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**Marital satisfaction in relation to social support, coping, and  
quality of life in medical staff in Tehran, Iran**

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*This work is dedicated to my dear parents*



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## Abbreviations

ANOVA	Analyses of variance
MANCOVA	Multivariate analyses of covariance
MANOVA	Multivariate analyses of variance
ENRICH	Evaluating & Nurturing Relationship Issues, Communication and Happiness
QOL	Quality of Life
SF-36	Short Form Health Survey
WOC	Ways of Coping
SSQ	Social Support Questionnaire
SSQS	Social Support Questionnaire Satisfaction
SSQN	Social Support Questionnaire Number
SPSS	Statistical Package for Social Sciences

## **List of original articles**

### **Article I**

Rostami, A., Ghazinour, M., Nygren, L., & Richter, J. (2013). Marital Satisfaction with a Special Focus on Gender Differences in Medical Staff in Tehran-Iran. *Journal of Family Issues*. (Accepted in Journal of Family Issues).

### **Article II**

Rostami, A., Ghazinour, M., Nygren, L., Nojumi, M., & Richter, J. (2012). Health-related Quality of Life, Marital Satisfaction, and Social Support in Medical Staff in Iran. *Applied Research of Quality of Life*. (Published). DOI 10.1007/s11482-012-9190-x.

### **Article III**

Rostami, A., Ghazinour, M., & Richter, J. (2013). Marital Satisfaction: The Differential Impact of Social Support Dependent on Support Situation and Gender in Medical staff in Iran. *Global Journal of Health Science*. (Published). DOI 10.5539/gjhs.v5n4p151.

### **Article IV**

Rostami, A., Ghazinour, M., & Richter, J. (2013). Marital Satisfaction, Ways of Coping and Social Support in Female Medical Staff in Tehran-Iran. (Submitted).

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## **Abstract**

Marital satisfaction is one of the main characteristics of a healthy family, and is known as an important predictor of overall quality of life. Stress is unavoidable in everyday life and it can affect marital relationships. Furthermore, employed married individuals encounter more stressors than do unmarried ones, especially when their jobs are demanding and stressful, such as working as medical professionals in hospitals. Applying effective coping strategies and receiving social support, especially from emotionally close persons, are protective factors which can help individuals deal with stress and buffer the negative effects of life stress on marital and life satisfaction. In the present cross-sectional investigation, marital satisfaction was studied in relation to socio-demographic variables, social support, ways of coping, and quality of life in medical staff in Tehran. Data were collected from 653 medical staff who worked in 12 hospitals affiliated with Tehran Medical University using socio-demographic questions, the ENRICH marital satisfaction questionnaire, the SF-36 questionnaire, the Social Support questionnaire, and the Ways of Coping questionnaire. The results indicated that marital satisfaction, quality of life and spousal support were significantly higher in men than women. Spousal support was significantly associated with marital satisfaction especially in women. Multiple regression analyses indicated that marital satisfaction, social support, and job satisfaction combined with socio-demographic variables explain between 12% and 28% of the variance in quality of life domains. Analysing the data with special focus on females revealed a significant negative relationship between subscales of marital satisfaction and using “seeking social support”, “confrontive coping”, “escape avoidance”, “distancing”, and “self-controlling” as ways of coping. Hierarchical regression analyses showed that job satisfaction, social support, and ways of coping explained between 24% and 38% of the variance in seven of the nine subscales of marital satisfaction. Therefore, focusing on the study findings could be helpful in promoting marital satisfaction and quality of life in married medical staff.

**Keywords:** Marital satisfaction, Social support, Ways of coping, Quality of life, Job satisfaction, Medical staff, Gender differences, Iran

## Thesis at a glance

Article	Aims	Data & Method	Main Results
I	<p>To assess:            (a) marital satisfaction and gender differences; and (b) the moderating effect of various socio-demographic variables dependent on the domains of marital satisfaction.</p>	<ul style="list-style-type: none"> <li>• 653 medical staff</li> <li>• Socio-demographic variables, ENRICH questionnaire</li> <li>• Mann-Whitney U test, Kruskal-Wallis chi-square test, Spearman rank correlation, MANCOVA</li> </ul>	<p>Marital satisfaction was significantly higher in men than women.            There was a negative correlation between age and marital satisfaction in women.            Educational level and number of children were associated with marital satisfaction in both genders.            All socio-demographic variables showed significant relationships with at least one subscale of the marital satisfaction questionnaire.</p>
II	<p>To assess:            (a) quality of life and gender differences; (b) the differences between quality of life in medical staff and the general population in Iran; (c) the associations between quality of life and marital satisfaction, and gender differences; (d) the association between social support and quality of life, and gender differences; and (e) the explanatory effect of socio-demographic variables, social support, and marital satisfaction on quality of life.</p>	<ul style="list-style-type: none"> <li>• 653 medical staff</li> <li>• Socio-demographic variables, ENRICH questionnaire, SF-36, SSQ</li> <li>• T-tests, Pearson correlation coefficients, hierarchical multiple regression analyses</li> </ul>	<p>QOL was significantly higher in men than women.            The QOL domains and marital satisfaction domains were correlated among male and female participants.            Social support was associated with QOL domains in both sexes.            The variance in all the study variables combined with socio-demographic factors explained between 12% and 28% of the variance in quality of life domains.</p>

Article	Aims	Data & Method	Main Results
III	<p>To assess:            (a) social and spousal support in different situations among medical staff; (b) gender differences in social and spousal support; (c) associations between social and spousal support and marital satisfaction by gender; and (d) the explanatory effect of socio-demographic variables, job satisfaction, and social and spousal support on the domains of marital satisfaction.</p>	<ul style="list-style-type: none"> <li>• 653 medical staff</li> <li>• Socio-demographic variables, ENRICH questionnaire, SSQ</li> <li>• T-test, <math>\chi^2</math> test, Pearson correlation coefficients, hierarchical multiple regression</li> </ul>	<p>Total social support satisfaction and the total number of supporting people were not different between men and women.            The women were more likely to be support providers for their spouses than men were. Spousal support was more important than social support from other sources to explain marital satisfaction in both sexes.            Job satisfaction had an explanatory effect on marital satisfaction especially in men and social support could decrease the explanatory impact of job satisfaction on scales of marital satisfaction.</p>
IV	<p>To assess:            (a) the major problem areas of marital stress in female medical staff; (b) the ways of coping with marital conflicts in female medical staff; and (c) associations between ways of coping and marital satisfaction in relation to marital problems in female medical staff.</p>	<ul style="list-style-type: none"> <li>• 100 female medical staff</li> <li>• Socio-demographic variables, ENRICH questionnaire, WOC questionnaire, SSQ</li> <li>• Mann Whitney U test, Kruskal Wallis <math>\chi^2</math> test, Spearman rank correlation, MANOVA, hierarchical multiple regression analysis</li> </ul>	<p>The women reported “problem between the spouses” as the most common conflict area. There was a significant negative relationship between subscales of marital satisfaction and using “seeking social support”, “confrontive coping”, “escape avoidance”, “distancing”, and “self-controlling” as WOC.            Job satisfaction, social support, and ways of coping explained between 24% and 38% of the variance in seven of the nine subscales of marital satisfaction.</p>



# **Background**

## **Introduction**

Marital satisfaction is an overall evaluation of the state of one's marriage and a reflection of marital happiness and function (Schoen, Astone, Rothert, Standish, & Kim, 2002). It has been comprehensively investigated in many studies of marriage and family. Family life and marital satisfaction, in particular, are known as main predictors of overall quality of life (Shek, 1995; Stutzer & Frey, 2006). Marital satisfaction can affect not only the physical and mental health of both spouses (Holt-Lunstad, Birmingham, & Jones, 2008; Le Poire, 2005), but also children's development, well-being, academic performance, social skills, and relationships (Cummings & Davies, 2010; Hetherington & Kelly, 2002). A gender role perspective has often been used to describe differences in marital satisfaction. Many studies have revealed that marital satisfaction is higher in men than in women (Bernard, 1972; Fowers, 1991; Mickelson, Claffey, & Williams, 2006). These differences were explained by gender differences in roles in marriage, and in expectations for marriage and intimate relationships (Shek, 1995). Women's roles in marriage are nearly always more demanding than their husbands', especially for employed women who encounter additional responsibilities (being wife, mother, homemaker, and employee). Because women and men usually are differently socialized, the emotional expectations of women are often not met by men.

Everyday stress in modern life can affect all aspects of human life including family and marital relationships. Stress significantly determines marital satisfaction and the development of close relationships (Neff & Karney, 2004; Story & Bradbury, 2004). Stress in couples has a mutual influence; the stress of one partner can affect the other one if he/she cannot cope adequately with it. Work stress has negative effects on the workers' well-being and on effectiveness of the organizations (Cory, 2007; Roberts & Levenson, 2001).

Medical staff are confronted with many stressors at work, such as high levels of responsibility and everyday encounters with people's diseases, pain, and even death (Laranjeira, 2011; Rahimi, Ahmadi, & Akhond, 2004). This stress can threaten the physical health, mental health, and marital relationships of medical staff (Lewis, Barnhart, Howard, Carson, & Nace, 1993; Peimanpak, Mansour, Sadeghi, & Purebraham, 2013; Ramirez, Graham, Richards, Cull, & Gregory, 1996; Wu, Li, Wang, Yang, & Qiu, 2011). The ways that individuals cope with their stressful situations and their social support resources are two

important mediators which can buffer the negative effect of stress. The main concept addressed in the following study is marital satisfaction, which is assessed in relation to related concepts, such as coping with marital stress, social support, and quality of life.

### **The concept of family in Iran**

Family is considered one of the most fundamental institutions in Iran. Iranians regard the family as a very significant part of their lives. The family in Iran today is influenced by tradition, religion, and modernization. The structure and function of Iranian families have changed during the past century. Decreasing household size, increasing age of marriage, increasing participation of women in society, increasing freedom in partner selection, and increasing numbers of educated and employed women are some of the changes in Iranian family life. After the Islamic revolution in 1979, religion and politics were merged when Sharia law was integrated into the constitution of Iran. The Islamic revolution changed the fabric of the society of Iran through policies for renewal of Islamic values in all aspects of life.

Sharia or Islamic laws are derived from the methodological interpretation of the Quran and the prophetic Sunnah (the words, practices, and teachings of the Prophet Mohammed) (Abiad, 2008). It is a wide-ranging legal system which includes all aspects of life, i.e., personal rules (e.g., diet, hygiene, and sexuality), family life, politics, business, banking, the judiciary, and social rules.

### ***Importance of the family***

Based on social and religious values, family is an important institution of Iranian society. This importance dates back to the pre-Islamic period (Zoroastrian time) and the Islamic period. In both the Zoroastrian and Islamic orders, family life and marriage were considered important parts of life, and people have been enjoined to marry, to show respect for and protect their own family and its members. Although the Iranian family has significantly changed during recent years, family is still as important as in the past. A study of the changes in families over three generations indicated that most Iranians believe that the family is very important and represents the main source of support in education, finding a job, marriage, and finances (Azadarmaki, Zand, & Khazai, 2000, 2003). The family is still regarded as the centre of relationships, supporting and negotiating for its members, and this importance is found in both traditional families and more modern families in large cities in Iran.

### ***Family type and size***

In the transitional stage from traditional society to modernization, family has changed from the extended to the nuclear form. Merriam-Webster's online dictionary defines the extended form of family as several relatives being included in the nuclear family that consists of parents and their children. Based on the report of the Statistical Centre of Iran (2008), 84% of Iranian households are nuclear families. As Azdarmaki and Bahar (2006) mentioned, the nuclear family in Iran is different from the nuclear family as understood in the West. Although Iranian families have changed functionally from their original extensive form, the Iranian nuclear family is still at the centre of the relationships and negotiations of its members, as well as the place for the formation of cultural groundings and values. In the Iranian nuclear family, residential separation does not prevent close relationships within the family and the links with kindred are strong. Despite the increasing population in Iran, a report of the Statistical Centre of Iran (2008) indicates that the size of family has decreased in recent decades. The mean size of an Iranian nuclear family has decreased from 5 persons in 1976 to 3.5 in 2010. Several investigators (Aghajanian, 2012; Salehi-Esfahani & Shajari, 2010) found various possible reasons for this process. Birth control policies, the increase in age of marriage for both men and women and, consequently, the shorter childbearing period in women, higher education, particularly for women, and an increasing number of dual-worker couples, as well as difficult economic conditions and high living expenses should be considered important factors when explaining the decrease in the fertility rate (i.e., the number of children born to a woman in her childbearing years) and household size in Iran. Based on World Bank data, the fertility rate in Iran has decreased from 5.8 in 1987 to 1.7 in 2010.

### ***Family relationship and structure***

The support and emotional attachment between parents and their children continues throughout their lives until death, even if the children get married and have their own children. Unlike in many Western societies, after the separation of children from their families, parents' dominance (economic and social) continues.

Iranian culture is known as male dominated and a family is described based on the father's status (Azadarmaki & Bahar, 2006). The family is under the influence of the father: children have to take their father's surname and the father is the main breadwinner and decision-maker in the family. Islamic values, which have shaped life in Iranian society for

many centuries, support the patriarchal family framework for family decision-making, individual behaviour, and action (Edalati & Redzuan, 2010). Azadarmaki (2005) indicated that in more than half of families (62%), fathers are the ones who make the important decisions.

### ***Social participation of women***

In traditional Iranian families, women's roles are limited to those of wife and mother. With the societal change to modernization in Iran, both family structures and attitudes are changing, which can be seen in a transition of women's roles in both family and society. Iranian women now tend to be socially active and economically independent as they improve their education, study at universities, and work outside the home in all sectors of society.

Based on a report of the Statistical Centre of Iran (2011), women comprise 49.6% of the country's population. The percentage of literacy in women has increased from 35.5 in 1976 to 74.2 in 1996 and 81.1 in 2010. Iranian high school girls have had notable success in the university entrance exams compared with males. Based on official statistics, in 2010, about 65% of accepted students at the universities were female. The percentage of women with university education has risen from 2.6 in 1976 to 18.4 in 2010. The statistical reports show that this trend is higher among women than among men (from 3.8% to 18.2%). This result can be interpreted as reflecting women's attempts to participate in society and play an active role to improve their situations and overall life conditions. Iranian women constitute 15.3% of employees in Iran. Although their share of employment has increased compared with in the past, the trend of this rate is not in line with the remarkable growth in educated women. The patriarchal attitudes and conservative policies related to the roles of women outside the family since the Islamic revolution, especially in the last eight years, can explain this slowly increasing trend.

In Iran today, women are present in schools, universities, government offices, factories, and parliament, and they also have a strong presence in artistic and literary activities, which indicates their attempts to strive for identity and self-determined subjectivity in social and cultural life (Moinifar, 2011). These achievements have been obtained despite some limitations and social laws such as the Islamic dress code, limitations on relationships between males and females (outside the family), and the pressure to maintain a traditional role as a woman.

## Marriage in Iran

Marriage is the only culturally and legally accepted way to regulate a family in Iran. The cultural and religious belief systems in Iran dictate that sexual relationships are only allowed within marriage and sex outside of marriage is considered taboo and a great sin, which leads to legal punishment.

Early marriage for both men and women was a long-standing tradition in Iran. However, legal and social changes have resulted in a shift towards marriage at a later age. The results of the recent censuses showed that age of marriage has increased significantly. In recent decades, the average age of first marriage among women has increased from 19.7 in 1976 to 22.4 in 1996 and 23.4 in 2010 and in men from 24.1 years in 1976 to 25.6 in 1996 and 26.7 in 2010. Higher education and the social participation of women have made them economically more independent, improved their decision making abilities, and changed their attitudes towards marriage and their expectations of husbands (Kazemipour, 2004; Mahmoodian, 2005). In this situation, women have more criteria for accepting a man as a husband and mate selection will be more difficult. Economic problems and the consequent high expenses of marriage and married life are other reasons which cause young people, particularly men, to postpone marriage (Habibpour Gatabi & Ghaffari, 2011). Another explanation for increased marriage age in women can be a “marriage squeeze” situation, which is defined as an imbalance between the number of males and females who are ready for marriage. Furthermore, the larger population of marriageable women than men increases the age of marriage for women (Jafari Mojdehi, 2003).

In the past, almost all mate selections and marriages were arranged by the parents and older members of families. This is still the case in rural Iran and in traditional families. Modern couples, however, choose their own mates but their parents’ consent is still very important. An important issue in the marriage process is the negotiation of *mehriyeh*, the sum of money or object of monetary value specified in the marriage contract that the husband is obligated to pay to his wife whenever she demands it. Generally, *mehriyeh* is paid upon divorce and is intended to deter men from initiating divorce, since they then have to provide financial support to their ex-wives (Tohidi, 2010); for a majority of couples who live together, *mehriyeh* remains a symbolic contract. The original Islamic custom of *mehriyeh* strongly emphasized a small amount but, in most of today’s Iranian families, *mehriyeh* has been used as a safeguard against the unilateral divorce right of men.

The Iranian marriage ceremony has been affected by both pre-Islamic (Zoroastrian) and Islamic traditions, but after the Islamic revolution, in which religion and politics were merged, marriage law changed to be firmly based on Islamic practices. Although Islamic law protects and honours women in many ways, it gives men authority over wives and children; for example, only men have the right to divorce and retain custody of the children, and control and limit what their wives do and where they go (Katouzian, 2006).

### **Divorce in Iran**

Islamic principles strongly advise against divorce and describe it as the last alternative for couples. In traditional and rural families, divorce is still stigmatizing for women and their families. In spite of all the social, cultural, and legal limitations accorded to divorce, the divorce rate in Iran is increasing compared with the rate of marriage (Statistical Centre of Iran, 2008). The divorce rate increased from 87.6 per 1,000 marriages in 1991 to 121 per 1,000 marriages in 2006, an increase of 37% (Statistical Centre of Iran, 2008). Divorce has been the unilateral right of men but, in the last century, there have been some modifications in the laws about divorce that improve the situation of women. Women are permitted to initiate divorce proceedings in certain limited circumstances, such as a husband's severe mental disorder, impotency, constant domestic violence, and drug addiction. If a woman can prove any of these problems in the family court, she can divorce and also receive her *mehriyeh*. Otherwise, a woman who wishes to divorce must start the process by asking for her *mehriyeh*. Since this usually involves a huge amount of money, the husband often tries to make a compromise, accepting divorce if his wife relinquishes her *mehriyeh*. Although the men have the power to divorce, they cannot do so without going to the family court and following the required processes. The court focuses on reconciliation but, if the husband insists on divorce, his application will be granted after he pays the *mehriyeh* to his wife. If the couple applies for divorce on a mutual basis, the process is easier.

Child custody after divorce is dependent on the age of the child. The mother retains custody of her child until the age of seven. After that, custody goes to the father, unless a severe mental disorder or some other disqualifying criteria are proven in court.

Divorce for women is more problematic than for men. Many Iranian women are housewives and economically dependent on their husbands. After divorce, they become economically dependent on their parents and brothers. Divorce is still stigmatizing, and divorced women face social control, especially from their fathers and brothers. Most women

remain single after divorce because virginity is an important factor in marriage, so men prefer not to marry divorced women. Thus, most divorced women do not have many options for remarriage and may choose to marry a divorced older man (with children) or to marry as a second wife. Therefore most divorced women prefer not to remarry (Aghajanian & Moghadas, 1998).

These problems and the fear of losing their children force many women to stay with their husbands even if they are not satisfied with their marriage (Moazami, 2004). They apparently live together while being “emotionally divorced”. There is no investigation on the rate of emotional divorce (“empty shell” marriage) in Iran, but it is estimated that the rate is twice the divorce rate (Bokharai, 2007). This situation has negative effects on the function and mental health of the spouses and children, and its effects include depression, anxiety, aggression, academic failure, and insecurity (Bastani, Golzari, & Rowshani, 2011).

### **Family in transition and stress**

Iranian society is shifting from a traditional society to a modern one. This transitional stage is a complicated period for people because they encounter conflicts between the modern and the traditional family value systems. A combination of modernity and Islamic law has placed the institution of the family under great stress. Family as a fundamental institution is one important part of society that is affected by this shift. Increased age at marriage, increased divorce rate, decreased family size, increased female education and participation in society, changes in the role of spouses, and changed interaction within families represent some of these recent changes and challenges for Iranian families (Azadarmaki, 2005; Edalati & Redzuan, 2010).

Work and family are two important issues in individuals’ lives that can interfere with each other. Iranian people, especially Iranian women, encounter conflicts between modern and traditional values. Women are still considered responsible for housework and may have different roles, such as wife, mother, homemaker, and employee that are incompatible to some degree. Expectations from employed women related to their family role are similarly high compared with the expectations from unemployed women (Rafatjah, 2011). This inter-role conflict is an important source of stress and employed women have to find a balance between their different roles. Women experience multiple-role stress that can affect their marital, parental, and occupational situations (Kandel, Davies, & Raveis, 1985).

Couples who are exposed to stressful work reported more marital dissatisfaction and less marital support (Crouter, Bumpus, Head, & McHale, 2001; Hughes & Galinsky, 1994). Stress negatively impacts marital satisfaction in three ways: it influences couple communication, decreases the time spent together, and increases health problems (Bodenmann, 2005).

### **Medical staff and job stress**

Medical staff encounter many stressors in their jobs. They are faced with severe suffering, death, emergency situations, and shift work, combined with a very high level of responsibility. Investigations of job stress in medical staff reported that patients' pain and suffering, time pressure, heavy workload, inadequate salary, and inequality at work are perceived as major sources of stress among hospital employees (Adeb-Saeedi, 2002; Cory, 2007; Mosadeghrad, Ferlie, & Rosenberg, 2011; Roberts & Levenson, 2001). Such stressors can lead to physical and psychological symptoms, and failures at work. The results of several investigations revealed that a stressful job situation can affect medical personnel's quality of life and marital relationships (Ardekani, Kakooei, Ayattollahi, Choobineh, & Seraji, 2008; Hamaideh, 2012; Lewis et al., 1993; Ramirez et al., 1996; Su, Weng, Tsang, & Wu, 2009). Job stress can reduce the time that partners spend together and the time that they are emotionally available; it can negatively affect sexual interest, activities, and satisfaction, reduce the frequency of shared experiences, the amount and intensity of shared emotions, and reduce the feeling of "we-ness" (Bodenmann, 2000).

Based on the statistical information of the Iranian Ministry of Health and Medical Education (2011), about 42% of medical and health care staff, 87% of nurses, and 40% of physicians are female. There is a lack of studies of marital satisfaction in medical staff in Iran. Nurses are the only medical staff group which has been somewhat investigated. An investigation of nurses' job stress in several hospitals in Tehran showed that 98.2% of the nurses reported a high or moderate level of job stress (Rahimi et al., 2004) and in another study 66% of nurses were not satisfied with their jobs (Mirzabeigi et al., 2009). Furthermore, Peimanpak et al. (2012) reported a negative effect of job stress on marital satisfaction in Iranian nurses. According to the limited empirical data on the family life of Iranian medical personnel, assessing marital satisfaction in this group can provide a clearer and more differentiated picture of marital life among them.

## **Social services and counselling with families**

Providing social services and assistance to improve the social and psychological functioning of families are important tasks for social workers. Many social workers are working in family consulting centres and social work clinics to help family members understand their relationships and roles in the family. Social workers work with the family to establish a healthy family dynamics, communication, and behaviour patterns among family members. There are two types of such centres or clinics in Iran: governmental centres which are financially supported by governmental organizations such as the State Welfare Organization and non-governmental centres, which are financially independent. These consulting services are not covered by health insurance services in Iran and the cost of these services in non-governmental centres is much higher than in governmental services, so those people who cannot afford them usually refer to the governmental centres.

Based on the State Welfare Organization official website, telephone counselling centres were also established by the State Welfare Organization in Iran after 1993. All individuals can call 148 and ask for help with marital problems, childrearing problems, psychological problems, drug abuse problems, etc. The consultants (social workers or psychologists) in these centres help clients identify their problems, facilitate decision making, and, if necessary, refer clients to the consulting centres. Thirty governmental and 39 non-governmental telephone counselling centres are currently established throughout all provinces in Iran.

Indeed, social workers and psychologists who work in divorce prevention centres (related to the State Welfare Organization) try to help couples resolve their disputes. The aims of these centres are several: to reduce the rate of divorce and protect the family by family therapy interventions, to determine the eligibility of parents for child custody, to decrease stress after divorce in order to protect mental health in divorced individuals, to guide parents in supporting their children after divorce, and to reduce the social damage caused by divorce. A team of social workers, psychologists, psychiatrists, and legal advisers work at these centres. Couples can directly self-refer themselves to the centres or they can be referred from family courts or other sections of the welfare organization such as “social emergency services”. At first the partners separately visit the social worker or psychologist; after that, the intervention programme starts in the form of individual or group sessions for couples. If the family intervention cannot change the couple’s decision to divorce, a report will be prepared for the family court, and the couples will be referred for legal counselling for divorce. There

was a legal vacuum about the role of family consultants in the legal process of divorce, but this problem was resolved in the new Family Protection Bill (2013). The legal procedures for establishing the new family laws took about six years. Based on the new laws, according to the official website of the Islamic Republic of Iran Judiciary, the couples who decide to divorce have to refer to the family counselling centres and the opinion of the family specialists/counsellors must be considered by the judges in the family court.

The above-mentioned represent public facilities for married couples who need help. However, no research reveals the frequency of medical staff who refer to the consultant centres as clients. Unfortunately, there is no special facility or programme for medical personnel as a group with a stressful job to help them with mental health or family problems, stress, etc. Medical personnel have often been investigated as caregivers and service providers for patients. Studying their well-being and family life as clients can provide relevant knowledge for family social workers and consultants to support and promote marital life and overall quality of life in this group and probably other similar groups with stressful jobs.

## **Aims and objectives**

The overall aim of this thesis is to investigate marital satisfaction in relation to socio-demographic data, QOL, WOC, and social support in medical staff in Tehran. The specific objectives of the study are as follows:

- To study (a) marital satisfaction and gender differences in Iranian medical staff; and (b) the moderating effect of various socio-demographic variables dependent on the domains of marital satisfaction (Article I).
- To investigate (a) quality of life and gender differences in Iranian medical staff; b) the differences between quality of life in medical staff and the general population in Iran; (c) associations between QOL and marital satisfaction in medical staff, and gender differences in these relationships; (d) the association between social support and QOL in this population, and gender differences in these relationships; and (e) the explanatory effect of socio-demographic variables, aspects of social support, and domains of marital satisfaction on QOL in medical staff (Article II).

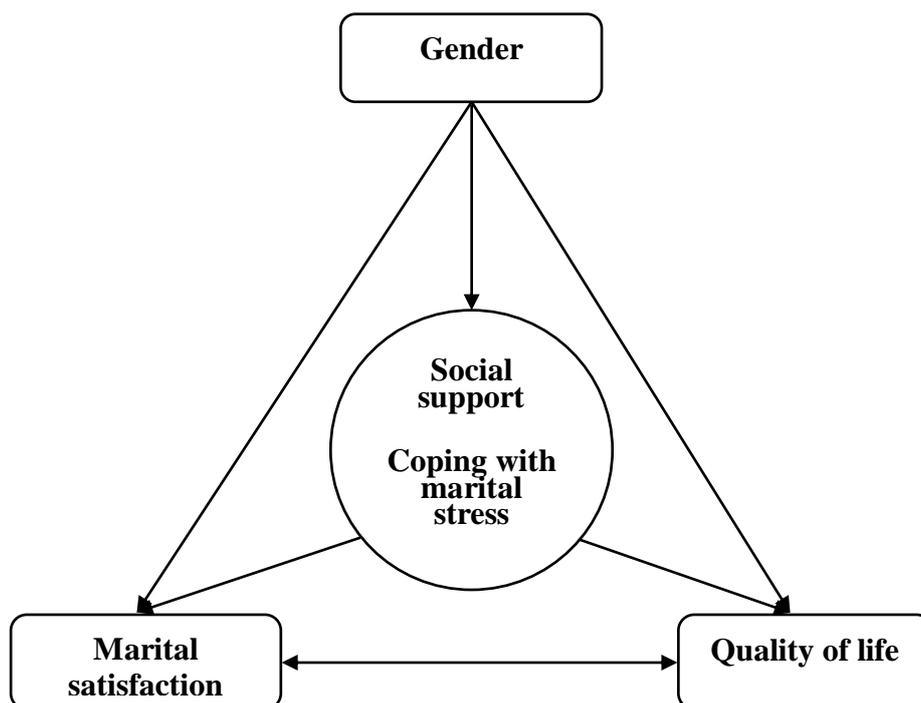
- To study (a) social and spousal support in different situations among medical staff; (b) gender differences in social and spousal support; (c) associations between social and spousal support and marital satisfaction by gender; and (d) the explanatory effect of socio-demographic variables, job satisfaction, and social and spousal support dependent on the domains of marital satisfaction (Article III)
- To explore (a) the major problem areas of marital stress in female medical staff; (b) the WOC with marital conflicts in female medical staff; and (c) associations between WOC and marital satisfaction in relation to marriage problems in female medical staff (Article IV).

## Conceptual framework

### Conceptual model of the study

The main focus of this study is marital satisfaction. The ways that individuals cope with stress and their social support influence the outcome of marital satisfaction and QOL. Gender can influence all these concepts and relationships: the stress appraisal, coping behaviours, social support, marital satisfaction, and QOL. Figure 1 shows the ways in which different constructs are related to each other and also the relationships and directions of the concepts in this investigation.

**Figure 1: The conceptual model of the study**



## **Marital satisfaction**

Marital satisfaction is one of the most important aspects of family life, and the quality of one's marriage is a critical component of life satisfaction (Waite, 1995). Marital satisfaction can affect not only the physical and mental health of both spouses (Holt-Lunstad et al., 2008; Le Poire, 2005) but also their children's development, well-being, biological function, academic performance, social skills, and relationships (Cummings & Davies, 2010; Hetherington & Kelly, 2002).

Marital satisfaction (also referred to as marital quality) is a subjective and multidimensional concept defined as "an attitude of greater or lesser favourability toward one's own marital relationship" (Roach, Frazier, & Bowden, 1981, p. 537). According to the *Encyclopedia of Social Psychology* (2006, p. 541), marital satisfaction is "a mental state that reflects the perceived benefits and costs of marriage to a particular person". This means that partners who perceive more benefits and fewer costs in their marriage are more satisfied (Baumeister, 2006).

Gender represents a further predictor of particular importance for marital satisfaction. Gender roles often have been used to explain differences in marital quality and perceptions of well-being (Gove, Hughes, & Style, 1983; Gove & Tudor, 1973; Mickelson et al., 2006). Several studies have demonstrated that men report higher marital satisfaction than women do (Bernard, 1972; Fowers, 1991; Gove & Tudor, 1973; Mickelson et al., 2006). Shek (1995) suggested two possible explanations for gender differences in marital relationships. The first explanation is based on the different roles of women and men in a marriage. The female roles in marital relationships are usually more demanding and less rewarding compared with the husbands' roles, and women feel that they benefit less from a marriage and hence have a less positive perception of it. Also, married women who have full-time jobs encounter more responsibilities, duties, and role conflicts within their families. The second suggested explanation refers to differences in expectations between women and men. Marital satisfaction in women is lower than in men because women tend to have higher expectations of intimacy and emotional support in a marriage, whereas men are usually not socialized to provide this kind of support in a relationship (Bernard, 1976). Men and women are usually differently socialized (e.g., instrumental vs. emotional), and some researches have indicated that affective and emotional spousal support predicts higher marital satisfaction (Gove, Style, & Hughes, 1990; Mickelson et al., 2006).

## **Quality of life**

The concept of quality of life (QOL) emerged as part of the answer to the arguments about social progress and social crises caused by scientific and technological advances in the 1960s and 1970s. QOL could apply in answering questions on whether social progress had actually occurred or how social crises (such as overpopulation, drug abuse, or pollution) affect human life (Armstrong & Caldwell, 2004). Today, QOL is discussed in various scientific fields: in sociology, it refers to the subjective understanding of well-being related to individual needs and is considered a main issue in sociographic and social indicator studies; in economics, it is discussed as the standard of living; in health sciences, it is related to health and illness and to factors which influence a healthy lifestyle (Susniene & Jurkauskas, 2009).

QOL is a multidimensional concept and includes all aspects of individuals' lives. It has been defined on the macro (societal, objective) and micro (individual, subjective) levels (Bowling & Windsor, 2001; Rosenberg, 1992). On the macro level, it includes the economic situation, education, employment, housing, and other living and environmental conditions. On the micro level, QOL refers to an individual's perceptions of overall QOL, experiences, and values, and is related to well-being, happiness, and life satisfaction (Brown, Bowling, & Flynn, 2004). There is no generally accepted definition of QOL other than that of the World Health Organization (1995, p. 1403), i.e., "the individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. It is a broad-ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, and their relationship to salient features of their environment". Grant, Padilla, Ferrell, and Rhiner (1990, p. 261) defined QOL as "a personal statement of the positivity or negativity of attributes that characterize one's life". QOL is by definition a subjective concept that can be affected by various factors, such as a person's physical, psychological, and social conditions, and health-related QOL is an important part of general QOL. In the present study, QOL refers to health-related QOL.

## **Stress and Coping**

Based on the transactional theory of stress and coping, stress is defined as a process between a person and the environment that is appraised by the person as taxing or exceeding his or her resources and as endangering his or her well-being. "Cognitive appraisal" and "coping" are two mediating processes between the person and his or her environment. Cognitive appraisal

has been defined as the process of evaluating an event and its significance for the person's well-being. There is a distinction between "primary appraisal" and "secondary appraisal": the primary appraisal constitutes the evaluation of a situation or event as benign/positive, irrelevant, or stressful; the secondary appraisal relates to the evaluation of what might and can be done, and of what coping options are available to the individual and can be applied to manage the situation best (Lazarus & Folkman, 1984).

Coping is defined as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands appraised as taxing or exceeding the resources of a person" (Lazarus & Folkman, 1984, p. 141). Coping efforts serve two main functions: the management or change of the source of stress (problem-focused coping) and the regulation of the individual's emotional responses to the problem or stressful situation (emotion-focused coping) (Folkman & Lazarus, 1980). According to Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen (1986), there are three key features of coping: First, coping is process oriented, meaning that it focuses on what the person actually thinks and does in a specific stressful situation. The process of coping contrasts with, for example, trait approaches, which focus on what the person usually does. Second, coping is contextual, meaning that particular personal and situational variables together shape coping efforts. Third, coping is defined independently of its outcome, i.e., coping refers to efforts to manage demands, regardless of the success of those efforts.

### **Social support**

Social support refers to the function and quality of social relationships, which can be as perceived or as actually received supports. (Sarason, Levine, Basham, & Sarason, 1983; Schwarzer & Leppin, 1991). Perceived social support has been defined as "an individual's perceptions of general support or specific supportive behaviours (available or enacted on) from people in their social network, which enhances functioning or may buffer them from adverse outcomes" (Malecki & Demaray, 2002, p. 2).

Social support includes providing instrumental support (actual help in time, money, and energy), informational support (information, suggestions, and advice), appraisal support (evaluative feedback), and emotional support (empathy, trust, caring, and love) (House, 1981). Women often have a greater number of close relationships and also a more extensive social network than men do (Laireiter & Baumann, 1992; McFarlane, Neale, Norman, Roy, & Streiner, 1981). Additionally, women provide more emotional support to others, and they

seek and receive more social support (Ashton & Fuehrer, 1993; Klauer & Winkeler, 2002; Reevy, 2007). Also, they benefit from the stress-buffering effects of social support more than men do (Bellman, Forster, Still, & Cooper, 2003). Women emphasize intimacy and self-disclosure in their close relationships, and they are more empathic, expressive, and disclosing than men are.

Two main theories about the nature of the relationship between social support and QOL are the “stress-buffering effect” and the “main effect” models. Stress-buffer theory argues that social support positively influences health and well-being by protecting people from the pathogenic effects of stressors, whereas the main effect hypothesis holds that social support positively influences well-being irrespective of whether people face stressful events (Helgeson, 2003). Based on stress-buffer theory, the existence of a supportive social network represents a buffer against stress. Social support also acts as a buffer between stressful life events and psychological distress by contributing to less negative appraisals and leads to the perception of situations as less stressful (Cohen & Hoberman, 1983; Lakey & Cohen, 2000).

Based on family stress theory, social support has an important moderating role in marital satisfaction (Hill, 1958; Hill, 2005). In the ABC-X model of family stress theory, family and individual characteristics and stressors are denoted A, resources and support are denoted B, and C represents family conflict and facilitation. Theoretically, interaction of these three factors leads to the outcome (X). In this model, family satisfaction and marital satisfaction are defined as family outcomes, and life satisfaction and individual stress as individual outcomes. Based on this model, social support as a moderating factor can improve physical and psychological health and facilitate couples’ marital satisfaction.

## **My point of departure for investigation**

Family and marital related subjects have always interested me. When I was working on my master's thesis on QOL among women during menopause, I administered questionnaires based on face-to-face interviews. During that process I noticed that the respondents' marital relationships played an important role in their feelings and QOL. Most of them tended to explain their marital problems as an important issue that affected their QOL and they asked me to counsel them. That experience surprised me, because I felt I had missed an important variable in my research: marital satisfaction. An increasing rate of divorce, "emotional divorce" between spouses, extra-marital relationships, and, in general, the marital relationships around me made me more interested in this subject. I became eager to study this in the general population. Since this was not a convenient subject for a Ph.D. project, I decided to investigate marital satisfaction in a specific group. Studies (Camerino et al., 2010; Wu et al., 2010) have shown that medical staff constitute one risk group related to job stress and work-family conflict. I gained experience working as a health education/promotion programme designer and midwife in the medical field. I could understand these problems. Medical personnel are always supposed to help and provide treatment for others, but there is not enough investigation of or attention to their own problems. Most Iranian studies in this group dealt with job stress, burnout, and health, especially in nurses (Ardekani et. al., 2008; Mosadeghrad et al., 2011; Rahimi et al., 2004). There is a lack of investigation of marital satisfaction in medical staff, so I decided to study marital satisfaction in this risk group. My intention in this research is to contribute to existing scientific knowledge in the health and social sciences. I hope that this thesis will also shed some light on knowledge of practitioners such as psychologists and social workers who work with families in vulnerable situations.

## **Methods**

### **Context of the study**

The investigation was performed in Tehran, the capital of Iran. Tehran is Iran's largest urban area and the largest cities globally with a population of more than 12 million. The hospitals in which data were collected were affiliated with Tehran Medical University and included both general and specialized hospitals with about 3000 medical staff. The sample consisted of 653 male and female medical staff who worked in different sections of the hospitals as doctors (general practitioners and specialists), midwives, nurses, operating room technicians, and anaesthesia technicians. As the fees in educational hospitals are lower than in private hospitals, most of the patients referred to these hospitals are from lower socio-economic levels compared with those referred to private centres. Indeed, the socio-economic situations of patients in hospitals differed according to the location of the hospitals, i.e., being lower in the southern than the western and northern areas of Tehran, but the living locations of the employed medical staff were not related to the hospital locations.

### **Overall research design**

The four articles in this thesis are based on a cross-sectional study that was conducted in 12 hospitals (both general and specialized and in different areas of Tehran) affiliated with Tehran Medical University between June 2010 and April 2011. The hospitals were located in the south, southwest, west, and north parts of the city. Because performing a longitudinal study would have been overly time-consuming and expensive in such a large and populated area, my study was designed based on the cross-sectional method. The statistical analysis was performed using SPSS 17 and 19 for Windows. The results presented in articles I, II, and III were based on data covering 653 male and female participants. Since 100 of the 116 participants who reported their stressful situations on the WOC questionnaire were women, I excluded the 16 male individuals from the statistical analysis, and the focus of the fourth article was solely on female medical staff.

### **Sampling and data collection**

The overall sample consisted of 653 medical staff who had been married for at least one year, whose wives or husbands were still alive, and who had no addiction problems or severe

physical and/or psychological disorders. Power analysis was performed to determine the necessary sample size calculated based on results from a pilot study of 30 medical staff. The necessary sample size of 600 individuals was divided by the number of hospitals, and in each hospital the data collection was continued until the required number of participants had been reached.

After obtaining research permission from Tehran Medical University for each hospital and the agreement of the hospital managers, the project, its aims, and inclusion criteria were explained to the staff of every hospital ward. After any necessary explanation about the questions, the prospective participants gave their informed consent and then were asked to complete a set of questionnaires. It took, on average, 45 minutes to complete these. To ensure enough time to complete the questionnaires, participants could take a day to do so, and return the completed questionnaire in a sealed envelope. Participation in the research project was voluntary and participants could withdraw at any time during the investigation.

## **Questionnaires**

### ***Socio-demographic form***

This form was designed by the principal researcher to obtain socio-demographic background information, such as the respondent's age, gender, education, date of marriage, number of children, job satisfaction (elicited in a single question, "How satisfied are you with your job?", answered using a 5-point Likert-type scale ranging from "very dissatisfied" to "very satisfied"), spouse's age, education and employment status.

### ***ENRICH marital satisfaction inventory (Evaluating & Nurturing Relationship Issues, Communication, and Happiness)***

This questionnaire was designed as a multidimensional inventory by Olson, Fournier, and Druckman (1983). The original version is a 125-item self-report measure consisting of 14 scales, including idealistic distortion, marital satisfaction, personality issues, communication, conflict resolution, financial management, leisure activities, sexual relationship, children and parenting, family and friends, egalitarian roles, religious orientation, marital cohesion, and marital change (Fowers & Olson, 1989).

In the present study, marital satisfaction was assessed using a short version of the questionnaire, which was standardized in Farsi by Soleimani (1994). The short version

consisted of 47 items in 9 scales (i.e., personality issues, marital communication, conflict resolution, financial management, pleasure activities, sexual activities, marriage and children, family and friends, and religious orientation). Each item was scored on a 5-point Likert-type scale ranging from “very dissatisfied” to “very satisfied”. The score for each domain represents the sum of question scores divided by the number of questions in the domain. The total raw score was obtained by summing up all the question scores. The raw scores range from 47 to 235. To show the level of marital satisfaction, the raw scores were converted into *t* scores (normal curve) according to the scale’s guidelines.

The construct validity, tested by comparison with a Family Satisfaction Scale, indicated an acceptable level (0.41–0.60) of common variance between the scales. The internal consistency of the measure was calculated as 0.95 for men and women (Soleimanian, 1994). The test-retest reliability was also measured, indicating a reliability coefficient of 0.92 over time (Rasooli, 2001).

### ***Short Form Health Survey (SF-36)***

This questionnaire is a generic health-related quality of life instrument that was constructed to survey health status in clinical practice and research, health policy evaluations, and the general population (Ware & Sherbourne, 1992). The SF-36 is a multi-item scale that assesses eight domains: physical functioning, role limitation due to physical problems, bodily pain, general health, vitality (energy and fatigue), social functioning, role limitation due to emotional problems, and mental health. The scores range from 0 to 100 and a higher score indicates better health-related quality of life.

The SF-36 was translated and validated in Farsi by Montazeri, Goshtasebi, Vahdaninia, and Gande (2005). The reliability was estimated using internal consistency, and its validity was assessed using known group comparisons and convergent validity. The group comparisons showed that the SF-36 discriminated between men and women and old and young respondents in all scales as anticipated (all *p*-values were less than 0.05). The convergent validity using each item’s correlation with its hypothesized scale showed satisfactory results (correlations ranged from 0.58 to 0.95). In assessing the internal consistency (to test reliability), the Cronbach’s  $\alpha$  coefficient for all eight SF-36 scales ranged from 0.77 to 0.90 with the exception of the vitality scale ( $\alpha = 0.65$ ). Furthermore, an exploratory factor analysis identified a two-factor structure (physical and mental components) that jointly accounted for 65.9% of the variance.

### ***Social Support Questionnaire (SSQ)***

The SSQ instrument is a 27-item self-report questionnaire that measures perceived social support and satisfaction with social support (Sarason et al., 1983). Each item is represented by a scenario and has two parts: in the first part, the respondents are asked to list the individuals from whom they receive support under given circumstances (SSQN); in the second part, they are asked to indicate how satisfied they are with this social support (SSQS) based on a 6-point scale ranging from “very dissatisfied” to “very satisfied”. The overall SSQN and SSQS scores are obtained by dividing the sum of satisfaction scores and the number of social supporters for all items by 27 (the number of items). The validity and reliability of the Farsi version of this questionnaire was investigated in Iran (Nasseh, Ghazinour, Joghataei, Nojomi, & Richter, 2011). An exploratory factor analysis, i.e., a principle component analysis with varimax rotation, was calculated in order to investigate the data structure. In order to test the fit of the data structure to the theoretical model, a confirmatory factor analysis was performed using Mplus. Differences have been reported relating to gender, education, and marital status, supporting the SSQ’s concurrent validity. The internal consistency in terms of Cronbach’s alpha was 0.95 for the SSQN scale and 0.96 for the SSQS scale.

Six domains (scenarios) were derived based on the type of situation (questions) by expert ratings (i.e., six clinical psychologists and social workers) for article III. These domains were: need for self-disclosure (scenarios 1, 6, 11, 14, 21), need for support in loss situations (scenarios 2, 4, 10, 18), need for belonging (scenarios 3, 20, 24), need for instrumental support (scenarios 5, 8, 9, 13, 26), need to be praised (scenarios 7, 12, 19, 22), and need for emotional support (scenarios 15, 16, 17, 23, 25, 27). The average number of supporting persons, the average satisfaction with the support, and the average frequency of reporting the spouse as a supporting person were computed for each of the domains.

### ***The Ways of Coping Questionnaire (WOC)***

The WOC instrument is a 66-item self-report questionnaire designed by Folkman and Lazarus (1988) to assess coping related to a particular event, answered on a 4-point Likert scale (0 = “does not apply/or not used”, 1 = “used somewhat”, 2 = “used quite a bit,” 3 = “used a great deal”) with eight subscales: confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem solving,

and positive reappraisal. Respondents are asked to describe a recent stressful situation and answer the questions based on the described stressful event. The validity and reliability of the Persian version of the WOC questionnaire were studied by Padyab, Ghazinour, and Richter (2012), who reported good face and content validity. The factor structure of the WOC questionnaire was analysed using both explanatory and confirmatory factor analyses. A seven-factor structured model with some important similarities to and differences from the original version was confirmed. Modifications were performed in a stepwise procedure. In total, 20 of the original WOC items were dropped from the calculation of scale scores in the Farsi version. The Farsi version of WOC was found to have good construct reliability and model fit, and has considerable potential to be used in future coping research among Iranian populations. Cronbach's alpha for the total score as an indicator of its internal consistency was 0.88.

## **Statistical analyses**

### ***Article I***

As none of the dependent variables (the marital satisfaction subscales) was normally distributed (tested by the Kolmogorov-Smirnov test), nonparametric tests were applied to the mean differences (Mann-Whitney U test, Kruskal-Wallis chi-square test) or correlations (Spearman rank correlation) between marital satisfaction and socio-demographic variables. MANCOVAs were performed using all nine marital satisfaction subscales as dependent variables, age and spouse's age as continuous variables as covariates, and various categorical socio-demographic variables as fixed factors.

### ***Article II***

*T*-tests were used to test for mean differences between both sexes on the continuous variables: scales of the marital satisfaction questionnaire (ENRICH), the Social Support Questionnaire (SSQ), and the Medical Outcomes Survey Short Form 36 (SF-36) and for testing for mean differences between medical staff and the general population. Pearson correlation coefficients and partial correlations were used to determine associations between quality of life and marital satisfaction as well as associations between quality of life and social support. Furthermore, hierarchical multiple regression analyses were calculated to test for predictive relationships between the variables. To compare the quality of life scores (SF-

36) in this sample with data from a representative Iranian general population sample, the scores derived by Montazeri and his colleagues were applied (2005).

### *Article III*

The *t*-test was used to test for group differences for continuous variables and the  $\chi^2$  test for categorical variables. Pearson correlation coefficients are provided to indicate associations between continuous variables. Hierarchical multiple regression analysis was used to test for the predictive value of socio-demographic variables in a first block (method: enter) and social support-related variables in a second block (method: stepwise) with marital satisfaction domains as dependent variables. All the calculations were run by gender.

### *Article IV*

Non-parametric tests were used to test for mean score differences (Mann-Whitney U test, Kruskal-Wallis  $\chi^2$  test) or correlations (Spearman rank correlation) of marital satisfaction and socio-demographic variables. MANOVAs were calculated on a multivariate level of analysis with all nine marital satisfaction subscales as dependent variables, age and spouse's age as continuous variables as covariates, and various categorical socio-demographic variables as fixed factors. Interaction terms were included in the model when theoretically and statistically indicated. Hierarchical multiple regression analyses were calculated to evaluate the predictive power of the WOC factors for marital satisfaction factors.

**Table 1*****Characteristics of the sample by gender***

	Females, <i>n</i> = 477			Males, <i>n</i> = 175		
	<i>Mean or N</i>	<i>SD or %</i>	<i>Range</i>	<i>Mean or N</i>	<i>SD or %</i>	<i>Range</i>
Age in years	35.36	7.14 <sup>a</sup>	22–60	39.22	7.70 <sup>a</sup>	23–56
Spouse's age in years	38.13	8.25 <sup>a</sup>	23–65	34.68	6.95 <sup>a</sup>	21–53
Age difference						
Spouse older than subject	355	74.4		6	3.4	
Equal	68	14.3		16	9.1	
Subject older than spouse	54	11.3		153	87.4	
Duration of marriage in years	9.29	7.19 <sup>a</sup>	1–43	10.74	7.52 <sup>a</sup>	1–31
Number of children	.99	.93 <sup>a</sup>	0–5	1.26	1.07 <sup>a</sup>	0–5
Number of marriages	1.03	.17 <sup>a</sup>	1–3	1.10	.34 <sup>a</sup>	1–3
1	466			159		
2 or more	11			16		
Educational level of subject						
Higher National Diploma	102	21.4		57	32.6	
Bachelor	317	66.4		78	44.5	
Master or higher	58	12.2		40	22.9	
Educational level of spouse						
Diploma or below	194	40.7		62	35.4	
Bachelor	199	41.7		86	49.2	
Master or higher	84	17.6		27	15.4	
Difference in educational level						
Spouse higher than subject	74	15.5		25	14.2	
Equal	271	56.8		110	62.9	
Subject higher than spouse	132	27.7		40	22.9	
Employment status of spouse						
Employed	447	93.7		101	57.7	
Not employed	30	6.3		74	42.3	

<sup>a</sup> Indicates Standard Deviation

## **Results**

The results of all four articles are presented together in this section. The detailed findings of each study can be found in the original publications included at the end of this thesis. The following provides an overview of the main findings of each study.

### **Marital satisfaction and gender differences (Article I)**

Men scored significantly higher than did women on the marital satisfaction subscales (ENRICH): “marital communication”, “personality issues”, “sexual activities”, “marriage and children”, “family and friends”, and “conflict resolution”, indicating that the males were more satisfied in their marriages than were the females.

### **Marital satisfaction and socio-demographic variables (Article I)**

The younger the female subjects, the more satisfied they were in their marriages on the subscales “family and friends”, “personality issues”, “pleasure activities”, and “sexual activities”, whereas a negative correlation was found only on the subscale “pleasure activities” among the males. Independent of their own age, the younger their husbands, the more satisfied the female subjects were on subscales “personality issues”, “religious orientation”, “marital communication”, “sexual activities”, “pleasure activities”, and “financial management”, whereas the younger their wives were, the more satisfied the male subjects were with “pleasure activities” in their marriages.

Educational level was substantially associated with the subscales “marital communication”, “financial management”, “family and friends”, and “religious orientation” in both female and male subjects, whereas “marriage and children” and “pleasure activities” were additionally related to educational level in women only.

The education of the spouse was correlated with satisfaction on the “marital communication”, “pleasure activities”, “family and friends”, and “religious orientation” subscales in both men and women; on the “financial management” and “marriage and children” subscales only in women; and on the “personality issues” and “conflict resolution” subscales only in men.

Subjects with an employed spouse scored higher on all marital satisfaction subscales except “family and friends” in female participants and “sexual activities” in male participants.

The number of children was related to marital satisfaction on the subscales “marital communication”, “pleasure activities”, and “sexual activities” in female and male subjects, with those having no children being most satisfied, followed by those with one child, and those with two or more children. Among women, only “personal issues” was additionally associated with satisfaction, with the same pattern.

The individuals were categorized in four groups (i.e., 1–7 years:  $n = 315$ ; 8–16 years:  $n = 215$ ; 16–24 years:  $n = 97$ ; and >24 years:  $n = 26$ ) based on the duration of marriage. These four groups did not differ in the “financial management”, “family and friends”, and “marriage and children” subscales according to post hoc tests for one-way ANOVA, whereas the mean scores for the other six domains successively decreased ( $F = 2.77$ ,  $p = .041$  for “religious orientation” and  $F = 11.70$ ,  $p < .001$  for sexual activities) between these groups with increased duration of marriage, with those married longer than 24 years scoring substantially lower than the other three groups without any substantial difference between the latter three.

### **Quality of life and gender differences (Article II)**

Men, on average, reported a higher QOL related to “physical functioning”, “vitality”, “mental health”, “pain”, and “general health” than did women.

### **Differences between QOL in medical staff and the general population (Article II)**

Comparing the QOL-scale scores of the medical staff with Montazeri et. al.’s (2005) data from the Iranian general population showed that the medical personnel’s scores on most QOL scales for both sexes were lower than those of the general population (except for “emotional well-being” in men); however, the differences were not significant in the subscales “role limitation due to emotional problems” in women, and in “mental health”, “vitality”, and “general health” in men.

### **Relationship between marital satisfaction and quality of life (Article II)**

The QOL and marital satisfaction domains were found to be differentially correlated among the male and female participants, most often with closer associations between aspects of these two phenomena in females, except for satisfaction with “pleasure activities” and “marital communication”, where all QOL domains were significantly related among males but not among females. All domains of marital satisfaction were found to be significantly associated with the QOL domains “vitality” and “mental health” among females and the “physical functioning” domain in the male participants.

### **Relationship between social support and QOL (Article II)**

Satisfaction with social support was associated with almost all QOL domains (SF-36) in both genders with different weights (from  $r = 0.20$  for “physical functioning” and “emotional problems” to  $r = 0.33$  for “general health” among women, and from  $r = 0.22$  for “physical health” and “emotional problems” to  $r = 0.41$  for “physical functioning” among men), whereas the number of supporting persons was only related to “physical functioning”, “vitality” ( $r = 0.21$ , highest score), “mental health”, and “general health” ( $r = 0.14$ , lowest score) among women only.

### **Explanatory effect of socio-demographic variables, marital satisfaction, social support, and job satisfaction on the variance in QOL (Article II)**

In hierarchical multiple regression analyses (method: enter) with the various QOL domains as dependent variables and the socio-demographic variables gender, spouse’s age, number of children, and duration of marriage entered as block 1, the two social support scales “satisfaction with support” and average number of supporting individuals entered as block 2, the nine marital satisfaction domains entered as block 3, and the single rated item relating to job satisfaction entered as block 4, the following results were obtained:

- The variance in these variables together explained between 12% (“pain”, “role limitation due to emotional problems”) and 28% (“mental health”) of the variance in the QOL domains.
- The variance in the four socio-demographic variables could explain between 1% (“social function”) and 4% (“vitality”) of the variance in the QOL domains, with gender almost always significantly contributing to the result by a significant

standardized beta score in the regression equation (except for “role limitation due to emotional problems”).

- The variance in the socio-demographic variables combined with the social support scales (blocks 1 and 2) explained between 4% (“pain”, “role limitation due to emotional problems”) and 12% (“vitality”) of the variance in the quality of life domains, almost always with gender and satisfaction with social support significantly contributing to this explained amount of variance.
- The variance in the variables of the three first blocks explained between 5% (“role limitation due to physical health”) and 23% (“mental health”) of the variance in the QOL domains, usually with gender, satisfaction with social support, and a variation in marital satisfaction domains being significantly included in the equation.
- Job satisfaction as a single variable in the fourth block always explained an additional significant amount of variance in the QOL domains.

### **Social and spousal support and gender differences (Article III)**

Neither the average total number of supporting persons nor the average total satisfaction with perceived social support differed between the genders. However, men reported their wives as supporting persons significantly more often than women named their husbands as supporting persons.

Furthermore, men reported their wives as supporting persons significantly more often than women named their husbands as supporting persons in scenarios related to need for belongingness, need for emotional support, need for self-disclosure, need to be praised, and need for instrumental support, and they evaluated their satisfaction with social support related to needs for belongingness substantially higher than the women. Women evaluated their satisfaction with social support in loss situations higher than did men.

### **The explanatory effect of various socio-demographic variables, social and spousal support, and job satisfaction dependent on the domains of marital satisfaction (Article III)**

In hierarchical regression analyses by gender with the various marital satisfaction domain scores as dependent variables and socio-demographic variables of impact (age, spouse’s age, years married, subject’s and partner’s education and job) included in the first block (method: enter) and the average number of supporting persons, the average satisfaction with social

support, and the average frequency of reporting the partner as a source of support related to the six scenario-groups derived from the SSQ in the second block (method: stepwise) as independent variables, a more differentiated pattern appeared: a) the variance in the socio-demographic variables from block 1 explained between 3% of the variance in “marriage & children” and 16 % in “financial management” among the female medical staff; and between 2% in “conflict resolution” and 20% in “marriage & children” in the male staff; b) the variance in the variables from block 2 (varying number and varying variables related to social support) additionally explained between 8% of the variance in “family and friends” and 28% in “conflict resolution” among the females and between 20% in “pleasure activities” and 37% in “marriage & children” among the males; c) the total amount of variance explained by both blocks together varied between 13% in “marriage & children” and 37% in “personality issues” for females and between 31% in “personality issues” and in “marital communication” and 57% in “marriage & children” for males; d) for the males, only 41.5% of the significantly contributing variables remaining in the regression equation were related to spousal support, whereas these were 66.7% for the women; and e) social support from the husband in situations characterized by need for instrumental support and by need for self-disclosure was most often of predictive impact related to marital satisfaction among the females, whereas support by their wife in situations of need for belongingness was most often of predictive impact among the males.

When replacing the differentiated social support scores based on the situations of need for support by the three total social support scores (number of supporting persons, satisfaction with support, spousal support) within the regression equation, the variation in the variables in both blocks together explained between 11% (“family and friends”) and 36% (“personality issues”) for the women, and between 18% (“family and friends”) and 26% (“marriage & children” and “religious orientation”) in the men. Spousal support was the only significant variable of the three social support scores remaining as significantly explaining variance in the ENRICH scores among the women with percentages between 5% of “family & friends” and 26% of “personality issues”. In the men’s data, spousal support alone explained between 6% of variance in “marriage & children” and 17% in “personality issues” and “conflict resolution”.

When separating job satisfaction from the socio-demographic variables as a second block within these calculations, it additionally explained between 0% (women: “pleasure activities” and “sexual activities”; men: “personality issues” and “conflict resolution”) and 3% of variance among the women in “family & friends” and 5% in “marriage & children”

among the men when controlling for the impact of the various social-demographic variables in block 1. After inclusion of the various social support variables in the regression as a third block, job satisfaction kept its variance explaining power for marital satisfaction scales among the women for “personality issues” ( $\beta = .17, t = 4.32, p > .001$ ), “marital communication” ( $\beta = .09, t = 2.26, p = .024$ ), “financial management” ( $\beta = .09, t = 2.36, p = .019$ ), “family & friends” ( $\beta = .17, t = 3.67, p > .001$ ), and “religious orientation” ( $\beta = .12, t = 2.67, p = .008$ ) as well as for “marriage & children” ( $\beta = .21, t = 2.70, p = .0008$ ) and “family & friends” ( $\beta = 0.17, t = 2.48, p = 0.014$ ) for men. However, its explanatory impact lost its significance when including the social support variables in the equation for the scales “financial management”, “pleasure activities”, “sexual activities”, and “religious orientation” among men.

#### **Coping and marital satisfaction (Article IV)**

The situations that were reported as stressful events for the WOC by these women could be grouped into four categories: conflict because of problems between the spouses (50%); conflict because of husband’s family or friends (25%); conflict about a child’s upbringing (17%); and conflict because of economic problems (8%).

Those women who were satisfied in their marriages reported applying “escape-avoidance” (post-hoc tests between  $<0.001$  and  $0.021$ ;  $F = 1.48, p = 0.225$ ) and “support seeking” (post-hoc tests all with  $<0.001$ ;  $F = 2.40, p = 0.073$ ) less often than did the other women, and they reported a significantly higher satisfaction with social support (post-hoc tests all with  $<0.001$ ;  $F = 2.86, p = 0.012$ ) than did the less satisfied women.

The total score of the ENRICH questionnaire as well as the factors “financial management”, “sexual activities”, and “religious orientation” were significantly negatively correlated with “confrontive coping”, whereas “marital communication” was significantly negatively associated with “distancing”, “escape avoidance”, and “support seeking”; “marriage & children” was significantly negatively correlated with “self-control” and “distancing” as ways of coping.

In hierarchical regression analyses with the various ENRICH factor scores as dependent variables and job satisfaction as the independent variable in the first block, the two SSQ factors in the second block, and the WOC factors in the third block, between 24% and 38% of the variance in seven of the nine ENRICH factors (a not significant model for “family

& friends” and “marriage & children”) could be explained by the variation in all the independent variables with the varying weight of the several independent variables.

## **Discussion**

### **Marital satisfaction and gender**

Marital satisfaction represents one important factor in married individuals which can influence all aspects of life and consequently their QOL. The overall aim of this thesis was to investigate the relationships between marital satisfaction, QOL, coping, and social support in medical staff in Tehran.

The finding of higher marital satisfaction in men compared with women once again confirms the results of several investigations of the effect of gender on marital satisfaction (Fanni-Asl, Narimani, Rajabi, & Siahpoosh, 2009; Fowers, 1991; Jose & Alfons, 2007; Ng, Teik-Cheok, Clinton, & Cheong, 2008). Iran is in a transitional period from a traditional to a modern society. In such societies, women find themselves in a more complicated situation and feel more stress because of role conflicts (Rafatjah, 2011). Traditional culture and Islamic values, which have shaped the way of life in Iranian society, support the male-dominated and patriarchal family framework. However, Iranian women have become more familiar with their rights and with equality issues and they often no longer accept the traditional values and norms that treat them as second-class members of their families (Edalati & Redzuan, 2010). Although the roles of the family and its members are changing in Iranian society and the relationship between husband and wife is based more on mutual understanding and sympathy, women are still considered as the main person responsible for household duties and childrearing. This paradoxical situation can be more severe for female medical staff because of their demanding job. On the one hand, they are faced with patients' pain and deaths, shift work, time pressure, heavy workload, and a high level of job responsibility, while on the other hand they must fulfil their traditional duties as wives and mothers.

Furthermore, the differences in marital satisfaction between women and men might be due to the differences in expression of their feelings: women tend to cope with their emotions by seeking social support (Simon & Nath, 2004; Thoits, 1991) and talking about what they feel in their personal lives (Simon & Nath, 2004), while men are more emotionally inhibited (Matud, 2004) and possibly dislike talking about such sensitive topics as their marital relationship. This is especially relevant to Iranian men who generally believe that their marital situation is a very personal subject, and they do not like to talk about or explain it to others.

### **Marital satisfaction and age, education, and number of children**

The results revealed a negative relationship between age and marital satisfaction in women on the subscales “family and friends”, “personality issues”, “pleasure activities”, and “sexual activities”. Similar findings from several studies showed that marital satisfaction decreases over the first 10–20 years of marriage (Glenn, 1998; Vaillant & Vaillant, 1993; Van Laningham, Johnson, & Amato, 2001). Some studies found this decline to be more remarkable in women than in men because women have the additional responsibilities of domestic duties and childrearing (Meijer & Van den Wittenboer, 2007; Shapiro, Gottman, & Carrère, 2000). Older women (who are usually in that period of their marital life) experience lower marital satisfaction than do the younger women. Another explanation for this decline could be their feeling of loss of physical attractiveness as they age. Physical appearance is more important for women than men and has an influence on their feelings (Davis & Cowles, 1991). Older women’s negative body image can negatively affect their marital satisfaction, particularly in terms of sexual relationships (Meltzer & McNulty, 2010; Pujols, Meston, & Seal, 2010). This fact can be more important for women in Iranian culture, where Islamic tradition and law allow men to have more than one wife. Although polygamy has now been limited in Iran by some legal restrictions and a negative social attitude, Iranian women may view polygamy as a threat to their marital lives, especially as they get older and feel less physically attractive.

The positive association between educational level and marital satisfaction confirmed the findings of several other studies (Kim, 1992; Mirfardi, Edalati, & Redzuan, 2010; Vaijayanthimala, Kumari, & Panda, 2004), which reported higher education level as a predictor of better marital satisfaction. Educated Iranian couples are more familiar with modern and new family norms and with equality in family relationships and thus may have more respectful relationships (Edalati & Redzuan, 2010). They are probably more open-minded, have better communication skills, and have a more open view of their marital life. It is possible that higher-educated couples can find better resources to help them solve their problems.

The higher marital satisfaction found in spouses with fewer children corresponds to the findings of some other studies which found that the absence or a low number of children has a significant positive effect on marital happiness (Twenge, Campbell, & Foster, 2003; White & Edwards, 1990). This negative relationship might be caused by the greater

responsibilities related to parenting and the many restrictions on spouses' freedom, especially in a group such as medical staff, who often work demanding shifts in a stressful job.

### **Quality of life in relation to gender and marital satisfaction**

The QOL results indicated that the men reported more vitality, better mental health, less pain, and better general health, which corresponds to the findings of two studies in Iran (Montazeri et al., 2005; Nedjat, Holakouie Naieni, Mohammad, Majdzadeh, & Montazeri, 2011). Based on a population survey, Noorbala et al. (2004) reported that mental disorders in women were 1.7 times higher than in men in Iran (29% versus 15%). The paradoxical situation of women in societies such as Iran makes women more vulnerable than men to mental and physical problems. Marital satisfaction and QOL are two related concepts that can affect each other, and this subject (i.e., lower satisfaction in marriage) can be another explanation for lower QOL in this group of women than in men.

The positive association between marital satisfaction and QOL in men and women confirmed research findings that marital satisfaction is positively linked to personal well-being, including physical health (Bookwala, 2011; Wickrama, Lorenz, Conger, Elder, & Gelen, 1997) and psychological health (Proulx, Helms, & Buehler, 2007; Whisman & Uebelacker, 2004). Marital satisfaction and QOL have a reciprocal relationship: stressful marital relationships, decreasing spousal intimacy, fewer positive communications, and an increasing number of marital conflicts and aggression can decrease QOL. Also, spouses' QOL can have an impact on marital satisfaction, for example, by changes in marital communication, increasing family conflicts, the distribution of responsibilities, and pleasure activities.

### **Social support in relation to gender, marital satisfaction, and quality of life**

Although social support results revealed that the total social support satisfaction and the total number of supporting persons did not differ between sexes, men received more support from their wives than women did from their husbands. This finding corresponds to the "support-gap hypothesis" (Belle, 1982), which suggests that women provide more support for their spouses than men do. This difference can also be related to the different social and cultural expectations of women and men. Women are supposed to be more supportive and providers of nurturance and support (Barbee et al., 1993; Schwarzer & Gutierrez-Dona, 2005; Wood, 1994), but men are supposed to be independent and self-reliant (Deaux & LaFrance, 1998). This social expectation guides women to provide support better than men.

My findings revealed that spousal support was an important indicator of marital satisfaction, particularly for women. This result corresponds to findings that spouse social support is associated with higher marital satisfaction in couples (Acitelli & Antonucci, 1994; Dehle, Larsen, & Landers, 2001) and the link is stronger in women than in men (Acitelli & Antonucci, 1994; Julien & Markman, 1991). The expectations of marriage are different between men and women. Women have higher expectations of intimacy and support in a marriage (Bernard, 1976), so that receiving more support from their spouses can meet this expectation better and improve their marital relationships and consequently marital satisfaction.

Furthermore, results show that spousal support is more important than social support from other sources in explaining marital satisfaction. This finding confirms other studies finding that support from other sources cannot compensate for inadequate spousal support (Coyne & DeLongis, 1986; DeLongis, Capreol, Holtzman, O'Brien, & Campbell, 2004). Family cohesion and emotional bonds between couples become stronger in couples who perceive their spouses as the main support resources, and this can lead to higher marital satisfaction.

Social support and socio-demographic variables could explain the variance in job satisfaction and also decrease the explanatory impact of job satisfaction on many scales of marital satisfaction. This confirmed the findings of other studies of the protective role of social support against negative effects of stress (Harris, Winskowski, & Engdahl, 2007; Veissi, Atefvahid, & Rezaee, 2000). As Hill (2005) described, social support has an important buffering effect (as resource and support) on perceived job and marital stress and consequently on job and marital satisfaction as an outcome.

Social support satisfaction was also associated with all domains of QOL in both women and men. This corresponds with the findings of several studies showing a positive relationship between social support and QOL (Achat et al., 1998; Daalen, Sanders, & Willemsen, 2005; Helgeson, 2003). Social support as a stress buffer can influence the stress perceived by individuals, help them cope with stress, reduce the negative effect of stress on mental and physical health, and, accordingly, improve the different aspects of well-being. This effect is important in Iranian society, where social networks and particularly family ties have a great impact on individuals' lives and remain very strong (Azadarmaki, 2005). In addition, it seems that the perceived quality of social support (satisfaction) has a more important effect than does quantity of social support on the aspects of QOL in both sexes, especially in men.

The significant association between social support and marital satisfaction and QOL revealed the protective role of social support in individual lives. As the stress buffer model and family stress theory indicated, social support as a resource and stress buffer mediator play effective roles in promoting good marital relationships and QOL.

### **Coping in relation to marital satisfaction and social support**

The situations that were reported by the women as the background for completing the WOC questionnaire could be grouped into four categories: conflict because of problems between the spouses (50%), conflict because of husband's family or friends (25%), conflict about a child's upbringing (17%), and conflict because of economic problems (8%).

Those women who were satisfied in their marriage reported applying "escape avoidance" and "seeking social support" less often than did the other women. The results revealed a significant negative relationship between subscales of marital satisfaction and using "seeking social support", "confrontive coping", "escape avoidance", "distancing" and "self-controlling". This result confirms findings of several investigations on negative relationship between using "confrontive coping", "seeking social support", "escape avoidance", and "distancing" and marital satisfaction (Bodenmann & Cina, 2000; Bouchard, Sabourin, Lussier, Wright, & Richer, 1998). Applying ways of coping such as "distancing", "escape avoidance", and "confrontive coping" can reduce effective communication and intimacy or increase conflicts and tensions in couples and consequently increase spouses' stress (Coyne & Smith, 1991), which can negatively influence the marital relationship. The importance of self-disclosure support for women's marital satisfaction confirms the role of communication in women's marital satisfaction. The consequences of spouses' stress might have serious impacts on women's health. Family conflicts and marital problems are among the main risk factors for suicide in Iran (Nazarzadeh et al., 2013). When these factors become a social dimension, they influence women's ways of coping; in the worst cases, women tend to choose suicide. Seventy-one percent of suicides via self-immolation were among women and marital problems were the main risk factor for suicide in women (Ahmadi, Mohammadi, Stavrinou, Almasi, & Schwebel, 2008; Ahmadi et al., 2009).

Although the results showed a positive association between social support and marital satisfaction, "seeking social support" as a way of coping in marital stress had a negative relationship with the "marital communication" subscale of marital satisfaction. Additionally, the results showed that women who mentioned their husbands as supporters mentioned "seeking social support" less often than did women with less husband support. Social support

as a moderating factor has an important buffering role against the negative consequences of daily life stressors related to marital conflicts and other social conflicts which can affect marital satisfaction (Chi et al., 2011; Muller, 2006). Apparently, women who experience better communication and receive more spousal support do not need to seek as much social support outside the marriage. When perceived spousal support is not sufficient, seeking support from other sources, such as extended family and friends, becomes more important (Namayandeh, Yaacob, & Juhari, 2010).

### **Methodological reflections**

In the current study, as only one spouse was available, marital satisfaction was assessed by only one partner of each couple, which hampered comparisons within couples. Additionally, most participants did not describe a recent stressful situation in their marital relationship in the WOC questionnaire. Since marital satisfaction was considered a very personal topic, participants, especially men, preferred not to speak much about their marital problems.

My gender perspective as a woman could have had an effect on the discussion and conclusions. I tried to compensate for this by reviewing a wide range of studies and research in this subject area which was performed by researchers of both genders.

### ***Causality and generalization***

All the findings in this thesis are based on a cross-sectional data collection. Cross-sectional surveys are aimed at determining a particular attribute in a defined population at a particular point in time. The main criticism of cross-sectional studies is the difficulty of establishing causal relationships from the data collected in a cross-sectional time frame (Hulley, Cummings, Browner, Grady, & Newman, 2007). The social sciences deal with multidimensional concepts where controlling for the effects of many important variables is often difficult and sometimes impossible. The cross-sectional study design also restricted me to interpretation of the causal relationships between marital satisfaction and other factors in relation to theory and previous research. More research based on longitudinal approaches is needed to detect causal relationships.

The sample used in this study is not representative of the married population in Iran. The respondents in this study were educated and employed and belonged to the middle class of Iranian urban society. Marital satisfaction and QOL are multidimensional subjects which

can be affected by personal, social, and cultural factors. The cultural diversity of Iranian society means that these findings cannot be generalized to other groups in Iran.

### ***Validity and reliability***

It is important that research instruments can be applied in different settings, over time, or in different groups with minimum error; the two very important concepts enabling this, are validity and reliability. Validity refers to whether a measure of a concept really measures that concept (Singh, 2007). Validity can be defined in several different ways: face validity, content validity, criterion validity, and construct validity. Face validity is a subjective evaluation of the presentation and relevance of the questionnaire; this refers to whether the questions are relevant, reasonable, clear, and unambiguous. Content validity assesses whether the instrument adequately covers the different dimensions of a concept. Content validity can be explored by a review of literature or by expert evaluations. Criterion validity relates to the agreement between the instrument and other valid instruments of similar focus. There are two forms of criterion validity: concurrent validity refers to correlations with a validated measure of a similar construct at the same time, and predictive validity refers to the degree to which an instrument can predict a closely related variable in the future, and how well the instrument can estimate future related events (Bruce, Pope, & Stanistreet, 2008; Singh, 2007). Construct validity refers to the extent to which an instrument is associated with another instrument which is theoretically close.

Reliability refers to aspects of consistency in the questionnaire (i.e., internal consistency and consistency between alternative forms or test-retest consistency) (Reis & Judd, 2000). In other words, reliability determines the extent to which the instrument yields the same results on repeated trials (Blanche, Durrheim, & Painter, 2006). There are three significant factors related to assessing reliability: stability, which shows that an instrument is stable over time; internal consistency, which defines whether the indicators of a scale are consistent; and inter-observer reliability, which refers to the consistency of the results from different observers (Singh, 2007). A measure/questionnaire should be both valid and reliable. An instrument must first be reliable; reliability is necessary but not sufficient for validity.

In this study, four instruments were used to assess the various constructs. All of them were developed in Western culture but were translated, adapted, and standardized in the Persian language and for the Iranian population. Unfortunately, there were no Iranian-designed questionnaires for measuring the main concepts of this investigation, so I had to

apply Western-designed instruments. Although all applied instruments were translated and adapted for the Iranian context following established guidelines, contextual differences might have caused some biases in the understanding of item content. For example, different values, the structure of concepts, and ways of asking questions can influence the data obtained. However, using internationally established assessment methods has the advantage of enabling direct comparison of research findings should cross-cultural equivalence be demonstrated as it was for the ENRICH questionnaire, WOC, SSQ, and SF-36. Since all assessment methods applied in the present thesis have been analysed in light of cross-cultural equivalence, I can conclude that the validity of my investigation is confirmed for all the above-mentioned types of validity.

### ***Ethical considerations***

The study protocol was approved by the Ethics Committee of Tehran Medical University and the process of data collection was pursued by permission of Tehran Medical University and the hospital managers. Participation in the study was voluntary and respondents could withdraw at any time. The aims and processes of the investigation were clearly explained to medical staff and an informed-consent form was signed by them before inclusion. Since the subject of this study (marital satisfaction) was very personal and participants were cautious or reticent, completion of the questionnaires was anonymous and a sealable envelope was provided for each set of questionnaires to protect the privacy of participants.

In those cases where the participants asked for counselling services, information on the three family consulting centres in Tehran was provided.

All the processes, findings, and suggestions of the investigation were presented as three periodic and final reports to Tehran Medical University.

## **Conclusion and implications**

In this thesis, I investigated marital satisfaction, social support, coping, and QOL in an Iranian context. Because of changes in spouses' roles and responsibilities in a transitional society such as Iran's, working couples and, especially, working women more often encounter conflicts between family and work life. This situation can affect the function and satisfaction of the individual, the family, and even work. Since there is a lack of research on marital satisfaction related to gender differences in QOL, social support, and WOC in this context, I hope that providing knowledge of this subject gives a better understanding of the family life situation of medical staff and other working couples for decision makers, researchers, social workers, and other professionals who work on family-related issues.

As my results indicated, marital satisfaction, QOL, and spousal support were significantly higher in men than in women. Spousal support was significantly associated with marital satisfaction. Furthermore, variation in marital satisfaction, social support, and job satisfaction explained substantial amounts of variance in QOL domains. WOC with marital stress, social support, and job satisfaction have meaningful relationships with marital satisfaction in women. All these factors should be considered as important factors when designing effective programmes to promote marital satisfaction and QOL. Education of effective coping to decrease marital stress, training of communication skills in couples, such as listening and self-disclosure, and various kinds of spousal support are recommended for inclusion when designing family education programmes.

According to the high work-stress situation in medical staff and the reciprocal effects of job satisfaction and marital satisfaction, these results should be considered by health policy decision makers when providing facilities such as educational programmes for empowering couples (e.g., family education and stress management), increasing job satisfaction, and reducing job stress (e.g., modified work schedules, system support, and daily child care facilities), performing periodic medical and health assessments of medical staff, and providing psychological and family consulting services at the workplace for medical staff.

These results could also be applied by family social workers and family consultants to help and empower couples in improving marital relationships and QOL, especially among women. Since spousal support is important in contributing to marital satisfaction, it is necessary for marriage counsellors to encourage communication and support between spouses. Additionally, based on the identified relationships between marital satisfaction and

health-related QOL, attention to different aspects of clients' health is recommended for family counsellors. The results of the present study can be applied on different levels (e.g., the individual, professional, and policy-maker levels) to improve individuals' mental and social health, family relationships (e.g., marital and parenting quality), and functioning in daily working life, thus improving the QOL of medical staff and other employed spouses.

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