

ORIGINAL RESEARCH

Perceived Stress, Sexual and Marital Satisfaction among Married Healthcare Workers in Nigeria



Matthew Idowu Olatubi¹, Olamide Olayinka², Olufemi Oyebanji Oyediran³,
Grace Oluwaranti Ademuyiwa¹, Taiwo Omotayo Dosunmu¹

¹Department of Nursing Science, Bowen University, Iwo, Osun State, Nigeria

²Lifeworth Health Maintenance Organisation, Oluyole Estate Extension, Ibadan, Oyo State, Nigeria

³Department of Nursing Science, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria

Article Info

Article History:

Received: 23 August 2022

Revised: 21 December 2022

Accepted: 22 December 2022

Online: 28 December 2022

Keywords:

Health workers; marital satisfaction; perceived stress; sexual satisfaction

Corresponding Author:

Matthew Idowu Olatubi
Department of Nursing Science,
Bowen University, Iwo, Osun
State, Nigeria
Email:
omoolatubi@gmail.com

Abstract

Background: Marital and sexual satisfaction are essential for conjugal bliss and harmony. However, stress in the workplace can influence sexual and marital satisfaction of couples. There is dearth of information about level of sexual and marital satisfaction among healthcare workers in Nigeria, as well as the connections between stress, sexual and marital satisfaction among healthcare workers.

Purpose: This study assessed inter-relationship between perceived stress, sexual and marital satisfaction among married healthcare workers.

Methods: This descriptive cross-sectional study adopted a quantitative approach among 150 consented healthcare workers recruited using a simple random sampling technique. Instruments for data collection included the Perceived Stress Scale, Enrich Marital Satisfaction questionnaire and Pinney Sexual Satisfaction Inventory. The Pearson correlation was used to ascertain relationships and linear regression was done to predict influence of one variable on the other.

Results: Perceived level of stress of the healthcare workers was low [16.9(0.001)] and mean sexual satisfaction (SS) was poor [78.93(23.68)]. Also, 49.3% were found to be the dissatisfied maritally. Perceived stress showed a positive correlation with marital satisfaction (MS) ($r=0.48, p<0.01$). However, stress negatively correlated with participants' SS with partners ($r=-0.51, p<0.01$). Similarly, general SS positively correlated with MS ($r=0.32, p<0.01$). Predictors of MS included perceived stress ($\beta=0.614, p=0.01$), age differences with spouse ($\beta=0.30, p=0.01$), number of children ($\beta=-0.24, p=0.01$), and family type ($\beta=-0.21, p=0.05$).

Conclusion: Only half of the participants in this study are maritally satisfied. Marital satisfaction increases with sexual satisfaction. Stress is correlated with reduced sexual satisfaction of the participant, and as number of children increases, marital satisfaction reduces. Couples should be encouraged to give birth to moderate number of children to improve marital satisfaction.

How to cite: Olatubi, M. I., Olayinka, O., Oyediran, O. O., Ademuyiwa, G. O., & Dosunmu, T. O. (2022). Perceived stress, sexual and marital satisfaction among married healthcare workers in Nigeria. *Nurse Media Journal of Nursing*, 12(3), 367-379. <https://doi.org/10.14710/nmjn.v12i3.48477>

1. Introduction

Marital satisfaction (MS) implies enjoyable mentality in husband and wife relationship in various aspects of their marriage (Pourakbaran et al., 2015). It depends on a number of factors, including communication with partner, love, spousal support, religiosity, stress and sexual satisfaction (SS) (Ghaibi et al., 2022; Khan & Aftab, 2013; Malm et al., 2022; Rostami et al., 2013). Satisfaction in one's marriage or primary relationship is an essential factor in overall happiness. Marital satisfaction is influenced by SS and level of stress exposed to (Maroufizadeh et al., 2019; Mashoufi et al., 2022). Similarly, SS is a predictor of MS (Renanita & Setiawan, 2018). This implies that positive and highly significant relationship had been found to exist between SS and MS (Fallah et al., 2018; Takbiri et al., 2017; Ziaee et al., 2014). Therefore, couples who are sexually satisfied are more likely to be maritally satisfied and vice-versa. Marital satisfaction on the other hand positively predicts job satisfaction (Fallahnejad et al., 2016; Tampieri, 2022) and increases job performances. Likewise, MS significantly predicts job commitment among nurses (Akinawo et al., 2019). Health workers' job performances and commitment will ultimately influence patients/clients' satisfaction. On the other hand, stress play a major role in sexual and marital satisfaction among couples (Maroufizadeh et al., 2019).

Stress can emanate from different aspects of life endeavors. However, healthcare workers are exposed to high level of stress on daily basis (Faremi et al., 2019; Olatubi & Ogunfowokan, 2020) as a result of their work. Scholars had documented negative significant relationship between marital adjustment and stress among married nurses (Maroufizadeh et al., 2019; Zarei & Fooladvand, 2019). Perceived stress had also been documented as a predictor of MS (Işık & Kaya, 2022; Maroufizadeh et al., 2019). Likewise, most women perceived their level of stress to have an inverse relationship with their partner's MS (Maroufizadeh et al., 2019). However, men did not conceive perceived stress to have significant effect on their partner's MS (Maroufizadeh et al., 2019). Women married to men with higher perceived stress were more probable to have worse MS (Maroufizadeh et al., 2019).

Renanita and Setiawan (2018) assessed predictors of MS among working and non-working wives; they established that sexual intimacy, financial relations and communication were found to influence marital satisfaction among working wives, while only financial relations and communication influences marital satisfaction among non-working wives. In a study among women that conceive through assisted reproductive technology, marital satisfaction was found to affect quality of life positively (Kayabaşı & Sözbir, 2020). Likewise, in another study among nurses, it was reported that attachment style of nurses predict marital satisfaction among them (Azizi & Beyranvand, 2018).

Womenfolk whose spouses have high level of perceived stress are more probable to have worse MS (Maroufizadeh et al., 2019). Similarly, women with higher level of education are reported to be more satisfied marital compared to those with lower education level (Ziaee et al., 2014). Although, SS influences MS, a number of factors had also been found to influence SS. Scholars had documented that, self-esteem, women's level of education, stress, spouse's education, husband's employment status and family income levels are positive predictors of SS (Jamali et al., 2018; Taghani et al., 2019). As women's age and duration of marriage increases, SS reduces (Palha-Fernandes et al., 2019; Shahhosseini et al., 2014). Also, working-class women and those with age differences less than 10 years with their spouses have greater SS (Shahhosseini et al., 2014).

Poor to moderate level of MS had been documented among difference categories of health workers (Fallah et al., 2018; Fallahnejad et al., 2016; Ghaibi et al., 2022; Ha & Ha, 2019; Taghani et al., 2019). In Nigeria, Odinaka et al. (2018) documented that four in every ten women in low-risk population of southwestern Nigeria are sexually dissatisfied. Although literature exists on the connections between stress, SS and MS among different population in other climes, there is sparse literature on the connections between stress, SS and MS among any population in Nigeria, and on the level of sexual and MS among healthcare workers in the country. Several scholars had documented high level of stress among healthcare workers in Nigeria (Faremi et al., 2019; Olatubi & Ogunfowokan, 2020) and establishing its effect on different aspects of healthcare workers' life, but little had been documented about its effects on sexual and marital satisfaction. Therefore, this study aimed to present level of stress and inter-relationship between perceived stress, sexual and marital satisfaction among married healthcare workers.

2. Methods

2.1 Research design

This study adopted a quantitative approach using descriptive cross-sectional design to assess perceived stress, sexual and marital satisfaction among healthcare workers.

2.2 Setting and samples

The study was carried out between January and April 2022 in a religious-organisation owned teaching hospital in southwestern Nigeria. Sample size of 161 healthcare workers was calculated using Taro Yamane's (Yamane, 1973) formula. Participants were enrolled using simple random sampling technique. They were selected using the hospital nominal roll. In all, one hundred and fifty (150) healthcare workers consented and participated in the study. Only healthcare professional that have one (1) year of experience were included in the study and only nurses, doctors, physiotherapists, laboratory scientists/technician pharmacists, nurse assistants/ward orderly and pharmacy technicians participated in the study. Those that were in one form of leave or the other during the period of data collection and administrative staff of the hospital were excluded from the study.

2.3 Measurement and data collection

All participants in this study completed a socio-demographic form, perceived stress scale (PSS), enrich marital satisfaction (EMS) questionnaire and Pinney sexual satisfaction inventory (PSSI). The socio-demographic form consists of 10 items and it assessed the sociodemographic characteristics of the participants including age, age difference with spouse, number of children, length of marriage, religion, highest educational attainment and family type.

2.3.1 Perceived Stress Scale (PSS)

The PSS (Chan & La Greca, 2020) was used in its original format to assess perceived stress among the healthcare workers in this study. It is a 10-item 5-point Likert type scale of “Never” – 0; “Almost never” – 1; “Sometimes” – 2; “Fairly often” – 3; and “Very often” – 4. The total obtainable mark is “0-40”. High scores imply high level of perceived stress while low scores suggest low level of perceived stress. Participants perceived level of stress was categorized into “Low” (score less than 50% of the total score - score “0 – 19”); “Moderate” (score between 50 and 69% of the total score ie “20 – 27”); and “High” (score 70% and above of the total score – “28 – 40”). The scale has a documented Cronbach alpha reliability coefficient score of 0.82 - 0.83 (Andreou et al., 2011; Siqueira Reis et al., 2010; Trujillo & González-Cabrera, 2007). In this study, the PSS has a Cronbach coefficient score of 0.96. The scale is therefore adjudged reliable.

2.3.2 Pinney Sexual Satisfaction Inventory (PSSI)

Healthcare workers sexual satisfaction in this study was assessed using PSSI (Pinney et al., 1987). The scale consists of 24 items and it is rated on a 7-point Likert scale of “Strongly agreed” – 1 to “Strongly disagreed” – 7). The scale was used in its original format in English, it is subdivided into two. The first section consists of fourteen (14) items that assessed general sexual satisfaction and are scored in reverse order. The second part consist of ten (10) items that assessed participant’s sexual satisfaction with partner. The scale has an overall score of 24 to 168. High scores represent good sexual satisfaction while low scores imply low/weak sexual satisfaction. The scores were further categorized into “sexually dissatisfied” (17-83) and “sexually satisfied” (84-168) using the median score (84). Also, the part that assessed sexual satisfaction with partner was further grouped into “sexually dissatisfied with partner” (10-29) and “sexually satisfied with partner” (30-70) using the median score (30). The scale has an overall Cronbach alpha coefficient score of 0.92 (Pinney et al., 1987).

Data was collected by two of the researchers who staff of the college of health sciences situated within the hospital premises. Unit nominal rolls of the staff was used to determine the sample frame. Prospective participants were visited in their various wards and unit and the purpose of the study was explained to them in details.

2.3.3 Enrich Marital Satisfaction (EMS) Questionnaire

Marital satisfaction was measured using EMS questionnaire (Fowers & Olson, 1993). The scale was used in its original format. It is a 15-item questionnaire containing the Idealistic Distortion Scale (IDS) (5 items) and Marital Satisfaction scales (MSS) (10 items). Total score range from “15 to 75”. Each item in the scale is rated on a 5-point Likert- type scale of “Strongly disagree” – 1; “Moderately disagree” – 2; “Neither agree nor disagree” – 3; “Moderately agree” – 4; and “Strongly agree” – 5. Six of the items on the scale (2, 5, 8,9,12 and 14) are graded in the reverse order. The EMS scores were derived by first adding up scores on the MSS and IDS separately. This score was then corrected on the basis of the person’s IDS (Fowers & Olson, 1993). Marital satisfaction was categorized into maritally dissatisfied and maritally satisfied using the median score (34.56). The scale has a documented Cronbach alpha reliability coefficient of between 0.77 – 0.95 (Maroufizadeh et al., 2019; Masoumi et al., 2016; Rostami et al., 2013).

2.4 Data analysis

Data collected was analyzed using Statistical Package for Social Sciences (SPSS) version 22. Frequencies, percentages and mean were used to describe the data. Pearson correlation was used to test relationship between perceived stress and sexual satisfaction, perceived stress and marital satisfaction; and sexual satisfaction and marital satisfaction. Linear Regression was done to

predict the influence of one variable on the other. Level of significance was set at $p < 0.05$ using confidence level of 95%.

2.5 Ethical considerations

The ethical board and the management of the Bowen University Teaching, Hospital, Ogbomosho, Oyo State, Nigeria approved the study (BUTH/REC-355). Data was collected by one of the authors. Informed consent was gained from all study participants. Confidentiality of all information retrieved, was ensured at every stage of the study. Participants were informed of their right to withdraw from the study at any stage without any consequence. No injury was inflicted on any of the study participants in the course of the study. Participation was voluntary.

3. Results

3.1 Demographic characteristics of the participants

As presented in Table 1, demographic characteristics of the participants in the study showed that there are more female healthcare workers in the study (59.3%). Majority of the healthcare workers in the study (54.7%) have less than five year age difference with their spouse. Results from the study further showed that more than half (52.0%) of the participants had spent between five to ten years in their marriage. An overwhelming majority (75.3%) are in monogamous family relationships while 24.7% are in polygamous family relationships.

Table 1. Sociodemographic characteristics of the participants

Characteristics	Frequency (f)	Percentage (%)
Gender		
Male	61	40.7
Female	89	59.3
Age in years		
21-30	31	20.7
31-40	54	36.0
41-50	38	25.3
51 and above	27	18.0
Age difference of spouse		
Below 5 year	82	54.7
5 to 10 years	63	42.0
More than 10 years	5	3.3
Number of children		
Nil	14	9.3
1	23	15.3
2	43	28.7
3 and above	70	46.7
Length of marriage		
Less than five years	55	36.7
Five to ten years	78	52.0
Above ten years	17	11.3
Religion		
Christianity	109	72.7
Islam	41	27.3
Education attainment		
No formal education	15	10.0
Primary level education	23	15.3
Secondary level education	11	7.3
Tertiary level education	101	67.3
Family type		
Monogamous	113	75.3
Polygamous	37	24.7

3.2 Perceived stress among the participants

Perceived stress among the participants showed that feeling nervous [2.18(1.31)]; becoming angry that things happening are outside the participants' control [1.95(1.38)]; and being upset because of things that happened unexpectedly were the most often experienced phenomenon among the participants. The mean perceived stress score among married health workers that participated in the study was found to be 16.99(0.001) (Table 2).

Table 2. Perceived stress experienced by the participants

In the previous month,	Mean (SD)
Have been troubled as a result of something that unexpectedly happened	1.78(1.3)
Have felt incapable to control the essential things in life	1.59(1.39)
Have felt stressed or nervous	2.18(1.31)
Have felt confident of my capacity to take care of my personal problems.	1.54(1.35)
I felt things were going the way I want it.	1.53(1.14)
Have felt I couldn't deal with stuffs that I had to do.	1.76(1.29)
Was able to control frustration in my life.	1.33(1.23)
Half felt I am on top of what are I am doing.	1.73(1.35)
Have been angry due to occurrences that I couldn't control.	1.95(1.38)
Have felt that difficulties were stacking up so great that I couldn't overcome.	1.59(1.32)
Total	16.99(0.001)

Furthermore, this study also found that more than half of the participants (58.0%) perceived their level of stress to be low; 23.3% - moderate and 18.7% - high (Figure 1).

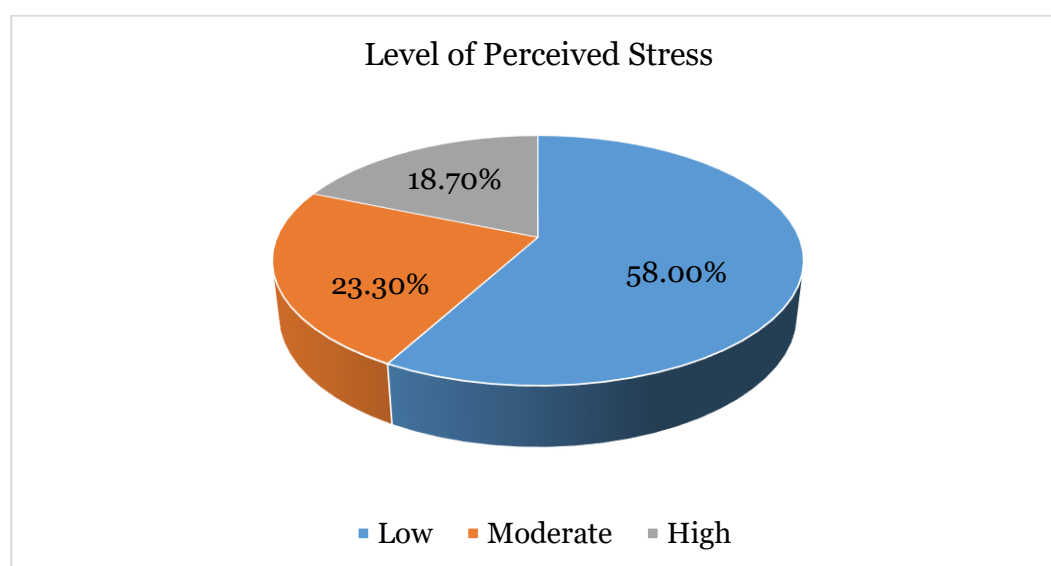


Figure 1. Level of perceived stress among the participants

3.3 Sexual satisfaction among the participants

As shown in Table 3, sexual satisfaction among the participants in this study revealed that in the general sexual satisfaction domain “feeling that nothing is lacking in my sexual life” scored highest [3.32(2.17)]. The least was observed to be “generally, satisfied with sex life” [2.93(2.01)]. In the area of satisfaction with partner, more participants wish their partner(s) were more patient with them [3.69(1.97)]. Results also showed that fewer participants wish their partner(s) show more love and care during sexual intercourse [3.33(2.13)] and their partner(s) show more affection through foreplay [3.37(2.08)]. The mean general sexual satisfaction score of the participants in the study was found to be 43.59(20.06) and satisfaction with partner 35.35(19.44) with overall mean sexual satisfaction score of 78.93(23.68) (Table 3).

Table 3. Sexual satisfaction among the participants

Statements	Mean(SD)
My sex life lacks nothing.	3.32(2.17)
Satisfied that during lovemaking, my physical need were met completely	3.05(2.04)
I am satisfied sexually on a general note.	2.93(2.01)
The amount of time my partner and I spent together after sexual intercourse is satisfying.	3.03(1.99)
The amount of time my partner and I spent together during sexual intercourse is satisfying.	3.14(1.96)
The foreplay involved during lovemaking is satisfying	3.13(1.92)
The impulsiveness of my lovemaking is satisfying	3.19(1.88)
The frequency of which I engage sexual intercourse is satisfying	3.08(1.98)
The quality of time my partner and I spent together after sexual intercourse is satisfying.	3.00(1.99)
My capacity to enjoy sex is satisfying.	2.99(1.95)
The importance my partner place on sexual intercourse is satisfying.	3.15(1.90)
I am contented with my capability to make my physical desires known during sexual intercourse.	3.20(1.94)
The time of the day I make love with my partner is satisfying.	3.21(1.96)
The rate at which I reach orgasm is satisfying.	3.17(1.94)
I desire my spouse show more love and care during intercourse	3.33(2.13)
I desire my spouse is more romantic during sexual intercourse.	3.57(2.00)
I desire my spouse is more affectionate through foreplay.	3.37(2.08)
I desire my spouse could make me feel more good-looking	3.51(2.11)
I desire I my spouse is a better lover.	3.53(2.20)
I desire my spouse is more thoughtful of my physical needs during sexual intercourse.	3.66(1.99)
I desire there could be better open communication of what my partner want during sexual intercourse to me.	3.42(2.08)
I desire my partner is more patients during sexual intercourse.	3.69(1.97)
I desire when I make love, I was less reticent.	3.64(2.11)
I desire my partner instigated sex intercourse more often	3.63(2.00)
General SS mean score	43.59(26.06)
Sexual satisfaction with partner mean score	35.35(19.44)
Overall SS mean score	78.93(23.68)

Further results also showed that 50.0% of the married health workers that participated in the study are sexually satisfied with their partner, and 48.7% were sexually satisfied (Figure 2).

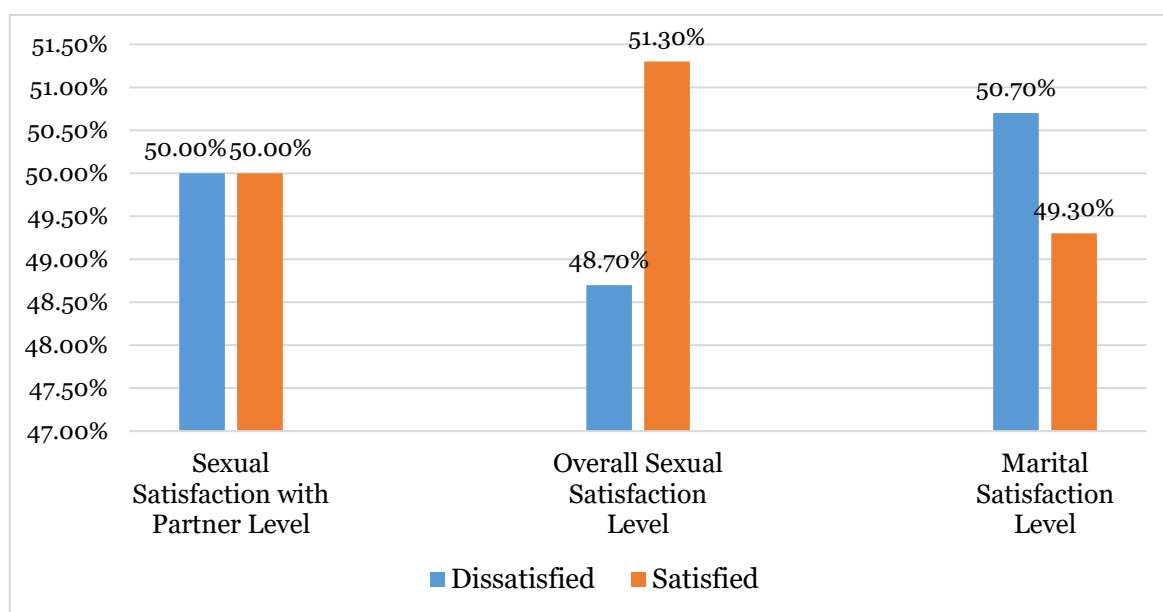


Figure 2. Level of marital and sexual satisfaction among participants

3.4 Marital satisfaction among the participants

Marital satisfaction of the married health workers in this study as shown in Table 4 revealed that the mean IDS score is 16.88(4.31) with MSS score of 30.61(3.70) and EMS score 37.56(9.96). The most satisfied with aspect of marital life among the participants was found to be equalitarian of role [3.68(1.37)]. This is followed by conflictual resolution [3.61(1.34)] and leisure activities [3.56(1.35)]. On the other hand, the least satisfied with was found to be in the areas of communication [2.34(1.34)] and personal issues [2.37(1.32)]. Furthermore, about half 76 (49.3%) of the participants were maritally satisfied (Figure 2).

Table 4. Marital satisfaction of participants

Components	Mean(SD)
Personality Issues	2.37(1.32)
Equalitarian Role	3.68(1.37)
Communication	2.34(1.34)
Conflict Resolution	3.61(1.34)
Financial Management	2.75(1.39)
Leisure Activities	3.56(1.35)
Sexual Relationship	3.48(1.34)
Children and Marriage	2.61(1.47)
Family and Friends	2.75(1.49)
Religious Orientation	3.47(1.44)
Mean ID Score	16.88(4.31)
Mean MS Score	30.61(3.70)
Mean Enrich Marital Sexual Satisfaction Score	37.56(9.96)

3.5 Relationships among perceived stress, sexual satisfaction and marital satisfaction

As shown in Table 5, level of stress experienced by the healthcare workers in this study has a strong negative significant correlation with Idealistic Distortion score ($r=-0.74, p<0.01$) and a moderate positive correlation with overall EMS score ($r=0.48, p<0.01$). Also, stress positively correlated with general sexual satisfaction of the participants ($r=0.85, p<0.01$) and negatively correlated with participants' SS with partners ($r=-0.51, p<0.01$). Similarly, general sexual satisfaction slightly has positive correlation with MS ($r=0.32, p<0.01$).

Table 5. Correlation analysis among stress, sexual satisfaction and marital satisfaction

Variables	1	2	3	4	5	6
PSS (1)	1					
IDS (2)	-0.74**	1				
MSS (3)	-0.02	0.4**	1			
EMS (4)	0.48**	-0.24**	0.78**	1		
General Sexual Satisfaction (5)	0.85**	-0.86	-0.24**	0.32**	1	
Sexual Satisfaction with Partner (6)	-0.51**	0.41**	0.08	-0.18*	-0.49**	1

** Significance at 0.01; * Significance at 0.05

Furthermore, the multiple regression results showed that level of stress ($\beta=0.614, p=0.01$); age differences with spouse ($\beta=0.30, p=0.01$); number of children ($\beta=-0.24, p=0.01$); and family type ($\beta=-0.21, p=0.05$) are predictors of MS among the healthcare workers (Table 6).

4. Discussion

This study assessed inter-relationship between perceived stress, sexual and marital satisfaction among married healthcare workers in Nigeria. Findings showed marital satisfaction increases with sexual satisfaction and level of stress. However, sexual satisfaction reduces with increase in stress level. Also, findings showed low level of perceived stress among health workers that participated in this study with only about one in every five experiencing high level of stress. The general SS and SS with partners were found to be moderate. Although majority felt they would have preferred if there are more sexually satisfied by their partner. Conversely, about half of the health care workers in the study were maritally dissatisfied.

Table 6. Regression analysis showing predictors of marital satisfaction among respondents

Dependent Variable: Marital satisfaction R ² =0.31	Coefficient	S.E	t	p-value	95% CI	
PSS	0.61	0.13	4.12	0.001	0.29	0.82
General sexual satisfaction	-0.23	0.06	-1.39	0.67	-0.21	0.04
Sexual Satisfaction with partner	0.12	0.04	1.42	0.16	-0.02	0.15
Age	-0.17	0.98	-1.76	0.08	-3.65	0.22
Age differences with partner	0.30	1.68	3.14	0.01	1.96	8.62
Number of children	-0.24	0.93	-2.54	0.01	-4.22	-0.53
Length of marriage	0.07	1.39	0.74	0.46	-1.72	3.78
Religion	0.08	1.85	1.03	0.31	-1.76	5.57
Level of education	-0.03	0.91	-0.27	0.78	-2.05	1.55
Family type	-0.21	0.91	-1.98	0.05	-9.58	-0.01
Constant	33.73	5.95	5.67	0.001	21.98	45.49

Scholars had documented high level of stress among different categories of health care workers in Nigeria (Onigbogi & Banerjee, 2019), nurses (Ezenwaji et al., 2019; Faremi et al., 2019); and doctors (Akinsulore et al., 2020; Ogunsuji et al., 2019) and others (Fasiku et al., 2022). Conversely, our findings showed that most of the healthcare workers in this study perceived their stress level to be low with mean stress level similar to what was documented by Azimian et al. among nurses in Iran (Azimian et al., 2017) and Baker and Alshehri among nurses in Saudi Arabia (Baker & Alshehri, 2020). The difference in the findings of this study and previous studies in Nigeria might be due to the fact that this study was conducted in a private hospital as against public hospitals in those previous studies. This is probably because the patient flow of private hospitals is lower compared to public hospitals in Nigeria.

This study showed that one in every five health workers still perceived their level of stress to be high. Although this is lower than what had been documented among healthcare workers in Nigeria previously, it is still high and needs urgent attention to abate different negative consequences of stress. This implies that a good number of healthcare workers experienced high level of stress. This may be associated with pressure from work due to inadequate equipment and workload (Faremi et al., 2019; Ingwu et al., 2018; Olatubi & Ogunfowokan, 2020; Umoe et al., 2020).

Sexual satisfaction is an important factor in marital bliss and stability (Karimi et al., 2019). Finding from the study showed that although most of the healthcare workers in the study are satisfied with the times of day that they have sexual intercourse with their partner. Conversely, they were not satisfied with their capacity to enjoy sex and they are generally dissatisfied with their sex life. This corroborates the submission of Ariguzo and colleagues in a study among married couples in Ogun State Nigeria that sexual instigation does not influence sexual satisfaction (Ariguzo et al., 2019). Also, findings showed that healthcare workers in this study are not satisfied with their sex life corroborating findings of previous study among female nurses in China (Ji et al., 2017). Findings also showed that many participants felt that their partners were not patient enough with them during sexual intercourse. This will in no small way affect their sexual satisfaction.

The least satisfied with aspect of sexual satisfaction were those directly related to sexual intercourse. Frequency of initiation of sexual intercourse was also pointed out by many of the participants as what they are not satisfied with. Our findings showed that many of the participants felt their partners initiate sex too often. Also, sexual satisfaction is influenced by ability to explore and try new idea and practices. However, in this study most participants believed that they were confined in exploring and trying new styles when it comes to sexual intercourse. Summarily only about half of the participants in this study were sexually satisfied which is congruent with submissions of Zegeye et al. in their study among married women in Northern Ethiopia (Zegeye et al., 2020).

The most satisfied with aspect of marital life among the healthcare workers in the study was found to be equalitarian of role and conflictual resolution. This showed that participants in this study are satisfied with role distribution and handling in their family. Conflict is an inevitable part of every marriage (Renanita & Setiawan, 2018). It is therefore important that conflicts are promptly and appropriately resolved to guarantee marital satisfaction. Our findings showed that

that healthcare workers in the study are satisfied with strategies adopted in resolving conflict in their families.

Healthcare workers in this study were less satisfied in the area of communication and personal issues. Effective communication is one of the essential ingredient of a good relationship in marriage (Renanita & Setiawan, 2018). Similarly, a good interpersonal relationship can promote good mental health in both partners (Luong et al., 2011). Our findings therefore implies that participants opined that they did not understand their spouse or their spouse did not understand them which is the purpose of communication (Olson et al., 2008). Summarily, findings showed that only half of the participants were maritally satisfied (Azimian et al., 2017; Odinka et al., 2018; Omran et al., 2015; Rajabi, 2010; Zandipour & Momeni, 2011). Previous study among secondary school teachers in Nigeria showed higher level of marital satisfaction compared to participants in our study (Ofovwe et al., 2013). Although our study did not establish relationship between shift duty and marital satisfaction, the difference in our study and the study among the secondary school teacher might be due to shift/call nature of the work of health professionals. Though, job demand had been documented not to have influenced marital satisfaction (Omolayo et al., 2013).

Findings revealed positive significant correlation between level of perceived stress and marital satisfaction. This negates the inverse relationship that had been documented in the literature (Maroufizadeh et al., 2019). The reason for the difference in the findings of this study and the previous study might be due to generally low level of stress that was reported among participants in this study. This study also showed that as level of perceived stress of the healthcare workers in the study increases, their sexual satisfaction with spouse reduces. This further confirms stress as inhibitors of sexual satisfaction among partners (Jamali et al., 2018; Tavares et al., 2019). This is not unexpected because sexual well-being which is an important predictor of sexual satisfaction is affected by stress (Tavares et al., 2019). As reported by other scholars, findings showed positive correlations between sexual and marital satisfaction (Fallah et al., 2018; Ziaee et al., 2014). This implies that as sexual satisfaction between partners increase, marital satisfaction will also increase. It is therefore important to promote increased sexual satisfaction among healthcare workers to promote marital bliss.

This study also showed that predictors of marital satisfaction were found to be perceived stress (Maroufizadeh et al., 2019); age difference with spouse (Izadi-avanji et al., 2020); number of children (Ghahremani et al., 2021) and family type. As level of perceived stress increases, the level of marital satisfaction of the healthcare workers in the study increases. People who are in marital relationship with older partners in this study have more marital bliss compared to those whose age difference with their spouse is small. However, our findings showed that as number of children in the marriage relationship increases, level of marital satisfaction reduces. Therefore, partners should limit their number of children to promote more marital bliss.

5. Implications and limitations

Stress is part of every work endeavor. Although perceived stress by the participants in this study was found to be low, it influences their sexual satisfaction with their spouse. Our findings imply that stress from work can influence satisfaction of healthcare workers in their intimate relationship. It is important to reduce level of stress that healthcare workers are exposed in order to improve their sexual and marital satisfaction. This may ultimately result in job satisfaction with resultant improvement in the quality of care that they render to the client. Nursing profession account for the largest percentage of healthcare workforce and it is dominated by female. Also, it had been documented to be one of the most stressful profession in the healthcare team. Therefore, level of stress that nurses are exposed to should be reduced to promote sexual satisfaction and marital bliss among them. Lastly, occupational health nurses have a role to play in developing interventions and programme that can assist health workers in effectively managing their stress to promote marital bliss. Our study is purely correlational in nature; it is therefore difficult to absolutely establish the causal relationship between stress, sexual and marital satisfaction.

6. Conclusion

Sexual satisfaction among participants in the study was found to be moderate. Marital satisfaction increases with sexual satisfaction. Stress correlated with reduces sexual satisfaction of the participant. This study also showed that most of the healthcare workers in the study are not

satisfied with the level of communication in their marital relationship. Overall, only half of the participants were satisfied maritally. Predictably, as sexual satisfaction increases, marital satisfaction also increases. People married to partners with higher age differences were more maritally satisfied compared to those with close age differences. Also, as number of children increases, marital satisfaction reduces among the participants. Couples should be encouraged to give birth to moderate number of children to improve sexual satisfaction. Couples should also be encouraged to improve their communication skill to foster better marital bliss. Similarly, stress management strategies should be put in place in workplace to reduce level of stress experienced by healthcare workers. Future studies should be designed to be able to establish this. Also, future studies should be designed to cut across a number of hospitals across different regions in Nigeria.

Acknowledgment

The authors acknowledge the support from the management of the hospital where the study was carried out. The authors appreciate the cooperation enjoyed from all the healthcare workers that participated in the study.

Author contribution

MIO and OO conceived the study, participated in review of literature, data collection and analysis. OOO, GOA and TOD participated in review of literature and data collection. All authors participated in the write up of the manuscript and approved the final draft.

Conflict of interest

No conflict of interest was declared.

Funding

The authors did not receive any external funding for the work.

References

- Akinawo, O. E., Akpunne, B. C., Ahmed, K. A., & Bello, I. B. (2019). Marital satisfaction and job commitment of Nigerian nurses: Implications for family value system. *Asian Journal of Research in Nursing and Health*, 2(2), 1–9.
- Akinsulore, A., Adegbenro, C. A., Balogun, Y. A., Elekwachi, G., Babalola, O. O., & Akinlua, F. M. (2020). Perceived stress and its relationship with coping strategies among doctors at a tertiary hospital in Ile-Ife, Nigeria. *West African Journal of Medicine*, 37(2), 145–151.
- Andreou, E., Alexopoulos, E. C., Lionis, C., Varvogli, L., Gnardellis, C., Chrousos, G. P., & Darviri, C. (2011). Perceived stress scale: Reliability and validity study in Greece. *International Journal of Environmental Research and Public Health*, 8(8), 3287–3298. <https://doi.org/10.3390/ijerph8083287>
- Ariguzo, V. A., Nnorom, G. K., Tijani, O. O., & Amanze, O. P. (2019). Nexus between gender differences and sexual satisfaction in selected married couples in Ilishan, Ogun State, Nigeria. *African Research Review*, 13(4), 107–122. <https://doi.org/10.4314/afrrrev.v13i4.10>
- Azimian, J., Piran, P., Jahanihashemi, H., & Dehghankar, L. (2017). Investigation of marital satisfaction and its relationship with job stress and general health of nurses in Qazvin, Iran. *Electronic Physician*, 9(4), 4231–4237. <https://doi.org/10.19082/4231>
- Azizi, A., & Beyranvand, H. (2018). The relationship between attachment styles with marital satisfaction among nurses. *Iranian Journal of Rehabilitation Research in Nursing (IJRN)*, 4(2), 8–14. <https://doi.org/10.21859/ijrn-04022>
- Baker, O. G., & Alshehri, B. D. (2020). The relationship between job stress and job satisfaction among Saudi nurses: A cross-sectional study. *Nurse Media Journal of Nursing*, 10(3), 292–305. <https://doi.org/10.14710/nmjn.v10i3.32767>
- Chan, S. F., & La Greca, A. M. (2020). Perceived Stress Scale (PSS). *Encyclopedia of Behavioral Medicine*, 1646–1648. https://doi.org/10.1007/978-3-030-39903-0_773
- Ezenwaji, I. O., Eseadi, C., Okide, C. C., Nwosu, N. C., Ugwoke, S. C., Ololo, K. O., Oforka, T. O., & Oboegbulem, A. I. (2019). Work-related stress, burnout, and related sociodemographic factors among nurses. *Medicine*, 98(3), e13889. <https://doi.org/10.1097/md.000000000013889>

- Fallah, M., Naz, M. S. G., Ozgoli, G., Mehrabi, Y., Farnam, F., & Bakhtyari, M. (2018). Correlation of women's marital and sexual satisfaction in different family life cycle stages in Khorram Abad, Iran. *International Journal of Women's Health and Reproduction Sciences*, 6(4), 432–437. <https://doi.org/10.15296/ijwhr.2018.72>
- Fallahnejad, T., Shahlla, F., & Mollahoseiny, S. (2016). Relationship between job satisfaction and marital satisfaction among nurses with rotating working shift: A two year study conducted in hospitals affiliated with Alborz University of Medical Sciences. *International Journal of Pharmaceutical Research & Allied Sciences*, 5(3), 187–193.
- Faremi, F. A., Olatubi, M. I., Adeniyi, K. G., & Salau, O. R. (2019). Assessment of occupational related stress among nurses in two selected hospitals in a city southwestern Nigeria. *International Journal of Africa Nursing Sciences*, 10(2019), 68–73. <https://doi.org/10.1016/j.ijans.2019.01.008>
- Fasiku, M. M., Akande, O. W., Bolarinwa, O. A., & Akande, T. M. (2022). Prevalence and determinants of stress of informal caregiving: A cross-sectional study among informal caregivers of hospitalised patients in a tertiary hospital in Nigeria. *Nigerian Postgraduate Medical Journal*, 29(1), 20. https://doi.org/10.4103/NPMJ.NPMJ_700_21
- Fowers, B. J., & Olson, D. H. (1993). ENRICH marital satisfaction scale: A brief research and clinical tool. *Journal of Family Psychology*, 7(2), 176–185. <https://doi.org/10.1037/0893-3200.7.2.176>
- Ghahremani, F., Doulabi, M. A., & Eslami, M. (2021). The correlation between marital satisfaction and childbearing characteristics in women in Tehran. *International Journal of Adolescent Medicine and Health*, 33(5), 20190018. <https://doi.org/10.1515/IJAMH-2019-0018>
- Ghaibi, E., Reza, M., Manesh, S., Dezfouli, H. J., Zarif, F., Jafari, Z., Gilani, Z., Ghaibi, C. E., Manesh, M. R. S., Dezfouli, H. J., Zarif, F., Jafari, Z., & Gilani, Z. (2022). Comparison of marital satisfaction, emotional divorce and religious commitment among nurses and staff of Ahvaz Government Hospitals. *Eurasian Journal of Chemical, Medicinal and Petroleum Research*, 1(1), 33–39. <https://doi.org/10.5281/ZENODO.7353470>
- Ha, B. N., & Ha, E. L. M. (2019). Effect of quality of working life on psychological well-being and marital satisfaction among married resident females at faculty of medicine – Zagazig University. *Egyptian Journal of Occupational Medicine*, 43(2), 269–282.
- Ingwu, J., Essien, U., Opara, H., Chinenye, O., & Egbechi, C. (2018). Sources and perceived effects of work-related stress among nurses working in acute care units of university of Nigeria teaching hospital, Enugu - Nigeria. *Journal of Advances in Medicine and Medical Research*, 25(1), 1–9. <https://doi.org/10.9734/jammr/2018/38703>
- Işık, R. A., & Kaya, Y. (2022). The relationships among perceived stress, conflict resolution styles, spousal support and marital satisfaction during the COVID-19 quarantine. *Current Psychology*, 41(6), 3328–3338. <https://doi.org/10.1007/S12144-022-02737-4/TABLES/5>
- Izadi-avanji, F. S., Takbiri, B. A., Imeni, M., Gilasi, H. R., & Amerian, M. (2020). Comparison of marital satisfaction in the elderly and non-elderly and related factors in 2012. *Preventive Care in Nursing & Midwifery Journal*, 10(1), 31–38.
- Jamali, S., Poornowrooz, N., Mosallanezhad, Z., & Alborzi, M. (2018). Correlation between sexual satisfaction and self-esteem and stress in women of reproductive age. *Journal of Clinical and Diagnostic Research*, 12(10), QC16–QC19. <https://doi.org/10.7860/JCDR/2018/37423.12152>
- Ji, F., Jiang, D., Lin, X., Zhang, W., Zheng, W., Cheng, C., Lin, C., Hu, L., & Zhuo, C. (2017). Sexual life satisfaction and its associated socio-demographic and workplace factors among chinese female nurses of tertiary general hospitals. *Oncotarget*, 8(33), 54472–54477. <https://doi.org/10.18632/ONCOTARGET.17664>
- Karimi, R., Bakhtiyari, M., & Masjedi Arani, A. (2019). Protective factors of marital stability in long-term marriage globally: A systematic review. *Epidemiology and Health*, 41, e2019023. <https://doi.org/10.4178/EPIH.E2019023>
- Kayabaşı, Ö., & Sözbir, Ş. Y. (2020). The relationship between quality of life , perceived stress , marital satisfaction in women conceived through ART. *Journal of Reproductive and Infant Psychology*, 40(2), 1–10. <https://doi.org/10.1080/02646838.2020.1788211>
- Khan, F., & Aftab, S. (2013). Marital satisfaction and perceived social support as vulnerability factors to institute of clinical psychology. *American International Journal of Social Science*, 2(5), 99–107. http://www.aijssnet.com/journals/Vol_2_No_5_September_2013/11.pdf

- Luong, G., Charles, S. T., & Fingerman, K. L. (2011). Better with age: Social relationships across adulthood. *Journal of Social and Personal Relationships*, 28(1), 9–23. <https://doi.org/10.1177/0265407510391362>
- Malm, E. K., Oti-Boadi, M., Adom-Boakye, N. A., & Andah, A. (2022). Marital satisfaction and dissatisfaction among Ghanaians. *Journal of Family Issues*, 0(0). <https://doi.org/10.1177/0192513X221126752>
- Maroufizadeh, S., Hosseini, M., Foroushani, A. R., Omani-Samani, R., & Amini, P. (2019). The relationship between perceived stress and marital satisfaction in couples with infertility: Actor-partner interdependence model. *International Journal of Fertility and Sterility*, 13(1), 66–71. <https://doi.org/10.22074/ijfs.2019.5437.Introduction>
- Mashoufi, M., Sarafraz, N., Shadman, A., Abedi, S., & Mardi, A. (2022). Relationship between health literacy and marital and sexual satisfaction and some demographic factors in women referring to health centers in Ardabil in 2019. *Journal of Health*, 13(1), 49–59.
- Masoumi, S. Z., Ph, D., Garousian, M., Sc, M., Khani, S., & Sc, B. (2016). Comparison of quality of life, sexual satisfaction and marital satisfaction between fertile and infertile couples. *International Journal of Fertility and Sterility*, 10(3), 290–296.
- Odinka, J. I., Nwoke, M., Chukwuorji, J. C., Egbuagu, K., Mefoh, P., Odinka, P. C., Amadi, K. U., & Muomah, R. C. (2018). Post-partum depression, anxiety and marital satisfaction: A perspective from Southeastern Nigeria. *South African Journal of Psychiatry*, 24(1), 1–8. <https://doi.org/10.4102/SAJPSYCHIATRY.V24I0.1109>
- Ofovwe, C. E., Ofili, A. N., Ojetu, O. G., & Okosun, F. E. (2013). Marital satisfaction, job satisfaction and psychological health of secondary school teachers. *Health*, 5(4), 663–668. <https://doi.org/10.4236/HEALTH.2013.54087>
- Ogunsuji, O. O., Adebayo, O., Olaopa, O., Efuntoye, O., Agbogidi, J. M., Kanmodi, K., Buowari, D. Y., Igbokwe, M., Oiwoh, S. O., Kpuduwei, S. P., Adeniyi, M. A., Fagbule, O. F., Ilesanmi, O. S., & Atilola, O. (2019). Burnout among Nigerian doctors: A systematic review. *Nigerian Medical Practitioner*, 76(1–3), 24–29. <https://doi.org/10.4314/nmp.v76i1-3>.
- Olatubi, M. I., & Ogunfowokan, A. A. (2020). *Relationship between work-related stress, resilience, and job performances of clinical nurses a preliminary study*. Sigma's VIRTUAL 31st International Nursing Research Congress, Abstract #104165.
- Olson, D. H., Olson-Sigg, A., & Larson, P. (2008). *The Couple Check Up* (1st Ed). Thomas Nelson.
- Omolayo, B. O., Falegan, T., & Ajila, C. K. (2013). Influence of job demand and employment status on marital conflict and marital satisfaction among women in Ekiti State, Nigeria. *Journal of Psychology and Behavioral Science*, 1(1), 8–18.
- Omran, S. A., Sheikholeslami, F., Tabari, R., Leili, E. K., & Paryad, E. (2015). Role of career factors on marital satisfaction of nurses. *Journal of Holistic Nursing and Midwifery*, 25(4), 102–109.
- Onigbogi, C., & Banerjee, S. (2019). Prevalence of psychosocial stress and its risk factors among health-care workers in Nigeria: A systematic review and meta-analysis. *Nigerian Medical Journal*, 60(5), 238–244. https://doi.org/10.4103/nmj.nmj_67_19
- Palha-Fernandes, E., Alves, P., & Lourenço, M. (2019). Sexual satisfaction determinants and its relation with perfectionism: A cross-sectional study in an academic community. *Sexual and Relationship Therapy*, 37(1), 100–114. <https://doi.org/10.1080/14681994.2019.1677884>
- Pinney, E. M., Gerrard, M., & Denney, N. W. (1987). The Pinney Sexual Satisfaction Inventory. *The Journal of Sex Research*, 23(2), 233–251. <https://doi.org/10.1080/00224498709551359>
- Pourakbaran, E., Amir, S., & Yazdi, A. (2015). A study of sexual functioning and marital satisfaction in women with and without history of labor. *Journal of Fundamentals of Mental Health*, 17(4), 202–208.
- Rajabi, R. G. (2010). Factorial structure of marital satisfaction scale in married staff members of Shahid Chamran University. *Iranian Journal of Psychiatry and Clinical Psychology*, 15(4), 351–358.
- Renanita, T., & Setiawan, J. L. (2018). Marital satisfaction in terms of communication , conflict resolution, sexual intimacy, and financial relations among working and non-working wives. *Makara Human Behavior Studies in Asia*, 22(1), 1190318. <https://doi.org/10.7454/hubs.asia.1190318>

- Rostami, A., Ghazinour, M., & Richter, J. (2013). Marital satisfaction: The differential impact of social support dependent on situation and gender in medical staff in Iran. *Global Journal of Health Science*, 5(4), 151–164. <https://doi.org/10.5539/gjhs.v5n4p151>
- Shahhosseini, Z., Gardeshi, Z. H., Pourasghar, M., & Salehi, F. (2014). A review of affecting factors on sexual satisfaction in women. *Mater Sociomed*, 26(6), 378–381. <https://doi.org/10.5455/msm.2014.26.378-381>
- Siqueira Reis, R., Ferreira Hino, A. A., & RomÉlio Rodriguez AÑez, C. (2010). Perceived stress scale: Reliability and validity study in Brazil. *Journal of Health Psychology*, 15(1), 107–114. <https://doi.org/10.1177/1359105309346343>
- Taghani, R., Ashrafizaveh, A., & Soodkhori, M. G. (2019). Marital Satisfaction and Its Associated Factors At Reproductive Age Women Referred to Health centers. *Journal of Education and Health Promotion*, 8(133), 1–5. <https://doi.org/10.4103/jehp.jehp>
- Takbiri, A., Imeni, M., & Azizi fini, E. (2017). The Relationship between sexual satisfaction and marital satisfaction in elderly. *Journal of Gerontology*, 2(2), 43–50. <https://doi.org/10.29252/joge.2.2.43>
- Tampieri, A. (2022). The effects of educational assortative matching on job and marital satisfaction. *Journal of Behavioral and Experimental Economics*, 98, 101883. <https://doi.org/10.1016/J.SOCEC.2022.101883>
- Tavares, I. M., Schlagintweit, H. E., Nobre, P. J., & Rosen, N. O. (2019). Sexual well-being and perceived stress in couples transitioning to parenthood: A dyadic analysis. *International Journal of Clinical and Health Psychology*, 19(3), 198–208. <https://doi.org/10.1016/j.ijchp.2019.07.004>
- Trujillo, H. M., & González-Cabrera, J. M. (2007). Psychometric properties of the European Spanish version of the Perceived Stress Scale (PSS). *The Spanish Journal of Psychology*, 9(1), 86–93.
- Umoe, D. E., Ella, R. E., Esienumoh, E., Nwakwue, N. C., & Catherine, T.-P. (2020). Stress related factors among nurses working in accident and emergency in a selected federal government hospital in South-South Nigeria. *Global Journal of Health Science*, 12(8), 166–175. <https://doi.org/10.5539/gjhs.v12n8p166>
- Yamane, T. (1973). *Statistics: An introductory analysis* (3rd Editio). Harper and Row.
- Zandipour, T., & Momeni, M. J. (2011). A study on the relationship between marital satisfaction and job satisfaction among employees of sewage water company in Tehran. *Journal of Career & Organizational Counseling*, 3(7), 113–129.
- Zarei, S., & Fooladvand, K. (2019). The moderating effect of self- differentiation in the relationship between perceived stress and marital adjustment in married nurses. *Iranian Journal of Psychiatric Nursing (IJPN)*, 7(2), 48–55. <https://doi.org/10.21859/ijpn-07207>
- Zegeye, B., Woldeamanuel, G. G., Negash, W., & Shibre, G. (2020). Sexual satisfaction and its associated factors among married women in Northern Ethiopia. *Ethiopian Journal of Health Sciences*, 30(2), 169–178. <https://doi.org/10.4314/ejhs.v30i2.4>
- Ziaee, T., Jannati, Y., Mobasheri, E., Taghavi, T., Abdollahi, H., Modanloo, M., & Behnampour, N. (2014). The relationship between marital and sexual satisfaction among married women employees at Golestan University of Medical Sciences, Iran. *Iranian Journal of Psychiatry and Behavioral Sciences*, 8(2), 44–51.

