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CAREGIVER BURDEN: UNDERSTANDING THE EFFECTS OF NATURE'S LOVE AND SALUTOGENESIS IN ELDERLY SPOUSES WITH CHRONIC ILLNESS

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KEYWORDS	ABSTRACT
<p>Nature-loving, Salutogenesis, Caregiver Burden, Older Spouses, Chronic Illness</p>	<p>The study was conducted to find relationship between nature, Salutogenesis & caregiver burden in older spouses with chronic illness. It was hypothesized that there is likely to be relationship amid nature, Salutogenesis & caregiver burden in older spouses with chronic illness. It was hypothesized that nature and Salutogenesis are likely to predict caregiver burden in older spouses with chronic illness. The quantitative method was used to collect the data from 120 participants. The Love for Nature Scale (Sohail & Tariq, 2023), Salutogenesis Wellness Promotion Scale (SWPS) (Becker et al., 2015), & Spousal Caregiving Burden Assessing Scale (BAS; Thara et al., 1998) were the respective scales used in this research. This study will offer indigenous basis for researchers to identify links between the relatedness of Love for Nature, Salutogenesis and Spousal Caregiver Burden in the Older adults. Findings showed negative link between nature, Salutogenesis & caregiver burden. Duration of chronic illness negatively predicts caregiver burden whereas seasonal nature & Salutogenesis positively predict caregiver burden. The findings of research are beneficial for the counselling of older adults, especially the ones who are providing care to their spouses.</p>
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INTRODUCTION

The natural world's sights, including those of plants, animals, terrain, and other topographies and products of earth, are contrasted with those of humans or human creation (Sohail & Tariq, 2023). Love for nature supports us in recovering from the effects of stress and letting us forget our daily concerns. It also alleviates our mood. Two of positive effects are lower blood pressure and stable heart rate. Nature has benefit of getting people outside and offering opportunities

for social interaction. Salutogenesis is field of positive health practices that investigates people being healthy or remaining unwell (Polhuis, Vaandrager, Muthu & Koelen, 2020). Increasing resilience is one example of a positive approach to health. Salutogenesis is especially important in understanding stress that many older people face because of uncertain future characterized by depletion of economic resources, social networks dwindling, health & quality deteriorating (Lindern, Lymeus & Hartig, 2022). The physical, financial, and mental difficulties of caring for a loved one, usually a family member, who is suffering from a medical problem are referred to as caregiver burden (International Review of Neurobiology, 2017). Caregiver strain is likely to decline health-related issues in caregivers, as well as lessen quality of life, reduced immunity, and death. Caregivers of different nations and cultures have been seen for psychological stress of caregiving and its link towards unavoidable health problems (Garlo, O'Leary, Ness & Fried, 2010).

Caregivers' partners confront several challenges. They may feel socially isolated, and it may be difficult for them to balance their caregiving responsibilities with other obligations, such as the family care. Caregiving can have the numerable financial problem, especially families having low income may force both partners to quit their job or may require sufficient money for home repairs. Every condition poses different challenges. Patients' spouse is generally afraid to leave the patient alone, especially if they noticed initial symptoms, and many avoid having sexual relations with patient. consequently, couples reported lower marriage happiness, even though most patients deny having any marital problems in romantic relationships (Cassepp, Gonzales, Frazier & Ferrer, 2023; Flesch, Batistoni, Neri & Cachioni, 2017). The benefits of providing care include making care receiver happy, preserving their dignity, and maximizing their potential, improving their connection, fulfilling their perceived obligations, sharing love and support, & growing personally. Chronic sickness, often known as non-communicable diseases, is largest cause of the death worldwide and includes cardiovascular diseases, malignancies, respiratory disorders, and diabetes (Daar, Singer, Persad, Pramming, Matthews, Beaglehole & Bell, 2007). Chronic illness is long-term condition that progresses slowly & is rarely addressed (Charmaz, 1991).

Objectives of Study

1. To determine love for nature affects psychological well-being (patient and caregiver).
2. It aims to demonstrate the diverse burden of caregiver relief by being with the nature.
3. The study aims to determine the impact of salutogenesis upon the burden of caregiver.
4. To investigate the impact of love for nature and salutogenesis on the caregiver burden.
5. To determine that how much the caregiver is caring as well as loving for their spouse.

LITERATURE REVIEW

The study was conducted on older adults with nature by Zandieh, Martinez and Flacke (2019), showing that older individuals have less access to neighborhood parks and outdoor fitness equipment. In high- vs low-deprivation locations, there have been recorded spatial disparities in the neighborhood green space characteristics (size of green space) and these disparities have been hypothesized to affect older people's outdoor walking levels (Levinger, Cerin, Milner, &

Hill, 2022; Li, Xu, Kang & Steemers, 2023). Another study conducted with the 77 participants, 70-year-old, who spent time outside every day, had fewer complaints of usual aging concerns (such as aching bones and difficulties sleeping) than those who did not spent time with nature. Finally, it helps to strengthen your immune system. According to one of study, women who spent six hours in the woods over two days raised their white blood cells, which fight viruses, and boost lasted around week after trial (Chlebowski, 2022; Nissola, 2023). A study conducted by Happich, König and Hajek (2022), examined how spousal care affects the caregiver's (and occasionally the care recipient's) life, but few have considered how it affects the partnership. To determine whether the commencement of spousal caring or care received in the person's life is connected with a change in their own partnership traits, study's objective was to evaluate this relationship.

Findings showed that spousal care has an impact on both care users and caregivers (Gonçalves, Hafe & Filipe (2021). Several couple-based intervention programs have been put into place in recent years to support couples in these trying circumstances (Vatter, McDonald, Stanmore, Clare, McCormick & Leroi, 2018). Taking care of sick partner give a feeling of 'meaning,' which can improve THE overall quality of life (Ahn & Logan, 2022). Gallagher and Rickenbach (2020) demonstrated being a caregiver for one's spouse is becoming more and more prevalent, and it can change dynamics of a marriage as it ages. The findings revealed that while some caregivers struggle to find fulfillment and enjoyment in their caregiving roles, others claimed that their shared illness or physical disability brought them closer. Caregivers who reported a low sense of couple hood talked of feeling unhappy & alone, stuck in their relationship. Some caregivers may have been able to reframe experience as an opportunity to serve as role models for others and a reminder that things could be worse if they had a strong sense of couple-hood. It gives a sense of coherence (Turró, Sala, Viñas, Juncà, Perxas & Olmo, 2023). There are researches that look at how spousal caregiving load in older adults might be enhanced (Duan & Chen, 2023; Hawkey et al., 2020; Liu et al., 2020), but few look at how Love for Nature and Salutogenesis are related, and even fewer talk about the Pakistani culture and religion or didn't know about salutogenesis.

Significance of study

Nature affects everyone and is admired by everyone, irrespective of age. Caregiving of older adults with chronic illness is a burden on spouses. They do suffer psychological issues being in the same place. Nature is a better option to relieve burden of being the status of the caregiver of a spouse with a chronic illness. So, exploring nature helps them as they feel being in the natural environment and thus overcome their burden by spending time with nature. When we wake up early in morning and remove curtains to get fresh air and to feel the early sun rays which provide freshness as well as medication. This activity in morning is very useful in removing burden of both patient and caregiver. Similarly, chirping of birds and blossoming of colorful flowers with butterflies flying around the flowers give refreshing feelings. Spending time in gardening and walking on lush green grass barefoot is also an effective way of relieving stress (Tosoni, 2022). By indulging themselves in such things burden of both caregiver and patient would be overcome. The impact of Salutogenesis in older adults with chronic illness in spousal

caregiving must be seen. Besides, to investigate whether Salutogenesis affects caregiver burden in a positive way or in negative way. Thus, rationale of the study was to study the relationship between nature-loving, salutogenesis, and caregiver burden in older spouses with the chronic illnesses.

RESEARCH METHODOLOGY

It is quantitative research, in which purposive sampling was used. The participants selected were (N=120) of the ages of 60 and above of both the genders. The participants were selected from Lahore, Pakistan. These participants are those who fulfilled the inclusion criteria of the research, that is, ages 60 and above, married, and with spouse having chronic illness. The data was collected through the questionnaires. In informed consent, permission was taken from the participants. They voluntarily agreed to fill our questionnaire. The researcher has explained the purpose and procedure to them. They were assured that their information will be kept confidential.

Demographic Information Sheet

Demographic sheet comprises age, gender, education, occupation, type of Marriage (Arrange marriage, By choice, Both), duration of Marriage, monthly Income, age at time of marriage, belong to rural (village), urban (city), spouse Age, spouse Belong to rural (village) urban (city), spouse education, spouse occupation, number of children (if yes no. of son & no. of daughter, If no, give reason), no. of Married children, no. of Unmarried children, family type (Nuclear, Joint, if joint, with whom you are living? Parents, In-laws, Others, specify), chronic illness, duration of chronic illness, how do you see your spousal care? (1= Not at all caring, 10= Very caring).

Love For Nature Scale (LNS; Sohail and Tariq,2023)

In-depth interviews method was used in study to understand the behavior of people. Total 120 students were interviewed from Lahore Punjab with age range 60-85. It consists 32 items with four subscales (13 items for aesthetic love, 8 for individual well-being, 6 items for plantation, & 5 for seasonal). It has response rate ranging from strongly agree to strongly disagree (1-4). This scale is suitable for age range of 18 onward. Internal consistency showed good Cronbach from .60 to .83. Higher score on each scale shows higher level of love for the nature (Sohail & Tariq, 2023).

Salutogenic Wellness Promotion Scale for Older Adults (SWPS; Becker et al., 2015)

SWPS (Salutogenic Wellness Promotion Scale) was adapted with expert support to measure health-promoting actions of older individuals to extend of work done with other populations. Adult version items that had previously been proved to be valid in other samples were utilized in the 25-items testing presence of health-promoting activities. Participants used a Likert scale to indicate how often they engaged in given health behavior or cognition: 5 (always), 4 (often), 3 (occasionally), 2 (once in while), 1 (never). The reliability for this scale was 0.87 (Becker et al., 2015).

Burden Assessment Schedule (BAS; THARA et al., 1998)

The burden assessment schedule (BAS) is designed to measure both objective and subjective burden experienced by primary care providers caring for chronically mentally ill patients. This 38-item instrument was created through step-by-step ethnographic research. Thru construction of schedule, reliability tests were performed. 1) To some extent, 2) very much, 3) not at all are response options of scale. The inter-rater reliability between interviewers was 0.80 (Thara et al., 1998).

RESULTS OF STUDY

The current study has been conducted to investigate the relationship between nature-loving, salutogenesis and caregiver burden in older spouses with chronic illness. Data was screened for checking the discrepancies and missing values. The statistics that are both descriptive and inferential were used to analyze data. Firstly, we found the reliability of the respective study variables which were good. The correlation and Regression analysis have been computed to find out relationship amid nature-loving, salutogenesis, and caregiver burden and predictive value of nature-loving, salutogenesis, and caregiver burden in older spouses with the chronic illness.

Table 1*Psychometric Properties of Study Variables (N=120)*

Variables	M	SD	Range	α
Nature	60.11	9.79	85-40	.82
Aesthetic love	23.81	5.89	13-45	.85
Plantations	9.78	2.87	18-6	.76
Individual WB	12.73	3.20	21-8	.74
Seasonal	10.55	2.62	17-5	.61
Salutogenesis	54.25	15.70	94-28	.93
Caregiving Burden	73.46	10.59	99-45	.83

Note. M= Mean, SD= Standard Deviation, Range, α = Cronbach's Alpha (Reliability)

The results of current study revealed that all the scales in this table underwent the Cronbach's reliability for internal consistency. The outcome demonstrated the validity and reliability of all scales.

Table 2*Correlation Analysis (N=120)*

Variables	N	M	SD	1	2	3	4	5	6
Nature (Aesthetic love)	120	23.80	5.89		.342***	.280**	.158	.300**	-.157
Plantations	120	9.78	2.87			.327***	.098	.183*	-.160
Individual well-beings	120	12.73	3.19				.036	.247**	-0.71
Seasonals	120	10.55	2.62					.071	.033
Salutogenesis	120	54.25	15.69						-.040
Caregiving burden	120	73.46	10.59						-

Note: 1=Aesthetic love, 2= Plantation, 3=Individual well-beings, 4= Seasonals, 5= Salutogenesis, 6= spousal caregiving burden

Pearson product moment correlation analysis showed that caregiving burden was negatively significant with nature and was negatively significant with salutogenesis as evident from the results.

Table 3
Linear regression Analysis Predicting the Impact of Caregiving Burden

Variables	Caregiving Burden		
	B	β	SE
Constant	86.20**		9.32
Chronic Illness	-1.15**	-0.34	3.36
Duration of Chronic Illness	-.66**	-0.44	1.44
Perceives spousal care	-.14*	-.03	.40
Nature	-.87*	-.81	1.10
Aesthetic love	.64	.36	1.13
Plantations	.32	.09	1.09
Individual well-beings	.89	.27	1.14
Seasonal	1.22	.30	1.22
Salutogenesis	.007	.01	.07
R2	.05		
$\Delta R2$.05		

Note: K=constant, $\Delta R2$ = Change of coefficient of determination, R2= Coefficient of Determination

Linear regression has carried out to examine the predicting impact of chronic illness, duration of the chronic illness, perceives spousal care, nature (aesthetic love, plantations, individual well-beings and seasonal) and salutogenesis on the caregiving burden. The chronic illness and duration of chronic illness is a negatively significant predictor of caregiver burden because the caregiver becomes used to it and become habitual of the caregiving. Nature is also negatively significant predictor of caregiver burden because the more the caregiver is close to nature, the less burden he/she feels. Nature gives a soothing effect to the individual and reduces the level of stress.

DISCUSSION

The current research has been conducted to find out relationship amid nature, salutogenesis and the spousal burden of caregiving in older adults with chronic illness. It was hypothesized that there is likely to be a relationship between nature, salutogenesis and spousal burden of caregiving in older adults with chronic illness. Spousal caregiving burden helps spouse who is facing with any chronic ailment but the burden on the spouses (care-givers) sometimes makes them frustrated, anxiety, less socialize and effects adversely on the physical and mental health of the spouse (caregiver) (Phillips et al., 2023). The bad effect of burden effects the care-givers mentally & physically. The low interest in caregiving would be side effects by being frustrated

and in stress. The social life effects very badly. The spouse (care-givers) is totally dependent in homes and socializes less in order to give attention towards the spouse facing chronic illness (Umrigar & Mhaske, 2022). A study upon depression in caregiver spouses of cancer patients in Pakistan, it was discovered that the female caregiver spouses were more depressed than male caregiver spouses. The severity of depression is most important indicator of low quality of life. Caring for a handicapped people was found to decrease health, disrupt social and family life, and raise stress, anxiety, depression among care-givers, according to study of 256 care-givers' accounts.

Care-giving stress affects women more than males, according to Women's health.gov (a project of the US Department of Health and Human Services Office on the Women's Health). Women account for approximately 75% of all cases of mental, physical, or financial stress (Asima et al., 2015; Umrigar, & Mhaske, 2022). Caregiving burden depends on religion, socio-culture, and economic systems. In many cultures, caregiving is not a part of the respective spouse. It is the responsibility of primary care services, or nurses. The people get hired nurses for the patient in order to get better attention and care from them as compared towards their respective spouses (Detaille et al., 2020). Even some spouses left their respective spouses after the diagnoses of any chronic ailment in order to live an independent, happy and healthy life rather than making themselves bound towards caregiving (Umrigar, & Mhaske, 2022). In Western countries, this concept is very common. Thus, the spouses didn't want themselves burdened towards these activities. They know better that by being indulging themselves in it would spoil their quality of life. Even in Western countries, the primary care services or concept of hiring nurses is very common.

Even sometimes, especially in older ages, if parents are living with their children, they got their parents admitted towards old homes rather than caring them as it's their responsibility just in order to get privacy in their life. My personal experience was in US, my brother lives over there and on the front of his apartments besides the road were the old homes. When children sent their parents over there, I heard the screaming of those people who were admitted to the old homes who didn't want to live here. They feel difficulty in living to a new place where they know no one. But children never bother. Even this concept is entering in Pakistan too. People sent their parents to the Edhi old age shelter homes and acknowledging their parents that they would come to meet them on weekends and then years gone no one came and even bothers to have any information of their parents. So, caregiving burden has never been so easy even if its family's responsibility, spouse or children. Everyone's priority is to hire anyone for this service rather than indulging themselves in it. The spousal caregiving in older adults is somehow a positive and negative affect. We can all relate to the relationship ideal of ageing with the loving spouse.

The various parts that make up a life start to come together along the way and form a story at some time. And it's an immensely romantic idea for two people who have been in a long-term relationship to look back and relish that the story's accomplishments together. Naturally, the difficulties that come with getting the older might reduce that happiness and fulfilment. The prospect of physical and mental ageing scares a lot of people. And they take immense solace in

knowing that loyal spouse will stand by their side till the bitter end. But those difficulties aren't always dispersed equally, as is frequently case. Even though they spend almost all their time with their significant other, spousal caregivers frequently describe feeling extremely alone in their roles. The change in nature of relationship—from lover to nurse—is frequently to blame. You two are no longer partners. Instead, each is largely dependent upon other. It's not unusual for caregivers to have intense feelings of loss, as if the person they're caring for has suddenly changed dramatically (Kilty et al., 2019). This is especially valid for the partners who look after people with dementia. It can be distressing to lose closeness and friendship as a result. Family care-givers may develop resentment towards the more dependent partner. So how do spousal caregivers preserve their marriage while still providing care? Whenever feasible, the rigidly compartmentalizing your roles is one of best ways to keep marriage strong while providing care.

Caregiving responsibilities, including as feeding, toileting, and bathing, should be carried out quickly and effectively. Then, make time aside for you and your husband to reconnect as a pair, separate from the illness that is the cause of current situation (Friesen, 2017). Additionally, spouse caregivers must be disciplined to take care of their own health. The healthy caretaker frequently neglects their own needs in favor of their partner, who is more in need. In the end, this is detrimental to both parties. Every day, schedule some time for yourself, even if it's just briefly. Take a 30-minute walk by yourself. While reading the newspaper, sip your coffee. It can be quite beneficial to do whatever little things you can to feel like the regular person. It appears normal for spouses to care for one another when they are sick as part of a close bond. Couples are taking on this task over a lengthy period of time and with little to no assistance from experts or other family members. "Taking care of one another" is a problem that should have to do on own in a time when complex pharmaceutical regimens, wound care, and duties related to complex chronic care are commonplace. Spousal caregivers need to be given a lot more consideration. It would be easier to design interventions that support but do not replace primary linking if there was a greater knowledge of how marital relations in caregiving differ from those of adult children or other family ties. Both partners are at risk, even if one spouse is unwell.

CONCLUSION

The current study was conducted to examine existence of relationship among three variables; nature, salutogenesis and spousal caregiving burden as well as this study focused on how the impacts of nature and a salutogenesis person affect spousal caregiving burden in older adults with chronic illness because especially at older ages it is difficult to caregiver the partner with chronic illness as respect to that similar old age time period. As well as when both of partners suffer from chronic illness. This study was conducted to look at how people caregiver their partner while living with the spouse for so long period and how they understand their partner while caregiving and how nature impacts their burden of caregiving and how it impacts the spouse suffering chronic illness too. The impact of salutogenesis on the caregiving burden for the spouse. Thus, results and findings of the current study show that there is negative relation amid nature, salutogenesis with the spousal caregiving burden in older adults with the chronic

illness.

Suggestions & Implications

1. The suggestion for further study is that the researcher should conduct a study on large sample size for determining issues on huge level from all over Pakistan.
2. Future research should be led by using diverse methods for better results. The study will help us better know how to counsel older persons, who are caring for spouse.
3. To give awareness to older adults about living a healthy and positive life in a better way; older adults are very conscious of health & work to maintain it as in older age.
4. The study's findings can assist psychologists and counselors in developing appropriate intervention techniques to reduce caregiver burden, mainly for older spouses.
5. Seminars, and awareness programs should be led to aware for ways to rally well-being for those, suffering from the chronic illness to involve themselves in the nature.

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