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Conflict management and teamwork in workplace from the perspective of nurses

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Abstract

Purpose: To examine the relationship between nurses' conflict management strategies and teamwork attitudes.

Method: This cross-sectional, descriptive, and relational study was conducted with 228 nurses in a hospital in southern Turkey. Data were collected through The TeamSTEPPS Teamwork Attitudes Questionnaire and the Rahim Organizational Inventory-II.

Results: Of all the nurses, 91.2% reported to have had conflicts. Nurses stated that they mostly used compromising and integrating strategies. Teamwork attitudes questionnaire mean score was 108.28 ± 11.45. Conflict management strategies are significant predictors of teamwork attitudes and these explain 46% (model 1; $R^2 = 0.46$; $P < .01$), and education, gender, units, years of experience explain 2% of the total variance in teamwork attitudes (model 2; $R^2 = 0.48$; $P < .01$).

Practice Implications: Mental health nurses together with manager nurses should focus on improving nurses' teamwork attitudes and constructive conflict management strategies within the team.

KEYWORDS
conflict management strategies, nurses, teamwork attitudes

1 | INTRODUCTION

Improvement of health care in the changing and developing world requires holistic maintenance of all the factors affecting care. The presence of effective teamwork is of importance to perform work in health institutions that have an ultimately complicated nature. A quality health service can only be achieved through effective teamwork models that are strong and self-sufficient and that manage possible conflicts effectively and with leaders who support teamwork.[1-5]

Teamwork and collaboration among health professionals have great importance in positive patient outcomes, patient and worker satisfaction, cost, and improvement of effective health services.[6] Teamwork skills of nurses are one of the important indicators of nursing work performance, and they have a positive effect on care behaviors.[7,8] In a meta-analysis study, it was stated that team work had a moderate effect on work performance.[5]

A high-quality teamwork and communication in health institutions enables improvements in costs, safety, use of resources, productivity, situation-monitoring, problem-solving, satisfaction, coping with requirements, managing workload, improving care quality; it also decreases medical mistakes and stress, which in turn improves the care service provided.[2] On the other hand, studies have proven that ineffective teamwork and poor communication cause negative outcomes in terms of the patient safety and quality of care.[9]

The success of a team is directly proportional to the effectiveness of communication within the team. Quality of care, which is considered outputs of teamwork, is affected by mistakes or performance; communication, coordination, or decision-making processes (ie, teamwork).[5] Effective teamwork requires communication, confidence, and leadership.[10] Therefore, effective management of the communication problems and conflicts between team members is of importance for teamwork. Nurses work in complicated environments

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that require rapid and careful working performance and important responsibly and hard workload to use time effectively.[11] Both loads of the task and communication within the team could make communication problems and conflicts inevitable. Ineffective management of these conflicts could cause many negative results. How nurses manage conflicts and how they view teamwork are important for the solutions to the conflicts. Ineffective management of conflicts in institutions could be a threat to successful teamwork.[1] Conflicts are threats for a person's physical, mental, and emotional health and work performance and cause poor teamwork perception.[12] Studies on health institutions show that poor communication affects team backup negatively and decreases patient care.[13,14] In this context, how conflicts within the team are managed is of importance.

Nurses' conflict-solving skills are of importance for improving conflict management and team backup in units.[3] Rahim[15] explained conflict as an interactive process that might emerge when social beings (individuals, groups, organizations, etc) experience manifestation of incompatibility, disagreement or differences between or within the parties involved in a conflict. Organizational sources of healthcare conflict include uncertainty in professional roles, scope of practice, reporting structure, or workflows. Perceived sources of interpersonal conflict ranged from poor social support to intentions and behaviors to harm others. The sources of individual conflicts involve personal traits, such as self-esteem, world view, locus of control, and moral features; the tendency of the individual to prevent, normalize or tolerate conflict; ability to recognize what constitutes conflict-triggering behaviors; and communication styles as well as individuals' conflict management strategies.[12] Five strategies used by individuals for conflict management include integrating, compromising, dominating, avoiding, and obliging.[15] Studies show that nurses use various strategies, but they use constructive conflict management approaches, such as integrating and compromising more[16-20]

In the literature, there are studies focusing on the negative effects of communication problems between health professionals on teamwork and therefore on team performance.[6,9,14,21] The individual conflict management strategies used are important in solving communication problems. In this context, examining the relationship between the strategies that nurses use in their conflicts and their attitudes towards teamwork becomes important in explaining the issue. However, no studies seem to have examined the relationship between these two concepts. Therefore, the major purpose of the present study is to examine the relationships between teamwork attitudes and conflict management strategies among nurses working in hospital.

Research Questions

*What is the level of nurses' teamwork attitudes?

*What is the level of their conflict management strategies?

*Is there a significant relationship between teamwork attitudes and conflict management strategies?

*Do socioeconomic and professional characteristics affect teamwork attitudes and conflict management strategies?

2 | METHODS

2.1 | Study design

This study was designed as a descriptive, cross-sectional, and relational one to investigate the relationship between teamwork attitudes and conflict management strategies among nurses working in a training and research hospital

2.2 | Setting and sample

The target population of the study was 453 nurses (123 from internal units, 167 from surgical units, and 163 from intensive care units) who worked in a training and research hospital in the southeastern part of Turkey between April and June 2019. The sample size was calculated using G*Power[22] with a medium effect size of 0.15, probability of alpha error 0.05, a power (1-β) of 0.95 to perform a multiple regression model with nine predictors. Minimum sample size was 166.

A stratified sample of nurses was drawn from three units in the hospital. First, the strata weights were calculated (internal units: 123/453 = 0.27; surgical units: 167/453 = 0.37; and intensive care units: 163/453 = 0.36), as were the sample size for each unit (internal units: 0.27*160 = 43; surgical units: 0.37*453 = 59; and intensive care units: 0.36*160 = 58). Samples were taken from each of these stratums using the convenience sampling method. However, 300 surveys have been distributed, taking into account the possibility of missing or irreversible surveys. Manager nurses and new nurses who worked less than 6 months were not included in the study. Thus, 232 nurses volunteered and participated in the survey, 68 surveys were not returned. Four of the 232 questionnaires were excluded from the analysis because the data in the questionnaires are missing. Therefore, the data of the 228 participants (internal units: 68/228 = 0.30; surgical units: 80/228 = 0.35; and intensive care units: 80/228 = 0.35) were used for the analysis (response rate: 76%).

2.3 | Measurements

The following three forms were utilized as data collection tools.

1. The sociodemographic form: This form, developed by the researcher based on the related literature, consisted of nine questions that aimed to collect the participants' descriptive data about age, gender, education level, years of experience, working unit, number of patients provided care, weekly working hours, people with whom they experienced conflicts most, and the reasons for conflicts.

2. (The TeamSTEPPS Teamwork Attitudes Questionnaire) (T-TAQ): The scale was developed by Baker et al[23] to identify attitudes of individuals about teamwork.[23] The scale has five sub-scales:

Team structure (six item): Components of a multi-team system that must work together effectively for patient safety.

Leadership (six item): Ability to direct/coordinate team members, assess team performance, allocate tasks, motivate subordinates, plan/organize, and maintain a positive team environment.

Mutual support (five item): Providing feedback and coaching to improve performance or when a lapse is detected; assisting teammate in performing a task; and completing a task for the team member when an overload is detected.

Situation monitoring (six item): Tracking fellow team members' performance to ensure that the work is running as expected and that proper procedures are followed

Communication (five item): Initiation of a message by the sender, the receipt and acknowledgment of the message by the receiver, and the verification of the message by the initial sender (Baker, Amodeo, Krokos, Slonim, & Herrera, 2010).

The items in the scale are responded on a 5-point Likert Scale. The scores range between 28 and 140. Higher scores indicate higher attitudes of nurses toward teamwork characteristics. Turkish adaptation, reliability, and validity of the scale were performed by Yardımcı et al[24] After the language validity of the scale was provided by five experts, the content validity was evaluated by eight experts with Davies technique (CVI: 0.88). Explanatory and confirmatory factor analysis was conducted to measure construct validity; results confirmed the factor structure of the scale. Reliability coefficients of the sub-scales (Cronbach's α) were found 0.78, 0.82, 0.89, 0.70, and 0.79 for the team structure, situation monitoring, leadership, mutual support, and communication sub-scales, respectively.[24] Reliability coefficients (Cronbach's α) of the sub-scales in this study were 0.92, 0.70, 0.95, 0.74, and 0.93, respectively. The reliability coefficient for the whole scale was found 0.94.

3. The Rahim Organizational Conflict Inventory-II (ROCI-II): The inventory was developed by Rahim[25] to identify which methods are utilized to solve the conflicts experienced within the institution. The inventory is composed of 28 items and five sub-scales that included integrating, obliging, dominating, compromising, and avoiding sub-scales. *The compromising strategy* includes a medium level interest in self and others, and seeks a middle-ground position by sacrificing some interests and desires mutually. As to *the integrating strategy*, it includes the investigation of openness, exchange of information and differences to reach a solution by the parties experiencing conflict in a win-win style. *Compromising* includes focusing on the similarities between the two parties by ignoring differences, expresses thoughts that accept and surrender to make the other party happy. *Dominating strategy* is identified with a win-lose approach or with a forcing behavior to win a competition or claim with another person or group. *Avoiding strategy* presents itself generally with withdrawal, indifference, or isolation.[15] The items are responded on a 5-point Likert scale. As the number of items is not equal in all sub-scales and as there is no cut-off point indicated, the item total mean score was calculated to show the conflict level. Accordingly, scores were evaluated as 1.00 to 1.79: very low, 1.80 to 2.59: low, 2.60 to 3.39: medium, 3.40 to 4.19: high, and 4.20 to 5.00: very high. The scale is composed of three forms as A, B, and C. The form C aim to identify

the solution methods used for conflicts experienced with peers.[25] The form was adapted to Turkish by getting expert opinions and content validity was provided by Gümüşeli.[26] The reliability and internal consistency of the scale have been established in previous studies. Also, its content and construct validity have been approved previously.[26,27] Reliability coefficient of the scale was 0.84.[27] This study found the Cronbach's Alpha coefficient as 0.89 for the whole scale, 0.90 for the integrating subscale, 0.68 for the obliging subscale, 0.70 for the dominating subscale, 0.80 for the compromising subscale, and 0.72 for the avoiding subscale.

2.4 | Data collection

This study was conducted in a training and research hospital located in the South-eastern part of Turkey between February and April 2019. After the ethics committee approval was obtained for conducting the study (2019/9-25), institutional approval was obtained from the hospital administration. Nurses were informed about the study before the data were collected, and their consent was obtained. Data were collected during day and night shifts in an available room in the units where nurses worked. Filling in the questionnaires took about 10 minutes. Data were based on the self-report of the participants who met the inclusion criteria, and the participants were not paid any money.

2.5 | Data analysis

Data were analyzed using the SPSS 21 software package. Descriptive statistics (percentages, means, and standard deviations) were used for the analysis of socio-demographical data. Shapiro-Wilk test was implemented to determine whether sample data were normally distributed. As the data did not have a normal distribution ($P < .05$), the statistical analysis was conducted by non-parametric tests. Kruskal-Wallis/Mann-Whitney U tests were used to determine if there was a significant difference in gender, education, marital status, and working unit; Spearman correlation analyses were used to identify the relationship between the scale variables.

3 | RESULTS

Table 1 presents characteristics of the nurses.

3.1 | Healthcare team members with whom nurses experienced conflicts

Table 2 presents people whom are in conflict with the nurses at workplace. Of all the participating nurses, 91.2% (n = 208) stated that they experienced conflict.

TABLE 1 Characteristics of the participants (n = 228)

Characteristics	Category	M ± SD or n (%)
Age		32.92 ± 7.02
Gender	Female	207(90.8)
	Male	21(9.2)
Education	Health vocational school	34 (14.9)
	Associate degree	44 (19.3)
	Bachelor's	139 (61.0)
	Master's/doctorate	11 (4.8)
Years of experience		11.21 ± 6.90
Weekly working hours		41.34 ± 4.80
Patients being cared for	Day shift (internal/ surgical services)	7.58 ± 3.18
	Night shift(internal/ surgical services)	9.74 ± 11,7
	Day shift (intensive care units)	3.18 ± 0.80
	Night shift (intensive care units)	3.30 ± 1.02

3.2 | Reasons for conflicts

An analysis of the reasons for conflicts in the nurses' working environments showed that 54% experienced conflicts about duties and responsibilities (20% ignorance, 8% having others do her/his duty, 7.3% writing missing information in the orders or writing them late, 4.6% patient acceptance and discharge procedures, and 4% duty distribution). In addition, 13.3% of the participants experienced conflicts about injustice and mobbing, 10% about lack of communication, 8% about lack of defense from their superiors, 6% about the working system, and 3.3% about lack of personnel.

3.2.1 | Teamwork attitudes and conflict management of nurses

Table 3 shows the participants' TAQ and ROCI-II mean scores.

TABLE 2 Healthcare team members with whom nurses experienced conflicts at workplace (n = 208)

Healthcare team members	n	%
Manager nurses	58	27.9
Nurses working in the same unit	57	27.4
Nurses in other units	7	3.4
Physicians	46	22.1
Auxiliary staff	40	19.2
Total	208	100

TABLE 3 Nurses' teamwork attitudes (TAQ) and conflict management strategies (ROCI-II) scores (n = 228)

	Mean ± SD	Min-Max
TAQ and its subscales		
Team structure	23.02 ± 5.31	6-30
Leadership	23.97 ± 5.34	6-30
Supervision	23.78 ± 6.12	6-30
Mutual help	17.93 ± 4.72	5-25
Communication	19.57 ± 4.30	5-25
TAQ total score	108.28 ± 11.45	28-172
ROCI-II subscales[a]		
Integrating	3.85 ± 0.81	1-5
Obliging	3.47 ± 0.83	1-5
Dominating	3.17 ± 0.71	1-5
Compromising	3.91 ± 0.72	1-5
Avoiding	3.29 ± 0.67	1-5

Abbreviations: ROCI-II, Rahim Organizational Conflict Inventory-II; TAQ, teamwork attitudes questionnaire.
[a]Item mean scores.

TAQ total mean score of the nurses was 108.28 ± 11.45; the subscale mean scores were 23.97 ± 5.34 for the leadership, 23.78 ± 6.12 for the situation-monitoring, 23.02 ± 5.31 for the teamwork, 19.57 ± 4.30 for the communication, and 17.93 ± 4.72 for the mutual support subscale. ROCI subscale mean scores were 3.91 ± 0.72 for compromising, 3.85 ± 0.81 for integrating, 3.47 ± 0.83 for obliging, 3.29 ± 0.67 for avoiding, and 3.17 ± 0.71 for dominating strategy (Table 3).

3.3 | Teamwork attitudes and conflict management by gender, education, and unit of working

An analysis of TAQ and ROCI-II of nurses by demographics and work conditions showed that the scores did not demonstrate significant differences by age and marital status ($P > .05$); ROCI-II scores showed differences in terms of gender, education, the unit of working and years of experience ($P ≤ .05$); and TAQ scores demonstrated differences in terms of the unit of working (Table 4).

Gender: Scores of the female nurses for integrating, dominating, compromising, and obliging strategies in conflict management were found to be statistically significantly higher in comparison to male nurses ($P < .05$).

Education: A statistically significant difference was found in female nurses' use of ROCI-II integrating, obliging, and compromising strategy scores according to their education levels ($P < .05$). Pairwise comparisons showed that this difference was caused by the difference between the mean scores of nurses who had an associate degree (two-year vocational training) and master's degree and nurses who had an associate degree and undergraduate degree.

Unit of working: Statistically significant differences were found between the integrating, obliging, compromising, and avoiding

TABLE 4 Conflict management strategies and teamwork attitudes scores according to the gender, education, units, and years of experience characteristics of nurses (n = 228)

Variable	n	Conflict management strategies (ROCI-II)					Teamwork attitudes (TAQ)					
		I	O	D	C	A	TS	L	S	MH	C	Total
Gender												
Female	207	27.10±5.30	21.05±4.52	16.25±3.26	15.77±2.57	19.85±6.40	22.82±5.36	23.81±5.17	23.44±4.55	18.09±3.67	19.65±4.01	107.83±19.24
Male	21	22.95±6.70	16.80±6.03	13.00±5.09	13.00±5.00	17.85±5.00	20.85±7.81	21.85±8.36	23.38±7.02	16.80±6.05	17.23±6.21	100.14±17.42
U[a]; Z; P		U=1548 Z=−2.179 **P=.029**	U=1244 Z=−3.244 **P=.001**	U=1309 Z=−3.014 **P=.003**	U=1429 Z=−2.626 **P=.009**	U=1924 Z=−0.871 P=.2384	U=2051 Z=−0.427 P=.669	U=2088 Z=−0.322 P=.763	U=2097 Z=−0.257 P=.789	U=2234 Z=−0.211 P=.833	U=1783 Z=−1.376 P=.168	U=2145 Z=−0.097 P=.923
Education												
Health vocational school	34	25.97±7.15	20.82±4.42	15.58±3.71	14.91±2.83	19.47±4.23	21.79±6.03	22.00±5.08	22.85±5.01	17.36±4.03	18.85±5.02	102.85±14.03
Associate degree	44	28.27±6.67	22.29±7.78	16.07±3.64	16.28±3.17	20.80±4.11	21.75±5.24	22.20±5.56	22.40±5.05	18.45±4.01	19.88±4.06	104.70±15.25
Bachelor's	139	26.82±4.37	20.43±2.98	16.16±3.18	15.69±2.47	19.56±3.46	23.30±4.12	24.82±3.25	24.15±5.21	18.22±3.21	19.55±3.41	110.09±13.21
Master's/doctorate	11	21.63±9.94	16.54±7.00	14.00±6.94	12.18±5.58	17.09±7.23	20.54±9.66	19.37±7.28	19.90±7.28	14.82±6.08	17.92±8.43	92.54±14.78
χ^2; P		χ^2=10.990 **P=.012**	χ^2=9.328 **P=.025**	χ^2=1.452 P=.693	χ^2=12.238 **P=.007**	χ^2=6.622 P=.085	χ^2=0.332 P=.954	χ^2=7.407 P=.060	χ^2=1.652 P=.648	χ^2=0.965 P=.810	χ^2=4.083 P=.253	χ^2=1.641 P=.650
Units												
Internal units	68	28.60±3.97	20.71±3.44	15.85±3.25	16.29±1.84	20.33±3.59	24.16±3.19	25.47±3.16	25.72±6.89	18.19±3.62	20.52±3.05	114.07±12.98
Surgical units	80	27.70±5.55	21.76±6.31	16.65±4.00	15.93±2.95	20.66±4.07	23.72±5.35	24.66±5.55	23.48±4.74	18.12±4.60	20.06±4.19	110.06±16.42
Intensive care units	80	24.13±6.46	19.53±3.79	15.35±3.33	14.45±3.47	18.10±3.82	20.27±6.73	21.05±6.19	21.45±5.77	17.64±3.72	17.87±5.06	98.28±16.65
χ^2; P		χ^2=23.406 **P=.000**	χ^2=11.435 **P=.003**	χ^2=5.816 P=.055	χ^2=16.610 **P=.000**	χ^2=25.194 **P=.000**	χ^2=14.966 **P=.001**	χ^2=26.341 **P=.000**	χ^2=13.859 **P=.001**	χ^2=1.028 P=.598	χ^2=12.243 **P=.002**	χ^2=16.600 **P=.000**
Years of experience												
6 mo-5 y	50	27.02±6.66	20.96±4.65	15.03±4.07	15.14±3.68	20.40±4.37	23.72±5.57	23.66±5.21	23.46±4.07	18.58±4.20	19.88±4.63	109.30±12.76
6-10 y	80	26.66±5.08	20.96±5.80	17.06±3.25	15.82±2.14	19.36±3.93	23.21±4.72	24.53±4.64	24.46±5.60	18.25±3.53	19.97±3.60	110.43±8.76
11-15 y	48	25.44±5.80	19.70±4.72	15.18±4.04	14.89±3.70	18.37±4.44	21.58±6.21	22.68±6.20	22.20±4.57	16.60±4.78	17.81±5.32	100.89±16.89
16-↑ years	50	27.74±5.90	20.82±3.03	15.58±2.66	16.00±2.47	20.66±2.47	21.68±4.56	23.08±5.45	22.96±4.54	18.24±3.51	19.68±3.98	105.64±10.93
χ^2; P		χ^2=16.185 P=.103	χ^2=3.142 P=.370	χ^2=11.404 **P=.010**	χ^2=1.966 P=.580	χ^2=9.300 **P=.026**	χ^2=5.159 P=.159	χ^2=3.346 P=.341	χ^2=0.540 P=.910	χ^2=6.688 P=.083	χ^2=6.579 P=.070	χ^2=3.998 P=.262

Note: Bold P values are statistically significant at P < .05.

Abbreviations: A, avoiding; C, communication; C, compromising; D, dominating; I, integrating; L, leadership; MH, mutual help; O, obliging; ROCI-II, Rahim Organizational Conflict Inventory-II; S, supervision; TAQ, teamwork attitudes questionnaire; TS, team structure.

aThe Mann-Whitney U test.

bThe Kruskal-Wallis test.

strategies scores of participants according to the units they worked, and between the TAQ total scores and sub-scales of team structure, leadership, situation-monitoring, and communication scores ($P < .05$). Pairwise comparisons showed that this difference was caused by the lower scores of the nurses who worked in internal and surgery services.

Years of experience: Statistically significant differences were found between the dominating and avoiding strategies scores of the participants according to the years of experience ($P < .05$). It was determined that the difference was due to the fact that nurses with a working period of 6 to 10 years use more domination strategy and nurses with a working period of 16 years or more use avoidance strategy more (Table 4).

3.3.1 | Relationship between teamwork attitudes and conflict management strategies

The study analyzed the relationship between the mean scores of TAQ and ROCI-II of nurses, as shown in Table 5.

There was a positive, statistically significant relationship between the nurses' TAQ total scores and ROCI-II except domination strategy ($P < .001$). There was a significant relationship between the integrating (moderate), compromising (strong), obliging (weak), and avoiding (moderate) strategies and TAQ total scores ($r = 0.582$; $r = 0.632$; $r = 0.387$; $r = 0.469$; $P < .001$). There was also a positive, significant relationship between the dominating strategy and team structure and leadership sub-scales ($r = 0.152$, $r = 0.191$; $P < .05$).

The results of multiple linear regression analyses show that there was a significant correlation between conflict management strategies and nurses' teamwork attitudes ($R = 0.69$, $R^2 = 0.46$, $P < .01$). Model 1 was studied only to investigate the effect of conflict management strategies, and model 2 to investigate the effect of confounding variables in addition to conflict management strategies on teamwork attitudes. Demographic variables (education, gender, units, and years of experience) for teamwork attitude were identified as confounders. Accordingly, conflict management strategies explain 46% and education, gender, units and years of experience explain 2% of the total variance in teamwork attitudes (Table 6). An analysis of the standardized (β) coefficient and the t test value shows that compromising strategy was the most important predictor of teamwork attitudes of nurses.

4 | DISCUSSION

This study aims to examine levels of conflict management strategies and teamwork attitudes of nurses, the relationship between them, and the affecting factors. Team approaches of nurses as indispensable members of institutions providing healthcare are of importance. This study found the TAQ mean score as 108.28 ± 11.45. Considering that the highest score that can be obtained according to the TAQ is 140, it can be said that the nurses participating in our study have a moderate teamwork attitude. A study with 230 nurses working in a university hospital also found the mean score as $111,53 \pm 11,47$.[28] Similarly, the study conducted by Çelik and Karaca[29] with 304 nurses working in a hospital reported the mean score as 110.67 ± 18.78.[29] In their study that utilized the same scale on nurses working in surgical clinics, Küçükakça Çelik et al[7] found the mean score as 112.11 ± 17.86.[7] Another study that assessed the teamwork level of 381 hospital nurses found it moderate.[30] TAQ levels of nurses in this study were similar to other related studies. This study ranks the sub-scales of the scale from higher to lower: leadership, situation-monitoring, team structure, communication, and

TABLE 5 Correlation between the five subscales of the nurses' teamwork attitudes and conflict management strategies (n = 228)

Teamwork attitudes (TAQ)	Conflict management strategies (ROCI-II)				
	Integrating	Obliging	Dominating	Compromising	Avoiding
Team structure	$r = 0.584$ $P = .000$*	$r = 0.410$ $P = .000$*	$r = 0.152$ $P = .034$**	$r = 0.607$ $P = .000$*	$r = 0.442$ $P = .000$*
Leadership	$r = 0.548$ $P = .000$*	$r = 0.333$ $P = .000$*	$r = 0.191$ $P = .003$**	$r = 0.628$ $P = .000$*	$r = 0.401$ $P = .000$*
Supervision	$r = 0.449$ $P = .000$*	$r = 0.268$ $P = .000$*	$r = 0.181$ $P = .067$	$r = 0.525$ $P = .000$*	$r = 0.325$ $P = .000$*
Mutual help	$r = 0.320$ $P = .000$*	$r = 0.285$ $P = .000$*	$r = 0.097$ $P = .116$	$r = 0.359$ $P = .000$*	$r = 0.408$ $P = .000$*
Communication	$r = 0.557$ $P = .000$*	$r = 0.358$ $P = .000$*	$r = 0.067$ $P = .131$	$r = 0.342$ $P = .000$*	$r = 0.444$ $P = .000$*
Total TAQ	$r = 0.582$ $P = .000$*	$r = 0.387$ $P = .000$*	$r = 0.058$ $P = .190$	$r = 0.632$ $P = .000$*	$r = 0.469$ $P = .000$*

Abbreviations: ROCI-II, Rahim Organizational Conflict Inventory-II; TAQ, teamwork attitudes questionnaire.
*$P < .001$; **$P < .05$.

TABLE 6 Linear regression analyses for nurses' teamwork attitudes

	B	SE	β	t	P	R	R²
Model 1							
Constant	20.931	4.542				0.683	**0.455**
Integrating	0.297	0.340	0.079	0.872	.384		
Obliging	−0.117	0.293	−0.026	−0.400	.689		
Dominating	0.891	0.352	0.146	2.531	.012		
Compromising	3.426	0.668	0.467	5.128	.000		
Avoiding	0.677	0.353	0.124	1.917	.057		
Model 2							
Constant	13.885	6.716				0.705	**0.477**
Integrating	0.225	0.339	0.060	0.662	.509		
Obliging	−0.014	0.296	-0.003	−0.047	.963		
Dominating	0.884	0.355	0.145	2.492	.013		
Compromising	3.649	0.662	0.498	5.510	.000		
Avoiding	0.642	0.352	0.118	1.822	.070		
Education	2.692	1.340	0.099	2.009	.046		
Gender	4.795	3.997	0.064	1.200	.232		
Units	−0.686	1.044	−0.034	−0.657	.512		
Length of employment	−2.593	1.045	−0.126	−2.482	.014		

Note: For model 1 (predictors: conflict management strategies): SE = 4.542, F = 38.842, P = .000. For model 2 (predictors: conflict management strategies, education, gender, units, length of employment): SE = 6.716, F = 23.993, P = .000.

mutual support. The rank is similar in other studies as well; while leadership was ranked first, mutual support, with the lowest score, was ranked the last.[7,28,29] Although the total mean score was good, communication and mutual support subscale scores were lower than others. Communication skills and mutual support is of great importance for effective teamwork. Various studies define the development of good communication skills as a fundamental concept for creating teams between professions[21,31] and report that lack of support decreases the productivity of the teamwork.[32] The lower mean of communication and mutual support subscales among nurses compared with other subscales may indicate problems and the need for improvement in these areas. Improvements in these areas are thought to further increase the level of team approach.

Conflicts are inevitable in health institutions that have an intensive and rapid work cycle. The present study showed that almost nine-tenth of the nurses (91.2%) had conflict; mainly with manager nurses, nurses working in the same unit, physicians, auxiliary staff, and nurses in other units respectively. In the studies conducted, it was reported that nurses mostly experienced conflicts with nurses and physicians in their own units,[20] nurses working in the same unit, physicians and manager nurses,[18] and other professions.[33] In this study, the conflict with the manager nurses came to the fore. It is expected that conflicts with managers are more likely to occur because the reasons for conflict are more duties and responsibilities. A study conducted with 7498 intensive care unit staff members (nurse 44%) from 24 countries showed that 71.6% of perceived conflict, and these conflicts were most common between nurses and physicians (32.6%), followed by conflicts among nurses (27,3%), and staff-relative conflicts (26,6%).[34] In this current study, both the perception

of conflict in nurses and the rate of conflict among nurses were higher. This result may be an indicator of the need to raise awareness of solutions to the causes of conflicts.

It is important to know the reasons for conflicts to manage them effectively. This study found that duties and responsibilities were among the primary issues about conflict. The reasons for almost half of the conflicts are caused by these. The problems reported within the duties and responsibilities are related to ignorance, having others do her/his duty, writing missing information in the orders or writing them late, patient acceptance and discharge procedures, and duty distribution. Other reasons are injustice and mobbing, lack of communication, lack of support of managers to nurses, leaves and shifts, working system, and lack of personnel. The sources most frequently defined in other studies included some personality traits, emotional intelligence level, the role of managers, bad conflict environments, lack of roles, lack of support, workload, work stress, time pressure, and poor communication,[32] personal hostility, lack of confidence and communication gaps,[34] authority positions and hierarchy, ability to work as a team, interpersonal communication skills, and performance expectations.[35] The reasons for these conflicts could be miscellaneous. However, findings display similarities in terms of roles and responsibilities, communication, and work environment characteristics. It is thought that individual and organizational initiatives for the main causes of deficiencies in the fulfillment of duties and responsibilities and for eliminating these deficiencies can positively affect the level of conflict.

The results of this study showed that nurses mostly used compromising and integrating strategies for solving the conflicts they experienced. These strategies were followed by the obliging, avoiding

and dominating strategies. Although studies indicate that the avoiding strategy was used more,[20,33] some other studies showed that compromising and integrating strategies were used more.[16-18,36] In line with the related literature, the participants of this study seem to manage conflicts using effective strategies.

Study results showed that female nurses used integrating, obliging, dominating, and compromising strategies more frequently than male nurses. A study reported that male nurses had higher competing and compromising scores in comparison to their female counterparts.[36] Another study reported that male nurses used competing and compromising strategies more frequently than females, and female nurses used the avoiding strategy more frequently than males.[16] It can be thought that different results in the studies may be caused by many factors, such as institutional operations or individual and cultural differences. Gender as well as education level is of importance for conflict management. Nurses who held associate and undergraduate degree were found to use the integrating, obliging, and compromising strategies more. Lahana et al[33] reported that more educated nurses used the collaboration strategy more. These results can be interpreted that the gains in conflict management through theoretical knowledge, observation and experience in the training process are effective in the use of these strategies. In addition, conflict management strategies and teamwork approach scores of nurses working in intensive care units were found to be lower in comparison to the nurses working in services (P < .05). In units with continuous work flow, communication problems and stress can be experienced more intensely. Accordingly, it is an expected result that the level of strategies used to manage conflicts in different units will be different. This result can be interpreted as the fact that nurses working in intensive care units use constructive strategies at a lower level affect teamwork attitudes negatively. Also, according to the results of the study; it was found that nurses with a working period of 6 to 10 years used the dominating strategy and nurses with a working period of more than 15 years used the avoidance strategy significantly. In a study, it is stated that nurses with 1 to 5 years of work experience use the integration strategy more than those with 6 to 10 years of experience,[18] and in another study, it is stated that accomodation increases with increasing work experience.[37] Differentiation of findings may be related to the interaction of other factors other than professional experience. In this study, of the nurses with more than 15 years of professional experience, 50% are Bachelor's and 43.2% are associate degree graduates. 76.3% of the nurses who have 6 to 10 years of professional experience are Bachelor's and 11.3% are associate degree graduates. This difference in education level is thought to affect the conflict strategies used.

The present study found a positive, significant relationship between all sub-scales (team structure, situation monitoring, leadership, mutual support, and communication) of team approach attitudes of nurses and integrating, obliging, compromising, and avoiding strategies. As a result of regression analysis, it was found that conflict management strategies explain 46% of total variance in teamwork attitudes (P = .000). No other studies were found to have investigated the relationship between the two concepts. Studies show that conflicts between colleagues are affected by a lack of identifying with the team,[38] lack of collaborative behaviors, and poor information exchange.[39] With these studies supporting the findings of the study, it can be said that although perceived conflict level is high, the team approach attitudes will increase as the nurses use appropriate strategies to effectively manage conflicts.

Mutual support among nurses is also another crucial issue. A study reported that conflicts are caused by a lack of support and poor communication between nurses.[32] Hence, the relationship between teamwork sub-scales of mutual support and communication and conflict management strategies is expected. In addition, a positive and significant relationship was found between the dominating strategy and teamwork structure and leadership sub-scales (P < .05). The study conducted by Grubaugh and Flynn[3] confirmed a positive relationship between manager nurses' leadership ability and conflict management.[3] With the characteristics of situation-managing and solution-finding, people with high leadership abilities seem to use dominating strategies more. Based on these results, we can say that the nurses who use the dominating strategy more often act in accordance with the team structure and by demonstrating their leadership characteristics in their team approach attitudes.

5 | LIMITATIONS

As this study was conducted at a research hospital in the southeastern part of Turkey, the results cannot be generalized to all nurses in the country. The study includes nurses working in internal and surgical services and intensive care units; hence, the results cannot be generalized to all nurses.

6 | CONCLUSION

Complicated work and the need for collaboration of several professionals together require a team approach in health institutions. Nurses in charge of health care are indispensable members of this team. This study found that nurses had a moderate teamwork attitude. Communication, sharing, and solutions of the conflicts experienced are important for the success of the team and maintenance of team spirit. Strategies used by nurses are of importance for the effective management of conflicts. This study found that nurses mainly used compromising, integrating, and obliging strategies for this purpose. In addition, a positive and strong relationship was found between compromising strategy used by nurses for conflict management and team approaches. This finding might indicate that, although the perceived conflict level is high, the use of constructive conflict management strategies strengthens the team approach. Given the patient outcomes, their effects on workers, and outputs in terms of the institution, excessive emphasis should be put on the issues of conflict and team approaches. Increase in the awareness of this topic and the development of the skills of nurses, nurse managers, and other team members about this issue will contribute to positive outcomes.

6.1 | Practice implications

It is important for mental health nurses and manager nurses to enhance teamwork and effective conflict management in the care services provided. Accordingly, many important factors are needed for all team members, such as communication, empathy, assertiveness, emotions and self-expression, motivation, use of effective conflict strategies, sense of belonging to the team and awareness of the importance of teamwork. Mental health nurses could have trainings and practice and make assessments together with manager nurses about these issues. In addition, it is important to teach nurse students these professional skills as well as the importance of collaboration and teamwork approaches, which are important for nurses and professionals before they start working as nurses. The content of nursing curriculum or in-service trainings should be prepared with this approach, and it could be beneficial for nurse educators and nurse managers to guide and motivate nurse students about teamwork.

ETHICS STATEMENT

Adiyaman University Non-Interventional Clinical Research Ethics Committee. (IRB Decision no: 2019/9-25).

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