RESEARCH ARTICLE

IMPACT OF INTERVENTION ON QUALITY OF LIFE OF ELDERLY IN INDIA.

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Abstract

In the recent years, the entire world has seen a tremendous increase in the elderly population. Even though countries differ in the numerical criterion for defining the old age, the UN has agreed that the cutoff of 60+ years refers to the older population. When the percentage of older population increases in a country, the country faces various new challenges like social impacts and all. On the social side, the elderly population feels continuously isolated due to the changes in the value system. In the present paper the author discover how better QOL can be achieved through the use of SNS. A self structured standardized questionnaire was used to collect the information regarding QOL of the elderly. A total of 450 elderly respondents were selected randomly from three cities i.e. metro, A class and B class city, 150 from each city. Another self structured questionnaire was also used to collect the information regarding use of SNS; the same questionnaire was administered on 166 elderly. It was an intervention study so both questionnaires were administered on 150 elderly after providing training to the elderly up to 3 months with the help of prepared intervention module to see the effect of intervention on elderly’s QOL. For assessing the impact of intervention on elderly’s quality of life many tests i.e. mean standard deviation and paired t test has been administered. There is a significant effect of intervention on QOL. The present paper concluded that the elderly from metro or A class cities were more benefitted than B class city from the intervention provided to them. After getting intervention regarding use of SNS, the tremendous improvement in elderly’s social life was observed.

Introduction:-

The ageing of population is an obvious consequence of the process of demographic transition. While the countries of the West have already experienced and have planned for their elderly population, it is only in the last one and half decades that countries in Asia too are facing a steady growth of the elderly, as a result of the decline in fertility and mortality, better medical and health care and improvements in the overall quality of life of people. Within Asia, as India and China are the two largest countries in the region, it is expected that they would have a significant proportion of the World’s elderly because of their large population base.

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There has been a progressive increase in both the number and proportion of the aged in India over time, particularly after 1951. Between 1901 and 1951, the proportion of population over age 60 increased marginally from 5 percent to 5.4 percent, while by 2001 this had increased to 7.0 percent. When changes in the decadal growth rate in the general population are compared with those for the elderly population, it is noted that the latter grew at a relatively much faster rate than the general population, since 1951. Furthermore, the decadal percent increase in the elderly population for the period 2001-2011 is likely to be more than double the rate of increase of the general population. The size of the elderly rose in absolute terms during the last century from 12 million in 1901 to approximately 71 million in 2001 and is likely to reach 113 million in 2016. Yet another feature of ageing in India is the fact that the proportion of elderly is much higher in the rural areas than in the urban areas. The sex-wise pattern of growth of elderly population reveals that the increase is greater among women in the recent past, which indicates that elderly women will outnumber elderly men in the future.

There is therefore an urgent need to examine the various aspects of this new and fast growing population to ensure the design of appropriate policy and programmes directed to meet the varied needs of this vulnerable and dependent group.

Every human being passes through various stages in his lifetime i.e. birth, infancy, childhood, adolescence, adulthood and old age. This biological transition through different stages has cultural and human overtones. For the individual, age serves as an important base for self perception and role performance. In an Indian home, elderly are regarded as symbols of the divine and given utmost respect. They are considered as the repositories of wisdom, carriers of traditions and transmitters of experience of ideas of group living.

Aging is progressive development in life span and a marker of life’s journey towards growth and maturity. The word aging is a phenomenon that has been widely discussed in the last decades. Nevertheless this quick aging process also observed in developing countries, still relies on scares. Studies in this area in order to supply the necessary element the proposition of appropriate policies to this growing part of the population; especially taking into account its quality of life (QOL).

Researches indicate that elderly as compared to the younger cohorts, are more vulnerable to certain losses. They may lose their friends, life partners, older relatives, neighbour due to disease, divorce, death, geographical mobility and retirement. It is the age when people face common problems as physical helplessness, economic insecurity, loneliness, increased leisure time, loss of spouse, lack of social support and health complaints etc., which affect the quality of life of theirs.

The term quality of life started as a social scientific index of the relative well-being of whole populations. Nowadays quality of life is more likely to be viewed as an individualized aspect of the modern psyche. This shift in conceptualization is problematic in that, if quality of life is individualized, it cannot be meaningful to assess it in the same way for everyone. Nevertheless, over the years a vast range of methods of measuring quality of life has emerged, leading to several measurement challenges. Physical, health, emotional, social, financial, psychological, spiritual and recreational relations have all been found to be prime determinants of subjective quality of life; for ICT to enhance quality of life for older people they need to mediate the relationships between these important factors and quality of life. To date there is relatively little evidence that ICT has improved the quality of life of older people. Suggestions are made as to why ICT is unlikely to influence life quality for older citizens [1].

For filling up the vacuum in their life, ICT’s play an important role, this helps to decrease loneliness among elderly. Technologies like cell phone, computer, internet, T.V. etc. are the devices which provide them the facility to communicate with others. Hence the present research focuses on the use of social networking sites (SNS) and how it will improve the quality of life of the elderly. Social networks like facebook, linkedin and twitter are very popular among youth. An elderly friendly social network in the native language will provide the elders to meet associate and spend time with people of their choice online. If the portal supports social networking facility with voice and video capability, they would be able to use this facility from their home on a smart phone. Online entertainment facilities would provide them with recreational facilities. These entertainments could be online games, music, video or any other from which the elders would be able to access and enjoy with relative ease [2].

The computer interaction made them more social elderly even expanded their social networks, and the isolated elderly do not want to be involved in society with or without computer interaction [3]. In order to improve the
quality of life of older people and support and prosperity in an ageing society, it is necessary to provide all people over their life course with opportunities for self-fulfillment, learning, education and active life. Older persons have similarly as all other people the right to be assessed as individuals, on the basis of their abilities and needs, regardless of their age, sex, colour of skin, disability or other characteristics. Older persons and their knowledge and experience should be placed in the centre of changes implemented in response to population ageing.

Many elderly people would like to work with computers, but, as also mentioned by the author that even if some elderly people possess a computer and have Internet access, they do not have the opportunity to go online, because more individuals want to utilize the connections at the same time [4].

In a randomized controlled trial, the psychosocial impact of the Internet engagement of older people and found that the elderly perceive the Internet as a way to develop new social activities and to replace some activities which are less appropriate for them [5]. In a randomized controlled trial study, the relationship between computer use and the physical, social and emotional well-being of elderly people at the baseline, after 4 months and after 12 months. The study showed that the elderly considered themselves physically less active than at the baseline - before ICT interaction (after 4 months), and volunteer work also decreased equally after ICT interaction. This may be a result of the ICT engagement, due to which the elderly did not have time to engage in physical activity and volunteer work. The researchers found significant changes over time in the frequency of meeting people with whom the elderly shared private things. Light computer users at first showed an increase between the baseline and 4-month follow-up, and a decrease after the 4-month follow-up. In contrast, heavy computer users showed an increase over all-time intervals [6].

**Rationale of the study:**
The progress of scientific invention in the field of medical science has lead to rise in life expectancy of an individual giving rise to increase in elderly population. Hand in hand our society is undergoing rapid changes, putting forth a competitive world for the youngsters to prove their expertise. Preoccupied with the tensions and anxieties, the younger generation is left with less time to spend for the elderly and realize their responsibilities towards them.

On the other hand the elderly confront many psychological, physiological and social problems. In the new era of 21st century youngsters are engaged in money oriented practices. They are very much materialistic having insensitive attitude towards their families especially elderly people. There is no one to take care of their needs due to the societal trends towards modernization and urbanization. This inturn leaves the elderly with a vacuum in their lives, the elderly have so much spare time and they cannot do anything to utilize their free time. They also have not the enough facility to spend their time according to their wish, they have limited resources to utilize their time. Hence the present study is taken up to examine the impact of use social networks through training. The present study is undertaken to facilitate the elderly how to use the social networking sites and keep them engage to maintain their social life which was previously inactive.

**Methodology:**
In the present study a self structured questionnaire was used and the same was standardized by calculating its validity and reliability. The same questionnaire was administered on total of 450 elderly of three city i.e. metro city, A class city and B class city, [7] 150 respondents from each city comprising rural and urban area across the gender for assessing their quality of life. Another questionnaire was prepared to assess the knowledge of respondents regarding use of social networking sites. This questionnaire was applied on total of 166 elderly, who have the facility of computer or knowledge regarding use of computer. It is an interventional study so that an intervention module was prepared, in which use of social networking sites, online ticket booking (bus, railways, airlines etc.), online transaction and online shopping was covered. Intervention was given to total of 150 respondents. The same intervention module was given to each elderly and proper training was given to each respondent under the guidance of researcher up to 3 months regularly. When the training was completed then again self structured questionnaire to assess the knowledge regarding social networking sites was administered along with self structured and standardized questionnaire on 150 respondents, 50 from each city, to assess the impact of intervention on quality of life of elderly.

Here is a phase wise plan which gives us a clear layout of the present research.
Phase wise plan:-

Phase I:-
In the First phase assessment of determinants of quality of life was done with the help of self made standardized questionnaire on the total sample of 450 respondents.

Phase II:-
In the second phase knowledge regarding various social networking sites and their use was assessed through self made questionnaire, who had the facility of computer/internet or having computer.

Phase III:-
In the third phase an intervention programme was developed including various modules of use of social networking sites and assessment of the same on their QOL was done. The developed module was administered on selected 150 respondents. Intervention package was given to them up to 3 months, after that again their quality of life was assessed.

Phase IV:-
In the last phase the effect of intervention package was assessed using pre and post factorial design.

Statistical analysis:-
The data was coded, then tabulated and analyzed with the help of SPSS (version 20). Mean standard deviation and paired t test statistic was used to analyses the data.

Results and Discussion:-
In the present research the effect of use of social networking sites was assessed and it was also tested that intervention provided them regarding social networking sites brings any differences in elderly's quality of life. In this connection the researcher wants to find out the impact of intervention on elderly's quality of life.

Table 1:- Difference in quality of life of elderly before and after intervention.

| Domains              | Pre test Mean | SD   | Post test Mean | SD   | t value | P value |
|----------------------|---------------|------|----------------|------|---------|---------|
| Physical Well Being  | 26.53 ±7.53   | 26.75 ±6.82 | 0.54 | 0.59 |
| Health Well Being    | 20.15 ±5.48   | 20.78 ±5.55 | 2.14* | 0.03 |
| Emotional Well Being | 25.29 ±5.09   | 28.44 ±4.77 | 11.47** | 0.00 |
| Social Well Being    | 23.44 ±4.41   | 26.68 ±3.5  | 12.04** | 0.00 |
| Financial Well Being | 33.95 ±8.02   | 34.4 ±8.14  | 1.16  | 0.25 |
| Psychological Well Being | 36.75 ±9.22  | 40.98 ±6.69 | 7.55** | 0.00 |
| Spiritual Well Being | 22.75 ±3.96   | 23.8 ±4.3   | 4.23** | 0.00 |
| Recreational Well Being | 11.98 ±2.42 | 13.19 ±2.08 | 7.6** | 0.00 |

*Significant   **Highly Significant.
A significant effect of intervention on elderly’s quality of life was seen (Table 1 and Fig. 1) among various domains like emotional, social, psychological, spiritual and recreational well being on quality of life. Intervention had an incredible impact on elderly indicating a highly significant impact of intervention on quality of life on emotional, social, psychological, spiritual and recreational domains. Elderly, who sit idle at home, feels isolated and emotionally disturbed. Knowledge of social networking sites enable them to do many of their works independently, like railways ticket booking, bank transactions etc. and also make them social active through sites like Facebook, Twitter etc. This will influence their life positively and improve their quality of life to a greater extent. The findings are supported by the study of Blazun whose study also proved that the elderly who are basically active with computer actually increased their ability to develop and maintain their personal networks [8]. Significant effect of intervention on quality of life was also seen in health well being which indicates a significant improvement in their health status and this may be due to the fact that as the elderly has become independent in doing many of their activities online and social networking sites made them more active.

Table 2: Difference in quality of life of elderly before and after intervention of metro city.

| Domains                | Pre test | Post test | t value | P value |
|------------------------|----------|-----------|---------|---------|
|                        | Mean     | SD        | Mean    | SD      |         |         |
| Physical Well Being    | 26.92    | ±7.44     | 27.28   | ±6.65   | 1.55    | 0.13    |
| Health Well Being      | 20.38    | ±5.58     | 21.22   | ±5.45   | 4.23**  | 0.00    |
| Emotional Well Being   | 25.66    | ±5.09     | 27.2    | ±4.87   | 6.89**  | 0.00    |
| Social Well Being      | 23.66    | ±4.04     | 25.62   | ±3.42   | 7.92**  | 0.00    |
| Financial Well Being   | 33.58    | ±8.07     | 34.16   | ±8.59   | 2.05*   | 0.05    |
| Psychological Well Being| 36.18  | ±9.17     | 40.7    | ±7.33   | 11.69** | 0.00    |
| Spiritual Well Being   | 23.06    | ±4.04     | 23.98   | ±4.73   | 3.8**   | 0.00    |
| Recreational Well Being| 12.06    | ±2.39     | 13.14   | ±1.95   | 8.28**  | 0.00    |

*Significant    **Highly Significant
A highly significant impact of intervention was observed on elderly’s quality of life in various domains like health, emotional, social, psychological, spiritual and recreational well being. Results revealed (Table 2 and Fig. 2) that there was a highly significant effect of intervention was noticed among elderly’s quality of life. Elderly’s, who were less physically active, stated that their social life was also affected due to laziness and some physical problems because they were unable to contact their relatives and friends directly or face to face. So the training provided the elderly people regarding use of social networking sites were very beneficial to them as they were made themselves enable to engage socially direct as well as indirect ways. Naham stated in a study that maintaining physical activity, social networks and other engagement in society can positively affect elderly people’s well being, because in this way they strengthen their mental as well as physical health [9]. A significant effect of intervention on quality of life was also seen in financial well being which indicates a significant improvement in their financial status, whereas in a study conducted by Ryan and Deci indicated that the more people focus on financial and materialistic goals, the lower their well-being [10].

Incredible impact of intervention was noticed in quality of life of elderly’s in psychological well being. The elderlys, who were living alone or isolated from the family, their psychological conditions were worse in comparison to others, they feel alone in their life. For individual older users, communication technologies have the potential to minimize social isolation and thereby improve quality of life [11]. So the practices of social networking sites are the best option to the elderly who are living alone to overcome their loneliness.

**Table 3:** Difference in quality of life of elderly before and after intervention of A class city.

| Domains                  | Pre test  | Post test | t value | P value |
|--------------------------|-----------|-----------|---------|---------|
|                          | Mean      | SD        | Mean    | SD      |         |         |
| Physical Well Being      | 26.16     | ±6.75     | 26.94   | ±5.92   | 1.7     | 0.13    |
| Health Well Being        | 20.94     | ±4.88     | 21.76   | ±4.83   | 3.54**  | 0.00    |
| Emotional Well Being     | 24.98     | ±4.92     | 28.72   | ±4.55   | 8.3**   | 0.00    |
| Social Well Being        | 23.78     | ±4.48     | 28.32   | ±3.18   | 10.34** | 0.00    |
| Financial Well Being     | 34.04     | ±8.45     | 35.2    | ±8.17   | 2.73*   | 0.05    |
| Psychological Well Being | 36.48     | ±9.72     | 42.98   | ±5.75   | 8.07**  | 0.00    |
| Spiritual Well Being     | 22.68     | ±3.8      | 23.64   | ±4.14   | 4.38**  | 0.00    |
| Recreational Well Being  | 12.38     | ±2.34     | 14.08   | ±1.74   | 7.73**  | 0.00    |

*Significant **Highly Significant
The present table 3 and fig. 3 also indicate a highly significant effect of intervention on elderly’s quality of life like, health, emotional, social, psychological, spiritual and recreational well being. The major effect of intervention was seen on psychological well being of elderly. The elderly who were living alone or isolated from the family, they feel much more alone which will affect their psychological condition because there was no one who take care of them, which may affect their social life as well, which will in turn lead to degrade overall quality of life of a people. Because they have much more free time so the training programme provided to them plays a very important role to made them socially active. Same as concluded by the Karahasanovic [3], that elderly people who are part of social network feel safer and more secure.

A significant effect of intervention on quality of life of elderly in financial well being was observed from the above table whereas physical well being had no effect of intervention on elderly’s quality of life.

The World Health Organization defines health as ‘a state of complete physical, mental and social well being and not merely the absence of disease or infirmity” (p 1) [13]. Thus, to examine the impact of health on perceptions of quality of life, we need to consider research on physical and mental health, including cognitive functioning, as well as social well-being. Before we begin, however, we must remind ourselves that there is, of course, a very large body of research showing that wealth is closely linked to health, with those who are wealthier exhibiting better health [14].

Table 4:- Difference in quality of life of elderly before and after intervention of B class city.

| Domains               | Pre test Mean | Pre test SD | Post test Mean | Post test SD | t value | P value |
|-----------------------|---------------|-------------|----------------|--------------|---------|---------|
| Physical Well Being   | 26.52         | ±8.45       | 26.02          | ±7.84        | 0.47    | 0.64    |
| Health Well Being     | 19.12         | ±5.88       | 19.36          | ±6.11        | 0.29    | 0.78    |
| Emotional Well Being  | 25.22         | ±5.32       | 29.4           | ±4.71        | 7.02**  | 0.00    |
| Social Well Being     | 22.88         | ±4.7        | 26.1           | ±3.33        | 5.53**  | 0.00    |
| Financial Well Being  | 34.24         | ±7.68       | 33.84          | ±7.75        | 0.39    | 0.7     |
| Psychological Well Being | 37.6    | ±8.81       | 39.26          | ±6.48        | 1.23    | 0.23    |
| Spiritual Well Being  | 22.5          | ±4.1        | 23.78          | ±4.09        | 1.89    | 0.06    |
| Recreational Well Being | 11.5          | ±2.49       | 12.36          | ±2.21        | 2.16*   | 0.04    |

*Significant  **Highly Significant
There was a highly significant effect of intervention on emotional and social well of elderly's quality of life. Hence it was proving from above table 4 and Fig 4 that practices of use of social networking sites had a positive effect of elderly’s quality of life. The same was concluded by the Karahasanovic that the elderly people who did participate in social networks were able to deepen their relationships with other people, neighbors, etc [3]. The training programme provided by the researcher to them had a greater impact on elderly’s quality of life especially social well being as well emotional well being. The same was concluded by the White participants had two weeks of training in computer use, well supported by a group of researchers and volunteers, and were encouraged to work together in groups. They showed a statistically significant reduction in loneliness [5].

**Table 5:** Comparison of mean on the basis of cities.

| Domains                | Metro city | A class city | B class city |
|------------------------|------------|--------------|--------------|
|                        | Pre test   | Post test    | Pre test     | Post test    |
| Physical Well Being    | 26.92      | 27.28        | 26.16        | 26.94        | 26.52        | 26.02        |
| Health Well Being      | 20.38      | 21.22        | 20.94        | 21.76        | 19.12        | 19.36        |
| Emotional Well Being   | 25.66      | 27.2         | 24.98        | 28.72        | 25.22        | 29.4         |
| Social Well Being      | 23.66      | 25.62        | 23.78        | 28.32        | 22.88        | 26.1         |
| Financial Well Being   | 33.58      | 34.16        | 34.04        | 35.2         | 34.24        | 33.84        |
| Psychological Well Being| 36.18      | 40.7         | 36.48        | 42.98        | 37.6         | 39.26        |
| Spiritual Well Being   | 23.06      | 23.98        | 22.68        | 23.64        | 22.5         | 23.78        |
| Recreational Well Being| 12.06      | 13.14        | 12.38        | 14.08        | 11.5         | 12.36        |

The table 5 depicted the comparison of mean scores of elderly of three city i.e. metro city, A class city and B class city. The elderly from A class city had a greater effect of intervention in comparison to other cities in physical well being, whereas elderly of B class city have no effect of intervention. In the health well being, elderly’s of metro city gain more through intervention other than two cities. Elderly’s from B class city showed remarkable effect of intervention in emotional well being in comparison to metro and A class city. Same as A class city showed remarkable gain from intervention in social, financial & psychological well being. In the spiritual well being the elderly’s of B class city had a positive effect of intervention on their quality of life in comparison to other two cities. The elderly’s of metro city

The table also revealed that B class city had no effect of intervention as they score less in post testing in comparison to pre testing in physical well being & financial well being.
Conclusion:
The quality of life of older people is a value and cross-section theme that goes beyond the boundaries of administrative powers and levels. It requires a comprehensive and integrated approach and cooperation across sectors of society. Population ageing and quality of life of older persons are issues that concern us all. The present paper investigated and concluded that intervention provided them was very helpful, as there is remarkable improvement in the various domains like, emotional, social, psychological and recreational well being. The results also showed that elderly from metro and A class city were more benefited from the intervention provided them. Social networking sites are helpful in engaging them socially, improving their social ties, leading to improved psychological condition and emotional status, and in turn lead to overall quality of life. It is concluded from the present research that metro city, A class city and B class city are benefitted from the training respectively. Major improvements were seen in emotional, social and psychological well being in all three cities.

Educational institutions and other facilities for elderly people should focus on looking for opportunities for involving in social networking sites in elderly people’s lives in an appropriate way, so that it could positively affect their well-being, life satisfaction, feeling of achievement, and feeling of self-control and general enrichment of life. The present study showed promising results, suggesting that social networking sites could help elderly people to cope with their everyday life situations. Therefore, regional, local and governmental organizations are obligated to provide the right conditions, such as adapted computer equipment, Internet access, appropriate ICT education, highly qualified computer experts, etc., all of which will help the elderly to adopt ICT for a healthy and fulfilling ageing.

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