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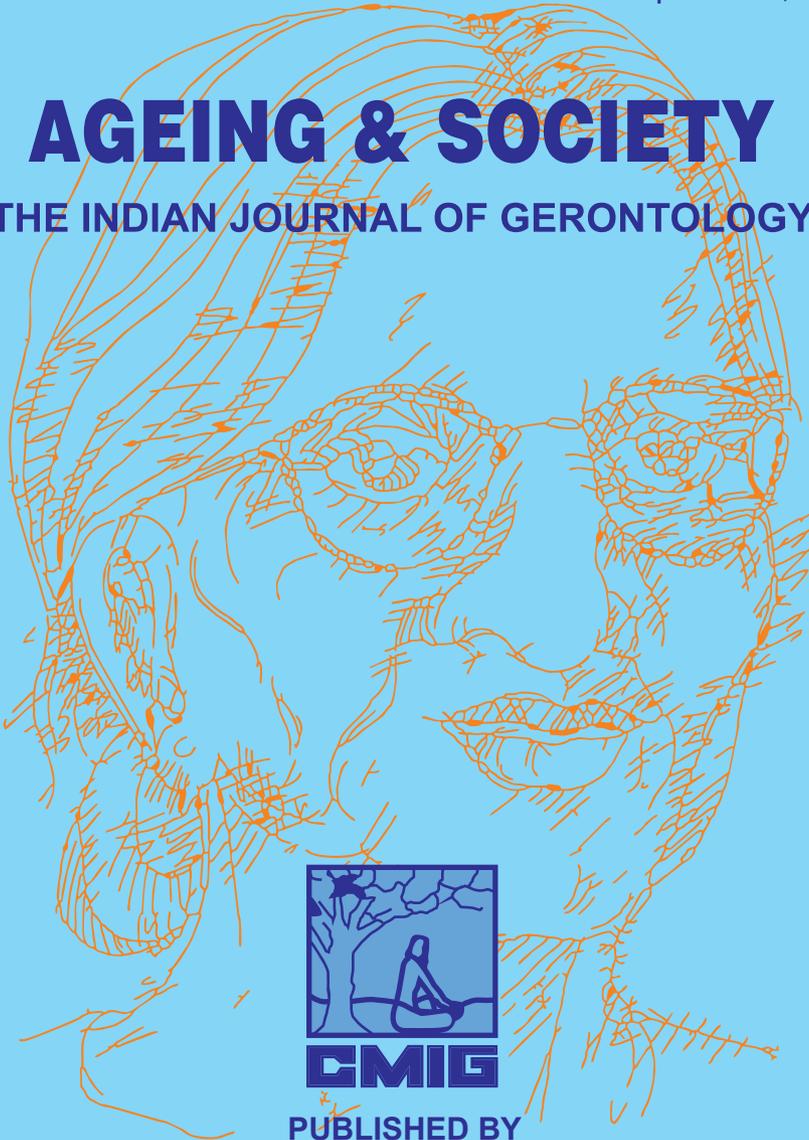
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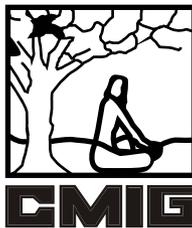
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Coping with Digital Literacy

A study of Ageing Population in select regions in Kolkata

***Dr. Biswajit Das**

****Dr. Debarati Dhar**

ABSTRACT

This paper seeks to explore the interplay between new media and the aged population. Studies on ageing population are far and few in Indian society. The recent hype of new media and young population has been much discussed and debated regarding media use, skill sets and participation in the social media. However, not much has been highlighted about a section of population and their possible use of new media, namely aged people. The aged people may be unproductive from a 'production' point of view, however, can not be undermined from their interest and enthusiasm to remain in connection with their near and distant ones. Aged people in their life time have undergone process of skilling and deskilling process to remain connected with the larger society. How new media plays an important function in the life of the aged population? How do they engage with the skilling and deskilling process of media in their everyday life? And finally, do new media provides an extension to their on-going social relations? These are some of the queries the present paper would attempt to address with the help of substantive details in select regions of Kolkata.

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Key words: ageing population, new media, digital literacy, social media, media literacy

Introduction

New media has infiltrated people's lives globally. With new media having a transformative impact on the way of life today, technology offers the significant potential of improvements and opportunities for improving the lives of older people as well. Its use has been highlighted by social science scholars in areas like socialisation, elections, business or peer- to- peer interactions and so on. It has added renewed dimensions to the existing social relations, i.e. instantaneity and interactivity. Much has been written about youth and the use of new media. New media technologies are abundantly used by different age groups and regions across the country. These technologies have become a part of the everyday life of the larger society as it caters to differing functions of their life world. Thus, one can say that everyday life becomes a mediatized life whereby different age groups live and spend considerable amount of time with media technologies. Present day youth spend considerable amount of time with social media. Be it chatting, socialisation, seeking information or connecting to distant places, new media becomes a major tool for connecting with the larger world. Besides youth, other age groups also use new media tools, although their reasons may be different. However, little is known about how ageing population use new media in their daily lives and their familiarity with the technology and adaptability with such technologies.

According to the Maintenance and Welfare of Parents and Senior Citizens Act, 2007, senior citizens are categorized as any person being a citizen of India, who has attained the age of 60 years or above (United Nations Population Fund¹). There is a rising challenge of ageing population across the world and an equally authoritative necessity to develop rational intervention policies to respond efficiently to the needs of the elderly. New media are not necessarily those that were technically initiated most recently, but rather those that experienced a fast phase of diffusion. New media can be

¹ <http://india.unfpa.org/>

defined in several ways. For instance, with 'the Internet' at the top of the list new media can be defined as a kind of model, which is thoroughly embedded in daily lives. The use of social media by the aged population is on the rise. With the advancement of age, importance of staying connected – maintaining relationships with family and friends has been established by a number of ageing theories (Siva Raju, 2002, Vijaykumar, 1999). However, with the demographic changes because of rapid urbanization, many aged people are forced to live alone or are in environments where they are not able to stay connected. In such cases, the use of new media provides the much needed opportunity to engage in healthy and meaningful social contact (Leist, 2013). New media and its different tools allow the elderly people to keep significant connections with family, friends, relatives and community. Moreover, it also lets the older adults to remain connected despite of prevailing frailty, geographical gap and concerns related to mobility issues.

With the advancement of technology and constant innovations, the nature of skilling and deskilling of media takes place. In order to be media literate the aged population have to be constantly on alert to be a part of the world of media literacy. The present study would address the use of new media by the aged population and how they cope with the literacy of new media, what motivates them? And finally, how do they cope with the changing grammar of new media?

Literature Review

Ageing as a category is not much encouraged within media studies and lack of sufficient research bears testimony to it. On the contrary, there is an abundance of literature on the process of ageing and aged population in Indian society (Dandekar, 1996; Prasad, 2000; Ramamurti & Jamuna, 1993; Gore, 2000, Chakraborty, 2001). It is interesting to note that while conventional social science literature addresses ageing as a liability, vulnerable and lonely, the studies on new media presents the promise of making connections, socialisation and reaching out to society. A host of social science researchers

have studied the common problems associated with ageing such as isolation, stress, depression, dementia, decrease in learning abilities, health issues and increased economic dependency etc. (Ramamurti & Jamuna, 1993; Dandekar, 1996; Prasad, 2000). Older adults represent a significant and ever growing part of the world economy and society. Ageing often brings difficulties preventing them from living independently and accessing services. However, technology is providing the scope for new patterns of family and bonding amidst all these changes. Much of the new media focus has been on its adoption by the young adults and very significantly less focus has been given on its acceptance by the aged people. Older adults rely on social networking platforms for sharing photos, videos, links, news and maintaining contacts with family and friends and former colleagues (Madden, 2010).

Digital literacy is described as multifaceted interlinked communicative forms which are digitally facilitating (Merchant, 2007). Scholarly research studies done earlier submitted that ageing people lag behind in terms of their engagement with the digital technologies (Madden 2006; Hale, Cotten, Drentea, & Goldner, 2010; Hargittai & Hinnant, 2008; Schreurs, Quan-Haase, & Martin, 2017). More scholarly researches in the same area revealed that the key hindrances in the adoption and usage of digital technologies by the ageing people are lack of digital literacy and the prevailing generational divide or gap (Broady, Chan, & Caputi, 2010; Friemel, 2016). In the new media age, connecting through social media is like meeting the closed ones every single day in a very cost effective way. According to an earlier study, older adults were found to having positive experiences after using the social media (Morrison, 2010). Social media is undoubtedly becoming more than a pastime for the aged people and if executed properly, it could definitely become their social support. One of the most significant findings stated in the study by Nimrod, *Seniors' Online Communities: A Quantitative Content Analysis* (2010) is that seniors' online communities are increasingly gaining acceptance.

Media depictions of ageing population are pervasive and tell a much generalized story about how different generations engage with the new media technology. In spite of evidences showing an upward trend in the adoption of new media tools, study by Schreurs, Quan-Haase, & Martin, (2017) suggests that ageing people do lag behind in terms of engagements with the digital technology. This research noted the digital skills and the perceived barriers to digital literacy of ageing people, and how technology can be a social support system for them. Aged people realise that age can be a deterrent factor in adopting technology. There are differences in the technology usage between the older and younger generations. It is further noted that lack of digital skills and inadequate social support makes it difficult for aged people to gain confidence and comfort in adopting technology (Schreurs, Quan-Haase, & Martin, 2017). Family and friends can help the older adults in mediating their reluctance and inhibitions regarding technology usage. Considering these issues, this paper aims at understanding the factors and needs of ageing people in gaining better digital literacy.

One of the factors for the digital divide is not accessibility always but lack of appropriate skills. As was noted by Chen & Wellman, (2005) some social groups lag behind in the adoption and use of technology like computer, mobile phones or Internet, not because of the factor of affordability but because they lack the adequate skills required for using these digital devices. Lack of digital literacy prevent a section of the society from using online platforms in performing various tasks such as Internet banking, information gathering or sharing messages or pictures with closed ones (Hargittai, 2002). One such section is ageing population, some of whom might have the potential to purchase the digital devices but somehow remain unconnected because of inadequate skills of using the technology. Thus, the acquisition of digital literacy skills specifically for aged people is considered vital, as it will provide them with benefits in their daily lives.

The conventional mass media are considered to be the chief resources for coping with information needs of the senior citizens.

Maintaining meaningful and significant social relationships is extensively considered as one of the most essential elements of healthy ageing. Hindrances such as geographical distance from progenies, reduced mobility are some of the factors that lead to increased risk of isolation and depression among the aged. In such circumstances new media can aid in overcoming these barriers as online social networking sites and online discussion forums can be used to engage in strong social contact irrespective of geographical location or time. Moreover, social media also provides new possibilities of socialization as well as to provide and receive support.

Methodology

The data for the present study is collected from Kolkata, West Bengal (a state in the eastern region of India). Kolkata is an entirely urban district forming part of Kolkata Municipal Corporation. It contains one third of population of Kolkata Urban Agglomeration. The entire district is urban with a population of approximately 45.80 lakhs and a population density of 24.760 per sq. km. Sex ratio is 1000:956 (male:female), and Literacy is 81.31 per cent as per 2001 census data (data retrieved from official website of Kolkata Municipal Corporation). A total of 80 respondents over the age of 60 years were interviewed for the study. Both quantitative and qualitative methods of data collection were used. The present research followed random sampling technique using a pretested questionnaire. After the analysis of the quantitative data, in-depth qualitative interviews were conducted with the respondents.

Demographic Profile of the Ageing People

The aged people under study shared their views and attitude about perceptual, mobility and rational capabilities in learning to use the smart phones, computers and the Internet, the comfortability factor and also spoke about the skills required (or not required) for learning and using new media tools. The respondents were found to be with good academic backgrounds and stable economic condition.

Out of the total respondents, 42 respondents were female and 38 were male (see table 1).

Gender				
	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid	Male	38	47.5	47.5
	Female	42	52.5	100.0
	Total	80	100.0	100.0

Table 1

In a study by Gatto and Tak (2008) significant reflections were found regarding the use of new media and gender gap. They observed a large gender gap with the use of the internet; older men were more likely to use the internet and new media as compared to older women. However, in this present study all the respondents were found to be equally enthusiastic regarding the new media use and no direct co-relations were found in new media use with gender.

Further, the responses did not vary much in terms of social class, income, education or health.

Marital Status				
	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid	Single	1	1.3	1.3
	Married	65	81.3	82.5
	Widowed	14	17.5	100.0
	Total	80	100.0	100.0

Table 2

Table 2 shows the marital status of the respondents. Out of the total respondents 65 people were found to be married, 14 were widowed and one respondent was found to be single. No direct relation was found between marital status and use habits of mobile phones or computers. It would be wrong to generalise by saying that marital

relations have any co-relation with new media usage by the old people. However, it was also observed that those who are married especially women do not feel the need to learn how to use the new media separately as their husbands can use the laptops or smart phones and they do not feel the need to learn the new technology. Similarly, while interviewing several other elderly couples, it was observed that men generally dominate the computer and mobile phone operation while women play a supportive role. When inquired, the respondents said it was both the need as well as the desire to learn that motivated them to use the smart phones. However, respondents who have lost their spouses and live alone were found to be having an increased use of new media comparatively. Though it is not that each one of them (the respondents) has adapted to new media out of loneliness and they have clearly stated that new media usage is entirely optional for them and they are not dependent on it.

Educational Qualification

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Intermediate	12	15.0	15.0	15.0
Graduate	49	61.3	61.3	76.3
Valid Post Graduate	13	16.3	16.3	92.5
Higher Education	6	7.5	7.5	100.0
Total	80	100.0	100.0	

Table 3

All of the respondents were educated, and the responses varied from intermediate to graduate or post-graduation degree. They all could read and write as about 61% of the respondents completed a graduation degree and around 16% of participants finished post-graduation. Approximately 7.5% completed higher education (see table 3).

Household Composition				
	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Lives Alone	5	6.3	6.3	6.3
Lives with Spouse	36	45.0	45.0	51.3
Lives with Next generation	7	8.8	8.8	60.0
Lives with spouse and children	27	33.8	33.8	93.8
Lives with caretaker	2	2.5	2.5	96.3
Lives with spouse and parents	1	1.3	1.3	97.5
Lives with spouse and caretaker	2	2.5	2.5	100.0
Total	80	100.0	100.0	

Table 4

Table 4 shows that ageing people under the study area preferred to live independently in their own homes rather than living in any old age home and most of the younger population have settled out of the city. However, it is a much generalised statement as the living conditions depend on the financial affluence and family structure of aged people. Family structures have changed drastically owing to globalisation and better job opportunities. Out of the total respondents interviewed, around 6% of the elderly people were found to be living alone, around 45% were living with their spouses, more than 8% live with the next generation, approximately 33.8% were living with entire family (i.e. spouse and next generation), 2.5% lived with caretaker, 1.3% lived with spouse and parents, 2.5% lived with spouse and caretaker (see table 4). It is quite clear from the tables that most of the elderly couples live alone as their children are settled elsewhere.

		Occupational Status			
		Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid	Working	10	12.5	12.5	12.5
	Retired	40	50.0	50.0	62.5
	Retired and Working	4	5.0	5.0	67.5
	Housewife	25	31.3	31.3	98.8
	Tuitions	1	1.3	1.3	100.0
	Total	80	100.0	100.0	

Table 5

The field survey results show that the frequency level of retired personnel was higher. Majority of the participants were found to be retired from their previously held professional commitments and they received monthly pension and some have taken up vocational jobs after retirement and around 12% were still working, which included own business as well as regular jobs. 31% of the female respondents were housewives who have never worked (see table 5). Those who have had the experiences of using computers during their professional tenure were found to be comfortable using mobile phones or laptops. The respondents were found to be in a financially stable condition.

Interestingly, it was found that educational qualification or occupational status of the respondents did not have any direct co-relation with their interest in using new media tools. Similarly, a study by Zickhur & Madden (2011) noted that there were no significant differences found in the use of social networking sites based on household income and education level. In this study, it was also found that female respondents in the age group of 65-70 years who have never had a professional life and are homemakers comfortably use the new media especially smart phones. The lifestyle and attitudes of the ageing people are changing considering the rapid socio-economic transformation and sustained economic development. In the daily lives of the older adults, television and newspapers are routinely embedded and new media provides them new possibilities of social engagement.

Aged People and Digital Literacy

Adaptation to technology is becoming vital to the functioning of modern day lives because it is persistent in every sphere of life. By examining the old people's accounts of experiences of using the new media, both positive and negative sides have been observed. Majority of the respondents of the present study appreciate the new media innovations and its role in enhancing social interactions. The experiences gathered also helped in exploring how the older adults construct social support relationships and interact with the computer mediated communication. In addition to decreasing social isolation, depression, anxiety, available services at the doorstep, medical information and most importantly connecting with near ones sitting miles away are some of the positive effects obtained from the older people using new media. However, from the inputs given by the aged people, it is also noticed that there are certain barriers in the learning process and use of computers, smart phones and the Internet by them.

Social media can provide the scope of improving the daily lives of the aged people who are a heterogeneous group in terms of social connections, health, interest, learning skills, sharing, etc. Those who do not have access to internet, lack of skills or lack of interest are some of the reasons cited by the respondents for explaining why they are not online. Psychological barriers have also been highlighted for preventing aged people from accessing the social media. Quite expectedly these factors appear to be more significant than the reasons such as cost or lack of infrastructure for the limited or non-use of social media by the ageing population. However, it is not possible to entirely dismiss the physical or material factors. Hence, it becomes important to understand a varied range of factors such as an elderly person's interest, skill and psychology towards social media. Finally, content of the internet is one such aspect that needs to be analysed for understanding whether it serves to the needs of the aged people or not.

Different types of technologies are used by different people and these have an effect on the ageing experience. For instance, those who have mobility problems might use the Internet for online banking

or home shopping. The new media is also used by them for extracting information or seeking online advices on health concerns. The elderly respondents are of the opinion that in addition to the mobile phones, the Internet offers tremendous information of any issue and online networking with family, children or friends can also re-direct them to other relevant websites or helplines if needed. However, in order to make complete use of the new media services, one has to be able to access a computer, laptop, smart phone or Internet. So, questions on accessibility, affordability and comfortability factors were asked to get an idea about the whole perceived new media scenario of the aged people in Kolkata. A vast majority of the respondents under study were found to be having access to mobile phones (basic as well as the smart phones), laptops or computers and Internet connection at home. Respondents tended to use their phones more frequently comparatively. Out of the total participants interviewed more than 50 per cent had used their phones for ordering goods or services. While discussing the reasons for increased use of new media by the older adults, majority of the respondents spoke about the ability of new media in providing them support in their daily activities as well as connectivity factor.

Simple frequency tables were used for representing the answers obtained from the field survey. Table 6 indicates the responses regarding the comfort factor in using new media. Majority of the respondents have said that they are comfortable in using the smart phones, computers and Internet. A total 71.25% of the aged people responded that they are comfortable in using the new media and 28.75% said they are not comfortable with the idea of new media and prefer the basic mobile phones or landline phones.

Are you comfortable in using new media?			
Opinion	Frequency	Per cent	Cumulative Per cent
Yes	57	71.25%	71.25%
No	23	28.75%	100%
Total	80	100%	100%

Table 6

When question about the literacy skills was asked whether the aged people require learning a new skill for using the new media or not, mixed responses were derived. Some hinted towards a non-friendly new media environment where they feel the applications or features of the new advanced smart phones are designed especially by keeping the young generation in mind and not the elderly. They also feel that weakening memory and slow learning process cause hindrances or demotivates in using the new media. Some opined that they are scared to touch the delicate smart phones and they feel that it might get damaged with their touch. However, there were maximum numbers of cases where the aged people are trying and coping with digital literacy and using the new media despite of these problems. Table 7 shows the responses on whether the aged people require separate sets of skills for using the new media or not. Around 38.75% said that they found it complicated and do not consider themselves digitally literate, however majority of the respondents found it is not that complicated and can be used if some initial training is given to them.

Do you feel that new media technology require different skills?			
Opinion	Frequency	Per cent	Cumulative Per cent
Yes	31	38.75%	38.75%
No	49	61.25%	100%
Total	80	100%	100%

Table 7

Experiences shared by participants on digital literacy skills reveal that some find it too difficult to overcome the initial fear to turn to new media whereas some as aged as 83 years old feel that ageing starts mentally and without succumbing to the common age related problems they use the smart phones and computers. Majority of the respondents feel that new media is a boon to the aged people in today's society where they are mostly living alone and need the new

media in every step. Interestingly, some respondents also disclose that it is not only the aged people who live alone but also those elderly people who are living with their next generations (children and grandchildren), also possess the interest and take initiation to use new media though in all cases the purpose differs. Some of the experiences shared by the respondents indicated that most of them are adapting to the changing media environment in order to keep pace with the technological and societal changes fearing that they would be left behind otherwise.

Is new media of any help to the aged people in their daily lives? To this question 63.75% of the people said that they find it helpful as they can opt for services like online banking or ordering goods or simply chatting with their children (see table 8).

Is your daily requirement fulfilled by new media?			
Opinion	Frequency	Per cent	Cumulative Per cent
Yes	51	63.75%	63.75%
No	29	36.25%	100%
Total	80	100%	100%

Table 8

One female respondent of 67 years of age shared how she bonds with her grandson who lives in Texas, over video games. She shares how she feels liberated when she could post a picture or a memory in Whatsapp group or Facebook and interacts with others. Remaining connected is one of the biggest motivational factors for elderly people to adapt to new media. As it is rightly pointed out by Ongun, Guder, & Demirag (2016) that technology not only helps in preventing the aged people from becoming socially isolated and secluded because of the various changes in life including retirement, losing of dear ones, declining of health but also helps them in escaping their miseries.

The question whether the older adults are aware of prevalent online fraudulence was one of the most significant ones of the entire survey. Those who are active users of various social networking sites, active into blogging and other virtual communities are aware of the online fraudulence and spams. 60% of the total participants responded that they are aware of such cyber duplicity (see Table 9).

Are you aware of online fraudulence?			
Opinion	Frequency	Per cent	Cumulative Per cent
Yes	48	60.00%	60.00%
No	32	40.00%	100%
Total	80	100%	100%

Table 9

A study in Korea (Kang, Lee, Lee, & Kim, 2010) talks about the concerns of old people when they meet other people in an online community. It suggests that fraudulent practices of phishing and spam are the major concerns that discourage elders from meeting other people online. Because of these general concerns, older adults are likely to gravitate to people who they find to have common interests when they make new contacts in the virtual world.

Overall, positive attitudes outnumbered negative attitudes over the use and attitude towards new media technology by the older adults. Respondents of the survey reported using a variety of new media tools for a wide range of purposes. They also feel that new media can facilitate the tasks of everyday life. However, most of the negative attitudes reflecting disliking were mostly associated with unhelpful features of the new technology that cause inconvenience as well as reliability and security concerns as old people are of the opinion that they are more vulnerable to threats. Most of the older population in the city (Kolkata) were found to be living in their own homes mainly with their spouses. They prefer to stay at home as long as they are

able to and are not open to the idea of old care homes. It was derived from the field findings that most of their activities occur within the home environment and technology can come to their aid in an extravagant way. Technology can be of immediate help in case of emergency, can help in maintaining in social connections, gather information related to diverse issues ranging from wellness to personal health.

The participants who are not into using the new media were asked why they had not undertaken the activity. Replies were grouped into categories indicating impairments (such as visual or auditory), lack of Internet access or computers at home, no interest and others (that included no requirement, children and relatives live close by, etc.). One male respondent of around 72 years of age said that it is just the lack of interest in using the new media otherwise there is nothing stopping him in using it. In his words, he prefers to use the landline and have face to face communication or write letters even in this technology age and that he hasn't found the need of adapting to new media literally. This hints towards an underlying assumption that non-use of new media may be generational, with younger people who have used a computer in the work place might be continuing to do so even after retirement. As noted by Selwyn (2004), after retirement, older adults may only make occasional and very limited use of new media.

In the virtual world, age does not matter when communicating as it does in the real world. In an online community the aged people are equally and freely chatting with the younger folks like in Facebook or Twitter as much as they are communicating with their friends and relatives of same age. As shared by a 70 year old man that even 10 hours of remaining online in a day seems less as he spends his time creatively in internet browsing, reading and learning. He believes there is no upper age limit of learning something new so he is learning a new language through an online course. For the participants, age old norms that after attaining a certain age, one is supposed to be immersed into books, chants, temples, social service, etc. is just

a myth. New media is giving them the healthy outlet through which they get a fresh perspective of viewing the larger world. The results of field survey indicate that social media use positively enhances the quality of life among senior citizens. Finding solutions to the problems of old age is possible by identifying the needs of the older persons. User friendly technological interventions are required especially for those who have mobility problems or vision or hearing impairment. Once the elderly population identifies the advantages offered by new media and its different platforms of social sharing, then more technology based applications and devices would be in demand. Hence, it can be stated that maximizing the acceptability of social media among the older adults is basically a step-by-step approach.

Social Media and Elderly: Empirical Findings

The field experiences suggest that many older adults are keeping in touch with the technological advancements of modern times and also using the technologies purposefully. They are making attempt to adapt to new media and don't avoid computers/laptops or smart devices. Senior citizens are learning to familiarize with social media but considering the increasing age and the general physical decline that follows does not make them immune to troubles that come hand in hand with social media. Some older adults point towards psychological issues that curtail from learning new skills in this age. The findings of this paper suggest that the frequency of remaining online impacts loneliness among the aged people. However, the respondents are of the opinion that getting connected in the virtual community does not affect the perceptions of social isolation. In studies done earlier, it has been suggested that higher frequency of remaining online is directly associated with lower levels of isolation but not with lower levels of perceived social seclusion (Leist, 2013). Very commonly, the perceptions of social isolation among the aged are associated mainly with face-to-face interactions than virtual network ties and hence the frequency of going online is not considered to be directly related to perceived isolation.

Some elderly respondents shared their experiences and views about the changing family structure because of the umpteen and better job opportunities that make the children move to other places leaving the parents behind. They admit that though they want their children to flourish in their career yet they feel heavy at heart when they plan and decide to settle in the place of their employment. One aged couple tells that they were initially reluctant to the idea of their only son moving to another country but have gradually accepted the situation. They were worried about how often they would be able to talk to their son after his migration. They proudly say that social media is a boon for people like them whose children have migrated to other places. For them communicating or talking to their son is no problem at all as they can see him and his family any time they want to. Similarly another respondent of 72 years old expressed that she is fighting with her loneliness by keeping herself preoccupied with the various avenues of social media. She chats with her children, friends and relatives. Apart from socialising, she also has learnt online banking and it has made her life easier. She admits that she is heavily relying on social media and it has become an integral part of her life.

It is equally true that not all elderly people feel comfortable using social media sites. Some consider it to be too complicated, confusing and not age friendly. They are also concerned about their privacy when communicating online. They say older people are vulnerable to cyber-crimes as they do not know the deeper aspects of information sharing. Some people avoid it and still prefer to have a telephonic conversation or face to face conversations over social media. The aged respondents are not denying the fact that social media has become a part of everyday life as it in many ways make them feel secured and closer to their near and dear ones. However, they clearly state that with the increasing age the physical issues take a toll on their health. Less memory, mobility issues and pain, etc. are common. With the advancing age, majority of the aged people change their living habits and adapt to social media communication because of restricted physical activity and mobility.

Previous studies show that from new media applications that connect the aged to emergency services to home delivery of medicines and essentials, physiotherapists and nurses on call to resort-like facilities for those who want autumnal luxury, the elderly in Kolkata are adapting to the new media tools the way they require it (Pal, 2016). There is a different picture as well. Despite the problems and the loneliness they face most of the elderly citizens who might have never used the smart phones or laptops earlier have started seeking professional help for using it. In Kolkata, a number of organizations have been helping the elderly people in video-chatting with their progenies living abroad. Interestingly, it is not the case always that the older people are living alone; sometime it is the children who seek professional help because they are unable to spend enough time with their old parents (Pal, 2016).

The success of the solutions provided by social media depends entirely on the use and acceptance by the older people. Having access to new media is not however the same as using it. Considering the age, it cannot be assumed that every aged person will accept ICT (information communication technology) based services automatically. From the empirical findings, it has been observed that the acceptance and usability of social media by the elderly depends on several factors like living conditions, financial resources, personal experiences and attitudes at the individual level and feasibility and accessibility of the device.

Conclusion

On the basis of substantive evidences, some significant conclusions can be drawn on how new media has made inroads into the lives of the aged people. Aged population, unlike the young population, spend considerable time with mobile phones and computers to connect with their progenies. Although maintaining social contacts continues to be the primary purpose for using the new media by the aged people, many of them now rely on virtual platforms to define their daily communications comprising of sharing links, chats, photos, videos, extracting news and updating of status with their fast growing social network. It is not only the younger people who create virtual communities, but presently aged people also enjoy being a part of this new concept of cybernetic community. The field data reveals that aged people perceived new media to be significant irrespective of initial inhibitions of using it. According to the aged people, social media helps in bridging the generational gaps. Blogging, online banking to participating in online health debates, new media have become an integral part of the daily lives of older adults. In the times to come, more senior citizens could be expected to go online and spend most of their time in computer-generated communities.

Moreover, the results of field survey also indicate that social media enhances the quality of life among senior citizens. Finding solutions to the problems of old age is possible by identifying the needs of the older persons. User friendly technological interventions are required especially for those who have mobility problems or vision or hearing impairment. Once the elderly population identifies the advantages offered by the new media and its different platforms of social sharing, then more technology based applications and devices would be in demand. Hence, maximizing the acceptability of social media among older adults may be a precondition for effective health and social care.

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Women and Family Caregiving of the Frail or Ill Older People in India

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Family caregiving is mostly an unpaid care provided by family members to chronically ill or functionally impaired persons predominantly by women that may be sometimes rewarding or may be emotional, physical, social and financially burdensome. Various studies have estimated that 57% to 81% of all caregivers of the older people are women, despite the demographic change where more women are working outside the home than ever before. I will take qualitative pieces of evidence from published research papers to understand whether the care of frail and/ or ill older people rests on women in India. Qualitative studies have been considered as they are better suited for capturing the culturally nuanced meanings of caregiving responsibilities on the women. Although India is an ageing nation, it is yet to develop adequate social care policies for its geriatric population. The existing services and policies do not address the long term needs of the frail or ill older people. Under these circumstances, most of the care tasks of the older people --including the care of the frail or ill older people -- are performed by the family members.

Naeim et al. (2011) have suggested caregiving to frail and/ or ill older people as a multi-faceted task which is not restricted to responding to the symptoms or treating the disease. Caregivers have to attend to the psychological, social as well as the economic needs of the older people over a prolonged period of time (Gobbens et al., 2010). In India, family caregivers perform a majority of the caregiving tasks for the older people. In Indian tradition, there has been a norm of providing care to the older family member - suffering from illness, frailty or psychological disorders- by the younger family members, at all stages of the disease (Murthy, 2016). This tradition is referred to as filial piety called "seva" (Sharma and Kemp, 2012), which explains the younger Indian families' caregiving attitude toward their older

family member (Gupta et al., 2012; Brinda et al., 2014). Literature reveals that most of the caregiving responsibilities within the home were performed by the women while those outside the home were traditionally performed by the men. Even within the home, the personal and the intimate care were provided either by the spouse or by the younger family members of the same sex. Although the government policies in India lack social care system and support for the older people and their family caregivers, the family caregivers, in most cases, take all the caregiving responsibilities towards their older family member. However, it is interesting to understand what happens to the traditional caregiving responsibilities to the older family members, in the face of modern day challenges arising due to globalisation, urbanisation, migration, women's participation in the labour force, the emergence of nuclear family systems, etc. Below is an example of a study which shows how women take up the elder care responsibilities in an Indian state, when the men migrate.

Ugargol and Bailey (2018) showed that when men migrate in the Indian state of Kerala, the gendered contexts burden women - especially the female spouses and daughters-in-law – to take up caregiving responsibilities for the older people in the family. Daughter in laws fulfill their husband's filial role by sacrificing their careers and enduring separation from their husbands. The study reveals that the daughters-in-law and female spouses experience huge caregivers' burden, as they have to perform multiple and competing tasks along with the caregiving tasks in the absence of the male member in the family. The female caregivers experience lack of autonomy and freedom and feel that they are left behind to take care of the older people. The female caregivers also experience that the caregiving tasks are imposed on them and their caregiving efforts are not adequately rewarded. Overall the study shows that due to the lack of alternative mechanisms to support female family caregivers in emigrant households, they feel unsupported in their caregiving roles. This example shows that the caregiving tasks have to be performed by the women where the males migrate. However, it can be noted here that the study ignores that the migrated males provide important

assistance to the female caregivers and the older people from a distance or during their regular visits. This reflects that there are gender differences in the nature of caregiving tasks performed by the male and female towards their older family member. Besides, it also shows that there are differences between the nature of care provided between the male and the female. While the male mostly takes care of the economic aspects the women are responsible for the caregiving tasks. In the absence of economic support from the males, caregiving can become more challenging for the females. Although the literature projects the females to be the caregivers of the older people, this understanding might have occurred due to operationalising caregiving in the restricted sense, and not taking a holistic understanding of the term.

Although many female caregivers in the study by Ugargol and Bailey (2018) responded that they would like to go back to work, it must be noted that there are no government provisions for leave for women for providing caregiving to the parents/ in-laws, although there are provisions for child care leaves. This makes it challenging for the women to pursue their career along with meeting their caregiving responsibilities towards their older family members. Again, it must also be noted that the government policies for the caregivers in the state of Kerala are much more supportive than the most parts of the country, which do not have any policies for the caregivers. It should also be noted that the state of Kerala has successfully developed a structure for community based palliative care which provides caregiving support to the frail and/ or ill older people, unlike the other states in India. The state of Kerala receives two-thirds of India's palliative care services with 3% of the country's population (Laurance, 2017). Therefore, it can be said that in Kerala the caregiving responsibilities of the frail and ill older people does not lie solely on the women, due to the presence of the structure of the community based palliative care support.

Besides, the above study has been conducted at home/community setting. So we do not have adequate information about the role/s

played by the female/male family caregivers in other settings like hospitals, hospices, etc. Therefore, more studies are essential to understand the caregiving responsibilities of the family caregivers in different settings.

Although the literature reveals that females perform most of the caregiving tasks, many studies have revealed that the quality of the relationship between the female caregiver and the older people is poorer (Gupta et al., 2009; Gupta et al., 2012). Therefore more studies are required for male caregivers to understand how they maintain a better quality of relationship with the older people. Van Wieringen et al. (2015) showed that now-a-days, the policies are focusing towards informal care -- especially family care -- and community based services globally. However, it should be noted that in developing countries like India the family caregivers do not have adequate education, training, understanding and/or experience in caregiving. Besides, many caregivers do not have access to adequate information and many are illiterate. When specialised medical care is provided by the family caregivers, the quality of care provider to the older people becomes questionable. This might be a reason for the poorer quality of relationship between the older people and their female caregiver, as most of the caregiving tasks are performed by the women.

Brinda et al. (2014) argued that women are forced to take up informal caregiving tasks by the gender hierarchy and gender stereotype of patriarchal societies. Gupta, et al. (2009; Gupta 2012) have also showed that the women perform most of the informal family caregiving task. As a result, caregiving to the older people is considered as a deeply gendered issue as the bulk of the caregiving responsibilities are performed by the women (Bhattacharyya et al., 2017). Most of the studies on family caregivers of the older people in India discuss about the caregiving burden. Although specific data is not available on the caregiving burden of the female family caregiver, but the following information about the caregiving burden of the family caregivers in the Indian context is discussed. Lukhmana et al., (2015) recognizes the fact that family caregivers burden is often

not recognised. Gupta et al. (2009) identified the factors which influences caregivers' burden, namely the family members' attitudes about caregiving towards the older person, the family structure, location of the residence, the amount of caregiving responsibilities performed, etc. Caregiving has been found to cause financial difficulties as well as challenges in professional and marital life of the caregivers. Brinda et al. (2014) also showed financial difficulties, difficulties in social life, sleep disturbance and suicidal ideation of the family caregivers of the older people in rural India. The study also showed that most of the family caregivers regarded themselves as unhappy, not having adequate time for themselves and losing control over their own lives due to the caregiving responsibilities. This study also identified the family caregivers of the older people to be at risk for common mental disorders. They found that eleven percent of the family caregivers were diagnosed with depression. Since the literature reveals that most of the caregiving tasks are performed by the female, therefore it might be said that the above findings are applicable for many female caregivers in India. Beside the above studies also reflect that the female family caregivers from rural parts of India are more vulnerable to physical, psychological and social hazards.

Although the caregiving responsibilities and burden of the female caregivers are clearly reflected through the literature, more extensive studies are required to understand the caregiving responsibilities and the burden of the male caregivers. Training programmes are required to make the family caregivers equipped in carrying out the caregiving responsibilities of the frail and the ill elderly. Government policies for social care are required for the frail and the ill older people. Government policies need to acknowledge the caregiving support provided by the family caregivers, irrespective of their gender. The government policies need to develop provisions for leave for providing care to the older family members. Provisions for respite care needs to be developed to reduce the burden of the family caregivers, most of whom are women.

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OVARIAN CANCER IN ELDERLY IN DEVELOPED COUNTRIES

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ABSTRACT

The incidence of ovarian carcinoma increases with advancing age, peaking during the 7th decade of life and remaining elevated until age 80 years. Despite the high prevalence of ovarian cancer in the elderly, the management of these patients is often less aggressive than that of their younger counterparts. As a result, many elderly cancer patients receive inadequate treatment. However, data do not support the concept that age itself is a negative prognostic factor. In fact, the majority of elderly patients are able to tolerate the standard of care for ovarian cancer including initial surgical cytoreduction followed by platinum and taxane chemotherapy. Because functional status has not demonstrated a reliable correlation with either tumor stage or comorbidity, each patient's comorbidities should be assessed independently. For elderly patients with significant medical comorbidity, the extent of surgery and aggressiveness of chemotherapy should be tailored to the extent of disease, symptoms, overall health, and life goals. In addition, enhanced cooperation between geriatricians and oncologists may assist the pre-treatment assessment of elderly patients and improve treatment guidelines in this population.

Marked improvements in health care have resulted in an increase in life expectancy among people living in developed countries. In Western countries, a woman's life expectancy was 81.1 years in 1991 and is expected to reach 90.4 years by 2020. [1,2] As a result, the number of cancer-bearing patients aged 70 years and older may also be expected to increase. [3-5] The incidence of ovarian carcinoma rises with advancing age, peaks during the 7th decade of life, and remains elevated until age 80 years. Malignant ovarian neoplasms manifest after age 65 in 30% to 40% of patients. [6,7] Despite

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the high prevalence of this disease in the elderly, the management of these patients is often less aggressive than that of their younger counterparts, with the result being that many elderly patients receive inadequate treatment.

Approximately 75% of patients with epithelial ovarian cancer are diagnosed when their disease has spread throughout the peritoneal cavity presenting with abdominal discomfort or pain. Gastrointestinal symptoms are nonspecific but include nausea, early satiety, constipation or obstipation, and, less frequently, urinary symptoms. [13] If disease has progressed to involve the lungs by the presence of pulmonary metastases or malignant pleural effusions, the patient may complain of shortness of breath and lethargy.

Surgical Cytoreduction

In addition to the prognostic importance of accurate staging, surgical cytoreduction (or debulking) has proven to be an integral component in the management of epithelial ovarian cancer. The volume of residual disease following cytoreductive surgery is inversely related to survival. [16-19] Current criteria for optimal cytoreduction imply residual tumor nodules no greater than 1 cm in diameter. Patients who have undergone optimal cytoreduction have approximately a 22-month median survival advantage compared to patients with sub-optimal cytoreduction (residual disease > 1 cm in maximum diameter). Hoskins and colleagues analyzed data from the Gynecologic Oncology Group and noted a significant improvement in survival among patients with 1- to 2- cm residual disease compared to those with greater than 2-cm residual disease. [20]

In addition to the survival benefits of cytoreductive surgery, recent reports also confirm that aggressive primary cytoreductions are associated with minimal morbidity and mortality when performed by experienced surgeons. [21] Most studies supporting the survival benefit of cytoreductive surgery have enrolled patients with both stage III and IV disease. Four recent retrospective reports have examined cytoreductive surgery separately in patients with stage IV

disease and have consistently demonstrated a statistically significant improvement in survival when a small volume of residual disease remains. [22-24]

Chemotherapy

Surgery alone rarely produces cure in ovarian cancer patients. Chemotherapy agents from a wide variety of classes have demonstrated activity against ovarian cancer. With the establishment of platinum-based therapy and the introduction of the taxanes, the past 2 decades have seen dramatic improvements in response to chemotherapy and progression-free survival.

Paclitaxel was reported to have significant activity in advanced ovarian carcinoma in 1989. [25] After a series of phase I and II trials established the activity of paclitaxel, two prospective randomized trials comparing cisplatin plus paclitaxel vs cisplatin plus cyclophosphamide (Cytosan, Neosar) demonstrated the superiority of the paclitaxel-containing regimen. [26,27] Subsequent prospective randomized trials compared paclitaxel/carboplatin (Paraplatin) vs paclitaxel/cisplatin, demonstrating decreased toxicity with the carboplatin regimen and no difference in efficacy. [28,29] With these results, paclitaxel plus carboplatin is now considered first-line treatment for most patients with advanced ovarian cancer.

Toxicity

The most commonly encountered chemotherapy-related toxicity is myelotoxicity, which may occur more frequently in the elderly. An Eastern Cooperative Oncology Group review showed that commonly used chemotherapeutic agents (for nine disease sites) were significantly more myelotoxic in patients over age 70 than in those under 70. [45]

Patterns of Care

In one of the earliest published reports to examine patterns of care among elderly patients with ovarian cancer, Ries [11] analyzed data for over 22,000 women diagnosed between 1973 and 1987 within

the Surveillance, Epidemiology, and End Results (SEER) program. When stratified by stage, age was a significant determinant of survival. The 5-year survival rate for women less than age 45 was 45%, compared to 8% for those aged 85 and over. Over 40% of women over 85 did not receive definitive treatment for their disease. In addition, when treatment was given, younger women received multimodality therapy more often than did their older counterparts, who received more single-modality treatments such as surgery, chemotherapy, or hormonal therapy alone.

Further evidence that older women received less aggressive therapy and had poorer survival rates was published in 1994. Hightower and colleagues [12] analyzed data from the American College of Surgeons Cancer Commission to investigate differences in patterns of care among the elderly. This study compared survival and care in two patient groups- those aged 80 or older vs those under 80. Of 12,316 patients diagnosed between 1983 and 1988, 1,115 were at least 80 years old. Survival was significantly lower among patients in the older group. Most elderly ovarian cancer patients were cared for by non-oncologists such as general surgeons (31%) and obstetrician/gynecologists (29%). They also received fewer total abdominal hysterectomies, bilateral salpingo-oophorectomies, and omentectomies than their younger counterparts. Optimal tumor debulking rates were significantly lower for women age 80 or older, and these patients were less likely than younger patients to be given adjuvant chemotherapy (42% vs 69%, $P < .0001$).

It was recently reported that, although 60% of cancers arise in people over age 65, only 20% to 40% of these patients are enrolled in phase II and III trials, and the majority of patients in these trials are less than age 70. [30,31] Markman et al [32] reported on the Memorial Sloan-Kettering Cancer Center experience regarding enrolment of women with ovarian cancer into clinical trials after primary surgical therapy. A total of 46% of the younger patients were entered into an intensive initial chemotherapy trial, compared to 17% of older patients.

Summary:

The treatment of elderly ovarian cancer patients should be individualized. Data do not support the premise that age, per se, is a negative prognostic factor. In fact, the majority of elderly patients are able to tolerate the standard of care for ovarian cancer including initial surgical cytoreduction followed by platinum and taxane chemotherapy.

Few clinical trials are specifically designed for older patients, and the number of elderly patients referred to existing trials is limited. A concerted effort should be made to enter older persons into treatment protocols. In addition, enhanced cooperation between geriatricians and oncologists may aid the pre-treatment assessment of elderly patients and improve treatment guidelines in this population.

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NOTES FOR CONTRIBUTORS

All Contributions and correspondence should be sent to Dr. Indrani Chakravarty, Calcutta Metropolitan Institute of Gerontology, E-1, Sopan Kutir, 53B, Dr. S. C. Banerjee Road, Kolkata-700 010. Contributors are requested to conform to the following norms and those articles that do not conform may not be considered.

Journal articles that deal with the biological, medical, psychosocial, service or other aspects of ageing are welcome.

Articles should be original contributions. Redundancy is discouraged. The articles should be written in English, free of grammatical or spelling errors, repetitions etc.

Articles shall contain: A brief introduction (reflecting the context, the review of relevant work and why the present study was planned) : relevant details of plan methodology, sample,) including standardization properties of tools) etc., the results or findings and their discussion and conclusions arrived at. At the beginning of the article the title and names of authors shall be mentioned. (Their affiliation may be given at the bottom of the page). This shall be followed by a brief abstract of the article (not exceeding 100 words) in single space, bold and set off the margins (inset by two spaces). Two or three key words of the article should be provided at the end of the abstract separately.

Articles may be computer generated. Two hard copies, double spaced in A4 size (one side only) with wide margin may be sent. The articles would be adjudicated by referees and the result would be communicated. When the article is accepted contributors are requested to send 2 corrected versions of the article (hard copies) and the same in an electronic version in CD, press ready.

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Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. *Developmental Psychology*, 23,611-626.

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