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Correspondence
Steps to Health, Showell Circus, Wolverhampton, WV10 9TH, UK
jgcr.gericare@gmail.com

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JOURNAL OF GERIATRIC CARE AND RESEARCH

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Editorial

Being happy in old age: reasons, methods and challenges

Nilamadhab Kar

Abstract

Happiness is an important component of subjective well-being and people generally wish to be happy. There are various factors linked to happiness, e.g. health, family relationships, social support, financial situation, work, personal independence, generosity and so on. It is quite possible that old age is associated with many positive and negative factors in the way of experiencing happiness. As there are many benefits of happiness it is important that this area is explored and individuals are supported in their pursuit of finding and maintaining happiness.

Key words

Aged, Happiness, Health, Mental Health, Method

Introduction

Happiness is one of many pursued objectives of life. It is a complex concept with great variation in its meaning for individuals. Usually described as a state or feeling, it is influenced by a lot of factors such as health, relationship, finances, individual values and so on; however the ability to experience happiness may have genetic and biological underpinnings.

There are lot of benefits being happy, in any age. Besides the psychological and social gains associated with happiness there are a lot of health related benefits as well. But with many age related issues of elderly, including multiple morbidities can one be really happy? It is important to discuss and reflect on this rather not well traversed area.

In older adults, poor health significantly predicts life dissatisfaction;[1] which may affect quality of life, and happiness. However, in spite of illness one can be happy. Considering physical and mental health, there are lots of benefits why one should try to be happy. Happier people are comparatively healthier than unhappy individuals. For example, it has been observed that happiness decreases the risk of coronary heart disease (CHD). Greater the number of positive emotions experienced, lesser is the risk of heart diseases; which suggests that positive emotions can be protective against the CHD.[2] Similarly, research suggests that happy people are less likely to have long-term health conditions such as chronic pain, vision problems, frailty, and stroke.

There are reports about the association of happiness with longevity. Most of the studies suggest that happiness increases longevity. It is true for general population and even for patients.[3] This may be due to the observation that happier people are more resilient to illnesses.[4] Although most studies involve middle-aged and older people, happiness has been observed to be a protective factor for all-cause mortality in very old.[5] However there are studies which suggest happiness may not be associated with mortality.[6] Poor health itself may cause unhappiness and decrease life-span; there are reports of people who are unhappy having higher probability of dying.[6] Multiple confounding factors and interrelated issues make the relationship between happiness and longevity rather indistinct.

It is obvious that people who are more satisfied with life are happier. In this connection, the factor that is closely linked to unhappiness is stress. Besides stressful life events and situations, worries and regrets affect life and become an obstacle towards the experience of happiness. Dealing with stresses, worries and regrets effectively is an important point in the path towards happiness. Interestingly happiness can be a buffer against stress, and decrease the impact of stress on the body and mind. Happiness can even decrease the pain intensity and suffering.

Methods to be happy

So it does make sense to try to be happy. It is important to find ways and methods for happiness, depending upon individual choices and preferences. However few common findings can be discussed. Happiness is mostly influenced by factors such as family relationships, financial situation, work, community and friends, health, personal freedom and personal values.[7] These should be explored and strengthened in the areas suitable for the person. There are many suggestions and options. For example the National Health Service (NHS) in the UK provides some tips to be happy; it suggests to manage stress levels, use humour and enjoy, boost self-esteem, have a healthy lifestyle, talk and share, and to build resilience.[8] Connecting with the people, being physically active, learning new skills, being kind, giving to others, helping or volunteering, and mindfulness i.e. being aware

of the present moment, one's own thoughts, feelings and people around are also suggested as ways for mental well-being.[9]

Other points that may help are: having positive emotions,[10] being generous,[11] having a purpose in life, being physically active,[12] managing illnesses, improving social connectedness,[13] spirituality and meditation.[14,15,] Simple measures such as sharing a meal or eating together can make one happy as well.[13] Remaining connected with people and increased socialization not only deals with the ill effects of loneliness and isolation but also helps gaining positive health and happiness in the process.

Interestingly, there are now interventions being suggested to improve happiness.[16] In addition, for many interventions for illnesses, happiness is being considered as an outcome measure. It appears that the field has greater clinical potential. Although there are many suggestions available, it is essential to find one's own way. The methods cannot be prescribed; it is individual specific and one has to reflect what makes him or her happy.

Challenges for happiness in old age

Health issues are common in old age; and many have multimorbidity.[17] However patients with severe illnesses can still be happy, as health is only one of many factors linked to happiness. Taking measures to prevent illness and disabilities, and taking care of illnesses and getting treated adequately are essential. Many times older adults and their carers accept symptoms and signs as just old age related and do not take or delay taking adequate steps to deal with these.

Besides physical illnesses, many older adults suffer from mental illnesses especially depression;[18] and a proportion have various disabilities. Psychiatric disorders are major contributors of unhappiness. Identifying and treating depression and other disorders are definitive strategies to defeat unhappiness.

Financial worries are one of the major concerns in old age. Although money cannot buy happiness, lack of it influences life in many ways. The cost of treatment and care can be worrying; so also if the children are still financially dependent on the older parents. Increase in income and living standard in many Western countries has not resulted in increase in happiness level;[19] so just having lot more money may not help.

Bereavements of the contemporaries and other life events are rather more common in old age. Anticipating, preparing oneself for these stresses with appropriate coping strategies and accepting the inevitable could be helpful. Children are a great source of happiness in all ages; however this may not be true for many older adults. There are many concerns; for example children's poor emotional health,[19] relational problems, maltreatment, neglect and even abuse from children can be reasons of unhappiness in old age. These are reality for many older adults.[20]

Perception of ageing may be a factor for the experience of happiness in old age. A negative self-perception of ageing has been linked to depression.[21] It is essential to develop a gracefully accepting attitude towards ageing and be positive to the changes over the years.

Conclusion

Being happy has many advantages. Factors that are associated with happiness are largely known, although individual variations are possible. In the same way, the reasons of unhappiness and the challenges in old age are being understood more and this may lead to innovative approaches for interventions. It is essential to explore individual specific ways to support older adults to be happy; and there is a lot of potential for research in this area.

Author information: Nilamadhab Kar, MD, DPM, DNB, MRCPsych, Consultant Psychiatrist, Black Country Partnership NHS Foundation Trust, Wolverhampton, UK

Correspondence: Nilamadhab Kar, Consultant Psychiatrist, Steps to Health, Showell Circus, Wolverhampton, WV10 9TH, UK. Email: n.kar@nhs.net

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Original research

Evaluation of risk factors for falling among Indian (Bengalee) elderly population

Piyali Sengupta, Amitava Pal, Kiran Mondal, Prakash Chandra Dhara

Abstract

Background: Among different types of age related problems, falling is a common barrier among the elderly population. **Aims**: Evaluation of the risk factors for falling among the selected Indian Bengalee elderly population. **Method:** Incidences of falling and pain related discomfort (PRD) were evaluated through questionnaire method. Hand grip strength was measured by a hand grip dynamometer. **Results:** Majority of the elderly subjects (70.3%) were fallers and rest were non-fallers. Frequency of falling was higher in females (76%) compared with males (74.3%), with OR of 1.76. Females had significantly higher occurrence of PRD. Fallers had significantly lower hand grip strength and higher PRD. The risk of falling tended to be 15.8 times higher among the elderly subjects above 80 years of age and 4.31 times higher among 71 to 80 years. **Conclusion:** Age, sex and PRD were significantly associated with falling status. Advanced age and females were the risk factors for falling.

Key words

Elderly, Fallers, Falling, Hand grip strength, Non fallers, Pain related discomfort

Introduction

Among different types of age related problems, falling is a common problem among the elderly population. It was observed from the previous studies that approximately 30% of the community-dwelling elderly aged 65 years and over, fall at least once per year and about 15% fall two or more times per year.[1] Falling and fear of falling have a negative effect on physical and functional well-being of the geriatric population. It may lead to activity restriction, social isolation and reduced quality of life (QoL).[2-4]

It is important to identify the risk factors of falls among elderly to reduce the incidence of falls.[5] The hand grip strength may be a useful parameter for assessing some of the activities in old age.[6] With increasing age, muscle strength decreases and it may eventually reach a level at which weakness start to restrict the ability to perform usual activities.[7-14] Handgrip strength was found to increase up until the thirties and to start to decrease with accelerated speed after the forties.[6,11,12] Impaired skeletal muscle strength and power leads to decreased ability to perform certain tasks such as walking, climbing stairs and thereby increases the risk of falling.

Previous studies on epidemiology suggest that the prevalence of pain related discomfort (PRD) increases with age and females are generally report persistent pain than males.[13] Other studies report that although the prevalence of pain increases with age, pain intensity may be highest during midlife (45-65 years) when the incidence of severe pain peaks.[14] In a state of persistent pain, older adults might limit their day-to-day activities; and that is probably due to pain[15] or fear of falling or both.[16]

Studies on falling status among geriatric population are lacking in Indian population. In the present study an attempt was made to evaluate the risk factors for falling among the Indian Bengalee elderly population. The study sample included only Bengalee population which is more or less homogeneous in nature considering their food habits, life style and cultural background. The findings of the present study are expected to represent the falling status of the Indian (Bengalee) elderly population and may help in the management of falls.

Method

Location of the study and sample selection

The study was conducted in different areas of East Midnapore, West Midnapore, Bankura, Bishnupur, Purulia, North 24 Parganas and Howrah districts of West Bengal state, India. The study was carried out in both rural and urban areas of the selected districts. People aged above 60 years were selected for the study. Two stage cluster sampling method was utilised in the study. In first stage, a cluster sampling method was employed to identify four clusters in each of the selected districts of West Bengal. In second stage, a systematic random sampling method was used to identify 10 families per cluster and it should be mentioned here that there should be at least one elderly person (age 60 or above) in the

Table 1: Falling Frequency and occurrence of PRD between male and female elderly subjects

Incidents of falling frequency				
		Frequency		
Fall count	Total (n=236)	Male (n=115)	Female (n=121)	χ^2
Once	90 (38.1)	48 (41.7)	42 (34.7)	1.23
Twice	29 (12.3)	15 (13.0)	14 (11.6)	0.12
Three times	34 (14.4)	7 (6.1)	27 (22.3)	12.59***
Four times	8 (3.4)	4 (3.5)	4 (3.3)	0.01
Five or more times	5 (2.1)	0 (0.0)	5 (4.1)	4.85*
Total Fallers	166 (70.3)	74 (64.3)	92 (76.0)	3.86*
Non-Fallers	70 (29.7)	41 (35.7)	29 (24.0)	
Occurrence of PRD				
Parts of the body				
Shoulder joint	197 (83.5)	82 (71.3)	115 (95.0)	24.08***
Elbow joint	187 (79.2)	85 (73.9)	102 (84.3)	3.86*
Wrist	142 (60.2)	59 (51.3)	83 (68.6)	7.36**
Hand	204 (86.4)	96 (83.5)	108 (89.3)	1.68
Upper back	24 (10.2)	19 (16.5)	5 (4.13)	9.91**
Lower back	214 (90.7)	93 (80.9)	121 (100)	25.53***
Hip joint	200 (84.7)	100 (87.0)	100 (82.6)	0.85
Knee	225 (95.3)	104 (90.4)	121 (100)	12.14***
Ankle joint	97 (41.1)	45 (39.1)	52 (43.0)	0.36

χ^2= Chi Square, *p<0.05, **p<0.01, ***p<0.001. Figures in parentheses are percentages.

Table 2: Comparison of hand grip strength and occurrence of PRD between fallers and non-fallers

Variables	Category	Group Classification		
		Fallers (n=166)	Non-Fallers (n=70)	
		Mean±SD	Mean±SD	t values
Hand grip strength (kg)	Right hand	8.19±1.44	15.3±6.08	9.28***
	Left hand	5.66±1.53	12.5±6.08	8.99***
Occurrence of PRD				χ^2
Parts of the body	Shoulder joint	144 (86.7)	53 (75.7)	4.34*
	Elbow joint	137 (82.5)	50 (71.4)	3.69
	Wrist	105 (63.3)	37 (52.9)	2.22
	Hand	148 (89.2)	56 (80.0)	3.52
	Upper back	22 (13.3)	2 (2.86)	5.82*
	Lower back	156 (94.0)	58 (82.9)	7.20**
	Hip joint	146 (88.0)	54 (77.1)	4.45*
	Knee	163 (98.2)	62 (88.6)	10.26**
	Ankle joint	73 (44.0)	24 (34.3)	1.91

χ^2= Chi Square, *p<0.05, **p<0.01, ***p<0.001. Figures in parentheses are percentages.

selected family. All families in the cluster were listed; and the number of families was divided by the required number of families to obtain the sampling interval. The first family was selected randomly and then the subsequent families were identified by adding a sampling interval to the random number. At last, according to the inclusion criteria, 250 subjects were selected. Among these, 236 persons completed (response rate was 94.4%) assessment for all the parameters. The sample included 48.7% (n=115) males and 51.3% females (n=121).

Ethical consideration

The objectives and procedures of the study were explained to the elderly subjects and signed consent was obtained from all of them. Approval was obtained from the Institutional Ethical Committee of Vidyasagar University.

Inclusion and Exclusion criteria

All the consenting elderly subjects with any age related health problems were included in the study. Persons who

had any acute illness, undergone recent surgery, had visual, hearing, or cognitive impairments, or a recent history of cancer, physical handicap interfering with the assessments were excluded from the study. The cancer patients were excluded because of their weakness, painful symptoms and in some cases side effects. Subjects who were receiving artificial enteral or parenteral nutrition were excluded as well.

Parameter studied

Measurement of hand grip strength:

The static hand grip strength of the subjects was measured by using maximal grip with the help of a Hand Grip Dynamometer (Lafayette, USA). Before taking the measurement, the subject was requested to stand in a comfortable position. The subject was asked to squeeze the dynamometer as hard as possible without moving the rest of the body. Thus, the final grip strength was measured for both hand and the reading was taken from the dynamometer scale when the pointer was still.

Pain Related Discomfort (PRD):

The PRD of elderly subjects was assessed by a questionnaire (appendix 1) developed for this study. The problems in different parts of the body were evaluated systematically. The questionnaire intended to get information from self-report and observation as well.

Statistical analysis

Data were summarized into mean and standard deviation (SD) values, using Microsoft Excel (Office 2010). The differences were determined by studying the level of significance after performing t-tests between two groups. Selected elderly persons were divided into fallers and non-fallers based on the falling status. Frequencies and percentages were used for categorical variables to summarize data. The difference of proportions in groups was assessed by the Chi-square test for categorical variables. In order to investigate the association of predictor variables with outcome variable (falling), bivariate logistic regression analysis was used. To determine the potency of each predictor variables on falling status of elderly person, the Odd ratio (OR) was calculated based on 95% confidence interval (CI). Statistical analyses were performed using the statistical software IBM SPSS version 20. Statistical significance was set at $p<0.05$.

Results

Frequency of falling and occurrence of PRD among the elderly subjects are presented in Table 1. The results of the present study depicted that among the selected elderly subjects 70.3% were fallers and 29.7% were non-fallers. Significant difference in frequency was observed between male and female subjects (Table 1). It was observed from the results that prevalence of falling was higher in females (76.0%) than that of males (64.3%). Frequency of fall count was also estimated among the selected elderly population and significant difference was observed between the genders and it was reportedly higher in females than that of males.

The prevalence of PRD was reportedly higher than 80% at knee, lower back, hand, hip joint and shoulder joint. Significant difference was observed between male and female subjects at most of the selected parts of the body. Female subjects had reported significantly higher occurrence of PRD than that of the male subjects. In case of female subjects prevalence of PRD was higher than 80% at knee, lower back, shoulder joint, hand, elbow joint and hip joint where as in male subjects 80% prevalence rate was observed at knee, hip joint, hand and lower back.

Hand grip strength and occurrence of PRD was measured and compared between faller and non-faller (Table 2). It was observed from the results that hand grip strength values were significantly higher in non-fallers than in fallers for both hands. The occurrence of PRD was significantly higher for fallers than that of non-fallers (Table 2). The prevalence of PRD was higher than 80% at knee, lower back, hip joint, hand, shoulder joint and elbow joint for faller than that of the non-fallers.

Age, sex and PRD at different body parts were significantly associated with the falling status of elderly subjects (Table 3). The risk of falling tended to be 15.8 times higher among the elderly subjects more than that of 80 years and 4.31 times higher among the subjects aged in between 71 to 80 years than that of the subjects aged in between 61 to 70 years. Between the genders, the likelihood of falling was 1.76 times higher in female than male. The likelihood of falling was significantly higher among elderly person having PRD at shoulder (OR: 2.1), upper back (OR: 5.19), lower back (OR: 3.23), hip (OR: 2.16) and knee (OR: 7.01).

Discussion

The purpose of the present study was to investigate the risk factors for falling among the selected Indian Bengalee elderly population. The factors were compared between fallers and non-fallers and so also between male and female elderly subjects.

In the present study a higher percentage (70.3%) of the selected elderly subjects were fallers whereas in Western countries the percentage of fallers were 20%-30%.[17-18] A significantly higher percentage of female elderly subjects were fallers than that of their male counterpart. The frequency of fall count was higher in females than in males. The finding of the present study was in agreement with the previous study where the authors concluded that the incidence of falls was higher in females.[19]

In the present study, prevalence of PRD was higher at the lower parts of the body among the selected elderly subjects and this finding was in conformity with some previous studies.[20-21] The PRD was higher in females than that in males. Prevalence of pain was higher than 80% at knee, lower back, shoulder joint, hand, elbow joint and hip joint among the female elderly subjects.

Table 3: Bivariate logistic regression analysis for factors responsible for falling among elderly persons

Variables	Category	Frequency	χ2	OR	95% CI	P
Age (years)	61-70	35 (43.21)	50.12***	1		
	71-80	59 (76.62)		4.31	2.17-8.56	0.000
	>80	72 (92.31)		15.77	6.15-40.44	0.000
Sex	Male	115 (48.7)	3.87*	1		
	Female	121 (51.3)		1.76	0.99-3.09	0.051
PRD at						
Shoulder joint	No	22 (56.41)	4.11*	1		
	Yes	144 (73.1)		2.1	1.03-4.26	0.04
Elbow joint	No	29 (59.18)	3.54	1		
	Yes	137 (73.26)		1.89	0.98-3.64	0.057
Wrist	No	61 (64.89)	2.2	1		
	Yes	105 (73.94)		1.53	0.87-2.7	0.137
Hand	No	18 (56.25)	3.32	1		
	Yes	148 (72.55)		2.06	0.96-4.41	0.064
Upper back	No	144 (67.92)	7.16**	1		
	Yes	22 (91.67)		5.19	1.19-22.73	0.029
Lower back	No	10 (45.45)	6.57**	1		
	Yes	156 (72.9)		3.23	1.32-7.87	0.01
Hip joint	No	20 (55.56)	4.2*	1		
	Yes	146 (73)		2.16	1.04-4.48	0.038
Knee	No	3 (27.27)	9.15**	1		
	Yes	163 (72.44)		7.01	1.8-27.29	0.005
Ankle joint	No	93 (66.91)	1.93	1		
	Yes	73 (75.26)		1.5	0.84-2.69	0.168

χ2= Chi Square, *p<0.05, **p<0.01, ***p<0.001; PRD=Pain Related Discomfort; OR= odds ratio, CI=confidence interval. Figures in parentheses are percentages.

The hand grip strength values were significantly higher in non-fallers than that in fallers.[22] The same trend of results was reported in the study of Wahba et al[23] who stated that muscle strength was the only one of the factors that was associated with falls and the grip strength was significantly correlated with lower limb capabilities. Some of the previous studies also revealed that the hand grip strength could be used to identify fallers from non-fallers.[24-25]

The present study found that the occurrence of PRD was significantly higher in fallers than that of non-fallers however no previous literature was found related to this finding. Age, sex and PRD at different body parts were significantly associated with falling status of the selected elderly subjects. In the present study it was noted that the risk of falling was higher in higher age groups compared to the lower age groups and this finding was in conformity with the study of Wahba et al[21] who reported that increase of age caused an increase in the risk of falls while probably other factors control the frequency of falls. The odd of falling was significantly higher in females than that in male elderly subjects. Previous studies also reported that advanced age and female gender were the risk factors for falls.[18]

Conclusion

The findings of the present study suggested that considerable proportion of elderly was fallers; and the female subjects were more prone. The occurrence of PRD was higher as well in females. Hand grip strength was lower in fallers. Age, sex and PRD were significantly associated with falling status. Age and female gender were the most predicting risk factor for falling.

Author information: Piyali Sengupta, M.Sc, Ph.D. Research Fellow, Department of Human Physiology with Community Health, Vidyasagar University, Midnapore, West Bengal, India., Email: piyali_07@yahoo.co.in; **Amitava Pal,** M.Sc, Ph.D, Assistant Professor, Department of Physiology, City College, 102/1, Raja Rammohan Sarani, Kolkata, India, Email: amitavaergo@gmail.com; **Kiran Mondal,** M.Sc, Senior Research Fellow, Ergonomics Group, Defence Institute of Physiology and Allied Sciences (DIPAS), Defence R&D Organisation, Lucknow Road, Timarpur, Delhi, Email: sonukiran89@gmail.com; and **Prakash Chandra Dhara,** M.Sc. Ph.D, Professor, Ergonomics and Sports Physiology Division, Department of Human Physiology with Community Health, Vidyasagar University, Midnapore, West Bengal, India, Email: prakashdhara@rediffmail.com

Correspondence: Prof Prakash Chandra Dhara, M.Sc. Ph.D, Professor, Ergonomics and Sports Physiology Division, Department of Human Physiology with Community Health, Vidyasagar University, Midnapore-721102, West Bengal, India, Email: prakashdhara@rediffmail.com

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Appendix: 1 Assessment of pain related discomfort and falling status among elderly	
A. General information:	Date-
Name-	Place-
Age-	Sex-
B. Information about the pain related discomfort (PRD):	
1. Do you have PRD at shoulder joint-	YES / NO
2. Do you have PRD at elbow joint-	YES / NO
3. Do you have PRD at wrist joint-	YES / NO
4. Do you have PRD at hand-	YES / NO
5. Do you have PRD at upper back-	YES / NO
6. Do you have PRD at lower back-	YES / NO
7. Do you have PRD at hip-	YES / NO
8. Do you have PRD at knee-	YES / NO
9. Do you have PRD at ankle joint-	YES / NO
C. Information about the falling status:	
Do you have any incidence of fall in last six months-	YES / NO
If yes, please state how many times you had a fall-	One
	Two
	Three
	Four
	Five or more

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Viewpoint

Perceptions and treatment of the elderly – time for a rethink?

Nwanneka Ijeoma Nwokolo

Abstract

The elderly are held in high esteem in many nations, valued for their wisdom and experience, cherished, honoured and protected by their families and society. Sadly, and increasingly, that is not the case everywhere. This could, in various degrees, be attributed to the global decline of traditional and religious values since the mid-twentieth century, increasing emphasis on aesthetics, individualism, competitive productivity and financial expediency - and the devaluation of anything not seen to facilitate these 'sacred cows.' Media portrayals of the elderly have not always been extremely helpful, either. Meanwhile, the pensioners of the twenty-first century are turning out to be somewhat different from any that have gone before. This article takes a light-hearted (and potentially controversial) look at whether modern society needs to review its approach to the elderly, and perhaps even dare to revisit some of the old-time values that worked so well for so long.

Key words

care, compassion, elderly, perception, respect, treatment, value

As an overseas-trained doctor, albeit one of now nearly twenty-five years' NHS experience, it remains to me a source of perplexity how much perceptions of the elderly vary between cultures. In my West African nation, as in Asia, the Caribbean and many other countries, the elderly are revered, respected, sought after for their wisdom, and cared for protectively, with the unspoken knowledge that not only have they looked after us us in our vulnerable years, but that it is the right and proper thing to do. 'Right, proper and our bounden duty,' as the Book of Common Prayer would say.[1]

Still fresh to the UK, I was horrified to see an extremely frail elderly man supporting himself on a Zimmer frame while pushing a shopping trolley in a supermarket. Where on earth is his family?' I remember thinking, in an anguished manner. Could it really be that someone that frail and old really had no one at all to do his shopping for him? I was heartbroken for the man, and at that age I was not unduly soft-hearted. Thankfully, in time I came to realise that even in the UK that particular scenario was most unusual, but the memory still saddens me over twenty years later.

The times, they are a-changing, even in my home country. My Dad, a very sprightly 80-something himself (and along with my mum, still gainfully employed in clinical practice), recently told me of how some nameless young man had publicly called an even more elderly man of our acquaintance a derogatory local term for 'old man.' The elderly gentleman had promptly turned round and cursed him: 'May there never be an old man in your father's household again', (or words to that effect). So revered are the utterances of the old among our people that the story still chills me to the marrow. In fact, other onlookers to the incident had immediately warned the young man that if he knew what was good for him, he should speedily beg the elderly gentleman for forgiveness, so that his words could be recanted. Even more so, as the old man was an Anglican priest.

Respect for the elderly was already part of our culture before Christianity was enthusiastically embraced to the hearts of people in my part of our country four or more generations ago, when they came in contact with the very best and brightest facet of the 'jewel' of Empire – those selfless missionaries.

As it always does (when properly practised), this mass conversion to the faith additionally resulted in a societal adoption of the qualities of compassion for one's fellow man in general. Christianity's principles remain the guidelines of most in our part of the country.

Many in my ancestral tribe, the Igbo, are convinced we are of distant Jewish descent; we circumcised our males even before colonialism, and are widely known for our sharp business skills. (No-one else believes our claim, mind you; even our 'bredrens' in Israel did not accept it as kosher when a few of our people went round some years ago to try and convince them, but never mind).

If I am permitted to make the observation, the Holy Scriptures abound with advice for the faithful on relating to elders, with the fifth of the Ten Commandments of God adjuring us to: 'Honour thy father and thy mother: that thy days may be long upon the land which the Lord thy God giveth thee.' The wisdom of Solomon, in Proverbs 23:22, advises:[2] 'Hearken unto thy father that begat thee, and despise not thy mother when she is old.' Timothy 5:17–

'Let the elders that rule well be counted worthy of double honour, especially they who labour in the word and doctrine.' Proverbs 16:3 - 'The hoary head is a crown of glory, *if* it be found in the way of righteousness.'

To my mind, it can be no accident that the abandonment of faith in many societies has come with a corresponding hardening of hearts. Self-styled intellectually-superior minds, in turning away from the Christian faith, have all too often thrown the baby out with what they consider the bathwater. Could there really be a sounder summary of the ideal way to treat your fellow man than the words of Jesus Himself in Matthew 7:12, 'Therefore all things whatsoever ye would that men should do to you, do ye even so to them'?

Other faith-based societies also appear to retain their respect and compassion for the elderly. However, all this is not so say that one cannot be compassionate and respectful without faith; very many are. But at the risk of further controversy, the very concept of man's 'humanity' towards his fellow man must, at the very least, have been consolidated, if not altogether introduced, by Judeo-Christian tradition. In Deuteronomy 30:19 the Israelites are told: '…I have set before you life and death, blessing and cursing: therefore choose life, that both thou and thy seed may live…'

Entire Western civilizations, down to their very justice systems, were founded on Christian principles. Could the widespread abandonment of these values really be unrelated to the general decline in society we see all around us?

Meredith Tupper explored the emergence of the 'blatant disregard and disrespect' for the elderly in American culture, and possible reasons behind it, including a general devaluation of tradition, the individualism, independence and autonomy on which American society is based, and technological developments demanding rapid change and specialized skills.[3]

The English language itself is replete with patronizing and less than complimentary slang terms for the elderly: 'old codger,' 'old dear,' 'old biddy,' 'old bat,' 'dirty old man,' and worse. English literature is not left behind in its portrayals of old age; Shakespeare got in early on the act (excuse the pun) in his immortal 16th century 'All the World's a Stage' monologue, bits of which I seem to recall our Dad quoting to us. The passage describes the old man's 'shrunk shank,' childish treble whistling and piping voice, second childishness, and eventual culmination, sans teeth, sans eyes, sans taste, sans everything.'[4]

Lewis Carroll's 'You are Old, Father William,' much enjoyed in my childhood, and again while writing this article, offers a somewhat more encouraging (if comically optimistic) picture, lauding as it does the elderly Father Williams' impressive athleticism, hearty appetite, acrobatic talents and balancing skills, entertainingly portrayed in John Tenniel's excellent accompanying diagrams.[5]

The old-fashioned Christian tradition of compassion should be re-introduced as a desirable concept to society, the earlier in the educational process the better. This would be much preferable to new policies hastily rushed through after the horse has tragically bolted, as in recent health-based cruelty scandals in the UK.[6]

I distinctly remember our headmistress Sister Mary Fausta, in my primary school days some forty-odd years ago, saying to us, 'Girls, we must be kind to the poor.' Catholics always did have great schools, of which our parents took full (and well-repaid) advantage despite our dyed-in-the-wool Anglican Protestantism. Never mind that Sister Fausta's words led for a long time to my overactive child's imagination picturing 'the poor' all sitting about in a high-walled red brick building waiting for handouts. The point is that the lesson stuck, and has remained with me for a lifetime. The mass cancellation of faith-based school assemblies and prayers in the UK is, to my mind, tragic. Cruelty and neglect often begin with perceiving others as alien to ourselves, and therefore impossible to empathise with.[7]

That frail elderly lady with the cane carefully crossing the road was once a glamorous dancer, a smart hairdresser and beautician, a conscientious nurse, or a successful businesswoman in her day. The even older friend that she has just visited in the nursing home could be a retired high court judge, physician, grocer or acrobat. Old people are full of fascinating stories laced with the wisdom of their years, if only we would take the time to hear them.

There are of course wonderful people in every nation looking after the elderly devotedly every day, because they are beloved family members, or because they themselves are caring professionals.

Today's technology-savvy elderly are very different from what was generally expected in the olden days, especially as the children of the sixties turn flamboyantly silver. With advances in modern medicine, and almost universally available health and nutritional information, the sixty-year-old is a virtual stripling nowadays. I, for one, am pretty pleased about that, as I tentatively approach middle age myself ('From which side?' I can almost hear my people ask. Yes, 'The Golden Girls' – those were the years!).

One only has to look around to see people of pensionable age everywhere living energetic and exciting lives. Actors Helen Mirren, Judy Dench, Morgan Freeman and Michael Caine, television personalities Barbara Walters, Oprah Winfrey, Davids Attenborough and Dimbleby, the singer Barbara Streisand, the endlessly inspiring 'Advanced Style' ladies of New York, and countless others around the world quietly getting on with enjoying life and enriching the lives of their loved ones without unlimited funds or high public profiles.

An elderly person who wishes to can go on working indefinitely if they are self-employed, still up to the job, and have punters who still want their services. As long as health permits, it is an issue of mindset. Church folk are very fond of the saying, 'There is no retirement in the Bible.' 'Never retire,' is also the advice (and final chapter

title) of Rabbi Daniel Lapin's fascinating book, 'Thou Shall Prosper: Ten Commandments for Making Money.'[8]

It delights me that even in my charmingly down-to-earth Midlands city, elderly ladies have in recent years begun to sport sharp, spiky, silver crops and elegant bobs, along with outfits their daughters and granddaughters could happily be seen in. The freedom of pensioners is much to be envied, especially those particularly fortunate ones who always seem to be flying or sailing off tomorrow on one fascinating holiday or other. It is more than possible to continue living an incredibly full, productive and active life after 65, and well beyond.

However, those elders with limitations in their physical or mental health fully deserve, and should expect, to be taken care of, not merely because they have paid into the system, but because it is the right and proper thing for society to do. If old people have no families, or their children are incapable, or unwilling, to care for them, the government should step (enthusiastically) up to the plate. As ever, with the assistance of those wonderful voluntary agencies.

Research has shown significant levels of unmet need in the health and social care of the elderly in the UK and other European countries.[9] Sadly, human nature is such that when funds are tight, the first thing to go is compassion for the vulnerable; when hospital beds are in short supply, the frail elderly are the first to be sacrificed on the altar of expediency.

Whether we like it or not, neglect and maltreatment of the vulnerable dehumanises and debases us as individuals and as a society. The failure to realise that every single human life has an intrinsic and inestimable value, simply by being human, I sometimes fear could be the first step on the slippery slope to the potential future horrors of expected, pressurised or enforced euthanasia, and goodness knows what else.

With the ever-increasing number of elders among us, and the ambition that most have to achieve that prized goal of advanced age themselves, it is essential that society once again begins to value and care properly for older people.

If only because that is what we would want done 'unto' us ourselves.

Author information: Nwanneka Ijeoma Nwokolo, MB.BS, MSc, Dip. AAS, Associate Specialist, Black Country Partnership NHS Foundation Trust, Wolverhampton, UK, Email: nwanneka.nwokolo@nhs.net

Correspondence: Dr N. I. Nwokolo, Steps to Health, Showell Circus, Wolverhampton WV10 9TH, UK, Email: nwanneka.nwokolo@nhs.net

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Review

Books on prescription: the role of public libraries in supporting mental health and wellbeing

John Hudson

Abstract

Books on prescription and bibliotherapy services available to the public, primarily in England and Wales, are investigated, with particular emphasis on those services and resources relating to supporting self-care in the field of mental health. Topics typically catered for in this field include panic / anxiety, depression / low mood, and stress, while other supported subjects commonly relate to coping with obsessive-compulsive disorder, dementia, low self-esteem, bullying, mental health crises, tackling poor sleep etc. Local and national schemes are explored, briefly covering both traditional "book-based" schemes and online alternatives / adjuncts. The potentially enormous benefits of such interventions, at both individual and societal levels, are considered; while the difficulties in evaluating the efficacy of existing schemes are not under-estimated. The likely relevance of public libraries for supporting patient activation and self-management in mental (and physical) health literacy is covered in the context of the new "social prescribing" movement.

Key words

Bibliotherapy, Health Literacy, Mental Health, Self-Care, Self-Efficacy, Social Prescribing, Wellbeing

Introduction

The benefits of incorporating some measure of self-care for patients with long-term conditions generally, and for various mental health issues, have been widely recognised. The demand for National Health Service (NHS) services, including mental health services, far exceeds supply. Health resources are stretched, perhaps as never before, while the number and availability of qualified healthcare professional is limited. Self-care, where patients or other individuals take some measure of responsibility and control in the management of their own conditions, is an important, albeit partial, solution to this inherent imbalance between supply and demand.

Schemes directed towards supporting individuals' capacity for self-care have numerous aspects, which include increasing their health literacy, thereby helping them to stay well (preventing avoidable ill-health), helping to avoid unhealthy lifestyle choices, and raising patients' ability to use health services appropriately thereby limiting excessive demand from patients. Research by the Health Foundation found that patients more able to manage their health conditions had 38% fewer emergency admissions, 32% fewer attendances at A&E, and were 32% less likely to attend A&E with minor conditions that could be treated better elsewhere. They used 18% fewer general practice appointments too. In addition, patients most able to manage their mental health conditions experienced 49% fewer emergency admissions than those least able.[1]

Self-help books: reading well books on prescription

The particular sub-category of self-management considered here has been named variously as book therapy, bibliotherapy and more recently "reading for health". Taking Wolverhampton as a local example, the Reading Well Scheme offers a selection of books, often for children and young people as well as adults, to help them handle difficult feelings and life experiences such as depression, anxiety, stress and bullying.[2] The books may be loaned from Wolverhampton Public Libraries; the book catalogue may be browsed online.[3] The Reading Well Scheme was developed by The Reading Agency.[4] The Reading Agency's Books on Prescription scheme offers self-management books that have been highly recommended by reputable practitioners and organisations. Many of these books are self-help versions of evidence-based treatments, allowing people to help themselves.

How this might work is that a general practitioner (GP) or a mental health professional may give their patients a Reading Well Books on Prescription leaflet and recommend one or more of the titles listed on an accompanying form. Patients then take their "prescriptions" to their local libraries, where the books should be available to borrow. Users can refer themselves on a self-directed basis too, if they prefer; it is not necessary to have a recommendation from a health professional to access these materials.

Not that Wolverhampton is unique in this respect; 98% of English library authorities run local Reading Well schemes, and 95% hold resources under related "common mental health conditions" schemes. At a national level, the Reading Well Scheme offers a growing repertoire of curated book lists, each with recommended book titles; these are: Reading Well for Mental Health,[5] Reading Well for Dementia,[6] Reading Well for Young People's Mental Health[7] and Reading Well for Long Term Conditions.[8]

Other reading-based mental health self-management resources

The emphasis on books may or may not be a historical accident, perhaps increasingly anachronistic in today's online multimedia age. Resources are not restricted to library books. There is a range of other online reading material available on topics including anxiety and panic,[9] depression[10] and stress.[11] Another set of online self-help (non-book) reading material on mental health topics is available nationally, produced by Northumberland, Tyne and Wear NHS Foundation Trust.[12]

Every mind matters

More recently, Public Health England (PHE) has launched the Every Mind Matters website.[13] Evidence-based reading matter available here is intended to help people look after their own mental health and wellbeing (as well as supporting other people whom they may know). There are sections on: Mental wellbeing,[14] Anxiety,[15] Sleep,[16] Stress,[17] and Low mood.[18]

Support for the elderly

Older people are not immune from the full spectrum of common mental health disorders, so many of the resources and schemes listed above have direct relevance to this demographic equally. One area of interest perhaps of particular relevance, given the ageing population, is that of dementia. Reading materials on dementia are available for persons living with mild cognitive impairment and dementia, and are a good source of information and advice for people caring for someone with dementia or for anyone needing to learn more about the condition. Library services are often provided to care homes and memory clinics in the community, supplying books suitable for use in reminiscence therapy aimed at improving mental stimulation, engagement and mental wellbeing in persons with dementia. Resources for reminiscence therapy often include not just books, but also music recordings and other audio-visual items likely to be deeply evocative of earlier residual memories for many individuals. There are collections of suitable material online, available freely.[19,20] The objective evaluation of reminiscence therapy for dementia is a complex non-trivial issue,[21] but mainstream thinking and policy in the UK supports the view that such activities are an important component in the post-diagnostic support for people with dementia.[22,23]

Questions of international availability

There is no world-wide directory of books, information sources and services covering reading therapy, book therapy and bibliotherapy; nor is one likely to be compiled, due to the range of continents, countries and languages and cultures which would need to be accommodated. The present article has been written from a UK perspective mainly, and the question of where international readers should look for help does arise. Many of the online information sources noted here should be available to read by English-speaking readers internationally, although this assertion cannot be verified from within the UK; certain geographical restrictions may apply within some juresdictions.[5-12,14-20] Overseas readers are advised to search online for suitable books, local self-help support services and related information sources, using the search engine(s) most familiar and appropriate in their particular locality. Local mental health practitioners and GPs may also be a good source of guidance.

Does it work: complexities of definition, implementation and assessment?

The evidence base for the efficacy of reading in improving mental health and wellbeing is said to be huge.[24] One of the major problems for arriving at a definitive assessment of the effectiveness of bibliotherapy / reading therapy interventions lies in the lack of clarity and precision in how this broad group of approaches are likely to be put into practice, for different mental health conditions and for diverse patient groups. Bibliotherapy means so many different things to different practitioners and advocates of its potential therapeutic value. This need not be a bad thing, necessarily. Arguably, bibliotherapy has been taking place, implicitly, since the dawn of written text and perhaps earlier into the days of hieroglyphics. The world's classic religious and philosophical texts are about reflecting upon and improving the human condition, whether individually or collectively; the main difference being that these ancient texts were grander and more ambitious in scope than the modern-day, secular and "psychological" alternatives referred to here.

There is heterogeneity, too, along the lines of whether bibliotherapy involves supervised reading or unguided self-motivated reading; whether the reading activity is intended to occur alone or in reading groups;[25] whether the reading materials involve traditional books alone or online web-based literature; whether the source text is purely textual or in audiobook format;[26] whether the materials might include non-fiction, fiction[27,28] or both; whether the source materials are textual or some other multi-media combination of audio-visual materials, possibly extending so far as related story-telling media including music, video, television, the dramatic arts and cinema;[29] the duration / "dose-dependent" extent of the interventions to be considered; the measurement tools for assessing outcomes etc. There is a separate, but related, type of interventions which involve some combination of bibliotherapy with therapeutic and creative writing.[30]

The bewildering breadth of scope for such real-world interventions presents something of a minefield when it comes to the formal operationalisation and rigorous evaluation of these potential treatments. The field remains relatively under-explored in mainstream medical and psychiatric literature to date. A robust and up-to-date Cochrane systematic review on the topic has yet to appear, and relatively recent editions of the major reference texts in psychiatry and mental health mention the topic not at all.[31,32] Some delay in formal recognition is to be expected inevitably, as with any "new" approach.

There are also the ever-present problems of the high "risk of bias" and under-reporting of poorer than expected outcomes. One can only speculate as to the incidence of projects (nationally and internationally) exploring the feasibility of bibliotherapy for dementia - for example - which may have been dropped quietly subsequent to well-intentioned starts, for one practical reason or another. The hidden reluctance to publicise minor failures and unwillingness to include negative results is a widely acknowledged problem even in supposedly rigorous medical clinical trials and systematic reviews; a similar phenomenon is likely to be no less prevalent in NHS or other taxpayer-funded projects at various levels. Such publication biases do act to skew interpretation of the available evidence in an uncharacteristically positive light.

There is a growing body of professional literature broadly favourable towards bibliotherapy nonetheless, but formal conclusions as to efficacy and cost-effectiveness must wait for future analysis.[33-38] Some tentative and preliminary conclusions may be drawn. Evidence indicates that guided reading for self-help works and is more effective than unguided self-help, but it appears likely that the latter does benefit many readers on an informal level.[24]

Of course, bibliotherapy for self-care / reading for health will be more suitable for different groups of readers. Non-readers, persons with reading difficulties, persons with attention deficits, and the time-poor - to mention but a few - are categories of clients with unmet needs who are less likely to benefit from such schemes. Persons with visual impairments, similarly, are more likely to experience difficulties, although it is always worth checking whether the relevant book titles are available in different formats - such as large print, audiobook or possibly even braille - from public libraries, online retailers or charities such as the Royal National Institute of Blind People (RNIB).[39] Non-English language speakers and readers would hit inherent barriers to access when suitable materials are unavailable in their native languages. Interestingly, the Reading Well Scheme is available bilingually in Wales, with support from the Welsh Government.[40,41] Similarly, bibliotherapy and reading for self-management (whether guided or not) would be unlikely to work for conditions where patients lack fundamental awareness about the nature of their condition, such as may occur in schizophrenia and psychosis untreated pharmacologically. Everything has limitations, so these considerations should not be construed unduly negatively.

While the exact contribution of reading for health interventions in improving mental health self-care may be as yet unquantified, one overriding consideration is often forgotten: namely, that such interventions are essentially benign and very unlikely (at face value) to do much harm.

Social prescribing: the new wave?

The NHS is investing concertedly in social prescribing. It is the next "big idea" on the horizon, given the high hopes many senior healthcare managers have for this practice in terms of reducing growing demands on NHS services on every front. NHS England's broad vision for social prescribing is that it will achieve this goal by delegating responsibilities to related local services, thereby promoting physical activity, supporting greater social inclusion (reducing loneliness and social isolation), and facilitating self-efficacy and healthier ageing. The formal definition is: "Social prescribing involves helping patients to improve their health, wellbeing and social welfare by connecting them to community services which might be run by the council or a local charity". A survey found that 59% of GPs thought social prescribing has the potential to reduce their workload.[42,43] Cited examples of social prescriptions to community services involve GP and social prescribing link workers' referrals to organisations such as parks and gardens, allotments, volunteer befriending organisations, leisure and sports facilities, local singing and drama groups, and even museums. One point to note is that examples of similar referrals to the local public library network are - somewhat surprisingly - not given. One wonders why?

Why public libraries?

A national network of taxpayer-funded NHS libraries does exist in the UK, but cannot be considered here. While these libraries do indeed often maintain collections of self-help books in the field of mental health and wellbeing, these are typically held exclusively for the benefit of NHS staff. Members of the public do not have physical access and would encounter many barriers in attempting to utilise the "closed-access" resources in NHS libraries, meaning that the latter have to be "ruled-out". Prescriptions and referrals from mental health practitioners to use the book collections held in public libraries, alone, may be may be considered as a general rule. Rare, little known, exceptions may exist.

A new synergy in the making?

This article is a preliminary exercise in "connecting the dots"; it being an attempt to draw together salient connections between bibliotherapy, books on prescription for self-care, and the emerging role of public libraries in the wider context of social prescribing. This is a small but conceivably important step, given that much of the existing NHS literature on social prescribing appears not to mention the link explicitly.[44,45]

The similarities / commonalities between these strands of thought are obvious and plenty. Both bibliotherapy for self-care and the social prescribing ethos are motivated, in part, by the need to reduce the burden on NHS services. Social prescribing and self-care are, both equally, about empowering individuals to become active participants in the management of their own conditions, instead of remaining passive recipients of solutions passed down from healthcare professionals.

The public libraries infrastructure exists already, funded - albeit inadequately - by the public sector and is there waiting to be used. While NHS services are over-burdened to breaking point, it might be observed that public libraries are somewhat under-utilised and under-valued. This may represent an ideal marriage of burden-sharing, with opportunities for collaborative commissioning and cross-sector partnerships.

On the less positive side, there are evidence uncertainties in common too. A systematic review investigating the efficacy and cost-effectiveness of social prescribing identified a mind-blowing heterogeneity in approaches, and a high risk of bias; with methodological limitations including a lack of comparative controls, short follow-up periods, the lack of standardised and validated measurements, missing data and failure to consider confounding factors.[46] If these design weaknesses are true of social prescribing, they are hardly less so for bibliotherapy interventions; yet another elective affinity between the two, whether for good or ill. Serious researchers will need to investigate such matters with due caution.

Bridge-building required?

While NHS England appears as yet oblivious of the relevance of books on prescription in the context of self-care and social prescribing, public libraries and The Reading Agency *are* conscious of their potential contribution.[47] More work needs to be done in bridging the gap. Public libraries have reported some difficulties: " …creating stable connections with local health partners represents one of the biggest barriers to successfully running the scheme. Feedback revealed a certain level of lack of confidence in approaching potential partners. Libraries felt they 'don't speak the same language' as the health sector, and that they would need support in understanding how to create connections with potential partners".[47]

Conclusion

Reading therapy, also commonly known as book therapy or bibliotherapy, has a role to play in the self-help treatment of a range of mental health related problems, whether with or without therapist/GP guidance. It may be used, also, as a means of supporting healthier ageing, and living better with certain long-term physical and mental conditions such as dementia in older age. The present article has highlighted some of the nascent - and often overlooked - links, affinities and partnerships in-the-making between (i) public libraries, (ii) bibliotherapy / reading interventions to promote improved self-management in mental (and physical) health, and (iii) the latest trends in NHS commissioning theory aiming to reduce pressures on NHS personnel, resources and services, in the guise of "social prescribing" which taps into the alternative and potentially supportive local community infrastructure. The role of public library services is under-acknowledged as yet in regard to the latter; this is a dimension of opportunity which the newly formed NHS National Academy for Social Prescribing might consider further.[48] Many uncertainties remain, admittedly, to be investigated by future research.

Author information John Hudson, BA (Hons), MCLIP. Bell Library, Royal Wolverhampton NHS Trust, Wolverhampton, WV10 0QP, UK. Email: John.Hudson2@nhs.net

Correspondence: John Hudson, Bell Library, Royal Wolverhampton NHS Trust, Wolverhampton, WV10 0QP, UK. Email: John.Hudson2@nhs.net

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Insight

Corporate involvement with dementia: a two-axes classification and policy support

Makiko Takao, Yohko Maki, Ushio Minami, Takao Suzuki

Abstract

This paper aims to explore ways in which companies can become involved in dementia support. The increased prevalence of dementia worldwide presents both risks to and opportunities for companies. We will suggest ways in which policy support programmes can be specially designed for dementia-friendly companies by organizing the involvement of companies along two axes: 1) risk versus opportunities and 2) products/services versus business operation/management. Promoting dementia-friendly measures goes beyond *corporate social responsibility* and helps *create shared value* between companies and society. Governments are expected to take support policies to promote to *create shared values*.

Key words

Corporate Ethics, Dementia, Social Responsibility, Social Values

Introduction

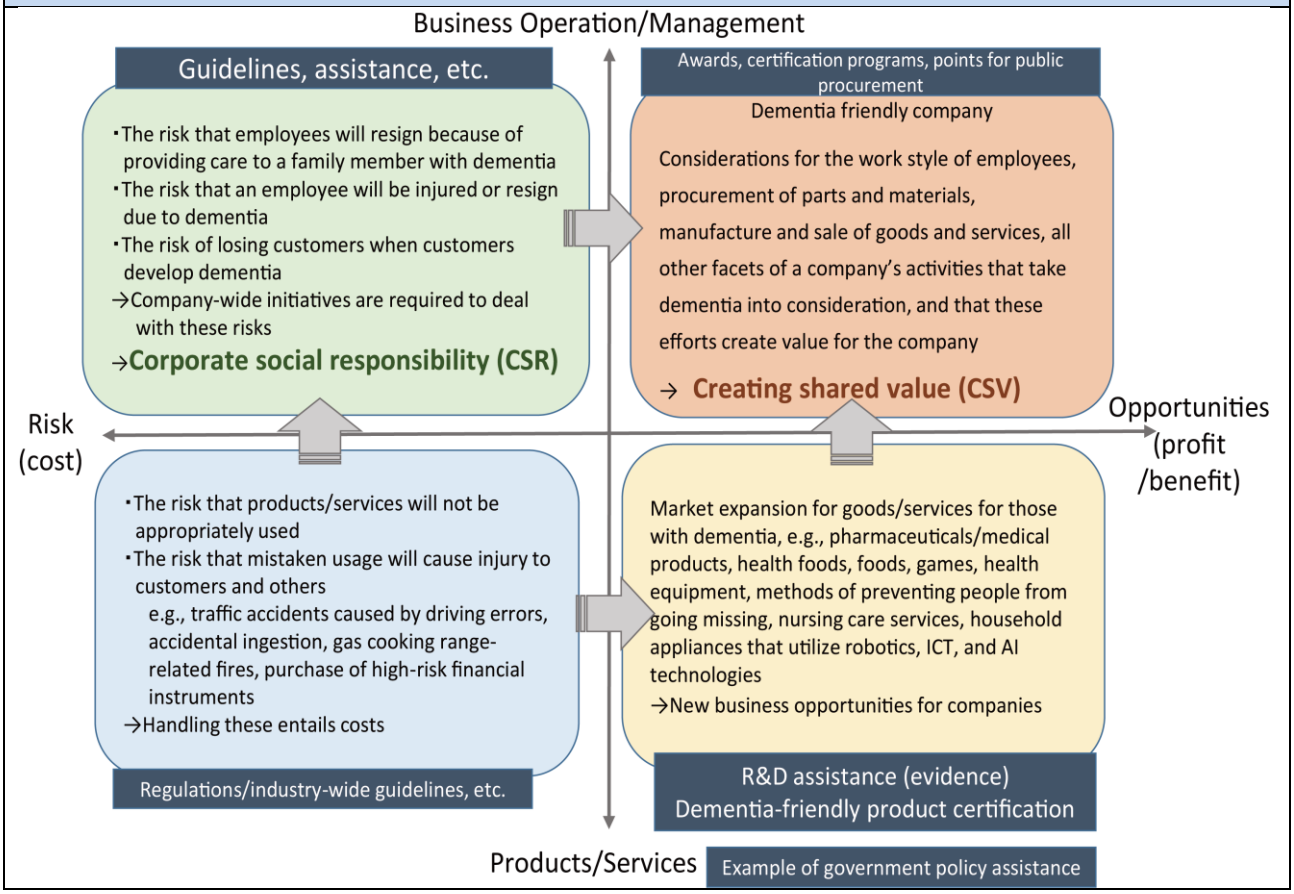
Dementia is becoming an unavoidable issue for companies. In 2015, the First World Health Organisation Ministerial Conference on Global Action Against Dementia discussed the global problems posed by dementia as well as promoting a dementia-friendly society.[1] New technology, product development, and human resource management can be key to taking on these challenges; to do so, companies need to share their experiences and ideas rather than act separately. While creating corporate value is important, it is also important to increase the well-being of society as a whole through corporate activities; the creation of dementia-friendly communities can improve the well-being of the entire community. In this manuscript, we will suggest ways in which corporates may build beneficial relationships in the community between those living with and without dementia.

Increased prevalence of dementia: risks or opportunity?

An increased prevalence of dementia can be a risk to companies in several ways. For example, traffic accidents, fires, and other accidents related to faulty operation harm not only the customer but also those around them and incur unexpected costs. From a public relations standpoint, corporates may earn negative publicity by selling high-risk financial instruments to people with dementia. Medication management and compliance by people with dementia is a major problem for pharmacies. Also, from a human resources point of view, business is affected when employees and business managers develop dementia. This may lead to losses for the company as well as the risk that employees will leave the company. Furthermore, when an employee's family member develops dementia there is a risk that the employee may also leave his or her job to provide care to that person, since one of major causes of people leaving their jobs is the long hours they spend caring for family members, which is a common problem in dementia. This may lead to productivity losses. In many cases, the employee does not inform his or her company that he or she is caring for someone with dementia. If an employee at management level (or another key position) suddenly announces a departure because of care responsibilities, this is a major loss for the company.

Dementia countermeasures need not necessarily present as a cost to companies, these may be opportunities as well. Patients, elderly people and customers may run the risk of mistakenly using or operating products incorrectly leading to accidents; which may be a concern. However, special functions and designs intended to compensate for the decline in cognitive abilities may help prevent adverse incidences. Regarding technological development, autopilot systems and automatic braking systems in automobiles, gas cooking ranges with automatic fire extinguishers are some examples of such products. These types of *dementia countermeasures* may lead to the creation of new markets and new possibilities for easy-to-use *universal designs* for all customers (not only those with dementia). Concerning environmental arrangement, supermarkets in the United Kingdom have installed *slow lanes* designed for those who need to take their time paying without feeling rushed. This kind of measure can attract more elderly customers and can lead to increased sales.[2] These are examples of an effort targeted not only towards people with dementia, but designed to deal with the potential loss of customers due to an ageing society.

Figure 1: From corporate social responsibility to creating shared value



An expansion of the *dementia market* is another way in which increase in the number of persons with dementia presents opportunities. Specific examples include pharmaceuticals and other medical products, fitness clubs (where exercise is used as prevention), games that stimulate the mind, as well as foods and supplements that are thought to prevent the onset of dementia. Goods and services designed for use after an individual develops dementia include devices with a wireless communication capability that inform family members when they are used (such as hot water dispensers, doors, etc.), sensors detecting falls and wandering behaviour, location trackers, robotic pets and many more. There are great expectations around the potential use of artificial intelligence and robotics in dementia care. There is also a need for group homes, day services, and visiting nursing services for people with dementia.

Corporate involvement with dementia: towards a shared value

Figure 1 represents types of corporate involvement with dementia along two axes. On the left hand side of the horizontal axis are risks and costs associated with dementia, while opportunities and benefits are shown on the right hand side. Along the vertical axis, products and services are found at the bottom, while the operational and managerial functions of companies are at the top.

The lower left side shows the risk companies face if consumers use their products and services incorrectly or by mistake (prevention also entails costs). If companies view dementia countermeasures simply as a cost when countermeasures are required; it may be effective to encourage them to take appropriate action through government policies such as legal restrictions and guidelines.

The lower right-hand side shows opportunities for companies that lead to profit such as dementia-related products and services. To promote these efforts, the government can offer financial assistance for research and development and designate products that meet certain criteria as *dementia-friendly products/services*.

The upper left-hand side shows the need for company-wide initiatives that include not only products but also work styles designed to deal with employees and their family members with dementia as well as clients and customers with dementia. There is also a need for *Corporate Social Responsibility* that includes activities designed to support those with dementia live more easily in society. There are government policies regarding this that provides guidelines and help for company initiatives.

The upper right-hand side shows the measures a dementia-friendly company can take regarding the work styles of employees, procurement of parts and materials, manufacture and sale of goods and services, and all other facets of a company's activities. It also shows the ways in which those efforts create value for the company. Dementia countermeasures are factors that can help to

create shared value between companies and society. The idea that companies could create economic value by creating societal value was initially advanced by Michael E. Porter and Mark R. Kramer.[3] Examples of government support policies that can help create shared value include: awards, certification systems, and a system of awarding public procurement points to companies that meet certain criteria.

As Figure 1 shows, effective corporate responsibility towards people with dementia is possible in the current circumstances. A comparable situation is the relationship between companies and environmental protection. In the past, pollution countermeasures were thought of as a cost incurred by businesses and many companies believed that environmental considerations were incompatible with profit-making. However, as public interest in the environment became increasingly widespread, so-called "green business" began to develop. Currently, being an *eco-friendly company* increases the value of a company because these companies are prioritized for investments, regardless of what industry they operate in.

Conclusion

As public understanding of dementia becomes more widespread and corporate interest in dementia increases, corporate involvement with dementia will deepen. This will be indicated by a shift from the bottom to the top and from the left to the right of the diagram presented above.

To increase dementia-friendly companies, both bottom-up and top-down approaches are necessary. Each company is required to increase shared values with societies. At the same time, government policies that promote efforts to help dementia-friendly companies create shared values in the future will also be needed.

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Author information: Makiko Takao, MPM, Graduate School of Regional Policy Design, Hosei University, 3-3-9, Kudan-kita, Chiyoda, Tokyo 102-0073, Japan, E-mail : makiko.takao.46@hosei.ac.jp**; Yohko Maki,** PhD, National Center for Geriatrics and Gerontology, 7-430, Morioka, Obu, Aichi 474-8511, Japan, Email: makiyk@ncgg.go.jp; **Ushio Minami,** PhD, Tottori College, 854, Fukuniwa, Kurayoshi, Tottori 682-8555, Japan, and Tokyo Metropolitan Institute of Gerontology, 35-2, Sakaemachi, Itabashi, Tokyo, 173-0015, Japan, E-mail：minami@ns.cygnus.ac.jp; **Takao Suzuki,** MD, PhD, J.F.Oberlin University, 3758, Tokiwa-machi, Machida, Tokyo 194-0294, Japan, and National Center for Geriatrics and Gerontology, 7-430, Morioka, Obu, Aichi 474-8511, Japan, Email; suzutaka@ncgg.go.jp.

Correspondence: Yohko Maki, National Center for Geriatrics and Gerontology, 7-430, Morioka, Obu, Aichi 474-8511, Japan, Email: makiyk@ncgg.go.jp

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Insight

Communication support for persons with dementia through 'Self-Management of Autonomous Interdependent Life Empowerment'

Yohko Maki, Shuji Iritani, Seishi Terada, Hideyuki Hattori, Takao Suzuki

Abstract

Communication support, which is indispensable for persons with dementia and their family members and caregivers, requires the unconditional acceptance of persons with dementia. Additionally, understanding declines in social cognition is beneficial for empathetic communication. Due to such declines, persons with dementia have difficulty monitoring and controlling themselves from a third-person perspective; thus, it is recommended that others attempt to delineate the thought processes of persons with dementia from their first-person perspective. In response to such support and consideration, it is desirable for persons with dementia to make efforts to maintain good relationships with others. To maintain mutually beneficial partnerships and retain self-esteem, one recommendation for persons with dementia is to take the initiative to express gratitude. In early dementia, reviewing one's relationships with others through communication may be critical for not only symptom management but also living well with dementia.

Key words

Aged, Co-beneficial relationship, Communication, Dementia, Empowerment, Gratitude, Interdependence, Self-management,

Introduction

In early dementia, communication difficulties tend to be overlooked. The feeling of being misunderstood because of miscommunication due to such difficulties can deepen the sense of loneliness experienced by persons with dementia. As dementia affects independence, the interpersonal relationships of persons with dementia inevitably change. The early stage of dementia is a critical period for maintaining one's identity and personal relationships; in this period, rebuilding important relationships and reaffirming one's identity can be aided through communication support. Cooperation between persons with dementia and key social partners, including family members, is required to promote mutual understanding.

Communication difficulties during early dementia

To ensure meaningful communication with persons with dementia, it is recommended to simulate their thought processes from their own perspectives.

Information flow

The present paper will outline the communication difficulties of persons with dementia according to a hypothetical image of information flow in the brain (Figure 1).[1]

1) Sensory input: information from the inside (body) and outside (environment, including other people) is input as sensory stimulation.

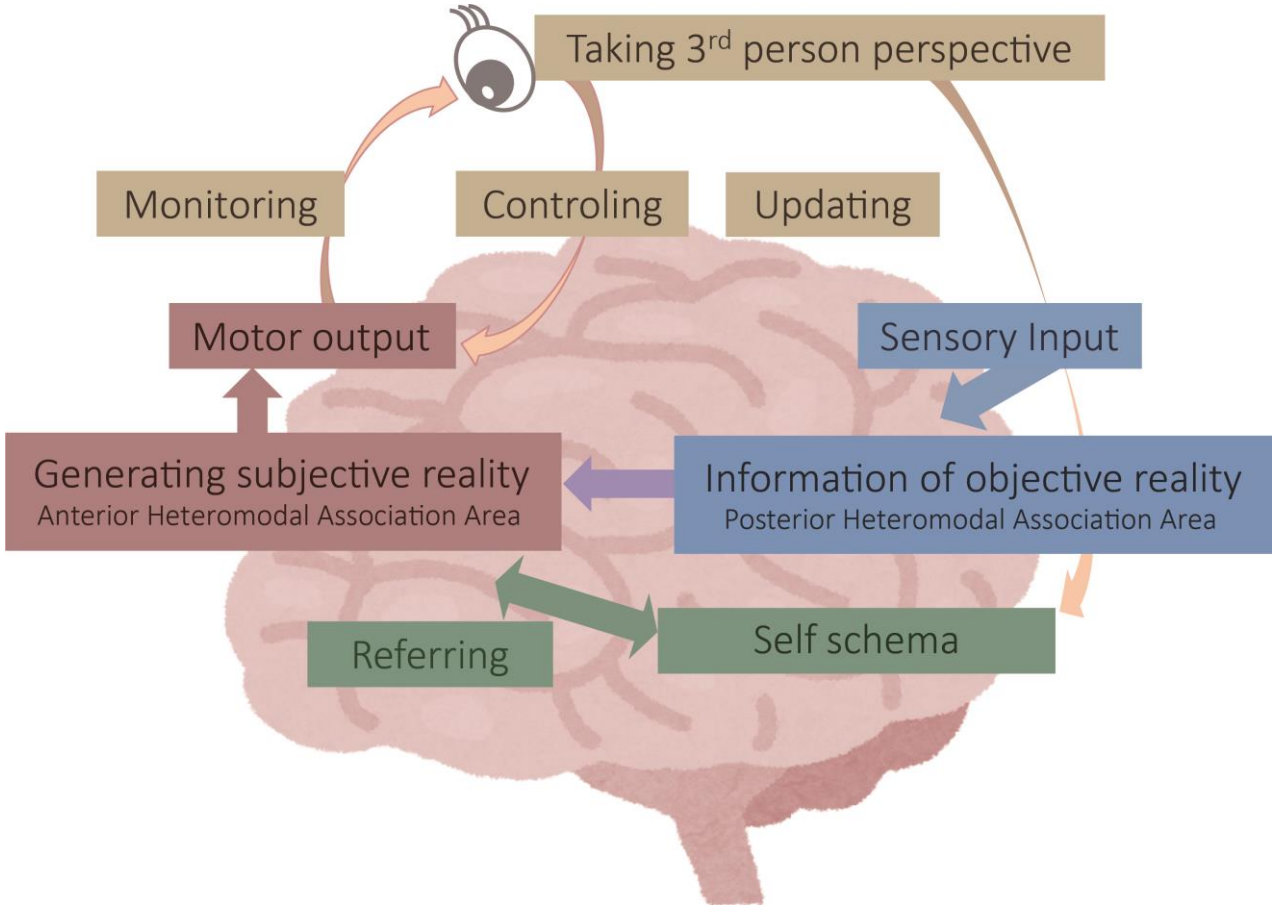
2) Sensory integration: multiple modalities of sensory information are integrated cross-modally into representation (in the posterior heteromodal association area).[2]

3) Creating 'subjective reality': based on objective information, 'subjective reality', which is not always the same as objective reality, is created in the brain (in the posterior heteromodal association area).[2]

4) Self-schema: in creating 'subjective reality', one refers to the abstract feature map of one's self-schema, which is an ordered map of autobiographical memory, including information about the self, relationships with others, and social situations.[3] Self-schema incorporates the new information and is continuously updated with new input and integrated information.[3]

5) Simulation of behaviour: behaviour simulations are conducted by inferring others' mental states (theory of mind[4]) and assuming others' reactions from a third-person perspective.[4] During this process, self-schema is essential for the modification and optimisation of behavioural output.[3] By taking a third-person perspective, one tries to infer others' mental states and monitor the self simultaneously. This perspective-taking is significant for smooth communication, since one can control one's behaviour by assuming others' reactions.

Figure 1: Flow of information processing



The concept of the image is based on a review by Iritani and Ikeda.[1]

6) Behavioural output and others' responses: thoughts are outwardly expressed through words and behaviours and others react to them.

7) Feedback: one's behaviour and others' responses are considered as sensory input signals. The cycle revolves, and prediction error information regarding others' responses is utilized for correcting and controlling one's behaviour.

8) Updating self-schema: this process is monitored and controlled by referring to self-schema, which is continuously updated.

In summary, one creates a subjective reality based on sensory input while referring to self-schema. Behaviour simulation and assuming others' reactions is conducted by inferring others' mental states from a third-person perspective. The consequence of behaviour, including others' reactions, is perceived as feedback in prediction error information. The process is monitored and controlled, referring to self-schema, which is continuously overwritten and updated.

Information flow in Alzheimer's disease dementia

Alzheimer's disease dementia (ADD) affects the entire communication process. The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) defines six domains of cognitive function, which are affected by dementia (major neurocognitive disorder): complex attention, memory, sensory-motor function, language, executive function, and social cognition.[5] Declines in all six domains affect smooth communication. The following is an explanation as to how declines in these six domains affect information processing.

1) Sensory input: some persons with dementia experience difficulty with sensory input. When hearing/visual acuity deteriorates, information may be changed at the sensory input stage. In addition, the deterioration of complex attention may distort the process of sensory input. Complex attention includes selective attention, which involves screening task-relevant information and minimising interference from irrelevant distractors.[6] Persons with dementia may encounter problems in screening sensory information because of the deterioration of their selective attention abilities. Furthermore, the occurrence of attentional bias is possible; for example, in persecutory delusions, attentional bias could occur when one selectively attends to threatening information.[3]

2) Sensory integration: sensory integration can deteriorate to such an extent that integrated information can be

modified and rendered inefficient, resulting in the integration process becoming time-consuming. In cases in which sensory integration is difficult, persons with dementia may find it difficult to create a body image, which is important for generating motor output.

3) Creating 'subjective reality': As 'subjective reality' is created and updated while referring to self-schema, the deterioration of self-schema can distort subjective reality and decisions regarding behaviour. This subjective reality is then strengthened and develops into a delusion. For example, the formation of persecutory delusions, including that of theft, is considered to be related to attribution bias (which is a distorted belief that others are responsible for an individual's misfortune or inconvenience) and reasoning bias (whereby an individual jumps to conclusions with insufficient information).[3] A typical example of this is the delusion of theft. In cases where a person with dementia has forgotten an entire episode in which he/she had replaced something, the 'subjective reality' of that person is that he/she did not replace the missing item, and the person thus presumes that someone else has taken it. Negative and inconvenient events are attributed to others, and one concludes that someone has stolen the item, without sufficient information.

4) Self-schema: self-schema deteriorates mainly because of declining autobiographical memory. It keeps getting updated inappropriately with biased and/or insufficient information.

5) Simulation of behaviour: ADD affects executive functioning,[5] which comprises the ability to plan and choose one's actions based on the appropriateness of a specific situation. Individuals incorporate multiple pieces of information, including feedback from behaviour, while referring to self-schema. In addition, one thinks through internal language; thus, the deterioration of language ability is one of the underlying difficulties related to abstract thinking and simulation of behaviour.

6) Behavioural output and others' responses: output of behaviour and words can be affected by the decline in executive functioning.[5]

7) Feedback: feedback on one's words and behaviours, and assuming others' responses can be biased due to the deterioration of self-monitoring.

8) Updating self-schema: because of the decline of social cognition, persons with dementia encounter difficulty in taking a third-person perspective;[4] consequently, objective thinking from a third-person perspective becomes difficult. Based on subjective reality, which is different from objective reality, self-schema is updated; thus, discrepancies between objective and subjective reality may increase. Furthermore, along with deterioration in perspective-taking, self-monitoring and self-control can be compromised. Consequently, persons with dementia find it difficult to monitor and control the self objectively from a third-person perspective. Instead, they tend to see themselves subjectively from a first-person perspective and face difficulties in incorporating others' thinking.

Furthermore, the entire cognitive process of persons with dementia is affected by emotions such as anxiety and reduced motivation. As such, the whole process is modified, and the person with dementia creates a unique subjective reality. The discrepancy between subjective and objective reality can enlarge, and the person is likely to cling to his/her own subjective reality. Given that persons with dementia may be vaguely aware of the vulnerability of their own subjective reality, they may all the more try to protect it by closing themselves off and rejecting others' advice. For example, attributional bias shown in delusions of theft can also be interpreted as an implicit intention to attempt to shift the responsibility for one's own shortcomings to others, in order to protect one's own vulnerable world.

To sum up, as all information processing is modified, analysing only specific domains of cognitive deficits is insufficient; therefore, the entire information flow must be considered.

Influence of social cognitive deterioration

Especially in early dementia, deterioration in social cognition, which was newly recognised as a cognitive domain in the DSM-5,[5] can cause miscommunication, even when persons with dementia are capable of objective information exchange (e.g. the time and place of an appointment). Thus, it is essential to understand how deterioration in social cognition affects communication.

Self-monitoring while taking a third-person perspective

As mentioned earlier, as dementia progresses, self-monitoring and self-control from a third-person perspective become increasingly difficult.[4,7,8] The deterioration of self-monitoring can be the main cause of miscommunication, rather than the decline of a single cognitive domain (such as attention or memory), especially in early dementia. Through the process of self-monitoring and self-control, one continues to evolve, maintain good relationships with others, and adjust the self to the specific environment through trial and error. At the same time, one's self-schema is continually updated[3]; thus, deficits in information processing could affect self-schema, and the discrepancy between subjective and objective reality may increase during miscommunication.

In self-monitoring, taking a third-person perspective is essential,[7] but this form of perspective-taking is difficult for persons with dementia.[4] Thus, they tend to cling to their own first-person perspective, and it becomes difficult to accept others' thoughts and emotions that differ from their own, which limits their ability to incorporate others' perspectives and be open to new plans/ideas. Persons with dementia become increasingly self-focused, but this is not necessarily due to changes in personality. Rather, this shift can result from the deterioration of social cognitive abilities. They may find it difficult to infer that others have different thoughts and

motives from their own; similar to children who have not yet developed theory of mind,[8] persons with dementia tend to believe that others think as they do. Thus, they may become confused when their own thoughts (especially their demands) are not understood as intended.

In addition, another's response to an action may not be evaluated objectively from a third-person perspective. Usually, one simulates another's response prior to a behaviour, and prediction error information, which reflects the difference between simulated information and the response, is used for consequent behaviour. Persons with dementia tend to evaluate information from their own first-person perspective and fail to use prediction error information appropriately to keep communication going, resulting in miscommunication. As such, the accumulation of trivial miscommunication can lead to difficulties in social interactions.

Declines in self-monitoring can also increase caregiver burden during early dementia or even pre-dementia.[9-11] Persons with dementia and their caregivers may fall into a vicious cycle of increasing miscommunication.

Pragmatic language

Deterioration in social cognition also affects pragmatic language. Daily conversations are filled with ambiguous, nuanced interactions rather than the transmission of entirely accurate information. However, because of social cognitive deficits, rhetorical terms, including metaphors, irony and euphemisms become difficult to understand in ADD.[12] Accordingly, persons with dementia are more literal in their language processes and rather blunt in their communication. Even when it is necessary to solve miscommunication issues, persons with dementia tend to take a self-oriented viewpoint from a first-person perspective. Thus, to avoid miscommunication, it should be noted that the consequences of social cognitive deficits need to be distinguished from selfishness.

Theory of mind reasoning ability

Because of the deterioration of visuoconstructional abilities,[5] the capacity to objectively understand a situation is compromised. In addition to these difficulties in objective recognition, persons with dementia experience problems inferring others' mental states, including intentions, thoughts, and emotions.[13,14] Thus, they find it challenging to understand the nuances of social situations and engage in appropriate behaviour in these contexts.

This tendency may result in social maladaptation. With declines in self-monitoring and self-reflection,[7,15] persons with dementia feel a vague sense of maladaptation, which could evoke anxiety.[16] Therefore, the social adaptation of persons with dementia can be compromised further by anxious distress.

Often, persons with dementia begin to dissociate from others. In such cases, friends or family members may try to persuade them to change their attitudes and continue with social participation; however, overcoming such deficits in insight and reflection is quite challenging. Friends and family may more easily understand memory decline. Just as it would seem useless to force persons with dementia to remember what they have forgotten, they cannot be forced to reflect on themselves.

Changes in emotion recognition

Dementia affects the recognition of others' emotions, which is consequential for interpersonal communication. In addition, persons with dementia experience problems inferring others' facial expressions, a key non-verbal communication cue.[17] Understanding emotions and mental states from eye gaze and gestures has been shown to be compromised in dementia,[13] but inferring others' emotions is still less difficult than inferring their thoughts for persons with dementia.[18]

The ability to recognise others' emotions is included in empathy, which has both affective and cognitive components. The affective component involves emotional relevance, whereby an individual shares a counterpart's feelings, such as emotional contagion of pain, while the cognitive component refers to an ability to analyse and consider the contextual factors underlying others' actions and emotional states.[19] Cognitive empathy is the ability to achieve cognitive inference of another person's affective state,[20] and this ability declines in persons with dementia because of cognitive deficits. Therefore, to ensure empathetic communication, their affective empathy can be spared if communication partners use cognitive empathy to facilitate understanding.

Declines in social cognition do not always lead to prosocial deficits

Social cognitive deficits do not necessarily translate into diminished prosocial behaviour among persons with dementia. It has been hypothesised that certain aspects of theory of mind are demonstrated automatically.[8,21,22] Tomasello and colleagues conducted a behavioural experiment with children aged 14–18 months and observed that the children voluntarily supported others. In the experiment, a man held a magazine with both hands and tried to place it in a cabinet. He hit the door of the cabinet when trying to open it. On observing this, the children spontaneously opened the cabinet door to assist the man. Children have also demonstrated similar altruistic behaviour in a variety of situations.[23,24] In another study, Tomasello and colleagues conducted experiments with 20-month-old children and observed altruistic behaviour in the absence of material reward or the presence of social reward. Instead, altruistic behaviour was diminished when material rewards were provided.[25] These results suggest that young children can perform altruistic behaviour spontaneously, and that they learn to adjust their behaviour according to material expectation later.

In summary, mutually beneficial intentions may be innate,[26] and they are not affected in persons with dementia even in the advanced stages of the condition

when they do not understand material reward. Alternatively, such innate intention may not be manifested because of material anticipation during the stages in which they understand material reward. Thus, it may be possible for persons with dementia to show prosocial altruistic behaviour spontaneously without inferring others' feelings, despite declines in some forms of social cognition. Therefore, the resultant support is required to extract innate prosocial altruistic tendency and affective empathy.

Proposal of support

We propose self-management support, called the 'Self-Management of Autonomous Interdependent Life Empowerment' (SMILE), which aims to extract innate mutually beneficial tendency and emotional empathy, and support the process of fostering subjective well-being through reviewing personal relationships and everyday life concerns for persons with dementia. The pillars of this support are as follows:

1. focus on individuals' preserved functions and strengths rather than deficits;
2. facilitate shared decision-making;
3. ensure the initiative of a person with dementia during decision-making;
4. work towards autonomous interdependence; and
5. maintain reciprocal, beneficial, and grateful relationships.[27]

SMILE proposes communication support that focuses on recognising characteristics unique to each person, and encourages persons with dementia to take the initiative in communication based on their understanding.

Accepting the person with dementia in his/her current state: support for 'being'

It is important to rely on prosocial tendencies and not to emphasize deficits and declines in behaviour. Support begins by accepting the person with dementia in his/her current state, as persons with dementia need to be accepted unconditionally. They experience loss of prior functional capacity; they could once recognise their social selves through specific abilities and achievements but are now confronted with themselves as being dependent and may feel anxious about losing these abilities. Consequently, they may lose motivation in everyday living. Such anxiety and reduced motivation may affect the manifestation of cognitive functions. To retain self-esteem, feeling accepted by others in this new reality is highly necessary. This acceptance is often assumed to be important in advanced dementia, but it is also essential during the early stages, as this is when the person with dementia most clearly recognises the deterioration. Even if one makes a mistake, it is critical not to evaluate the related behaviour but to accept the value of the person regardless of the success or failure of each attempt. Furthermore, persons with dementia are inevitably confronted with their weaknesses, which they may want to hide from others. However, they need to expose their weaknesses to others, to ask for support. Thus, an absolute sense of security is desirable. Communication should be based on a profound confidential relationship, and the purpose of communication in SMILE is to confirm this mutually beneficial relationship.

Creating 'new stories' with persons with dementia through conversation

It is desirable to create 'new stories' with persons with dementia through conversation. As the 'subjective reality' of persons with dementia is individualistic, which may be difficult to understand, it may be better to 'create new stories' with persons with dementia rather than try to adjust their subjective reality. During this process, it is recommended that the perspectives of persons with dementia are adopted, because attempting to prompt them to take others' perspectives is relatively futile. The pillars of this process are explained below.

Focusing on individuals' preserved functions and strengths rather than deficits

It is meaningless to point out mistakes and errors that arise because of cognitive dysfunction. In daily living, communication is expected to be based on mutual reflection on thoughts while respecting each other's perspectives. However, persons with dementia may encounter difficulty in objectively reflecting on their thoughts and taking others' perspectives. Thus, they will find it challenging to understand any thought processes that differ from their own or to modify their thoughts according to others' advice. Therefore, instead of forcing persons with dementia to engage in behaviour whose meaning they cannot understand, effective communication can occur by focusing on their strengths and preserved function, helping them delineate their thoughts. An attitude geared towards empowering persons with dementia may be effective for facilitating prosocial and adaptive behaviour.

Before the onset of the disorder, persons with dementia have the capacity to think rationally using inner language. Thus, even after the onset of dementia, they may want to continue living in a world that is filled with meaning. In the early stages, many persons with dementia may try to rationalise their subjective worlds to generate meaning; however, this becomes difficult as the disorder progresses. Therefore, a beneficial support would help to delineate daily living and encourage them to find meaning in daily living. It is important to highlight any potential for engaging in appropriate coping styles in persons with dementia.

On the contrary, if others try to manage their behaviour without first gaining their understanding, they may become deeply confused. Therefore, through communication, appropriate coping styles should be aided. Even though it is difficult to incorporate new provisions from the external world, persons with dementia

have the potential to manage the condition by making full use of their remaining abilities during early dementia. Although time-consuming, it is recommended that they are helped to rationalise their thoughts themselves by extracting their potential, instead of managing their behaviour and forcing them to behave in a certain way.

Engaging in shared decision-making, and ensuring the initiative of persons with dementia in decision-making

During the decision-making process, it is necessary to confirm purpose in a step-by-step manner. Language expression of persons with dementia can be inaccurate because of decreases in vocabulary knowledge. Word-finding errors and the use of pronouns also increase. Instead of treating these words literally, it may be necessary to explore the intention behind them and proceed by confirming the intention of the person with dementia.

It takes time and effort to confirm understanding at each step; however, once a misunderstanding arises, it is difficult to resolve. In other words, it is difficult to correct a stringent belief held by a person with dementia. Thus, when a misunderstanding occurs, it can be helpful to make light of the situation with humour, rather than using correction, to ensure that such interactions are geared towards the situation rather than the person.[28] It is recommended that persons with dementia make their own decisions without any imposition from others.

Working towards autonomous interdependence

According to the World Health Organization, 'Autonomy is the perceived ability to control, cope with, and make personal decisions about how one lives on a day-to-day basis, according to one's own rules and preferences'. In addition, 'Independence is commonly understood as the ability to perform functions related to daily living—i.e. the capacity of living independently in the community with no and/or little help from others'.[29]

Dementia affects independence, yet autonomy can be protected through support. Others should be careful not to deprive persons with dementia of autonomy. While people are highly interdependent in modern society, respecting others' autonomy is still an essential component of health and well-being, regardless of the presence or absence of dementia.

Maintaining reciprocal, beneficial, and grateful relationships

Maintaining good relationships is a collaborative challenge; furthermore, there is an expectation that the person with dementia also works to improve and maintain mutual relationships. Accepting the limitations of a person with dementia does not mean that one needs to make unilateral concessions. Rather, communicating within their range of understanding can be a useful means of maintaining mutually beneficial relationships.

As others provide conditions for smooth communication, it is desirable for persons with dementia to collaborate to facilitate good communication, and to try to raise their social reserve, which is the ability to maintain social competence regardless of declines in social cognition.[18] To raise social reserve, we recommend to take the initiative to express gratitude; expressing gratitude can help promote altruistic behaviour,[30] while receiving gratitude may be considered a form of social reward.[31] It has been reported that successful social interaction can provide one of the most rewarding stimuli for humans; however, as perspective-taking can play a pivotal role in decoding the rewarding aspect of social interaction, a decline in the ability to take a third-person perspective can prevent persons with dementia from experiencing this rewarding aspect.[32] From our experience, because persons with dementia understand the meaning of 'thanks', even in the advanced stages of the condition when they have forgotten the meaning of monetary reward, it can be beneficial to help them maintain their ability to recognise the rewarding aspect of social interaction.

Another recommendation is to try and find the good in people and perceive situations positively. Positivity bias has been observed in older adults, particularly within memory. According to previous studies, this positivity bias may diminish in dementia owing to a deterioration of cognitive functioning.[33-35] However, the mechanism underlying this bias has not been fully clarified. Moreover, positivity biases have been observed in facial recognition tasks,[36] and the authors reported positivity bias in early ADD.[17] Thus, positivity bias can at least be recognised during early-stage ADD in some phase of cognition. Thus, we encourage engagement with positive preference patterns in their communicative behaviour.

Dementia progressively affects independence, and persons with dementia need support from others to live. To live well with dementia, we recommend that persons with dementia consciously look for the good in others and raise their communication skills, to ask for support and show gratitude when support is received. As they have the right to live well while receiving support from others, persons with dementia should not feel submissive. Instead, they can appreciate others and themselves as a means of facilitating high-quality interdependent relationships.

Interventions

Habituation of gratitude

The goals of SMILE are as follows: 1) strengthen reciprocal relationships among persons with dementia; 2) help persons with dementia feel needed, and 3) help persons with dementia feel a sense of their own existence within their relationships.

We recommend that persons with dementia and their family members keep a 'gratitude one-line diary'. The person with dementia takes the initiative to say 'thank you' to his/her family members for specific assistance (i.e. making meals). Next, family members can respond in kind (i.e. 'Thank you for eating'). The point here is that the person with dementia gives thanks for family

members' care and support, while family members acknowledge desirable behaviour.

As noted above, persons with dementia tend to be self-oriented and more sensitive to what is beneficial to themselves. Thus, they can acknowledge others' help and provide explicit gratitude. As such, strengthening social reserve through gratitude can be a good means of communication training.[18] Furthermore, it is important to verbalise the good aspects of family support, as care is collaborative, and both parties should try to focus on the positive.

Conclusions

It should be noted that effective communication with persons with dementia starts from a place of acceptance; they need to be accepted in their current state. Next, individualistic support should be provided to ensure equitable and mutually beneficial communication, considering their difficulties, in order to delineate thinking and infer others' thoughts and feelings from an objective third-person perspective. In response to such support and consideration, persons with dementia should try to maintain good relationships with others. These are not ethical or emotional requirements, but they rather serve as a rational means of maintaining mutually beneficial communication. During early dementia, reviewing relationships with others through communication may be critical to enable persons with early dementia to live well.

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Author information: Yohko Maki, PhD, National Center for Geriatrics and Gerontology, 7-430, Morioka, Obu, Aichi 474-8511, Japan, E-mail: makiyk@ncgg.go.jp; **Shuji Iritani,** MD, PhD, Department of Psychiatry, Nagoya University Graduate School of Medicine. 65, Tsurumai, Showa, Nagoya, Aichi 466-8560, Japan, E-mail: iritani@med.nagoya-u.ac.jp; **Seishi Terada,** MD, PhD, Department of Neuropsychiatry, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, 2-5-1 Shikata, Kitaku, Okayama 700-8558, Japan,. E-mail: terada@okayama-u.ac.jp; **Hideyuki Hattori,** MD, PhD, Department of Psychiatry, National Center for Geriatrics and Gerontology, 7-430, Morioka, Obu, Aichi 474-8511, Japan, E-mail: hideyuki@ncgg.go.jp**; Takao Suzuki,** MD, PhD, Institute of Gerontology, J. F. Oberlin University, 3758, Tokiwa-machi, Machida, Tokyo 194-0294, Japan, and National Center for Geriatrics and Gerontology, 7-430, Morioka, Obu, Aichi 474-8511, Japan, E-mail: suzutaka@ncgg.go.jp.

Correspondence: Yohko Maki, National Center for Geriatrics and Gerontology, 7-430, Morioka, Obu, Aichi 474-8511, Japan, Email: makiyk@ncgg.go.jp

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Research article

Social security of elderly is at stake: concerns raised by older adults from India

Shreyan Kar, Prasanta Kumar Mohapatra, Brajaballav Kar, Anupama Senapati, Namita Rath, Tushar Kanti Das, Nilamadhab Kar

Abstract

Background: Old age has many positive and negative aspects associated with it. Often the realities, perceptions and expectations vary a lot and become a source of distress. It is important to evaluate the concerns and reflect on the possible solutions. **Aim:** It was intended to study the various old age related issues influencing the lives of the older adults in an urban setting. **Method:** In a qualitative study, issues that are of concern to the older adults, besides the health related reasons were explored amongst the attendees of a public education conference on Healthy Ageing 2019 in Bhubaneswar. **Results**: Discussion and feedback from the older adults suggested that while specific information and support were available for the health related issues, there were some concerns; it was the social issues and security which were highlighted as a major cause of concern for the older adults. Lack of respect, unacceptable behaviour of younger generation in the public places towards the elderly, inadequate or lack of infrastructure supporting elderly in various public areas, offices, conveniences or support systems were given as examples. There was no visible implementation of laws on the ground, although many were available to support or protect the elderly. Suggestions for possible solutions were offered which included: more involvement of multiple agencies along with the government, non-government organisations working in the field of old age, authorities for law and order and legal systems, all working in tandem keeping focus at the needs of the elderly. While the elderly are supported it was considered vitally important to take care of their dignity and self-respect. It was felt that awareness needs to be raised in all quarters, from educational set ups to even political establishments to support the cause of the elderly and safeguard their dignity. **Conclusion:** There are many social concerns raised by the older adults and these need to be addressed. These would require multilevel, multidisciplinary and consistent vigil to deal with and prevent many reasons of silent sufferings of the older adults.

Key words

Aged, Health, India, Law, Social Security

Introduction

Increasing age comes with various concerns. Justifiably health remains in focus in most situations with include both physical and mental health, although the latter does not seem to get proportionate attention in many regions.

Multi-morbidities are common in old age,[1] and although physical morbidities are commonly observed,[2] mental morbidities are common too. For example, the estimated median prevalence rates of depressive disorders around the world for the elderly is around 10%, and that in the Indian population was determined to be 21%.[3,4] Most of these depressive disorders could be secondary to life situations and stresses for older adults.

While age and female gender is significantly associated with depression in older adults, the potentially modifiable risk factors for depression in this age group were identified as low socioeconomic status, loss of a spouse, living alone, chronic co-morbidities, cognitive impairment, bereavement and restricted activities of daily living.[5] Besides depression, with increasing longevity, dementia is fast becoming more common in societies. Dementia is associated with various mental and behavioural symptoms which affects both the patient and their care-givers.[6,7]

However, often, the quality of life of older persons is affected by the situations around them e.g. concerns regarding the availability of appropriate care, expectations from family, changing family systems and traditional values, safety in the community, and environment issues.[8] Health related concerns, loneliness, boredom,[9] abuse from family members,[10] bereavements, financial worries are many concerns that the elderly face. The older people report discomfort in adjusting to the changes in societal attitude and behaviour especially from younger generations.[8]

Aim

On the above background, it was intended to explore the current concerns of the older adults and their needs in general.

Method

In a qualitative study, the attendees of a public education conference on Healthy Ageing 2019 for older adults in Bhubaneswar, India provided information about their concerns through a survey involving an open ended questionnaire. The concerns and the suggested solutions, as expressed by the attendees, were discussed during the conference and the summarised. From these summaries, the themes were explored and were categorised.

The project was considered as a survey by the institutional ethics committee of Quality of Life Research and Development Foundation. Ethical principles of anonymity, voluntariness, and option of non-participation were adhered.

Result

There were around 130 delegates for the conference and most of them were involved in the discussion and providing feedback and opinions. These were captured, and the themes were analysed. The quality of the conference and discussions were rated by the delegates on a scale of 1-5 where 1 is poor, 2 fair, 3 good, 4 very good and 5 excellent. Average scores for various areas were: overall assessment 4.1, organisation 4.2, programme meeting the expectations 4.2, and usefulness of the content/information 4.4. These suggested that the conference and the discussions were evaluated positively by the delegates.

Table 1. Major themes raised by the older adults

Health related

- Anxiety
- Insomnia
- Memory problems / dementia
- Diabetes
- Obesity
- Prostrate problems
- Dental problems
- Cancer
- Foot care
- Diet
- Food supplements

Psychosocial

- Loneliness
- Lack of interaction
- Isolation of older persons
- Lack of respect to elders
- Abuse of elders by younger persons
- Social disturbances
- Social anxiety
- Stress / Mental tension
- Lifestyle
- Wealth/money management during old age

The themes generated during discussion and feedback suggested that there were many social issues of concern for older adults, besides the health related reasons. These are mentioned in table 1. It appeared that most of the health related problems can be topics where there is a need for more information in the public domain, probably with the local language.

Solutions suggested by the older persons

Older adults discussed various possible solutions, during the animated discussion. A sample of such solutions that were suggested by the elderly for the elderly is given in Table 2. Substantial proportions of these solutions were methods that the older adults found helpful to themselves. The sharing was observed as a way of peer-support and was facilitated during the group interaction.

Table 2: Solutions for the concerns of the elderly as offered by the elderly

Health related points

- Adherence to medical advice
- Nutrition (eat less, work more)
- Balanced diet
- Good habits
- Preventive health care
- Healthy life
- Yoga
- Food and exercise in time
- Nonmedical intervention for healthy ageing

Psychological points

- Love self
- Be joyful
- Happy and worry free life
- Take life as it comes
- Be positive
- Disciplined life
- Keep mind peaceful

Social points

- Work for the community
- Be interactive
- Motivate friends
- Societal development
- Activities (Small group activities, dance, song,)
- Surprises
- Collaborations

Societal attitude and security

Various concerns regarding societal attitude towards the elderly people and lack of adequate security were raised (Table 3). The attendees also suggested possible solutions during the conference. Issues related to younger generation, concerns related to children, financial worries, lack of or inadequate implementation of the existing laws were major themes.

Support from the authorities was considered an important step towards ensuring and improving the sense of security in the community. It was suggested that different areas should have named individuals in police or authority to

support the elderly, take the complaints, and if needed to visit the older persons in their homes. These may be community security officers, social workers, and others. The reporting of problems and actions taken regarding those should be seamless and hassle free. These officials should be accessible, approachable, and they should take proactive steps to prevent untoward incidences.

Table 3. Concerns of the elderly related to social attitude and security, suggested solutions

Concerns

- Odd, problematic, unacceptable behaviours of the younger generation both at home and outside
- Distance from adult children – lack of meaningful communication
- Financial hardships of older parents and no adequate support from children
- Financial problem of children and their continued expectations from parents to solve that
- Issues related to medical expenses, perceived to be high

Suggested solutions

- Holistic and value education for children from school level
- Senior citizen charter to have close links with authorities like police
- Improved attention of the political parties to raise the issues of older people
- Active and visible implementation of the laws
- Government support for older adults regarding finances, social security
- Improved sensitivity of the population to the needs of elderly
- Old age friendly societies, facilities in public places

Discussion

As evident from the census, the proportion of elderly in India is consistently increasing.[11,12] It is alarming to observe that a considerable proportion of the population in their old age are feeling concerned about various things, including negative social attitude towards them.

Societal concerns

From the discussion, it appeared that there is a sense of learned helplessness among the elderly about disrespectful, neglectful, and abusive behaviour from the younger generations. The absence of a response from the society even if it notices the concerns of older adults, neglect, ill-treatment, and harassment from younger adults, exploitation, and abuse is a major concern.

One of the suggestions from the discussion was to be re-emphasizing the moral and social values in the education in schools, so that it may gradually help in changing the attitudes. There appears no such option in the curriculum at present. There are obvious roles for the families in this regard as well.

Older adults are a huge resource for the families and society with their wisdom, knowledge and most continue to contribute to society and remain active in later years.[13] It is obvious that they require adequate support, opportunities, and ambience to utilise their abilities optimally. There is a strong need to change the adverse perceptions about them.

It has been highlighted that in Indian culture and tradition, elderly people always had respectable status; which is currently deteriorating. It is suggested that the breakdown of joint family system, urbanisation, economic migration, growth of materialism are some of the reasons why the change in the value are observed in current societal systems. Gradually the economic power of the elderly is also depleted as sources of income have mostly changed from agricultural landholdings to individual jobs. A report suggested that the elderly are less vulnerable in rural compared to urban areas, mostly being in a joint family system.[14] Similarly, proportions of the elderly couples living on their own has jumped up considerably in recent years.[14] However, with all these changes, it could still be possible to maintain honour and respect for the elderly.

Old age friendly facilities, priorities are becoming more evident, to address their failing physical and cognitive abilities however, this is too little compared with the needs. Not only do the attitudes of young people towards the elderly require change, but also the authorities and policy makers have to refocus their attention to developing and implementing old-age friendly facilities, programmes and laws. Efforts should be taken to improve the awareness of the options available and to facilitate the use of the support systems. Older adults themselves can help each other developing local groups, peer-support and connecting with larger networks.

Abuse

A wide range of abuse: physical, verbal, economic, disrespect, neglect has been observed in the Indian elderly population. The abuse of elders is very common in India, and unfortunately, it is the children, mostly sons, who are the wrongdoers.[15] Although many elderly people are experiencing various types of abuse and financial exploitation at home;[16] they do not come out and seek help regarding this, in spite of the existence of specific laws in the country. In addition, many older people may not be aware of such laws; therefore efforts should be taken for improving awareness in the community and ease of utilisation of such laws. There are many laws protecting the rights of the elderly in India;[11] however their implementation and use are seriously flawed. It has been observed that those with formal education (8 years or above) among the elderly is associated with reduced violence against them.[15] Hopefully, with increases in literacy rates, the abuse may come down in the future. However, providing public education about rights of the elderly, existing protective laws and supportive

programmes may help older adults to improve their awareness and decrease their vulnerability.

Financial and wealth management in old age

Reportedly, nearly 50% of the elderly are entirely dependent, and another 20%are partially dependent on others for their economic needs. The majority, 85%, of the older adults depend on others for their day to day maintenance.[14] Financial issues appear to be a major concern in old age. There are two sides to it; there may be a lack of funds for day to day maintenance to various health and other related expenses; and the other side is managing the finances/wealth they have. For the lack of funds, there are many government support systems for poorer elderly individuals such as old age pension, and health insurance initiatives (Ayushman Bharat) and specifically Senior Citizen Health Insurance Scheme from Government of India.[17,18] However, Ayushman Bharat is only for poor, deprived rural families and urban workers' families; which does not help to many in the middle or lower middle socioeconomic state. Financial planning earlier in life for old age may help many people.

There is a growing need for support regarding wealth management and professional-help specialised for older adults' issues. Financial firms can work towards it. While there are provisions of will for proper management of wealth after death, it is not particularly well taken up yet in Indian society.

Conclusion

The study highlighted many current concerns of older adults from a mostly urban background in India. While health related issues were mentioned, changing social attitude towards the elderly, a sense of inadequate social security for them predominated. There was a perception of gradual dwindling of respect for the elderly in the wider community. Abuse and exploitation considering their vulnerability were acknowledged, although it appeared that the elderly are not adequately aware of the extent of their prevalence and the supportive options available. Many solutions were suggested by the older adults and most were practical and implementable. It was interesting to observe older adults shared many methods they found useful as a way of peer-support. Future research may investigate what helps to improve the social positions of older adults and societal attitude, through case examples and comparative studies.

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We thank all the attendees of Healthy Ageing Conference 2019, Bhubaneswar, who agreed to participate in the study and provided their valuable observations and suggestions. We appreciate the support from the Geriatric Care and Research Organisation (GeriCaRe), Quality of Life Research and Development Foundation (QoLReF), Bhubaneswar and The Institute of Insight, United Kingdom.

Author information: Shreyan Kar, MBChB Student, University of Birmingham, Birmingham B15 2TH, United Kingdom; Email: kar.shreyan@gmail.com; **Prasanta Kumar Mohapatra,** MD, Consultant Psychiatrist, Odisha Medical and Health Services, Government of Odisha. Email: drpkm2@rediffmail.com**; Brajaballav Kar,** B.Tech, PGDM, PhD, Associate Professor, Technology and Operations Management, School of Management, KIIT Deemed to be University, Bhubaneswar, India, Email: brajkar@gmail.com; **Anupama Senapati,** PhD, Assistant Professor, KIIT Deemed to be University, Bhubaneswar, India. Email: senapati.anupama@gmail.com; **Namita Rath,** MA, MPhil, PhD, Assistant Professor in Management, Faculty of Management Studies, Sri Sri University, Cuttack, India. Email: namita.r@srisriuniversity.edu.in**; Tushar Kanti Das,** MD, Director of Medical Services at J. G. Hospital, TRL Krosaki Refractories Limited, Jharsuguda, India. Email: tkdas@trlkrosaki.com; **Nilamadhab Kar,** MD, DPM, DNB, MRCPsych, Consultant Psychiatrist, Black Country Partnership NHS Foundation Trust, Wolverhampton, UK. Email: n.kar@nhs.net

Correspondence: Brajaballav Kar, B.Tech, PGDM, PhD, Associate Professor, Technology and Operations Management, School of Management, KIIT Deemed to be University, Bhubaneswar, India, Email: brajkar@gmail.com

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Creative Expressions

Grandchildren

Subha Das

After my retirement from medical profession, I spent some time doing painting. This is an acrylic painting on Canvas, my four grandchildren standing on a beach of Northumberland. This painting is all about grandparents and grandchildren.

When people are older and have grandchildren; that is the happiest time of their lives. Some elderly people might have lost their partners and might be feeling lonely and may be needing company. Grandchildren give them pleasure and break their monotonous lives in many ways.

Young kids love to talk. They love to talk about their various activities and achievements in their schools which give a lot of joy to grandparents. Also, grandparents and grandchildren learn from each other in many ways. Kids teach grandparents about the latest technology, which are new to some. On the other hand grandparents tell the kids about lives centuries ago, things about post war time, how were their lives in school days, the punishments etc.

As a whole, little grandchildren could change the lives of grandparents by giving them joy, happiness, helping them at the time of depression or just being there at the time of illness.

Artist information: Dr Subha Das

Correspondence: Dr Subha Das, Dundee, Scotland, United Kingdom.
Email: drsubhadas@gmail.com

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Information Capsule

Healthy Ageing 2019: conference summary

Healthy Ageing, GeriCaRe Annual Conference 2019 was held on 10 August 2019 at Gita Govinda Sadan, Bhubaneswar. It was a public education conference, attended by more than 130 elderly and their caregivers.

Topics and speakers

A range of topics was presented at the conference by invited speakers. These included - Healthy living in old age: **Dr Tushar Kanti Das,** Director of Medical Services at J. G. Hospital, TRL Krosaki Refractories Limited, Jharsuguda; Mental health problems in elderly: a silent threat, by **Dr Susanta Kumar Padhy**, Head of the Department of Psychiatry, All India Institute of Medical Sciences, Bhubaneswar, India; Role of physiotherapy in osteoarthritis: **Sanjay Kumar Ram**, Director, Upkar physiotherapy and rehabilitation centre, Cuttack; Occupational Therapy in Old Age: **Bishnupriya Lenka,** occupational therapist at Kalinga Institute of Medical Sciences, Bhubaneswar; The art of living with diabetes mellitus: **Dr Subash Ranjan Behera**, Consultant Endocrinologist, Capital Hospital, Bhubaneswar; Diet and life style modification for healthy ageing: **Anjana Tripathy**, Clinical Nutritionist BR Life Kalinga Hospital, Bhubaneswar. **Dr Nilamadhab Kar,** Consultant Psychiatrist, Black Country Partnership NHS Foundation Trust, Wolverhampton, UK coordinated the academic event.

Panel members for discussion

Besides the speakers, other professionals joined the discussion panel for the public interaction. The experts included: **Dr Prasanta Kumar Mohapatra,** Consultant Psychiatrist, Odisha Medical and Health Services, Government of Odisha**; Dr Siba Prasad Chakrabarty**, Consultant Psychiatrist, Kalinga Hospital; **Dr Narendra Nath Samantaray**, Clinical Psychologist, Mental Health Institute, SCB Medical College Cuttack, India; **Dr Dinabandhu Sahoo,** Consultant Physician, District Hospital, Bhawanipatna, Odisha; **Dr Saroj Ranjan Naik**, Consultant in ENT department (Otorhinolaryngology), Khordha; and **Dr Niharika Panda**, Professor and Head of Radiation Oncology Department, Acharya Harihar Regional Cancer Center, Cuttack. There was immense input from the attendees as well.

Health screening

There was a health screening opportunity specifically for cardiovascular risk factors. The screening was conducted by **Shreyan Kar,** MBChB Student, University of Birmingham, Birmingham B15 2TH, United Kingdom and supported by **Dr Subash Ranjan Behera**, Consultant Endocrinologist, Capital Hospital, Bhubaneswar.

Panini Samman

The 2019 Panini Samman was given to **Shri Nrusingha Charan Sahoo**, Editor of 8 volumes of Ame Odia, a compendium of biographical account of more than 5000 prominent Odias over centuries, for his exemplary contribution to Odia literature and knowledgebase.

Book Release

Healthy Ageing Year Book 2019 by GeriCaRe with updated information was released at the conference. It is available as Free E-Book for the public. In addition An Art Book titled '*Chitra mo Mitra'* (Art my Friend) by **Mrs Sabita Manjari Dash** of Cuttack was also released at the conference.

Management

Overall management support for the programme was received from **Dr Brajaballav Kar,** Associate Professor, Technology and Operations Management, School of Management, Kalinga Institute of Industrial Technology, Bhubaneswar; **Dr Namita Rath,** Assistant Professor in Management, Faculty of Management Studies, Sri Sri University, Cuttack, India; **Dr Anupama Senapati,** Assistant Professor, School of Electronics Engineering, Kalinga Institute of Industrial Technology, Bhubaneswar.

Support

The Healthy Ageing conference was conducted by the Geriatric Care and Research Organisation **(GeriCaRe).** The registration fee was subsidised for all and waived for the eligible attendees by GeriCaRe. The scientific programme was supported by Quality of Life Research and development Foundation **(QoLReF)**, Bhubaneswar. Support was also available from **GenX Studios**, Bhubaneswar, **The Konark Foundation**, Odisha; and **The Institute of Insight**, United Kingdom.

Tanaya Kar, B. Design Programme Student, National Institute of Fashion Technology (NIFT), Bhubaneswar, 751024, India; Email: kartaniya234@gmail.com

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Manuscript Preparation

Instructions for authors

Introduction

The *Journal of Geriatric Care and Research (JGCR)* is the official publication of Geriatric Care and Research Organisation (GeriCaRe). The *JGCR* publishes original work in all fields of geriatrics, contributing to the care of elderly. Theme based special issues focusing one aspect of care are also published periodically. Manuscripts for publication should be submitted via email <jgcr.gericare@gmail.com>.

The *JGCR* is not responsible for statements made by authors. Material in the *JGCR* does not necessarily reflect the views of the Editors or of GeriCaRe.

Editorial process

The *JGCR* follows in principle the Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals by the International Committee of Medical Journal Editors (ICMJE) and the Committee on Publication Ethics (COPE).

Contributions for *JGCR* are accepted for publication on the condition that their substance (whole or part) has not been published or submitted for publication elsewhere, including internet. If there are other papers from same database, then the authors must send all details of previous or simultaneous submissions.

All submitted articles are peer reviewed. At the first step, the articles are assessed by the editorial board for its suitability for the formal review.

If found suitable, the manuscripts undergo a double-blind peer review. The suggestions received from reviewers are conveyed to the corresponding author. When appropriate, the author is requested to provide a point by point response to reviewers' comments and submit a revised version of the manuscript.

Manuscripts accepted for publication are copy-edited to improve readability and to ensure conformity with *JGCR* style.

Authorship

Authorship credit should be based only on substantial contribution to:

- Conception and design, or analysis and interpretation of data
- Drafting the article or revising it critically for important intellectual content, and
- Final approval of the version to be published

All these conditions must be met. Participation solely in the collection of data or the acquisition of funding does not justify authorship. In addition, the corresponding author must ensure that there is no one else who fulfils the criteria but has not been included as an author.

Group authorship is permitted, but in this case individual authors will not be cited personally.

If a professional medical writer was used for manuscript preparation, their name and contact details must be given in the acknowledgement and any conflicts of interest must be disclosed.

The corresponding author must sign the contributors form on behalf of all the authors, once a manuscript has been accepted. This author must take responsibility for keeping all other named authors informed of the paper's progress.

Unless otherwise stated corresponding author will be considered as the guarantor of the article. However one or more authors/contributors can be guarantor. The guarantor accepts full responsibility for the work and/or the conduct of the study, had access to the data, and controlled the decision to publish.

Declaration of competing interest

All submissions to the *JGCR* (including editorials and letters to the Editor) require a declaration of competing interest. This should list fees and grants from, employment by, consultancy for, shared ownership in, or any close relationship with, at any time over the preceding three years, an organisation whose interests may be affected by the publication of the paper.

Ethics approval of research

The *JGCR* expects authors to follow the World Association's Declaration of Helsinki and base their article on researches conducted in a way that is morally and ethically acceptable. The research protocol must have

been approved by a locally appointed ethics committee or institutional review board.

Every research article must include a statement that the investigators obtained ethical approval for the study (or an explanation of why ethical approval was not needed) in the methods section of the manuscript with the name and location of the approving ethics committee(s).

Patient consent and confidentiality

A statement regarding informed consent must be included in the methodology. Studies involving humans must have written informed consent from the patients. Where the individual is not able to give informed consent for lack of mental capacity, it should be obtained from a legal representative or other authorised person. If consent cannot be obtained because the patient cannot be traced then publication will be possible only if the information can be sufficiently anonymised. Anonymisation means that neither the patient nor anyone could identify the patient with certainty. Such anonymisation might, at an extreme, involve making the authors of the article anonymous. If the patient is dead, the authors should seek permission from a legal representative or other authorised person as a matter of medical ethics.

The authors should check the specific laws in their country. Contributors should be aware of the risk of complaint by individuals in respect of breach of confidentiality and defamation; and must archive the signed informed consent form.

The process used to assess the subject's capacity to give informed consent and safeguards included in the study design for protection of human subjects should be mentioned.

Publication Ethics

Authors should consider all ethical issues relevant to publication. This includes (but not restricted to) avoiding multiple submission, plagiarism and manipulation of figures/data. Any concerns in this regard must be brought to the attention of the Editor and these will be investigated by procedures recommended by the Committee on Publication Ethics (COPE). If conclusive evidence of misconduct is found, the *JGCR* undertakes to publish a correction or retraction of article as necessary.

Clinical trial registration

All clinical trials must be registered in a public trials registry. This is a requirement for publications of the trials.

Qualitative research

The *JGCR* welcomes submissions of reports of qualitative research relevant to the scope of the care of elderly.

Type of manuscripts

Research article

The research article should normally be between 3000 and 4000 words in length (excluding references, tables and figure legends). Only the essential references should be given, preferably not more than 25 beyond those describing statistical procedures, psychometric instruments and diagnostic guidelines used in the study. Authors are encouraged to present key data within smaller tables in the appropriate places in the running text. This applies also to review articles and short reports.

A structured abstract not normally exceeding 150 words should be given at the beginning of the article, incorporating the following headings: Background, Aims, Method, Results, and Conclusions.

Key words: Up to six key words should be provided. Please use Medical Subject Headings (MeSH) as key words.

Article should have Introduction, Method, Results and Discussion sections. Authors may use relevant subheadings under these sections. Introductions should normally be no more than one paragraph; longer ones may be allowed for new and unusual subjects. The Discussion should always include limitations of the paper to ensure balance. A paragraph of practical implications of the observations is encouraged.

Short report

Short reports (brief communications) are based on original research, observational or evaluation studies, clinical audits etc. These are structured as research articles and require an unstructured abstract of one paragraph, not exceeding 100 words. The report should not exceed 1500 words (excluding references, tables and figure legends) and contain no more than one figure or table and up to 10 essential references beyond those describing statistical procedures, psychometric instruments and diagnostic guidelines used in the study.

Case report

Case reports and series require up to 100 word abstract, and the length should not exceed 1000 words (excluding references, tables and figure legends). The written informed consent of the individuals must be obtained and submitted with the manuscript. Please refer to patient consent and confidentiality paragraph for further detail. In general, case studies are published in the *JGCR* only if the authors can present evidence that the case report is of fundamental significance and it is unlikely that the scientific value of the communication could be achieved using any other methodology.

Review

Systematic and narrative review articles should be structured in the same way as research article, but the length of these may vary considerably, as will the number

of references. It requires a structured abstract like that of research articles.

Short review

These articles focus on highly topical issues based on evidence. Professional perspectives, viewpoints, commentary and opinion are included here. It can also include clinical review relevant to the practitioners. These articles are usually more broad-based than editorials. They can include tables and figures. Usual length is around 1500 words (excluding references) with an unstructured abstract up to 100 words.

Editorial

Editorials require an unstructured summary of one paragraph, not exceeding 50 words. Editorials should not exceed 1000 words and may contain no more than one figure or table and up to 10 essential references.

Letters to the Editor

Letters may be submitted either as responses to published articles, to inform about particular situation or raise pertinent issues, as expert opinion or as general letters to the Editor. Letters may be up to 400 words in length with a maximum of 5 references.

Insight

These articles include variety of topics which may reflect an individual perception, involvement or contribution to geriatric care. It can include good practice examples, inspirational experiences and highlight neglected areas. Essays in descriptive prose can be submitted on any topic related to geriatric care. These are usually written by a single author but a second author may be included occasionally. The length of the articles may vary considerably depending upon the topic and may be up to 2000 words excluding references. An unstructured summary of around 100 words is preferred but not mandatory. Use of subheadings is encouraged.

First person account

In first person accounts *JGCR* publishes experiences of older persons or their care providers about the care and concerns of the elderly, that can be considered significant and provide learning points for others.

Columns

These comprise a range of materials considered to be of interest to readers of the *JGCR*. This section includes reviews on book, film or web resources as short articles up to 400 words. Some other examples include News regarding developments that can influence the care of elderly, poems, paintings, photographs, quotations, information about important internet links, etc. These articles are published individually or as fillers at the end of other articles where space allows.

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8. Word count for abstract:
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1. Singh SP, Singh V, Kar N, Chan K. Efficacy of antidepressants in treating the negative symptoms of chronic schizophrenia: meta-analysis. Br J Psychiatry. 2010; 197(3): 174-9.

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2. Murray PR, Rosenthal KS, Kobayashi GS, Pfaller MA. Medical microbiology. 4th ed. St. Louis: Mosby; 2002.

3. Meltzer PS, Kallioniemi A, Trent JM. Chromosome alterations in human solid tumors. In: Vogelstein B, Kinzler KW, editors. The genetic basis of human cancer. New York: McGraw-Hill; 2002. p. 93-113.

4. Foley KM, Gelband H, editors. Improving palliative care for cancer [Internet]. Washington: National Academy Press; 2001 [cited 2002 Jul 9]. Available from: http://www.nap.edu/books/0309074029/html/.

5. Cancer-Pain.org [Internet]. New York: Association of Cancer Online Resources, Inc.; c2000-01 [updated 2002 May 16; cited 2002 Jul 9]. Available from: http://www.cancer-pain.org/.

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