

Study of Relationship between Health, Integrity and Depression in the Elderly Population: A Salutogenic Approach

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Abstract

Background: The salutogenesis is very relevant concept in today's era when we are shifting focus from tertiary to primordial prevention where it can show us a way to remain healthy and act as a concept of pre-primordial prevention. These apparent links between the sense of coherence which defines the integrity of an individual, depression which is a consequence of changed demands of life and its implications on the health of an individual will provide a conceptual framework to this study. **Subjects and Methods:** This is a cross sectional community based study done on above 60 years of age from an urban area which is a field practice area of the institution taken as study group A and elderly residing in the old age homes of the city taken as study group B. They were explained about the details of filling the questionnaires in advance and their identity were kept confidential and the participation was voluntary. Orientation to life questionnaire i.e. OLCQ-13 version was used to estimate sense of coherence scores of the individual. GDS or geriatric depression scale is an appropriate questionnaire used for measuring the depressional status of an elderly person in their respective life stressful conditions. **Results:** Our study showed that the 61.7% of total population of study group A were males and 38.33% were females. 15% of the total elderly of study group A have high SOC, 84.17% have medium SOC and 1% have low SOC. 13.33% of the elderly in study group B have high SOC whereas 87% have medium SOC. **Conclusion:** We concluded that SOC and BMI are directly proportional to each other; GDS and education were in direct correlation to each other; SOC was found to be directly proportional to the educational status of the person.

Keywords: Depression, Elderly people, SOC, GDS.

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Received: January 2020

Accepted: January 2020

Introduction

Elderly persons experience a complex array of physical (poor sleep, pain, low energy, poor concentration, poor appetite), psychological (negative thoughts, low self esteem, sadness, hopelessness) and social changes (social withdrawal, decrease in activity, decreased productivity, lack of initiation. Yet despite high prevalence, depression remains under diagnosed.^[1] Salutogenesis means genesis of health as opposed to pathogenesis. It was introduced by Dr. Aaron Antonovsky, an American-Israeli sociologist. The concept includes² firstly, the orientation towards problem solving and secondly the capacity to use the resources available. The concept consists of 2 major pillars supporting a healthy life i.e. 1. Sense of coherence and 2. Generalized resistance resources.^[2]

Whether a stress factor will be pathogenic, neutral or salutary depends on the generalized resistance resources. The GRR's are of both genetic and constitutional and psychosocial characters such as material, knowledge/intelligence, ego identity, coping strategy (rational, flexible, far sighted), social support, commitment (continuance, cohesion, control), cultural stability and a preventive health orientation.^[2,3] GRR's have 2 functions, firstly, they have a continuous effect on life enabling us to make coherent and

meaningful decisions in life which in turn form the SOC and secondly, they function as a potential which can be activated when necessary for managing stress and tension.^[4]

The salutogenesis is very relevant concept in today's era when we are shifting focus from tertiary to primordial prevention where it can show us a way to remain healthy and act as a concept of pre-primordial prevention.

United Nations has ranked India at 134 out of 187 countries in terms of quality of life index/human development index. Within the field of healthcare, quality of life is often regarded in terms of how it is negatively affected, on an individual level. This study aims to change the same i.e. to empower the positive conscience of a person over his negative conscience.

These apparent links between the sense of coherence which defines the integrity of an individual, depression which is a consequence of changed demands of life and its implications on the health of an individual will provide a conceptual framework to this study.

Subjects and Methods

This is a cross sectional community based study done on above 60 years of age from an urban area which is a field practice area of the institution taken as study group A and

elderly residing in the old age homes of the city taken as study group B. They were explained about the details of filling the questionnaires in advance and their identity were kept confidential and the participation was voluntary. It was specified that data will be used only for research purposes.

Study Setting

The elderly people residing in the field study area and in the old age homes were interviewed and the first part of the performa i.e. "the performa questioning the personal and general information" was filled by the interviewer. The remaining two sections i.e. "the orientation to life questionnaire and the geriatric depression scale" respectively were filled up by the elderly persons, assistance was provided to the needy ones in filling up the questionnaire. The scoring of both the questionnaires was done according to the standard procedures.

Number of Subjects Included

A total of 240 elderly persons were included i.e. 120 from old age home residents and 120 from the elderly living in the urban area.

Inclusion and Exclusion Criteria

Persons of age of 60 or above living in old age homes or residents of the urban area were included in this study. The elderly people with any mental problems, deaf and dumb, NRI's, having any previous criminal records, suffering from any communicable disease which may have affected the results in a negative way were excluded from the study.

Methods

Orientation to life questionnaire i.e. OLQ-13 version was used to estimate sense of coherence scores of the individual.⁵ In total the SOC questionnaire has been used in 33 languages in 32 countries.^[3] It consists of four items of manageability which explains the extent to which the person perceives that resources at their disposal are adequate to meet the demands posed by stimuli that bombards them, this is the instrumental or behavioral component of SOC.^[3] It consists of 5 items of comprehensibility which refers to the personal stimuli that confront us deriving from the external and internal environment. The person scoring high on the sense of comprehensibility expects that stimuli they encounter in the future will be predictable, ordered, and explicit, this is the cognitive component of SOC.^[3] 4 items for meaningfulness demonstrate the extent to which the person feels that life makes sense emotionally, that problems and demands are worth investing energy in, are worthy of commitment and engagement, seen as challenges rather than burdens. This is the motivational component of the questionnaire.^[3]

The term quality of life is used to evaluate the general well-being of individuals and societies including the fields of international development, healthcare, and politics. Quality of life should not be confused with the concept of standard of living, which is based primarily on income. Instead, standard indicators of the quality of life include not only

wealth and employment, but also the built environment, physical and mental health, education, recreation and leisure time, and social belonging.^[2] QOL reflects the difference, the gap, between the hopes and expectations of a person and their present experience. Human adaptation is such that life expectations are usually adjusted so as to lie within the realm of what the individual perceives to be possible. This enables people who have difficult life circumstances to maintain a reasonable QOL.

The necessary language modification in OLQ was done in order to adapt it locally. All the OLQ items were fitted to a seven point LIKERT scale. Each option was explained to the people to make it understandable to them. Each question had 7 options ranging from 1 to seven, the first and seventh option being the two extremes of a particular question. The subject was told to select any one option according to his/her orientation towards life. The scores were then cumulated. Possible scores ranging from 13 to 91 with greater scores indicating greater sense of coherence were found, with a mean score of 58.

Geriatric Depression Scale (GDS)

GDS or geriatric depression scale is an appropriate questionnaire used for measuring the depressional status of an elderly person in their respective life stressful conditions.⁶ The GDS questions are answered in a simple "yes" or "no". This simplicity enables the scale to be used with ill or moderately cognitively impaired individuals. The geriatric depression scale short form (GDSSF) is a 15-item self rating scale commonly used as a routine part of comprehensive geriatric assessment.^[7] One point is assigned to each answer and the cumulative score is rated on a scoring grid. The grid sets a range of 0-4 as "normal", 5-9 as "mildly depressed", and 10-15 as "severely depressed".

Unlike other depression scales for adult population, GDSSF does not include somatic symptoms because many of these symptoms (for example, sleep disturbance, weight loss, and pessimism about the future) may be related to the normal process of ageing or to an underlying physical illness.⁸ Many medical problems common to older people may be related to, or intensified by, a depressive disorder. The GDS was found to have 92% sensitivity and 89% specificity when evaluated against diagnostic criteria. The validity and reliability of the tool have been supported through both clinical practice and research based on analysis of Yesavage et al.^[6]

The GDSSF is derived from the 30-item GDS long form (GDSLF), which has high internal consistency and performance that is comparable to the Hamilton depression scale.^[9] Correlations between the GDSSF and the GDSLF range from 0.66 to 0.89.^[7-9] The GDSSF is currently screening tool for most patients admitted to the NARG program.^[1]

Results

Our study showed that the 61.7% of total population of study group A were males and 38.33

% were females. 52.5% of the total elderly of study group A belonged to 60-65 age group category. 65% of total population of study group B were males and 35% were females [Table 1]. The present study showed that 15% of the total elderly of study group A have high soc, 84.17% have medium soc and 1% have low soc (Table 2). 13.33% of the elderly in study group B have high SOC whereas 87% have medium SOC (table 3). In table 4 & 5 showed that 56% of the elderly of study group A having medium SOC are not depressed whereas 9.9% having medium SOC are slightly depressed and 34% of the same are highly depressed. 66% of the elderly of study group B having medium SOC are moderately depressed and 17% are highly depressed. Our study showed that 1.48% of the elderly having medium SOC were of normal weight and healthy and 52% of the elderly of medium SOC combined (underweight+overweight+obese) were not healthy [Table 6]. 61% of the elderly having medium SOC were of normal weight and healthy and 39% of the elderly of medium SOC combined (underweight+overweight+obese) were not healthy [Table 7].

Table 1: Age and Sex

	Age and Sex											
	Study Group A				Study Group B				Total			
	M	F	T	%	M	F	T	%	M	F	T	%
AGE												
60-65	39	24	63	52.5	13	6	19	15.83	52	30	82	34.16
66-70	16	15	31	25.83	14	11	25	20.83	30	26	76	31.66
more than 70	19	7	26	21.66	6	2	8	6.33	25	9	34	13.33
Total	74	46	120		35	19	54		109	65	174	
%	61.66	38.33			65.35	34.65			63.33	36.66		

Table 2: SOC and Education in study group A

	Soc											
	Study Group A											
	High				Medium				Low			
Education	M	F	T	%	M	F	T	%	M	F	T	%
Illiterate					6	26	32	31.68	1	0	1	100
Primary	1	1	2	11.11	5	1	6	5.94	0	0	0	
Secondary	1	0	1	5.55	6	5	11	10.89	0	0	0	
Hr.Sec	2	0	2	11.11	5	3	8	7.92	0	0	0	
Graduate	2	0	2	11.11	4	9	13	14.41	0	0	0	
Post.Gr.	11	1	12	61.11	30	1	31	30.69	0	0	0	
Total No.	17	1	18		56	45	101		1	0	1	100
%	94	5.6			55	45						

Table 3: SOC and Education in study group B

	SOC											
	Study Group B											
	High				Medium				Low			
Education	M	F	T	%	M	F	T	%	M	F	T	%
Illiterate	0	2	2	12.5	6	2	8	7.54	0	0	0	0
Primary	0	0	0	0	4	2	6	5.66	0	0	0	0
Secondary	0	0	0	0	8	6	14	13.2	0	0	0	0
Hr.Sec	0	0	0	0	4	4	8	7.54	0	0	0	0

Graduate	6	0	6	37.5	32	4	36	33.96	0	0	0	0
Post.Gr.	6	2	8	50	12	22	34	32.07	0	0	0	0
Total No.	12	4	16		66	40	106		0	0	0	
%	75	25			62	38			0	0	0	

Table 4: SOC and GDS

	SOC											
	Study Group A											
	High				Medium				Low			
GDS	M	F	T	%	M	F	T	%	M	F	T	%
A	15	1	16	88.88	41	16	57	56	1	0	1	-
B	2	0	2	11.2	5	5	10	9.9	0	0	0	-
C	0	0	0	0	10	24	34	34	0	0	0	-
TOTAL	17	1	18		56	45	101		1	0	1	-
%	89	11			55.4	46						

Table 5: SOC and GDS

	SOC											
	Study Group B											
	High				Medium				Low			
GDS	M	F	T	%	M	F	T	%	M	F	T	%
A	2	2	4	25	10	8	18	17	0	0	0	0
B	10		10	62.5	48	22	70	66	0	0	0	0
C		2	2	12.5	8	10	18	17	0	0	0	0
TOTAL	12	4	16		66	40	106		0	0	0	
%	75	25			62.3	38						

Table 6: SOC and BMI

	SOC											
	Study Group A											
	High				Medium				Low			
BMI	M	F	T	%	M	F	T	%	M	F	T	%
less than 18.5	1	0	1	5.55	1	4	5	5	0	0	0	0
18.5-25	14	0	14	77.8	25	23	48	48	0	0	0	0
25-30	2	1	3	16.7	29	16	45	45	1	0	1	100
more than 30	0	0	0	0	1	3	4	4	0	0	0	0
Total	17	1	18		56	45	101		1	0	1	
%	94	6			55.4	45			100	0		

Table 7: SOC and BMI

	SOC											
	Study Group B											
	High				Medium				Low			
BMI	M	F	T	%	M	F	T	%	M	F	T	%
less than 18.5	0	0	0	0	1	5	6	15	0	0	0	0
18.5-25	11	3	14	87.5	38	25	63	61	0	0	0	0
25-30	1	1	2	12.5	17	8	25	24	0	0	0	0
more than 30	0	0	0	0	0	0	0	0	0	0	0	0
Total	12	4	16		66	38	104		0	0	0	0
%	75	25			63.5	37						

Discussion

The health and well-being of older adults is affected by the level of social activity and the mood states. Researchers have reported the negative effects of loneliness on health in old age (Henkin *et al.*, 1996).^[10] Loneliness, coupled with other physical and mental problems, gives rise to feelings of depression in the elderly persons. Gender differences have been reported in the prevalence of health problems in

elderly persons (Arber & Ginn, 1993).^[11] Results in table 1 shows that there is no gender biased done in the study as the number of male and female subjects in the study groups A & B respectively are nearly equal. As well as in the age categories i.e. 34.16% belong in 60-65 age group; 31.66% in 66-70 age group and 46.66% belong to greater than 70 age group. Therefore there are no gender and age differences in the study.

There is direct correlation between the SOC and GDS as 34% of medium SOC of study group A are severely depressed and 66% of the elderly of medium SOC of study group B are moderately depressed. So the depression status of the elderly living in old age is more than those who live in the urban area. In socio economic classification, out of the total people living in the old age home 31.66% are from the middle class family as compared to 12.5% living in the urban area. This may be possibly because of the low per capita income in the middle class family the elderly are not properly supported by their kith and kin and are forced to move out to old age home.

65% of the illiterates in the study group A are severely depressed whereas only 5.4% come under this category as shown in our study. The probable explanation to this is that more the education, the more is the self-dependence. As more education will provide them more earnings and they can support themselves and their spouses in a better way as done by a non-educated person. 83% of the post graduates have excellent self rated health whereas only 55% of the illiterates have poor self rated health; this may be because of the fact that the post graduates due to their education status have better living conditions as compared to the illiterates. As well as the more educated are more aware about the different health programs and camps conducted by the government and the private sector as compared to that of the illiterates.

It was earlier concluded that 59.33% of male elderly and 40.66% of female elderly were within normal range of BMI, 58.8% of male elderly and 64.63% of female elderly were in overweight range and 57.43% of male and 65.5% of female were placed in obese category.^[12] Corina-aurelia zugrava et al (2012)^[13] which Results similar to the review of literature were found in this study as 51.21% of males and 49.39% of females are in normal BMI range. However there is some difference in the results of BMI in medium SOC

for overweight candidates as only 39.34% of male elderly and 28.91% of the females are overweight. This may be due to the fact that due to medium and high SOC there is more response to the surroundings and the comprehensibility, meaningfulness factor increases which helps them to stay fit.

Conclusion

We concluded that SOC and BMI are directly proportional to each other; GDS and education were in direct correlation to each other; SOC was found to be directly proportional to the educational status of the person.

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How to cite this article: Singh R, Sharma R. Study of Relationship between Health, Integrity and Depression in the Elderly Population: A Salutogenic Approach. Asian J. Med. Res. 2020;9(1):CM07-CM10. DOI: dx.doi.org/10.47009/ajmr.2020.9.1.CM3

Source of Support: Nil, **Conflict of Interest:** None declared.