

Work-Family Conflict and Its Association with Job Performance and Family Satisfaction among Physicians

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Abstract: According to the scarcity hypothesis; the sources of the individual are limited and multiple roles inevitably reduce the sources available to meet all role demands, thus creating strain and work-family conflict (WFC). Physicians are more likely to experience difficulties in balancing work and home life as a result of high physical and emotional demands. The aim of this study was to assess the prevalence of WFC and its association with demographic features, job performance, and family satisfaction among physicians. For this purpose an anonymous questionnaire, WFC scale, job performance scale, and family APGAR scale were used. A total of 396 physicians (women: 40.7%, men: 59.3%, mean age: 38.83± 8.05 years) participated in the study. Work-to-family conflict (W-to-FC) score was higher (3.40±1.09) than family-to-work conflict (F-to-WC) (2.46±0.97). The WFC, W-to-FC and F-to-WC scores decrease as the age increases (p=0.021, p=0.048, p=0.064, respectively). WFC, W-to-FC and F-to-WC scores were higher in assistant physicians (p=0.022, p=0.047, p=0.148, respectively). No significant relationship was found between WFC and gender, marital status, institution of employment, duration of employment and monthly income. And no significant correlations were found between WFC and job performance and family APGAR scores.

Key words: Work-Family Conflict, Job Performance, Family APGAR, Physicians

INTRODUCTION

Role conflict is described as the psychological tension that is aroused by conflicting role pressures. Work-family conflict (WFC) is conceptualised as a construct with dual direction (work-to-family and family-to-work), multiple forms (time-based, strain-based, and behaviour based). The most common type is time-based conflict and it is based on the scarcity hypothesis. According to this theory the sources (e.g. time, energy) of the individual are limited and multiple roles inevitably reduce the sources available to meet all role demands, thus creating strain and work-family conflict (Hammer and Thompson, 2013; Ahmad, 2013).

In the last few decades various disciplines such as psychology, sociology, organizational behaviour and management have studied WFC. These studies suggest that high levels of WFC are related to dysfunctional outcomes for the individual (e.g., life dissatisfaction, anxiety, depression, poor health), for relationships (e.g., increased interpersonal conflict, divorce), and for the organization (e.g., absenteeism, tardiness, loss of talented employees) (Hammer and Thompson, 2013; Ahmad, 2008; Hammer *et al.*, 1997; Allen *et al.*, 2000; Bruck *et al.*, 2002; Day and Chamberlain, 2006; Cinamon and Rich, 2003; Hammer *et al.*, 2005; Adam *et al.*, 2008).

Physicians are a key group to ensure a well-functioning health care system and more likely to experience difficulties in balancing work and home life as a result of high physical and emotional demands (Adam *et al.*, 2008; Geurts *et al.*, 1999). Physicians under stress are more likely to treat patients poorly, both medically and psychologically. Consequently, work/family issues may not only adversely affect physicians' well-being but also the quality of patient care. The studies about work/family issues among physicians have increased in the recent years (Adam *et al.*, 2008; Geurts *et al.*, 1999; Fuß *et al.*, 2008; Knechta *et al.*, 2010; Aminah, 2010; Ohta *et al.*, 2011; Estryin-Behar *et al.*, 2011; Wang *et al.*, 2012; Ronald *et al.*, 2009; Tunc and Kutanis, 2009; Anafarta, 2011).

However, it is known that perception and prevalence of WFC, its antecedents and consequences tend to vary across cultures. According to Russell and Bowman "global organizations have realized that there is a need to understand variations in work/family issues from one country or region to another, and what the key drivers of these variations are" (Ayca, 2013). The present study aimed to assess the prevalence of WFC and its association with demographic features, job performance, and family satisfaction among physicians in a Southern city of Turkey.

Research Methodology:

The study was conducted among physicians working in Adana city centre (n=2898). The least sample size representing the physicians working in Adana city centre with 95% reliability was determined as 340.

Anonymous self-administered questionnaire was distributed to participants. Questions about demographic features (age, gender, marital status, job status, institution of employment, duration of employment in the institution, monthly income), work-family life conflict scale, job performance scale and family APGAR scale were used in collecting the data.

Work-Family Life Conflict Scale:

Work-family life conflict scale, developed by Netemeyer, Boles and McMurrian (1996), is composed of two subscales which aim to measure work-family conflict stemming from the job life of the employees and family-work conflict resulting from family life (Netemeyer *et al.*,1996). These scales are comprised of judgment questions evaluated through 5-item Likert (1= strongly disagree, 5= strongly agree) in order to determine the conflict (Netemeyer *et al.*,1996;Efeoglu,2006).

Job Performance Scale:

Two-dimensional job performance scale through which employees evaluate themselves consists of 24 questions. While the first four items measure task performance, other 20 items gauge contextual performance. Whereas task performance is related with fulfilling a task successfully, contextual performance is associated with off-job behaviours such as voluntariness, joint work, obeying rules and procedures, adopting the aims of the organization. The scales are comprised of judgment questions evaluated through 5-item Likert (1= strongly disagree, 5= strongly agree) in order to determine the performance (Borman and Motowidlo,1996; Motowidlo, 2003).

Family APGAR Scale:

Scale involves five parameters of family functionality (adaptability, partnership, growth, affection and resolve). APGAR is formed of the first letter of each parameter. There are three degrees choices so as to identify the frequency of satisfaction regarding the each parameter in the scale. These choices are ordered as 0 (almost never), 1 (sometimes) and 2 (almost always). Total point is obtained by summing the points from each indicator in the scale, and the possible points range from 0 to 10. High point indicates a high satisfaction from family functionality (Smilkstein *et al.*,1982;Ozcan *et al.*, 2011).

Statistical analysis:

To determine the validity and reliability of the scales, structure validity, factor analysis were performed and Inter-item correlations, Cronbach's alpha coefficients has been calculated.

The internal consistency, factor loadings, error variances and reliability were evaluated. The WFC scale emerged two factors. (Cumulative Variance=72.1%, KMO=0.88). The Cronbach's Alpha of the scale was 0.88 and inter-item correlations were found to be between min: 0.17 max: 0.76. The scale revealed two subscales; factor 1 named W-to-FC, consisting 5 items and Cronbach's Alpha of the subscale was 0.92. Inter-item correlations were found to be between min: 0.61 max:0.76. Factor 2 named is F-to-WC, consisting 5 items Cronbach's Alpha of the subscale was 0.88. Inter-item correlations were found to be between min: 0.53 max: 0.75. Cronbach's alpha coefficients are satisfactory for the scale and for the each subscale.

As a result of factor analyses of job performance scale 3 factors emerged, consisting of 24 items and accounting for the 70.8% of the variance (KMO=0,96). The Cronbach's Alpha of the scale was 0.97 and inter-item correlations were found to be between min: 0.39 max: 0.81. The scale revealed into three subscales; factor1 named functional performance, consisting 4 items and Cronbach's Alpha of the subscale was 0.93. Inter-item correlations were found to be between min: 0.70 max: 0.81. Factor 2 named job context consisting 8 items, Cronbach's Alpha of the subscale was 0.91. Inter-item correlations were found to be between min: 0.31 max: 0.86. Factor 3 named personality context consisting 12 items, Cronbach's Alpha of the subscale was 0.95. Inter-item correlations were found to be between min: 0.47 max: 0.85.

As a result of factor analyses of APGAR scale one factor emerged, consisting of 5 items and accounting for the 64.6% of the variance. The Cronbach's Alpha of the scale was 0.86 and inter-item correlations were found to be between min: 0.44 max: 0.71.Cronbach's Alpha coefficients are satisfactory for all scales and for each scale.

For each continuous variable, normality was checked. T test and ANOVA test were used for the normally distributed data. Since the data was not distributed normally, appropriate non-parametric test was chosen. Ordinal data were analysed using Mann Whitney U or Kruskal-Wallis test. Since analysis of variance was significant, comparisons were applied using the Mann-Whitney U test. Bonferroni's correction was applied ($p < 0.05/n$; where n =number of comparisons) when multiple comparison was made. Categorical variables

between the groups were analyzed by using the Chi square test. Results were presented as mean \pm SD and n (%). Analyses were performed using the statistical package SPSS v 19.0.

Results:

A total of 396 physicians participated in this study. Of the physicians, 161 (40.7%) were women and 235 (59.3%) were men. The mean age was 38.83 \pm 8.05 years ranging from 23 to 66 years (37.08 \pm 7.09 for women and 40.04 \pm 8.45 for men).

Participants experience work to family conflict (W-to-FC) (3.40 \pm 1.09) more than they experience family to work conflict (F-to-WC) (2.46 \pm 0.97) (Table 1). No significant correlations were found between WFC and job performance and family APGAR scores. Correlation coefficients were lower than 0.20 for all comparisons between scores.

It was found that WFC (p=0.021), W-to-FC (p=0.048) and F-to-WC (p=0.064) scores decrease as the age increases and WFC (p=0.022), W-to-FC (p=0.047) and F-to-WC (p=0.148) scores are higher in assistant physicians than in physicians at other status.

No relationship was found between WFC, W-to-FC, F-to-WC and gender, marital status, institution of employment, duration of employment and monthly income (Table 1).

Table 1: Mean scores of work-family life conflict scale according to sociodemographic features (n=396)

Scales Mean \pm SD								
		n (%)	Work-family conflict	p	Family-work conflict	p	Work-family life conflict	p
Gender	Female	161 (40.7)	3.44 \pm 1.06	0.538	2.39 \pm 0.91	0.240	2.92 \pm 0.79	0.785
	Male	235 (59.3)	3.37 \pm 1.12		2.51 \pm 1.00		2.94 \pm 0.89	
Age	<30	75 (18.9)	3.58 \pm 1.08	0.048	2.72 \pm 1.06	0.064	3.15 \pm 0.90	0.021
	31-40	147 (37.1)	3.48 \pm 1.04		2.42 \pm 0.90		2.95 \pm 0.77	
	41-50	149 (37.6)	3.30 \pm 1.15		2.40 \pm 0.97		2.85 \pm 0.87	
	>50	25 (6.3)	2.97 \pm 0.99		2.26 \pm 0.95		2.62 \pm 0.88	
Marital status	Single	92 (23.2)	3.54 \pm 1.08	0.155	2.56 \pm 1.04	0.268	3.05 \pm 0.88	0.122
	Married	304 (76.8)	3.35 \pm 1.10		2.43 \pm 0.94		2.89 \pm 0.84	
Status	GP/FM ¹	123 (31.1)	3.21 \pm 1.13	0.047	2.35 \pm 0.93	0.148	2.78 \pm 0.84	0.022
	Resident	76 (19.2)	3.66 \pm 0.98		2.67 \pm 1.01		3.17 \pm 0.82	
	Specialist	179 (45.2)	3.41 \pm 1.12		2.44 \pm 0.97		2.92 \pm 0.85	
	Faculty	18 (4.5)	3.46 \pm 0.96		2.56 \pm 0.97		3.01 \pm 0.85	
Institution of employment	FHC ²	98 (24.7)	3.18 \pm 1.14	0.061	2.32 \pm 0.88	0.419	2.75 \pm 0.84	0.060
	Public Hospital	56 (14.1)	3.31 \pm 1.16		2.38 \pm 1.02		2.85 \pm 0.91	
	Private Hospital	48 (12.1)	3.55 \pm 0.99		2.51 \pm 0.98		3.03 \pm 0.82	
	Medical Centre	36 (9.1)	3.26 \pm 1.20		2.48 \pm 1.04		2.87 \pm 0.99	
	Training Hospital	158 (39.9)	3.55 \pm 1.03		2.55 \pm 0.98		3.05 \pm 0.79	
Duration of employment (years)	<1	57 (14.4)	3.51 \pm 1.15	0.241	2.43 \pm 1.02	0.771	2.97 \pm 0.90	0.349
	1.1-3	136 (34.3)	3.51 \pm 1.02		2.53 \pm 0.93		3.02 \pm 0.82	
	3.1-5	109 (27.5)	3.29 \pm 1.17		2.45 \pm 1.04		2.87 \pm 0.88	
	>5	94 (23.7)	3.28 \pm 1.07		2.40 \pm 0.91		2.84 \pm 0.82	
Monthly income (TL) ³	<5000	171 (43.2)	3.52 \pm 1.09	0.164	2.55 \pm 1.04	0.332	3.03 \pm 0.87	0.120
	5000-10000	192 (48.5)	3.32 \pm 1.08		2.40 \pm 0.90		2.86 \pm 0.83	
	>100000	33 (8.3)	3.24 \pm 0.83		2.39 \pm 0.93		2.81 \pm 0.83	
Total			3.40 \pm 1.09		2.46 \pm 0.97		2.93 \pm 0.85	

¹GP/ FP -General Practitioner/Family Physician, ²FHC- Family Health Centre, ³TL-Turkish Liras

Discussion:

The WFC scale (0-5) showed a moderately mean (2.93 ± 0.85) among physicians in our sample. Studies conducted in Turkey reveal that WFC is experienced mildly by middle-class working men and women (Aycan, 2013). In Germany, hospital physicians reported elevated level of WFC compared to the general German population ($p < 0.01$) (11). In a study carried out in Switzerland, physicians reported strong time based as well as strain-based work-life conflicts are frequently than university graduates and general working population (Knechta *et al.*, 2010). A study of Malaysian females' operators, clerks, secretaries, nurses and physicians found that physicians experienced the greatest intensity of work-to- family conflict (Ahmad, 2008). These findings underlie the relevance of negative work-life balance as an existing stressor for physicians.

Our results showed that participants experience W-to-FC more than they experience F-to-WC in line with the literature (Ronald *et al.*, 2009; Anafarta, 2011). It is stated that family borders are more permanent than job borders; namely, it is a permeable area and thus work-family conflict occurs more than family-work conflict (Aycan and Eskin, 2005).

In our study, it was detected that WFC decreases as the age increases. Similarly, WFC was identified to diminish as the age increased in the study conducted in Germany (Fuß *et al.*, 2008); since there are more job and family stressors in young ages, and as the age ascends both these stressors wane and coping strategies are developed, conflict was thought to decrease. As described in the literature this could be attributed simply to worse working conditions for physicians in lower job positions. In line with this, work-family conflict was found to be significantly higher among research assistants in our study, as well. In a study conducted with 220 female junior physicians working in a hospital in Malaysia, a series of multiple regression analyzed indicated that WFC partially mediated the relationship between role overload and emotional exhaustion (Aminah, 2010).

Based on gender role theory, some researchers confirm that women are more likely to report higher levels of WFC. In a study conducted with 431 physicians in Central Anatolia female physicians reported more W-to-FC ($p < 0.005$), and more F-to-WC ($p < 0.005$) compared to men (Ronald *et al.*, 2009).

In this study it is intriguing that although female physicians reported more W-to-FC, they are satisfied with their jobs, careers and lives as their male colleagues. The authors argued that this may reflect a concentration on their present job and work situations and experiences rather than a comparison with

male colleagues which might put them a relative disadvantage, or an appreciation of their shorter medical careers to date. In a study carried out in Hungary (Ádám, 2008), female physicians reported significantly higher mean level and prevalence of WFC compared to men. The predominant form was W-to-FC among physicians: however, significantly more female physicians experienced F-to-WC and strain-based WFC compared to men. Female physicians reported significantly less parental, spousal, and peer support compared to men. Although female physicians in Central Anatolia and Hungary reported more work- family conflict, no relationship was found between work-family life conflict and gender in our study compatibly with the studies conducted in Switzerland, and Germany. In a study performed in United States (US) (Frank *et al.*, 2000) women physicians spend little time on domestic activities that can be done for them by others, including cooking, housework, and especially gardening. Women physicians spend somewhat less time on child care and substantially less time on housework than do other US women. Social support may play an important role in pathogenesis of WFC experienced by female physicians. In studies to be conducted hereafter, female physicians could be asked whether they have a helper in child care and house work, or they get support from their husbands and parents.

Even though WFC and sub-scale scores was found to be higher in singles, those working in private hospitals and training hospitals, and those whose duration of employment in the institution is 1, 1-

3 years, no statistically significant relationship was identified between marital status, institution, duration of employment and monthly income. In congruent with our study and the one conducted in Germany, no significant effects on WIF conflict had cohabitation with a partner or a child under 15 years of age, job position, institution, temporary or permanent work contract, cultural background, time working with in the profession and age at job entry.

Also we searched correlation between perceived work-family conflict and job performance and family satisfaction; however we did not find any correlation. This is an unexpected result. In the study conducted by Celik and Turunc in defence sector, the levels of family-work conflict were detected to influence job performance negatively and significantly (Turunc and Celik, 2010). Aycan and Eskin found that in Turkey W-to FC, but not F-to WC, was associated with lower psychological well-being, lower satisfaction with parental role performance and lower marital satisfaction. They argue that because the family has a central importance in lives, the possibility of harming the family because of work responsibilities was more disturbing to Turkish dual-earner families, than the possibility of harming the work due to family responsibilities (Aycan and Eskin, 2005). It is also possible that the coping mechanisms commonly may vary across cultures and individuals and this may account for the differences in the relationship between WFC and its outcomes. Hence, the results of a study comparing WFC in Ukraine, Iran and America refer to differentiation of power of cultural values especially at the individual level (Frank *et al.*, 2000). Eby *et al* carried out a review of 190 work-family studies published in Industrial Organizational/Organizational Behaviour journals. They demonstrated that

work-family relationships were complex and multivariate studies are needed to examine how work influences family and vice versa (Leka and Jain, 2010).

Limitations:

First, because this was cross-sectional study, causal conclusions cannot be drawn. Second, we note that all of our data were self-reported, and the extent of underreporting or over cannot be determined.

Third, our sample was selected from an urban area and may not be representative for the rural area. Fourth, our data were salaried physicians -based, and therefore cannot be generalized for all physicians working in Adana. Fifth, in our study we did not ask about social-particularly parental, peer, and organizational-support.

Conclusion:

In our study, WFC was moderately prevalent among physicians. We did not find any gender differences differently from the study conducted in Central Anatolia Region of Turkey. According to Aycan “gender roles are expanding, especially in the urban, middle-class, professional population of Turkey. Women are more active in work life, whereas men are more active in family life, in today’s modern Turkey. The universality of this trend leads to a convergence of findings in WFC research, conducted in different cultural contexts” (Mortazavi *et al.*, 2009).

We observed that young physicians and residents were more likely to experience WFC in line with the literature. Young physicians seem to be susceptible for high stress levels due to their relatively high responsibility and low control at work. At the same time they are likely to be in the family-founding phase of their lives thus being faced with different demands related to work and private life. For work - family balance, training medical students and young physicians on communicative and management skills (stress-, time-, and self management) may be helpful. Also, developing political and organizational arrangements for better work conditions is crucial and could possibly reduce WFC and its negative outcomes.

ACKNOWLEDGEMENT

The authors thank to Assoc.Prof.Dr. Gulsah Seydaoglu from Department of Biostatistics, University of Cukurova, for her contributions in statistical analysis.

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