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KNOWLEDGE ABOUT AGING AND ITS RELATIONSHIP WITH WORRY AND INTOLERANCE OF UNCERTAINTY IN WORKING CLERICAL QUINQUAGENARIANS - AN OBSERVATIONAL STUDY.

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ABSTRACT

BACKGROUND: Retirement builds a stereotype in older individuals as physical and mental decline, changes in self-perceptions and loss of valuable social status at workplace. Individuals and the society tends to create negative perceptions about old age and life after retirement. Lack of knowledge and misconceptions may alter the acceptance of aging and associated uncertainties initiating worry. Therefore the purpose of this study is to evaluate the knowledge of aging and its correlation with worry and intolerance of uncertainty in working clerical quinquagenarians of degree colleges of Belagavi city.

PROCEDURES: An observational study was conducted to examine the knowledge about aging, worry and intolerance of uncertainty in clerical quinquagenarians (N=104, mean age=54.5±2.46) from degree colleges in Belagavi via Facts of aging Quiz, Penn State Worry Questionnaire and Intolerance of Uncertainty Scale.

RESULTS: Total FAQ1 score for males are 23.04±3.96 and females are 23.23±4.36 with no significant difference found. Also, there was positive and significant association found between PSWQ and IUS with p value as 0.002 using Mann-Whitney U test.

CONCLUSION: The study concluded that there was moderate level of knowledge about aging in this population. Also, increase in the level of worrying related to aging is associated with intolerance of uncertainty specific to aging process. Therefore, there is a need to increase the awareness and inculcate positive perspective regarding aging process in the pre-retired population as their scope of acceptance and modification is higher than older individuals.

KEYWORDS : Facts of aging Quiz, Penn State Worry Questionnaire, Intolerance of Uncertainty Scale, quinquagenarians, aging.

INTRODUCTION:

According to Oxford Dictionary, 'Quinquagenarians' is a Latin word used to describe a person who is between 50-59 years of age.[1] Factors such as personality, experiences, stage in the life course and the approach of society toward aging citizens influences one's attitude towards the aging population. Certain health related habits have positive influence on health and life expectancy during later stages of life.[2] Life events namely career changes, adult education, relationship stability or change, child-rearing and post child-rearing, caring for older parents and coping with their loss, preparing for retirement, health changes for women such as going through menopause ranges widely while transiting from mid-life to old age.[3]

Individualised aging and health in terms of reflection and development of attitude is well defined during mid life compared to younger age.[2] Mental and physical health is affected by various ways and is influenced by the utilisation of our time upon retirement. Mental health may be particularly sensitive to change at retirement.[4] Perspective towards increasing age is less acknowledged by the mid-aged individuals.[2]

Realisation about aging and awareness of mortality increases during the fifth decade.[5] The recent studies are proving that having positive attitude towards aging can lead to healthy and longer life expectancy.[6] Positive attitudes towards aging reflect a perspective that personal growth and development can be experienced during later life, while negative attitudes reflect a perspective that older age is a time of physical and mental decline.[7] Positive attitudes in early life and midlife have been associated with increased life satisfaction, health and longevity till 60 years later.[8]

Increase in aging related anxiety may be due to worry in association with negative stereotypes and low level of knowledge about old age.[9] Obtaining less knowledge about aging leads to negative stereotypes early in life which resists to change further in life.[10]

Acquiring adequate knowledge about the changes related to aging would aware them, make them more predictable and may initiate better acceptance and coping strategies.[11] There is a dearth of literature about the negative outcome preferred by the individuals with higher levels of worry and generalized anxiety, hence pathological worry is caused due to intolerance of uncertainty.[12] While relating knowledge about aging

and worry in older adults, there may be significance of intolerance of uncertainty. Sufficient knowledge of the age related changes could decrease the level of uncertainty and increase tolerance of those changes. Similarly, a high level of knowledge about aging could increase the predictability and perceived control of the risks that are caused due to aging.[2]

It is stated that early retirement is caused due to poor health. Therefore, there is an established relationship between improved individual health and high positive perceptions.[13] Accurate knowledge about aging may counteract this process by increasing tolerance of the uncertainty associated with aging, thereby reducing worry and anxiety.[14]

The WHO dictum states that "years have been added to life and now the challenge is to add life to years".[15] Till 2050, the proportion of the individuals above 65 years will be doubled, so further attention is required to study and analyse the attitude towards aging process and health.[2]

The aim of the study was to evaluate the knowledge of aging and its correlation with worry and intolerance of uncertainty in working clerical quinquagenarians of degree colleges of Belagavi city using Facts of aging Quiz, Penn State Worry Questionnaire and Intolerance of Uncertainty.

METHODS:

The present observational study was carried out on clerical staff of degree colleges in Belagavi, Karnataka. The study was approved by the Institutional Ethical Review Committee. One hundred and four met the study criteria, all voluntarily participated in the study and signed informed consent.

The inclusion criteria consisted of clerical staff of both genders between the age group of 50-59 years. The exclusion criteria included subjects diagnosed with psychological disorders, neurological disorders or chronic illness, Subjects with recent traumatic injuries or surgeries in last 3 months and hospitalized for the same.

PROCEDURE:

Demographic data was obtained from each subject followed by filling three self-report questionnaires namely Facts of aging Quiz, The Penn State Worry Questionnaire and Intolerance of Uncertainty Scale.

Facts of aging Quiz is the most widely used measure world-wide for misconceptions about aging. It is a self-administered scale which consists of 50 items. The FAQ asks respondents to make "True", "False" or "Don't Know" judgments about a series of factual statements regarding aging and older people. Total scores ranges from 0 to 50, with higher scores reflecting greater knowledge about aging. The percentage of correct responses measures amount of correct knowledge possessed by a respondent, the percentage of incorrect responses indicates level of misinformation and the percentage of "Don't Know" responses provides a measure of perceived lack of knowledge or ignorance.

The Penn State Worry Questionnaire is employed as a measure to assess tendency to worry via 16 statements, with 5 being reverse scored. All items are measured on a 5-point Likert scale and then summed for a total worry score. The total score of the scale ranges from 16 to 80. Higher scores indicates higher tendency to worry.

Intolerance of uncertainty was assessed with Intolerance of Uncertainty scale-12 consisting of 12 items designed to measure one's tolerance for uncertainty. The twelve statements are measured on a 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. The total score ranges from 12 to 60. Items are summed for a total intolerance score, and higher score indicates higher level of intolerance.

STATISTICAL ANALYSIS:
Statistical analysis was performed using the SPSS software version 23. Descriptive analysis provided for 104 subjects between the age group of 50-59 years. Mann Whitney test was used to check normality of the data. Pearson correlation test was used for correlation analysis between FAQ1 and PSWQ, FAQ1 and IUS, PSWQ and IUS. Mann Whitney Test was used for between group analysis.

RESULTS:
Baseline demographic data was tabulated according to subject's gender, age, BMI, marital status, education and habits (Table 1). Table 3 describes that there is positive and insignificant association at 5% level between FAQ1 and PSWQ, negative and insignificant association at 5% level between FAQ1 and IUS, positive and significant association at 5% level between PSWQ and IUS with p value as 0.002. Between group analyses for PSWQ, Mann Whitney Test was used and it was found to be significant at 5% level. It was observed that female sample respondents have indicated higher mean and male sample respondent's lower SD values (Table 2). Total FAQ1 score for males (23.04±3.96) and females (23.23±4.36) with no significant difference was found.

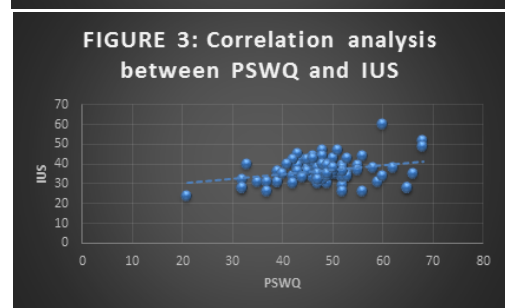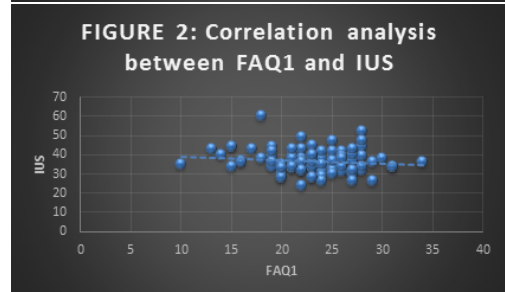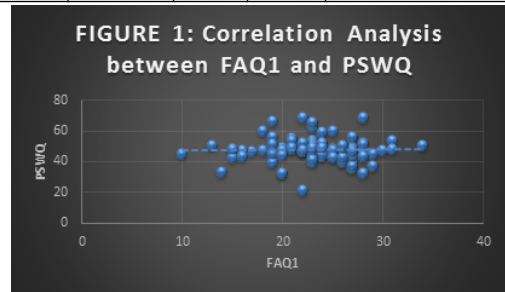**Table 1: Demographic data of the subjects.**

Particulars	Categories	Frequency	%
Gender	Male	62	59.6
	Female	42	40.4
Marital status	Married	93	89.4
	Unmarried	11	10.6
Education	Under Graduation	90	86.5
	DIPLOMA	2	1.9
	Higher Secondary Certificate	7	6.7
	Joint Operations Center	1	1.0
	Secondary School Certificate	4	3.8
Habit	NONE	100	96.2
	SMOKING	2	1.9
	TOBACCO CHEWING	2	1.9
Age	51 – 55 years	74	71.1
	56 – 60 years	30	28.9
BMI	Normal	89	85.6
	Overweight	15	14.4

Table 2: Between group analysis using Mann Whitney Test.

Variable	Gender	Mean	SD	z-value	p-value
FAQ1	Male	23.04	3.96	0.226	0.822
	Female	23.23	4.36		
PSWQ	Male	46.22	7.05	2.793	0.002*
	Female	50.35	7.62		
IUS	Male	37.01	5.73	1.072	0.287
	Female	35.80	5.57		

Table 3: Correlation analysis of Facts of aging Quiz-1, Penn state worry Questionnaire And Intolerance of Uncertainty Scale.

Variable 1	Variable 2	r-value	p-value	Result
FAQ1	PSWQ	0.08%	0.939	Positive & insignificant association at 5% level
FAQ1	IUS	-14.4%	0.144	Negative & insignificant association at 5% level
PSWQ	IUS	30.1%	0.002	Positive & significant association at 5% level

FIGURE 1: Correlation Analysis between FAQ1 and PSWQ

FIGURE 2: Correlation analysis between FAQ1 and IUS

FIGURE 3: Correlation analysis between PSWQ and IUS

DISCUSSION:
The present study has shown to have moderate level of knowledge about aging with no significant relation with worry and intolerance of uncertainty. However, there is statistical significant relation between aging related worry and intolerance of uncertainty. In a study where 120 community-dwelling older adults were evaluated using Facts of aging Quiz, Penn State Worry Questionnaire and Intolerance of Uncertainty. Their results suggest that a good knowledge of the aging process could help decrease aversive uncertainty and thus reduce the level of worry among older adults. Thus, educational programs to increase knowledge about aging could serve as one preventive strategy for anxiety in old age.[14]

In a study, men and women aged 60 years and over were analysed and they concluded that older people who have a more positive attitude to aging are at reduced risk of becoming physically frail or pre-frail. Future research needs to replicate this finding and discover the underlying mechanisms.[16]

Their findings of a study revealed that the younger and older generations demonstrated differences regarding the causal relationship between knowledge, attitudes and discriminatory behaviour towards older people. The paths model between independent and dependent variables in the structural equation modelling was non-equivalent in younger and older groups. For both groups, knowledge about aging and older people led to a positive influence on their image of and prejudice against older people. The effect of prejudice on discriminatory behaviour was significant in the younger group, but not in the older group.[17]

In a study, 105 participants were followed from 6 months before retirement to 12 months after retirement using Depression, anxiety and stress were assessed using the Depression, Anxiety and Stress Scales (DASS21), well-being with the Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS), life satisfaction with the Australian Unity Personal Well-being Index (AUPWI), and self-esteem with the Rosenberg Self-Esteem Scale. They concluded that life transitions provide both threats and opportunities for health-related behaviour change. Transitions can be pivotal moments when people consciously decide to adopt healthier lifestyle or times when they fall into unhealthy behaviour patterns. If the longitudinal patterns found in this study reflect causal associations, it is possible that appropriate planning of use of time in retirement may improve mental health. Specifically, retirees should be encouraged to become more physically active, to sleep more, and to reduce screen time.[4]

LIMITATIONS:
The self- administered questionnaires were time consuming for the subjects. Also the subjects were reluctant to disclose their annual income.

CONCLUSION:
The study concluded that there was moderate level of knowledge about aging in clerical quinquagenarians also correlation between intolerance of uncertainty and worry related to aging.

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