

Compassion fatigue among obstetricians and gynecologists

Deniz Dirik¹ • Ramazan Sak² • İkbal Tuba Şahin-Sak²

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Abstract

Obstetricians and gynecologists are likely to be at risk of occupational distress because their quality of life is affected as a result of their experiences of assisting with traumatic births and/or providing abortions, among others. Nevertheless, there have been few studies of this group of doctors' compassion fatigue. This study aimed to examine obstetricians and gynecologists' compassion fatigue. This survey-based quantitative study examined 107 obstetricians and gynecologists' compassion fatigue. Data were collected using a demographic information form and the Compassion Fatigue Short Scale. This established that had low levels of compassion fatigue related to secondary trauma and job burnout, but moderate levels of it overall. Among female obstetricians and gynecologists, compassion fatigue was higher than among their male counterparts, and respondents who worked at private hospitals had higher compassion fatigue related to secondary trauma than those who worked in state-run hospitals. The data also revealed that obstetricians and gynecologists with 11–15 years' seniority scored higher on the job-burnout subdimension of compassion fatigue, and overall, than their more senior counterparts. Interestingly, however, no statistically significant differences in the participants' compassion fatigue were found to be associated with their ages, marital statuses, numbers of children, number of patients seen per day, or number of daily operations performed. Professional sharing groups that allow doctors to share their experiences and to gain awareness about their colleagues' traumas should be organized. Teamwork should also be encouraged; and various prevention strategies should also be considered.

Keywords Obstetricians · Gynecologists · Compassion fatigue · Secondary trauma · Burnout

Introduction

It is important to answer the question of *why psychology has focused on frailties rather than strengths*. One answer may be compassion, boiled down to a straightforward idea that people who are hurt or suffering should be helped before help is given to those who are already doing well (Gable & Haidt, 2005). It is human nature to exhibit compassionate behaviors (Houston, 2019), rooted in each person's desire to be happy, extended to or projected onto others (Dalai Lama, 1995; cited in Gilbert, 2009).

☐ İkbal Tuba Şahin-Sak ikbalsak@yyu.edu.tr

Deniz Dirik denizdirik@yyu.edu.tr

Ramazan Sak ramazansak@yyu.edu.tr

Compassion can be defined in multiple ways: for instance, as a feeling that activates and directs a person to help (Kant, 2017); as a feeling of pity that is distributed equally to everyone, regardless of their identity or personality (Tarhan, 2017); or as an awareness of the difficulties one's own and others feels or suffers, prompting action to alleviate such distress (Nas & Sak, 2021). However, people sometimes have difficulty being compassionate, a phenomenon that in some cases can be explained by the concept of compassion fatigue. Initially, compassion fatigue was associated with stress and burnout, particularly among nurses (Joinson, 1992). Subsequently, Figley (2002, p. 1435) explained it as "a state of tension and preoccupation with. .. traumatized patients [caused] by re-experiencing the traumatic events, [and] avoidance/numbing of reminders persistent arousal (e.g., anxiety) associated with the patient", further considered as "a function of bearing witness to the suffering of others." In other words, given a definition of compassion as bearing suffering, compassion fatigue leads to decreases in individuals' capacity for and/or interest in compassion (Figley, 2002). Compassion fatigue – or more specifically, fatigue caused by one's efforts to understand the conditions of those in need and support them – can also result in emotional exhaustion (Sayar & Manisaligil, 2016). Therefore, as Flarity et al. (2013) reported,



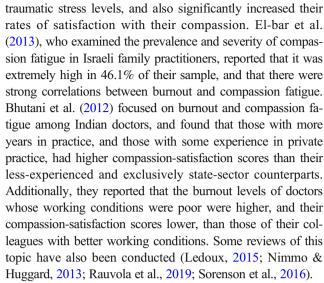
Faculty of Medicine, Van Yüzüncü Yıl University, Van, Turkey

Faculty of Education, Van Yüzüncü Yıl University, Van, Turkey

compassion fatigue can readily be divided into two components: burnout, and secondary traumatic stress. Although the terms burnout and compassion fatigue are sometimes used interchangeably, it is important to bear in mind that burnout is "external to the provider", whereas compassion fatigue is "what happens internally to the provider" (Babineau et al., 2019, p. 2).

The onset of compassion fatigue can be sudden or gradual (Nas & Sak, 2020), and can occur in any caring situation marked by the development of empathy. It is common among healthcare providers, and notably pediatric, cancer, and intensive-care nurses (Pehlivan & Güner, 2018). The prior literature emphasizes that compassion fatigue and some related concepts such as burnout, moral distress, and vicarious traumatization can cause a range of symptoms in healthcare providers (Pehlivan & Güner, 2018; Sorenson et al., 2016). These sypmptoms, which can negatively influence such individuals' relationships with their colleagues and patients, and also their patient-care performance, can be physical (e.g., headaches and digestive problems), emotional (e.g., depression, restlessness and poor concentration), and work-related (e.g., avoidance of particular cases or patients, decreased ability to establish empathy toward patients and their relatives, frequent use of sick leave, and lack of pleasure) (Lombardo & Eyre, 2011). Compassion fatigue is also negatively related to patient satisfaction and patient safety (Pehlivan & Güner, 2018), and at worst, it can have destructive effects on patients, healthcare organizations, and society in general (Ledoux, 2015).

The reason that so many prior studies of compassion fatigue have focused on healthcare providers, and especially nurses, is that these professionals have prolonged and intense connections with patients and exposure to stress, and thus develop this type of fatigue more readily than people working in other jobs do (Coetzee & Klopper, 2010). Cingi and Eroğlu's (2019) examination of compassion fatigue in head-and-neck cancer surgeons found that their compassion levels increased as they aged and gained more experience. Polat and Erdem (2017) studied the realtionship between compassion-fatigue levels and the quality of professional life among medical professionals in Turkey, and found that compassion fatigue more frequently than male ones, and that nurses' means scores on the tenderness sub-dimension of compassion fatigue were higher than the group mean. On that basis, the authors concluded that compassion fatigue was most likely to be observed in nurses. Other sub-dimensions of medical professionals' compassion fatigue have been found to vary based on their ages, genders, tasks, administrative functions, service durations, and types of institution in which they work. One of the few prior studies of compassion fatigue among obstetricians and gynecologists was conducted in Australia by Allen et al. (2017), and focused on the impact of work-focused discussion groups on compassion fatigue and other occupational-stress indicators. Its findings showed that monthly psychiatrist-led discussion groups significantly decreased these doctors' burnout and secondary



Obstetricians and gynecologists are likely to be at risk of occupational distress because their quality of life is affected as a result of their experiences of assisting with traumatic births and/or providing abortions, among others (Allen et al., 2017). Nevertheless, there have been few studies of this group of doctors' compassion fatigue, either in Turkey or elsewhere in the world. This research gap makes it more difficult to ameliorate their working conditions, increase their compassionate behaviors, or decrease their occupational stress and burnout; and the present study was designed to help fill it. It will be guided by the following questions:

- (1) What is the level of Turkish obstetricians' and gynecologists' compassion fatigue?
- (2) Are any significant differences in this group's compassion fatigue linked to
- a. their gender, age, marital status and number of children?
- b. the type of hospital where they worked?
- c. their professional seniority?
- d. the number of patients they see daily?
- e. the number of operations they perform daily?

Methods

Research Design

This study adopted a quantitative survey-based approach, due to its suitability for describing a past or present situation (Karasar, 2005), including individuals' attitudes, actions, ideas and/or beliefs. Provided that effective measurement procedures are used, it can also help researchers examine relationships between variables, make predictions, and identify how subgroups change (Christensen et al., 2014). In the current study, data on compassion fatigue were collected from a



sample reflective of the target population – as described in the next section – through the Compassion Fatigue Scale adapted into Turkish by Dinc and Ekinci (2019).

Sampling

The target population for this research consisted of doctors working as obstetricians and gynecologists in public and private hospitals, and 107 participants were recruited via snowball sampling: a non-random approach used when it is difficult to reach those who make up the population, or when information about the population, e.g., its size, is (Patton, 2005). It focuses on people and critical situations that rich data can be obtained from, and reaches its target population by following them (Creswell, 2013). Continuing on the path that a key person opens up, the researcher will naturally differentiate the chain with new resources, by reaching the recommended people (Kothari, 2004). Our participants' background characteristics are shown in Table 1.

As Table 1 indicates, most of the participants were female, between 29 and 42 years old, and married; and nearly three out of four had between one to three children. They were more or less evenly divided between public and private hospitals. A little over half had 11 or more years of professional seniority. They saw between 2 and 100 patients per day, and more than 70% performed fewer than three operations per day.

Table 1 Participants' background characteristics

		n	%
Gender	Female	70	65.4
	Male	37	34.6
Age	29–35	33	30.8
	36-42	36	33.6
	43–63	38	35.5
Marital status	Married	89	83.2
	Single	18	16.8
Number of children	0	25	23.4
	1–3	82	76.6
Type of hospital worked in	Public	53	49.5
	Private	54	50.5
Professional seniority	0-5 years	18	16.8
	6-10 years	33	30.8
	11-15 years	16	15.0
	16-33 years	40	37.4
Number of patients seen daily	2-20	31	29.0
	21–45	36	33.6
	46–100	40	37.4
Number of daily operations	1	34	31.8
	2	42	39.3
	3–10	31	29.0

Data-Collection Tools

Demographic Information Form This instrument was developed by the researchers to capture all of the categories of background information shown in Table 1, above.

Compassion Fatigue-Short Scale (CFSS) This instrument, used by the researchers to capture information about obstetricians' and gynecologists' compassion fatigue, was devised and tested for its psychometric properties by Adams et al. (2006) and subsequently adapted into Turkish by Dinc and Ekinci (2019), It consists of 13 items, responded to on a 10-point, visual analog-type Likert scale ranging from 1 = rarely/never to 10 = very often. Accordingly, the lowest score this instrument can yield is 13, and the highest, 130, with higher scores indicating greater compassion fatigue (Dinc & Ekinci, 2019). Exploratory and confirmatory factor analysis revealed that the Turkish version of the scale had a two-dimensional structure. with the two factors being secondary rauma and job burnout. The factor loadings of all items were over 0.40, and without any items being removed, two sub-dimensional structures were found to be acceptably similar to the original scale $(x^2 = 106.72; df = 61; RMSEA = 0.007; p = 0.0001)$. The Cronbach's \alpha coefficient for the whole Turkish CFSS is 0.876; for its secondary-trauma dimension, 0.748; and for its job-burnout dimension, 0.852 (Dinc & Ekinci, 2019).

Ethical Considerations

Our study protocol was approved by Van Yüzüncü Yıl University Institutional Review Board. Data were collected via an online-survey program. Upon accepting the online-survey invitation (all data were collected online), all participants received an informed-consent document, which they were asked to confirm they had read before starting the survey. The aim of the study was also explained to them at that point, along with the voluntary nature of their participation and right to withdraw from the study at any stage. To assure the confidentiality of the data provided, access to the dataset was granted only to the study team. The data of the study were collected between 09:00 and 17:00 on weekdays (Monday-Friday).

Data Analysis

Data from the final pool of 107 participants were analyzed using SPSS 22 software. Initially, this involved checking whether the data were distributed normally, via Kolmogrov-Simirnow (n > 50) and Skewness-Kurtosis tests. Because those tests showed that the data were normally distributed, parametric tests were then applied. Descriptive statistics — minimum-maximum values, percentages, means, and standard deviations — were then calculated. Independent-samples t-tests or one-way analysis of variance (ANOVA) were used to compare group



means. The statistical significance level was taken as 0.05 in our analyses.

Results

The Level Obstetricians' and Gynecologists' Compassion Fatigue

It was found that the participants had low levels of compassion fatigue related specifically to either secondary trauma and job burnout, but that cumulatively, these two dimensions amounted to moderate overall levels of such fatigue, as shown in Table 2.

Comparison of Compassion Fatigue by Gender

An independent-samples t-test conducted to compare the participants' compassion fatigue by gender found statistically significant differences in secondary trauma ($t_{105} = 2.784$, p < 0.05, d = 0.56), job burnout ($t_{105} = 2.513$, p < 0.05, d = 0.50), and overall ($t_{105} = 2.849$, p < 0.05, d = 0.57). Also, females' mean scores were higher than males' in both subdimensions and overall. In short, women's compassion fatigue was greater than men's (Table 3).

Comparison of Compassion Fatigue by Age

The respondents were divided into three age groups: Group A, 29–35; Group B, 36–42; and Group C, 43–63. A one-way ANOVA was conducted to compare these three groups' compassion fatigue. This revealed no statistically significant age-based differences in their secondary trauma ($F_{104} = 0.229$, p > 0.05), job burnout ($F_{104} = 1.163$, p > 0.05) or overall compassion fatigue ($F_{104} = 0.749$, p > 0.05).

Comparison of Compassion Fatigue by Marital Status

An independent-samples *t*-test conducted to compare the participants' compassion fatigue by marital status found no statistically significant difference in secondary trauma ($t_{105} = -0.065$, p > 0.05), job burnout ($t_{105} = 0.624$, p > 0.05), or overall ($t_{105} = 0.407$, p > 0.05).

Table 2 Obstetricians' and gynecologists' compassion fatigue

	n	Minimum	Maximum	$\overline{\mathbf{X}}$	SD
Secondary trauma	107	5.00	50.00	32.41	10.25
Job burnout	107	8.00	80.00	48.33	18.18
Overall	107	13.00	126.00	80.74	26.20



Comparison of Compassion Fatigue by Number of Children

An independent samples *t*-test conducted to compare the participants' compassion fatigue based on their number of children found no statistically significant difference in secondary trauma ($t_{105} = .216$, p > 0.05), job burnout ($t_{105} = -.785$, p > 0.05) or overall ($t_{105} = -.628$, p > 0.05).

Comparison of Compassion Fatigue by Workplace Type

When we applied an independent-samples *t*-test to compare the respondents' compassion fatigue across the two broad types of hospital where they worked, we found a statistically significant difference in secondary trauma ($t_{105} = -2.693$, p < 0.05, d = 0.52), with those working in private hospitals experiencing greater compassion fatigue. However, there were no statistically significant differences in job burnout ($t_{105} = .468$, p > 0.05) or overall ($t_{105} = -.696$, p > 0.05) (Table 4).

Comparison of Compassion Fatigue by Professional Seniority

The respondents were divided into four groups according to their seniority (Group A: 0–5 years, Group B: 6–10 years, Group C: 11–15 years and Group D: 16–33 years), and a one-way ANOVA was conducted to compare these groups' respective levels of compassion fatigue. Although there were no statistically significant differences in secondary trauma ($F_{104} = 2.386$, p > 0.05), such differences were found in job burnout ($F_{104} = 2.794$, p < 0.05) and in overall compassion-fatigue scores ($F_{104} = 3.039$, p < 0.05). Bonferroni testing further revealed that there were significant differences between Group C and Group D in job burnout and overall (Table 5).

Comparison of Compassion Fatigue by Number of Patients Seen

The respondents were divided into three groups according to number of patients they saw per day (Group A: 2–20, Group B: 21–45 and Group C: 46–100), and a one-way ANOVA was conducted to compare compassion fatigue across these three groups. There were no statistically significant differences in secondary trauma ($F_{104} = 1.713$, p > 0.05), job burnout ($F_{104} = 2.245$, p > 0.05), or overall compassion fatigue ($F_{104} = 0.504$, p > 0.05).

Comparison of Compassion Fatigue by Number of Operations Performed

The respondents were divided into three groups according to number of operations per day that they performed (Group A: 1, Group B: 2 and Group C: 3–10), and a one-way ANOVA conducted to compare these groups' compassion fatigue. There were no statistically significant differences in secondary trauma

Table 3 *T*-test results, compassion fatigue by gender

	Gender	n	Mean±SD	t	p	Effect Size (Cohen's d)
Secondary trauma	Female Male	70 37	34.35±9.81 28.72±10.19	2.784	0.006	0.56
Job burnout	Female Male	70 37	51.47±17.06 42.40±18.99	2.513	0.013	0.50
Overall	Female Male	70 37	85.82±24.82 71.13±26.37	2.849	0.005	0.57

 $(F_{104} = 0.084, p > 0.05)$, job burnout $(F_{104} = 0.192, p > 0.05)$, or overall compassion fatigue $(F_{104} = 0.166, p > 0.05)$.

Discussion

The results of this study indicated that obstetricians and gynecologists in Turkey had moderate levels of compassion fatigue. Like all healthcare providers, these professionals are expected to be helpful and compassionate, and to have effective communication skills and an empathic approach. However, these requirements – and the emphatic approach in particular – sometimes become a source of pressure; and, in combination with traumatic experiences, they may cause emotional stress and the development of compassion fatigue (Yılmaz & Üstün, 2018). Bearing in mind that most of the obstetricians and gynecologists who participated in this study had more than six years of experience, it was not unexpected that they had all developed a certain level of compassion fatigue. On the other hand, the fact that this fatigue was not of an extremely high level may reflect that these doctors had found some effective ways of dealing with it and keeping it under control; but this should not be taken to mean that they do not need external help with coping with compassion fatigue, and/ or with increasing their compassionate behaviors.

Another interesting result was the lack of any statistically significant differences in obstetricians' and gynecologists' compassion fatigue based on their age, marital status, number of children, daily patients seen, or daily operations performed. Several prior studies have reporting parallel or contradictory results. For instance, the current study's lack of evidence that age was correlated with doctors' compassion fatigue paralleled the results reported by Amir et al. (2016) in the case of psychotherapists. However, Cingi and Eroglu (2019) found

that head-and-neck cancer surgeons' compassion levels increased significantly as they aged and gained experience. Ruiz-Fernández et al. (2020), meanwhile, reported that nurses' compassion fatigue did not vary significantly with age, employment status, work experience or seniority in their current position, but that it did differ significantly across marital status, healthcare settings, location, and work-shift patterns. Polat and Erdem (2017) found that various dimensions of compassion fatigue among medical professionals differed based on their ages, genders, tasks, administrative functions, service durations, and the institutions where they worked; and Chatterton (2014) reported that divorced participants were more likely to develop compassion fatigue. The fact that the current study found no evidence that Turkish obstetricians' and gynecologists' compassion fatigue was linked to these variables may have been because all the doctors in our sample provided the same specific services under similar working conditions, and had similar responsibilities: a point also underlined by Ruiz-Fernández et al. (2020).

On the other hand, we did find a statistically significant difference in compassion fatigue by doctors' gender; in secondary trauma, by the type of hospital where they worked; and in job burnout and overall compassion fatigue, by professional seniority. That compassion fatigue was higher among the female doctors than among the male ones may be related to prior findings that compassion fatigue can be developed in all situations. .. [marked by] a care relationship, since as a result of this relationship, empathy develops (Pehlivan & Güner, 2018). This is because of a strong expectation in Turkish culture that women will be care givers for their family members, over and above the demands placed upon them by their profession to care for patients, students, and colleagues. Thus, expectations related to both their day-to-day and professional roles may be linked to the higher compassion fatigue we

Table 4 *T*-test results, compassion fatigue by hospital type

	Type of hospital	n	Mean±SD	t	p	Effect size (Cohen's d)
Secondary trauma	Public Private	53 54	29.79±10.91 34.98±8.93	-2.693	0.008	0.52
Job burnout	Public Private	53 54	49.16±19.52 47.51±16.91	0.468	0.641	_
Overall	Public Private	53 54	78.96±28.21 82.50±24.22	-0.696	0.488	_



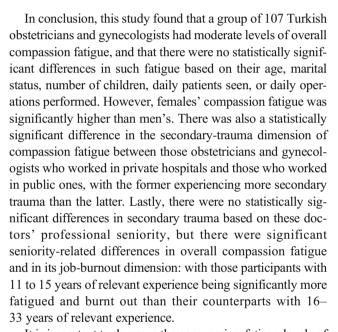
Table 5 Means, standard deviations and ANOVA results, compassion fatigue by professional seniority

	Professional seniority	N	$Mean \pm SD$	df	F	p	Eta squared
Secondary Trauma	0–5 years	18 33	33.66±9.32 30.45±11.04	3/103	2.386	0.073	.065
	6–10 years						
	11–15 years	16	38.06 ± 9.84				
	16-33 years	40	31.20 ± 9.59				
Job Burnout	0-5 years	18	50.05 ± 18.99	3/103	2.794	0.044	.075
	6-10 years	33	47.30 ± 20.45				
	11-15 years	16	59.06 ± 13.59				
	16-33 years	40	44.12 ± 16.11				
Overall	0-5 years	18	83.72 ± 26.45	3/103	3.039	0.032	.081
	6–10 years	33	77.75 ± 29.55				
	11-15 years	16	97.12 ± 19.90				
	16-33 years	40	75.32 ± 23.26				

observed in Turkish female obstetricians and gynecologists. However, it may also be related to women being more empathic than men (Borges et al., 2019), which may enable them to more easily connect with patients and their relatives, and feel their traumas. Prior results have been mixed: with Ruiz-Fernández et al. (2020) reporting no statistically significant difference in nurses' compassion fatigue based on their gender, but Borges et al. (2019) finding that female nurses had higher secondary traumatic stress than male ones.

Another interesting result of the current study was that those doctors who worked in private hospitals had higher compassion fatigue related to secondary trauma than their colleagues in public hospitals did. Because a critical amount of exposure to trauma survivors is one of the key causes of secondary trauma (Jenkins & Baird, 2002), it is to be expected that obstetricians and gynecologists will have secondary trauma. However, the observed significant difference based on hospital type was unexpected, especially in light of Jenkins and Baird's (2002) conclusion that secondary trauma was not linked to workplace conditions. Accordingly, this might be an important question for further studies to explore.

Lastly, it was found that mean scores of participants with 11 to 15 years of experience in their current roles was higher than for those with 16 years' experience or more, both for overall compassion fatigue and for its job-burnout dimension. Conceivbly, this could be because 11–15 years is enough experience to gain an acute awareness of difficulties and traumas, but not yet enough to deal with them effectively. In this context, we should also mention Amir et al.'s (2016) finding that psychotherapists with more years of service had a lower prevalence of compassion fatigue than their less-experienced colleagues. However, Ruiz-Fernández et al. did not find a statistically significant difference in nurses' fatigue based on their work experience (Ruiz-Fernández et al., 2020). Again, this discrepancy might point the way to a fruitful avenue for further exploration.



It is important to decrease the compassion-fatigue levels of obstetricians and gynecologists as much as possible, because of the negative influence it is known to have on the quality of doctors' professional and private lives (Ruiz-Fernández et al., 2020). Therefore, professional sharing groups that allow doctors to share their experiences and to gain awareness about their colleagues' traumas - as previously recommended by Allen et al. (2017) – should be organized in Turkey. Teamwork should also be encouraged; and various prevention strategies, such as training about stress and fatigue symptoms, and regular monitoring and assessment, should also be considered (Borges et al., 2019). Our finding that the female participants' compassion fatigue was higher than the males' may also indicate that the working conditions of female doctors stand in need of improvement. Compassion and selfcompassion are potential resilience factors against the challenge of burnout (Beaumont et al., 2016; Gerber & Anaki,



2020). Therefore, some preemptive clinical interventions can be developed to increase compassion and self-compassion of obstetricians and gynecologists.

Current study has some limitations. First limitation is small sample. Therefore, it is recommended that similar studies can be conducted with larger samples in the future. Another limitation of this study is that the questions about psychiatric disorders and symptoms (anxiety, depression, sleep etc.) were not asked to the participants. Compassion fatigue of the groups can be compared in this context in further studies. Also, the on-line collection of data has some risks such as representative sampling, response rates and the generalizability of the findings (Lefever et al., 2007) so, the on-line collection of data is another limitation of the current study. Another limitation of the current study is about the data collection time. Although individual differences in morningness as a mediator variable in the normative circadian functions (Adan, 1993), the time of day in which the responses were collected has not been controlled in the current study.

Future research on this topic should examine in detail why female obstetricians' and gynecologists' compassion fatigue may be higher than that of their male colleagues. Additionally, differences in private and public hospital doctors' working conditions, and such conditions' effects on their compassion fatigue and compassionate behaviors, should be investigated. Collection of longitudinal data would also be useful in explaining how years of professional experience and public vs. private hospital work might be interrelated, and/or jointly influence compassion fatigue and compassionate behaviors, not only among obstetricians and gynecologists, but among doctors with other specialisms.

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Data Availability Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

Declarations

Van Yüzüncü Yıl University Institutional Review Board approved the study.

Informed Consent Informed consent form was obtained from parents of children in the study.

Conflict of Interest The authors declare that they have no conflict of interest.

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