Abstract

The World Health Organization has recognized health and wellbeing as two important determinants of successful ageing. Globally, ageing population is a major area of research as the average life expectancy has increased by 5 years in the period 2000 to 2015. Higher life expectancy on account of lower mortality and lower fertility have resulted in the relative weight towards the older cohort.

Currently India has 17.73% of the world's ageing population and it is expected to take the first place on this population metric by 2050. The 60+ and 80+ cohorts are projected to grow from 7.6% and 0.6% in the year 2000 up to 20.6% and 3.1% respectively, in the year 2050 (UN Population Division, DESA, 2015). This would overwhelm the already overburdened public health system in the country.

One of the Sustainable Development Goals, i.e., 'healthy living and wellbeing at all ages' is adopted by all member states of the United Nations (UNDP, India,2018). The decade 2021-2030 is declared as a 'decade of healthy ageing' in line with the global declaration by the World Health Organisation (WHO Report,2020). On this backdrop, it is important to explore the physical health, mental health, and wellbeing of elderly from different socio-demographic background.

Urbanization and migration of the working age population at national and international levels lead to common experiences of loneliness, emotional neglect, and lack of physical support among the elderly population (MOSPI,2016). The process of ageing is often perceived negatively as it brings physical, emotional, and psychological limitations and growing dependency. However, the Gerontologists focus on 'functionality' rather than 'chronology' has widened the scope of successful ageing through enhanced wellbeing (Feldman,2015).

The present research has addressed successful ageing through physical health and subjective wellbeing in older adults. According to Diener (2000, pp.34), irrespective of the objective facts, subjective evaluation of one's life at cognitive and affective level refers to subjective wellbeing. Health and wellbeing are intertwined in the definition of health by the World Health Organisation (1948), which shows their bidirectional relationship.

The mental state theories, theories of self-regulation and the hedonic tradition in Psychology have highlighted the role of quality of the consciousness in the maintenance and enhancement of the well-being. Mindfulness meditation nurtures consciousness by non-judgmental observation of every phenomenon, resulting into behaviour regulation and wellbeing (Brown et al.,2015). Mindfulness brings greater awareness, clarity in thoughts, feelings, and attitudes. It helps the individual accept the reality, appreciate feelings of joy, peace, and happiness, and attempts growth and transformation in the individual (Kabat-Zinn,2005).

Generativity is defined as 'a desire to transcend one's knowledge, experience, skills, abilities and interests to the newer generation' (Erikson,1963, pp.267). In the view of Mc Adam and St Aubin (1992), generativity is a multidimensional construct, connecting an individual to the society. Generativity, reflects in the role of parenthood in young adulthood and continues in later years. When it is acknowledged by younger generation, it significantly predicts life satisfaction and well-being in the elderly (Cheng,2009). Such studies confirm the importance of generativity in healthy ageing.

Challenges in daily life and age-related adversity are commonly found in the life of elderly. Resilience refers to positive adaptation in the context of adversity (Luthar et al.,2000,pp.543). Personal qualities which enable an individual to thrive and strengthen the coping skills in the face of adversity (Connor & Davidson,2003,pp.76).Resilience helps in maintaining wellbeing by effectively managing stressful events in life (Fontes &Nari,2015) or by using one's social resources optimally(Hildon et al.,2008), and improving health during rehabilitation stage of chronic illness and help individual to attain wellbeing(Hassani et al.,2017).

Nutrition is one of the determinants of health of the elderly. In Indian context, malnutrition and morbidity are closely associated among elderly, particularly in the rural areas as well as elderly living in the institutions(Agarwalla et al,2015;Arlappa et al.,2016; Khole & Soletti, 2018).Adequate quantity of certain nutrients are a part of age-related diseases; if not are important in maintaining homeostasis and coordination among the elderly(Nair& Maseeh,2012). Exercise, physical activity and nutrition are found to be important in regulation of hunger and satisfaction level of the older adults. Exercise is a protective factor in various non-communicable diseases, helps to delay neurocognitive disorders (Laurin et al.2009), helps maintain muscular strength and physical fitness in later years of life(DiPietro,2001). Spirituality is Indian cultural phenomenon

across all religions(Bhawuk,2011). Hence, through various spiritual practices, spirituality works as preventive measure ensuring health across the age(Goswami,2014;Saleem &Khan,2015).

In the Indian context, social and economic support from the family has been a traditional practice.. An age-old joint family system is undergoing demographic transitions , as a result of urbanization and migration. Approximately 78% of the elderly stay with the family. However, it does not ensure kin relationship among the family members and elderly-care by the family(Rajan & Kumar,2003). Considering the role of above mentioned variables in physical health and wellbeing in the older adults, the present research was carried out in Indian context with the following objectives.

The research aimed to study the relationship among generativity, resilience, mindfulness and physical health and subjective wellbeing among the elderly. It was also aimed to understand whether generativity, resilience and mindfulness are the precursors of physical health and subjective wellbeing among the elderly. Whether these psychological variables differ across the demographic variables such as gender, marital status, socio economic status, working status, place of stay, type of family, pursuit of hobbies and social engagement. The research also aimed to study the mediation effect of nutrition, exercise, and spiritual practices on the relationship between generativity, resilience and mindfulness and few parameters of physical health and subjective wellbeing among young elderly. The research focused to get an insight into perceptions, beliefs, and experiences of the elderly to explain the scores obtained, while attaining these objectives.

Thus, the study was conducted in two phases with Explanatory Sequential Design. The quantitative and qualitative designs in the research were predetermined and planned in the conception stage of the research. Both the strands have been independent for the research questions, data collection and data analysis and are mixed during the interpretation of findings and drawing conclusion in the research (Creswell &Clarke,2018).

Phase one of quantitative design aimed to study the relationship among the psychological and physical health variables and to understand the precursors of health and wellbeing of older adults, with reference to various demographic variables. The mediation effect of nutrition, exercise, and spiritual practices on the relationship between generativity, resilience and mindfulness and few parameters of physical health and subjective wellbeing among young elderly was also studied. Phase I consisted of the pilot study and the main study.

Pilot study was carried out to analyse feasibility of the quantitative measures of psychological variables such as generativity, resilience, mindfulness, subjective wellbeing and the self-constructed checklists of nutrition, exercise, engagement in spiritual practices and the physical health parameters. It was conducted on 15 non-institutionalised and 5 institutionalised young elderly from MMR and PMR. The recommendations of these participants were considered and implemented during the main study.

The sample for the Phase I of the study consisted of 452 male and female elderly from Mumbai and Pune Metropolitan Regions. Amongst them 103 were the institutionalised and 349 were the non-institutionalised elderly who were approached. They represented 25/35 wards of MMR and 2 Municipal Corporations and 3 Municipal Councils from PMR. The inclusion criteria were young elderly without any major psychopathological problems and any locomotive disability. And the exclusion criteria were young elderly suffering from any acute health problems at the time of data collection. Phase I of the research consisted of the Pilot study, which was carried out on 20 elderly. Their suggestions were considered in the Main study of the research.

With the help of standardised tools, psychological variables, i.e., generativity, resilience, mindfulness, subjective wellbeing, and physical fitness parameters were measured. Nutrition, exercise, spiritual practices, and other physical health parameters such as systemic / sensory parameters, lifestyle habits, chronic medical condition and biomarkers were measured by using a checklist prepared by the researcher in consultation with experts from the respective fields.

On the recommendation of the participants of the Pilot study, translation of the tools was done in Hindi and Marathi languages. Conceptual and linguistic equivalence was maintained by doing back and forth translations by the language experts.

Based on the objectives and the past literature, the hypotheses were conjectured.

H1. There will be a significant positive correlation among generativity, mindfulness, resilience, subjective wellbeing, and physical health parameters i.e., sensory/systemic parameters and lifestyle habits among young elderly

H2. Young elderly high on chronic medical condition, biomarkers and low on physical fitness parameters will significantly differ from elderly who score low on chronic medical condition,

biomarkers and high on physical fitness, across generativity, mindfulness, resilience, and subjective wellbeing of young elderly.

H3. Generativity, mindfulness, resilience will significantly affect physical health parameters i.e., sensory/systemic parameters and lifestyle habits and subjective wellbeing of young elderly.

H4. a) There will be a significant mediating effect of nutrition on the relationship between generativity, mindfulness, resilience, and sensory/systemic parameters of physical health of young elderly

b) There will be a significant mediating effect of nutrition on the relationship between generativity, mindfulness, resilience, and physical health parameters such as lifestyle habits of young elderly

c) There will be a significant mediating effect of nutrition on the relationship between generativity, mindfulness, resilience, and subjective wellbeing of young elderly

H5. a) There will be a significant mediating effect of exercise on the relationship between generativity, mindfulness, resilience, and sensory/systemic parameters of physical health of young elderly

b) There will be a significant mediating effect of exercise on the relationship between generativity, mindfulness, resilience, and physical health parameters such as lifestyle habits of young elderly

c) There will be a significant mediating effect of exercise on the relationship between generativity, mindfulness, resilience, and subjective wellbeing of young elderly

H6.a) There will be a significant mediating effect of spiritual practices on the relationship between generativity, mindfulness, resilience, and sensory/systemic parameters of physical health of young elderly

b) There will be a significant mediating effect of spiritual practices on the relationship between generativity, mindfulness, resilience, and physical health parameters such as lifestyle habits of young elderly

c) There will be a significant mediating effect of spiritual practices on the relationship between generativity, mindfulness, resilience, and subjective wellbeing of young elderly

H 7. There will not be any significant difference between young elderly pursuing hobby and not pursuing across generativity, mindfulness, resilience, subjective wellbeing, and physical health parameters such as sensory/systemic parameters, lifestyle habits, chronic medical condition, biomarkers, and physical fitness of young elderly

H8. Young elderly engaged in social activities will not significantly differ from their counterparts across generativity, mindfulness, resilience, subjective wellbeing, and physical health parameters such as sensory/systemic parameters, lifestyle habits, chronic medical condition, biomarkers, and physical fitness of young elderly

H9. There will be significant difference between institutionalised and non-institutionalised young elderly across generativity, mindfulness, resilience, subjective wellbeing, and physical health parameters such as sensory/systemic parameters, lifestyle habits, chronic medical condition, biomarkers, and physical fitness of young elderly

H10. There will not be any significant difference between young elderly males and females across generativity, mindfulness, resilience, subjective wellbeing, and physical health parameters such as sensory/systemic parameters, lifestyle habits, chronic medical condition, biomarkers, and physical fitness of young elderly

H11. There will not be any significant difference between young elderly staying in different types of family across generativity, mindfulness, resilience, subjective wellbeing, and physical health parameters such as sensory/systemic parameters, lifestyle habits, chronic medical condition, biomarkers, and physical fitness of young elderly

H12. There will not be any significant difference among the groups of elderly with their different educational status across generativity, mindfulness, resilience, subjective wellbeing, and physical health parameters such as sensory/systemic parameters, lifestyle habits of young elderly

H13. There will not be any significant difference among the groups of elderly with their different socio-economic status, across generativity, mindfulness, resilience, subjective wellbeing, and physical health parameters such as sensory/systemic parameters, lifestyle habits of young elderly

H14. There will not be any significant difference among the groups of elderly with their different working status, across generativity, mindfulness, resilience, subjective wellbeing, and physical health parameters such as sensory/systemic parameters, lifestyle habits of young elderly

The hypotheses were tested by using statistical measures such as multiple regression, hierarchical regression, independent group t test, one-way ANOVA, and chi square test of significance.

Major findings of Phase I of the research suggest generativity, resilience, and mindfulness arethe significantly predictors of physical health parameters i.e., sensory/systemic parameters and lifestyle habits and subjective wellbeing among elderly. Nutrition, exercise and spiritual practices do not show significant mediating effect on physical health parameters of the elderly. However, nutrition, exercise and spiritual practices show significant mediating effect on the subjective wellbeing of the elderly. Elderly who are engaged in social activities are more generative, resilient, mindful and perceive greater wellbeing. Similarly elderly pursuing hobbies are more generative, resilient, mindful and perceive greater wellbeing. There are gender differences in resilience, subjective wellbeing, and physical health parameters such as lifestyle habits and biomarkers of young elderly. Generativity, resilience, mindfulness, and subjective wellbeing among elderly differ based on educational status; highly educated elderly are more generative, mindful, resilient and tend to perceive wellbeing in life. The elderly from higher socioeconomic background are observed to be more generative, resilient, mindful and perceive greater wellbeing than the elderly from the rest of the socioeconomic groups. However, these elderly score significantly low on lifestyle habits, which may affect their health and wellbeing. Elderly who are the self-professionals or those working post-retirement with or without financial gains are found to be more generative, mindful, resilient and tend to perceive wellbeing in life. They benefit in the systemic / sensory parameters of physical health, as well as have lifestyle habits promoting good physical health.

In Phase two of qualitative design of the research, with the help of semi-structured interview, perceptions of the elderly about physical health, happiness, life satisfaction, generativity, resilience, and present preparedness were understood. In this phase, seventeen respondents living with the family and thirteen respondents living in the institution willingly participated. Adhering to the code of ethics, semi-structured interview technique was used to understand the perception of young elderly towards their physical health and wellbeing. The Probes were used during the interview. The transcripts of responses were prepared by the researcher for the content analysis.

Major findings from Phase II of the research were the global themes which emerged from perceptions, beliefs, and experiences of the elderly about physical health, happiness, generativity, resilience, and present preparedness. Physical health was perceived by elderly as a state of absence

of illness, being physically active and independent, tranquil mind and ability to enjoy good variety of diet and sleep. Happiness was perceived to be a subjective phenomenon, unconditional acceptance of a situation, confelicity. Personal achievements, success of family members, self-reliance, creative pursuits, altruistic pleasure and having spiritual support are the sources of life satisfying moments for elderly. Generativity in other people was perceived by elderly majorly as a selfish motive, symbolic social influence, situational demand and contingent to recognition by others. However, empathic joy, emotional accuracy, emotional empathy, and selfish motive could trigger generativity among the elderly. Elderly in the present study prefer to provide customized help, help on demand to the younger generation. Being generative towards younger generation, they feel satisfied, socially connected, socially responsible and find happiness in others' satisfaction. While facing the challenges / difficulties in life, elderly take support from family and friends, show complete faith in the God, and trust their intrinsic strengths which make the elderly resilient. The qualities such as self-efficacy, intrinsic strengths like strong determination, flexibility, positive perception, internal locus of control, fitness make them resilient, is shared by the elderly. Present preparedness is reflected by the elderly, as majority of them choose to remain in the Present, so that can take decisions, improve one's mistakes, hope to make better future, feel 'control over life', and can live every moment of life.

In Phase II, during the interviews with the elderly from the institution, a need was felt by the researcher to make one-to-one communication to understand their perceptions of the situation in the current context and their ways and means applied to face successfully and qualifyto be happy and healthy. They were finding difficult to cope with the challenges and restrictions which emerged due to Covid-19 Pandemic. It resulted into various temperamental and behavioural changes among the elderly. Hence, to understand the life of the elderly in the institution and know their coping strategies, online telephonic interaction with each elderly was scheduled with nine elderly between 66 to 83 years who were available and eager for the interaction. In a span of 3 months, 37 sessions were held for 45 to 50 minutes each. Difficulties experienced and the observations bythe researcher, during the sessions are elaborated further.

In the context of the Pandemic, the participants revealed the sources of happiness, how one can be generative, in a given situation. Various strategies to develop resilience as well as tips of physical fitness were enthusiastically shared by the institutionalised elderly.

To summarize the findings of the present research which highlights the role of psychological factors in physical health of elderly. Generativity, resilience, and mindfulness together and independently act as the precursors of physical health and subjective wellbeing among the young elderly. Chronic medical condition makes significant difference in resilience, mindfulness and subjective wellbeing, but not in generativity among the elderly. Physical fitness promotes generativity, resilience, mindfulness and wellbeing in the elderly. Subjective wellbeing is enhanced by generativity, resilience and mindfulness with nutrition, exercise and spiritual practices among young elderly. Nutrition, exercise and spiritual practices do not have mediating effect on subjective wellbeing but not on physical health parameters. Spiritual practices do not have mediating effect on physical health and psychological parameters of young elderly. Pursuance of hobbies and engagement in social activities are beneficial as they enhance generativity, resilience, mindfulness, and subjective wellbeing in the elderly. However, both do not contribute significantly to physical health. Place of stay of the elderly makes difference in all psychological variables. The non-institutionalised elderly are more generative, resilient, and mindful and also perceive greater wellbeing in life than the elderly living in the institution. Significant gender differences are found in resilience, subjective wellbeing, and physical health parameters such as biomarkers and lifestyle habits; however, mean scores of male elderly are higher than the counterparts. The type of family that the elderly live makes significant difference only in subjective wellbeing. Elderly living in nuclear family experience more wellbeing. Elderly with higher education, who are from higher socio-economic status and who are working in continuation or post retirement tend to be significantly more generative, resilient, mindful and experience greater subjective wellbeing.

The implications of the present research are in diverse fields / groups. Other than the elderly themselves, the findings of the research give insights to the caregivers of the elderly, elderly-care institutions, Policy makers and the society in general which will holistically build a healthy society.

The research has stated the limitations such as the sample of the study is only from the urban areas and difficulty to represent every ward of MMR and PMR. There were limitations in the data collection of Phase II, due to Pandemic situation. The sample for the qualitative design was restricted to thirty. Along with the elderly in institution, care takers and the staff of the institution could have given valuable inputs in the research.

However, there are few suggestions for future research such as in-depth analysis of the dimensions of resilience, mindfulness and subjective wellbeing would give more clarity to design the intervention. The inhibiting factors for consumption of age- appropriate diet, exercise and spiritual engagement would help to bridge the gap between the opinions and the actions on the part of the elderly. Nuances of the elderly-friendly institutions need to be understood to design the same, as it is going to be a need of the hour.

Key words: Generativity, resilience, mindfulness, subjective wellbeing, young elderly, successful ageing.