΓΝΑ "Αττικών", Αθήνα, Ελλάδα
3. Επίκουρος Καθηγητής, Τμήμα Νοσηλευτικής, Τεχνολογικό Εκπαιδευτικό Ίδρυμα Αθήνας, Αθήνα, Ελλάδα
4. Αναπληρώτρια Καθηγήτρια, Τμήμα Νοσηλευτικής, Τεχνολογικό Εκπαιδευτικό Ίδρυμα Αθήνας, Αθήνα, Ελλάδα
5. Επίκουρη Καθηγήτρια, Τμήμα Νοσηλευτικής, Τεχνολογικό Εκπαιδευτικό Ίδρυμα Κρήτης, Ηράκλειο, Ελλάδα

Περίληψη

Εισαγωγή : Πλήθος παραγόντων σχετίζονται θετικά ή αρνητικά με το βαθμό ικανοποίησης των νοσηλευτών από την εργασία τους. **Σκοπός** της παρούσας μελέτης ήταν η διερεύνηση του επιπέδου ικανοποίησης των νοσηλευτών από την εργασία σε Μονάδες Εντατικής Θεραπείας (ΜΕΘ) και Τμήματα Επειγόντων Περιστατικών (Τ.Ε.Π.) στην Ελλάδα. **Υλικό και μέθοδος:** Το δείγμα της μελέτης αποτέλεσαν 151 νοσηλευτές και βοηθοί νοσηλευτών εργαζόμενοι σε ΜΕΘ και Τ.Ε.Π. Η συλλογή δεδομένων πραγματοποιήθηκε με την συμπλήρωση της κλίμακας 'Measure of Job Satisfaction'. **Αποτελέσματα :** Από τους 151 νοσηλευτές, οι 95(62,91%) εργάζονταν στη ΜΕΘ ενώ οι 56 (37,09%) στα Τ.Ε.Π. Επίσης, 97(64,24%) συμμετέχοντες δήλωσαν ότι, θα άλλαζαν το χώρο εργασίας τους αν είχαν την ευκαιρία ενώ οι 98(64,90%) δήλωσαν ότι, επιθυμούσαν αλλαγή επαγγελματικής δραστηριότητας. Επίσης, τα αποτελέσματα έδειξαν ότι, 151 συμμετέχοντες είχαν χαμηλότερη βαθμολογία στην «ικανοποίηση μισθού και στις προοπτικές» ενώ το αντίστροφο παρατηρήθηκε «προσωπική ικανοποίηση». **Συμπέρασμα:** Παρόλο που οι νοσηλευτές εμφανίστηκαν γενικά ικανοποιημένοι, η υψηλή τάση αποχώρησης από το επάγγελμα δείχνει την αναγκαιότητα λήψης μέτρων για τη βελτίωση των συνθηκών εργασίας και της επαγγελματικής ζωής γενικά.

Keywords: Ικανοποίηση από την Εργασία Νοσηλευτές σε Μονάδα Εντατικής Θεραπείας, Τμήμα Επειγόντων Περιστατικών

Υπεύθυνος αλληλογραφίας : Ιωάννα Κοντογεώργου, Αττικών, Νοσοκομείο Αθηνών, Αθήνα, e-mail: joannakont@hotmail.com

INTRODUCTION

The studies about nurses' job satisfaction have a long history with the first one dated back in 1940. According to this study the main reasons leading to job satisfaction is the income, working conditions, relationship with supervisors, family and social relationships, working hours, interest, opportunities for progress and development¹.

The main factors contributing to nurses' job satisfaction are as following: stress, recognition and status, routine, communication with colleagues and doctors, equality, providing quality care to patients, job demands, control, age, experience-education, professionalism, working hours, and work load².

Hence, it is clear that nurses' job satisfaction is a field which has received high attention in recent years, mainly because of the wide reduction in the nurse force globally³. The main cause of this reduction, as referred in the literature, is "leaving" the profession⁴ or according to Price the "voluntarily leaving the profession for any reason"⁵.

The drop-out rates in the USA range between 35% and 55% during the first working year with 40% of nurses stating dissatisfied with their working environment⁶. It is estimated that the magnitude of nurse deficit in the USA until 2020 will be ranging from 340,000⁷ to a million people⁸. In the

United Kingdom nursing employment is being reduced by 83% three years after graduation⁹.

The phenomenon of leaving the profession also affects the young nurses with percentages often higher than those of the experienced ones¹⁰ which range for the first working year between 35 and 60%¹¹. Their preparation for something completely different than what they face in reality¹², their desire to continue their studies at a higher level¹³, lack of support from colleagues and their placement in indifferent nursing departments¹⁰⁻¹³ probably lead them to leave the profession. Psychological support, professional development as well as developing guidance and support programmes by experienced nurses contribute to their job satisfaction¹⁴.

A frequently reported factor negatively associated with job satisfaction is inadequate staffing¹⁵⁻¹⁹, which leads to an increased work load for the nurses and dissatisfaction^{15,18,20}. In addition, the ratio of nurses and nurse assistants is crucial for nurse assistants' job satisfaction¹⁷. On the other hand, the factors which are positively associated with job satisfaction are motivation²¹, supportive management practices²², rotation²³, and autonomy²⁴ for which an increased interest was manifested from nurses.

In Greece, job satisfaction has been studied in relation to self-esteem²⁵, health and quality of life²⁶, working hours and

extrinsic rewards²⁷, while the intention for leaving the profession was correlated with multiple work problems and with the lack in educational, development and recognition opportunities²⁸.

The factors endangering ICU nurses' job satisfaction are many with stress being prominent²⁹, moral fatigue of experienced nurses³⁰ -especially women³¹, burnout³², depression and poor sleep quality³³. Parameters associated with working as a team, supportive supervision³⁴ and open and targeted communication with doctors seem to promote job satisfaction³⁵. Similarly, ED nurses are extremely vulnerable to stress³⁶ while good communication with doctors, professional development, leadership and autonomy contribute to satisfaction³⁷. In the Greek reality, the low social appreciation and the low public image are still major sources of dissatisfaction among Greek ED nurses³⁸.

Nurses' job satisfaction is important both for themselves and the patients since their satisfaction has been linked with positive results for the inpatients³⁹ as well as with a better quality care⁴⁰, thus constituting an indirect indicator of the quality of the nursing services.

The aim of the study was to examine the level of nurses' job satisfaction who work in Intensive Care Units and Emergency Departments in Greece.

METHOD AND MATERIAL

The sample of the study consisted of

registered nurses and nurse assistants, working in the ICU and ED of two large tertiary hospitals in the prefecture of Attiki, Greece. There were no further selection criteria for inclusion to the study except the working place. A total of 200 questionnaires were distributed of which 151 were returned completed, with a response rate of 75.5%. More specifically:

Hospital in Attiki (a): sample N=85, response rate=77.27% (85/110).

Hospital in Attiki (b): sample N=66, response rate=73.33% (66/90).

ETHICAL CONSIDERATIONS: The study was approved by the Committee of the Faculty where the study was conducted. All nurses participated only after they had been informed and given their written consent.

QUESTIONNAIRE

Following a detailed literature review the tool Measure of Job Satisfaction by Traynor & Wade was selected, since it was considered that it fulfills the selection criteria for the present study and does not overlook any important work factor. The questionnaire was translated, standardized and used for the first time in a Greek study by Ioannou as part of his doctorate dissertation entitled "The effect of job satisfaction in the health and quality of life of nurses"²⁶. The initial standardization after the pilot study by MJS

was found to have Cronbach coefficient $\alpha=0.93$. The tool consisted of 41 questions which measured satisfaction with a 5-point Likert scale. The potential answers were the following: “very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied”. The tool was found to have high credibility ($\alpha=0.89-0.93$) and high validity ($ICC=0.83$). The total of the 41 questions were divided in six groups measuring different job characteristics which according to the literature affect the level of job satisfaction. The 41 questions were grouped in six subscales and the corresponding synoptic indices (accumulative score for each subscale). Question 41 can be used as a comparative index. The summary indices were:

Personal satisfaction: calculated from 10 questions (7,8,20,23,26,27,29,33,35,36) with $\alpha=0.85$. Satisfaction with work load: calculated from 8 questions (6,11,14,16,19,22,34,37) with $\alpha=0.81$. Satisfaction with support: calculated from 9 questions (2,3,10,13,15,21,28,31,39) with $\alpha=0.88$. Satisfaction with education: calculated from 4 questions (5,18,25,30) with $\alpha=0.82$). Satisfaction with salary and prospects: calculated from 9 questions (1,4,19,12,17,24,32,38,40) with $\alpha=0.94$. Total job satisfaction: calculated from the 40 questions with $\alpha=0.94$. The internal consistency of the total synoptic index was found equal with $\alpha=0.94$.

STATISTICAL METHODS

The quantitative variables are presented as mean values \pm standard deviation ($M\pm SD$), while the qualitative variables as percentages (%). The quantitative variables were tested for their normality in their distribution with the Shapiro-Wilk test. For comparison of the mean values the student's t-test was used for independent groups, as well as the correlation analysis through the Pearson's (r) coefficient. Nonparametric methods were used in the quantitative variables which are not distributed according to normal distribution, such as the Mann-Whitney U test to compare mean values, and the correlation analysis with the Spearman (p) test. The univariate and multivariate logistic regression was used to estimate the beta coefficients with the corresponding Standard Error (SE). The statistical tests are two-sided with the significance level at $\alpha=0.05$. For the data analysis the statistical package STATA 12.0 (College Station, Texas USA) and MS Excel were used.

RESULTS

In the study 151 individuals aged 35.6 ± 6.0 years participated (men: $n=23$, 15.23%). The majority of the participants were single while a significant percentage (46.36%) was married. The individuals who had children were more (56.95%) in relation to those who did not (43.05%).

The nurses had a work experience after their basic education equal to 10.8 ± 6.7 years, while in the particular nursing department they stated that they had been practicing nursing for 7.25 ± 6.1 years. Regarding the working relationship, the majority of nurses stated that they were on a permanent-term contract ($n=124$, 82.12%), 26 nurses ($n=17$, 22%) were on fixed-term contract, while one nurse stated (0.66%) another type of working relationship. Furthermore, most nurses stated that they work in an ICU ($n=95$, 62.91%), while the rest ($n=56$, 37.09%) stated that they work in an ED. Regarding their work position, most nurses stated "Staff Nurse" ($n=112$, 74.17%), 16.56% ($n=25$) "Nurse Assistant", while 6 individuals (3.97%) "Charge Nurse" and 8 individuals (5.30%) "Ward Manager".

All nurses ($n=151$, 100%) stated they had normal working hours, while none ($n=0$, 0%) had maternity or paternity working hours. The majority of nurses ($n=128$, 84.77%) had rotation shifts on a permanent basis while less ($n=22$, 14.57%) had morning working hours on a permanent basis.

Concerning night shifts/month, the nurses responded that they work by average 5 ± 3 shifts/month (median value=6 nights/month, range=10 nights/month).

Regarding weekends, the nurses stated that they work by average 2.5 ± 1 weekends/month (median value=3 weekends/month, range=4 weekends/month).

As far as continuous education is concerned, most of the nurses ($n=97$, 64.24%) responded that they attended a conference/seminar during the previous year, among whom the majority had 1-5 days of attendance ($n=65$, 43.05%). The way in which the nurses finance their education varies. Most of the nurses finance their education themselves ($n=53$ 35.1%).

The nurses were asked if they would change their work place given the chance and the majority stated ($n=97$, 64.24%) that they would want such a change. The nurses were also asked that if given the opportunity they would change their profession with the majority ($n=98$, 64.90%) stating that they would like a change of profession. In the question regarding the days of absenteeism during the last year, most of them stated that they were not absent even for a day ($n=93$, 61.59%). Furthermore, the most significant reason for absenteeism was illness ($n=53$, 35.10%).

The descriptive data of the MJS subscales are presented in Table 1.

Table 1. Descriptive analysis of the MJS subscales

Synoptic indices MJS	N	Mean value ± Standard Deviation
Personal satisfaction	151	3,3±0,5
Satisfaction with work load	151	2,7±0,5
Satisfaction with support	151	3,1±0,6
Satisfaction with education	151	2,6±0,7
Satisfaction with salary and prospects	151	2,2±0,5
Total job satisfaction	151	3,5±0,4

As presented in Table 1, the lower scores of satisfaction were found in the dimension “satisfaction with salary and prospects”, while the higher scores were recorded in the dimensions “personal satisfaction” and “total job satisfaction”.

There was no statistical difference between men and women regarding the total job satisfaction (p=0.745). Age was positively

correlated with “total job satisfaction” (r=0.198, p=0.014) (figure 1). There was not any statistical difference in job satisfaction in relation to whether the nurse was a graduate from a secondary vocational school, a tertiary education degree holder, or a holder of a master’s degree (p=>0.05). The nurses with a nursing specialty presented higher job satisfaction in relation to those who had not such specialty (3.8±0.5 vs 3.4±0.4, p=0.025).

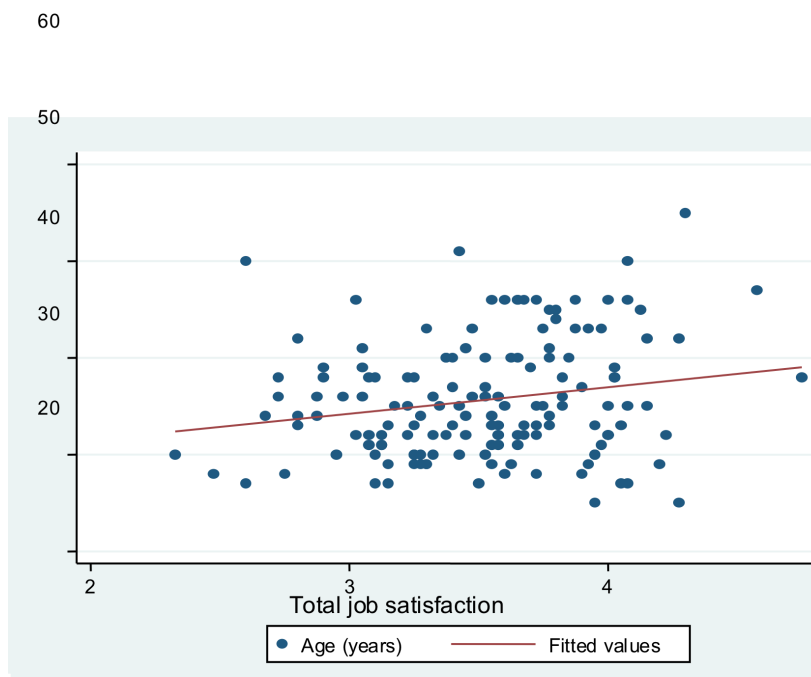


Figure 1. Linear regression between age and the “total job satisfaction” parameter.

Furthermore, the nurses with more nursing activity after their basic education or with more activities in their department, present more job satisfaction ($r=0.179$, $p=0.027$ and $r=0.241$, $p=0.002$). There was no difference concerning job satisfaction and the department (ICU or ED) ($p=0.530$).

Working relationship was not correlated with job satisfaction ($p=0.587$). The work position was correlated with job satisfaction. More specifically, levels of job satisfaction did not differ between the ward managers and staff nurses ($p=0.503$), however nurses had a statistically significant less satisfaction than charge nurses [$\beta=-3.81$ ($SE=0.017$), $p=0.033$].

The bivariate regression analysis showed that the correlation between job position and job satisfaction did not remain statistically significant after implementing correction for the nurse's age ($p=0.142$). Working hours were associated with job satisfaction. In particular, the nurses with permanent rotation shifts had statistically significant less job satisfaction compared to those with permanent morning working hours [$\beta=-2.84$ ($SE=0.09$), $p=0.005$]. The bivariate linear regression analysis showed that the correlation between working hours and job satisfaction remained marginally statistically significant after the data statistical adjustment for the age ($p=0.082$). The more night shifts nurses assigned the less job satisfaction they had (Spearman $\rho=-0.247$,

$p=0.022$), while there was a marginal statistical significance regarding the number of weekends of work per month and job satisfaction (Spearman $\rho=-0.142$, $p=0.081$). Finally, the nurses with 4 or more days of absenteeism during the last year had less job satisfaction [$\beta=-0.222$ ($SE=0.104$), $p=0.035$] in comparison to those who were not absent from their job, while a marginally significant less satisfaction was found for the nurses with 1-3 days of absence during the last year in relation to those with no absence [$\beta=-0.150$ ($SE=0.083$), $p=0.075$]. Following a statistical adjustment for the age, the nurses with 4 or more days of absence during the last year showed less job satisfaction in relation to those who were not absent [$\beta=-0.216$ ($SE=0.0102$), $p=0.036$].

Limitations of the study

Convenience sampling was one limitation of this study. Other limitations were related to the study design which was cross-sectional and not longitudinal.

DISCUSSION

Based on the data analysis, the ICUs and EDs under study were staffed by 85% by women and only 15% by men nurses, with a mean age of 35.6. 63% works in an ICU and 37% in an ED while their nursing activity after basic education is on average 11 years approximately and in the specific department 7-8 years.

Regarding the educational level, a

trend of education upgrading was observed with a significant percentage of 21.19% stating to be holders of a post-graduate degree, 1.99% a doctorate and 7.28% of nursing specialty. It is worth mentioning that 64% of the respondents attended educational seminars in the current year, in an effort to broaden their knowledge probably because of the particularly demanding nature of working in the specific departments.

In the question if they would change their work department 64.24% answered positively in an attempt to perhaps discharge themselves from the particularly stressful atmosphere of these departments. According to other studies, working in such places for a long period – in this case 7-8 years – may cause fatigue and emotional burnout, conditions which endanger nurses' job satisfaction and increase the intention of abandoning the profession^{29,36}. The lack of implementing rotation from managers' planning in Greek hospitals in combination with the intense and exhausting work patterns may explain the tendency to change departments by the majority of the participants.

In the other crucial question which has mainly occupied the research in nursing in recent years, the majority responds that if given the opportunity they would abandon the profession, with a percentage of 64.90%. Given that the average age of the respondents as mentioned before was 35.6

years and the corresponding years of total professional activity after graduation was 10-11 years, it becomes obvious that it is about young health professionals. These data raise concern since they are in agreement with findings from other studies both abroad¹¹ and domestically^{26,27} with abandonment rates in every study to be in high levels.

According to the data the highest dissatisfaction is caused by the salary and the poor professional development, two factors which are often mentioned in studies about job satisfaction^{41,42}. The second in importance index causing dissatisfaction is that of education a result which is in agreement with other studies^{41,42}, followed by work load, probably because of the poor staffing of hospitals, which derives from the disproportion between hiring new nurses and the retirement of the old ones. The heavy work load remains one of the most frequently mentioned indicator of nurses' dissatisfaction both internationally^{15,16,20} and nationally^{41,26}.

Based on the results the nurses appear more satisfied regarding total support in their workplace. The good cooperation with supervisors from all levels, the interactive communication and support from colleagues and associates appears to be the reason why the support index showed more positive results than the aforementioned ones. The right supportive framework as a factor of dissatisfaction reduction is discussed by other authors as well^{34,35-37}.

Autonomy in the workplace and its positive effect on job satisfaction has been thoroughly studied in recent years^{2,43}, a fact which may partly explain the respondents' satisfaction at a personal level and the agreement of the results with those of the above-mentioned studies.

The reported overall satisfaction is of a particular interest compared with the rest of the indexes, because it is evident that the nurses in general are satisfied. Job satisfaction did not seem to be affected by the nurse's gender²⁶ in contrast to a study which showed that female nurses reported higher mean total satisfaction than men⁴⁴.

The age was positively correlated with "total job satisfaction" which is consistent with estimates of other studies². Consequently, even the more experienced nurses appear to be more satisfied, while in a study about ICU nurses' emotional fatigue it was observed that its emergence was frequent in this specific workplace, particularly in the more experienced nurses, and that it is negatively correlated with satisfaction³⁰.

There was no difference in job satisfaction associated with the nurses' educational background although in a study the importance of a good academic preparation to the higher job satisfaction of nurses is highlighted⁴⁵.

No difference was found regarding job satisfaction between ICU and ED nurses,

probably because the conditions and work patterns are similar to an extent and defined by the severity and urgency of nature of the work.

However, job position and fixed working hours, especially morning hours, were positively correlated with job satisfaction. The supervisor's position has been positively linked with job satisfaction²⁷ as well as the fixed working hours^{41,26,27}, which highlights that the satisfaction provided by the work position may be linked to the stability of working hours that this position offers. The greater dissatisfaction is caused by night shifts⁴¹ with their number being negatively associated with job satisfaction, since sleep quality has been found to be a significant predictive factor for the willingness to abandon the nursing profession³³.

Finally, the present study positively answered to the question of the correlation between days of absenteeism with job satisfaction. In particular, more dissatisfied are the nurses who were absent from their job for four or more days. These findings are consistent with those of other studies, according to which, low job satisfaction contributes to the increase of absenteeism⁴⁶, while dissatisfied nurses have double days of absence than the rest⁴⁷.

CONCLUSION

The percentage of abandoning the nursing profession has been extensively studied in recent years. The nurses in general

state that they are dissatisfied with their working environment.

From the present study, it is shown that the ICU and ED nurses manifest the explicit desire to change departments. Although they appear satisfied at a personal level and from the supportive environment in their workplace, they would abandon the profession at a high percentage if given the opportunity.

The fixed working hours and the educational level affect the nurses' perception about salary, development prospects and

their work load. The additional difficulties and their mental or physical burden which exist in departments that deal with emergencies or critically ill patients should potentially be studied further in the future, regarding their impact on the attitude that nurses have towards their profession.

There was no financial support and sponsorship.

Conflict of Interest: The author declared that there is no conflict of interests regarding the publication of this paper.

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