Technological Utilization and Ethical Considerations: Surveillance, Consent, and Financial Aspects in Old Age Homes in West Bengal

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Abstract

The surveillance technology currently being used in nursing homes raises some serious ethical questions. In particular, the freedom, privacy and consent of the elderly are key issues. In West Bengal, where the elderly are increasingly dependent on nursing homes, this digital surveillance is raising serious issues of human dignity, power and commercialisation of services. The main objectives of this study are to execute the types of surveillance technologies employed in old age homes in West Bengal, to explore the experiences and comprehension of elderly residents regarding digital surveillance, to evaluate the ethical implications related to consent and privacy, and to examine the influence of capitalist principles on caregiving through technological interventions. A qualitative approach for this study is taken, where 50 elderly residents, 10 caregivers and 10 administrators from 10 nursing homes in Kolkata, Howrah and Hooghly were interviewed. The data was analysed using grounded theory. Research has shown that surveillance devices such as CCTV cameras, health monitoring apps, and digital health gadgets – while used in the name of safety and security often infringe on people's freedoms. Older adults are often not properly informed and feel uncomfortable being constantly monitored. As corporate investors turn the service into a business, surveillance has become a means of control rather than assistance. These policies are not being implemented properly, and there is little government oversight.

*Keywords***:** Elderly monitoring, digital ethics, consent, senior living facilities, capitalist caregiving

1. Introduction

Like many other parts of India, West Bengal is also witnessing major changes in the way people live. For example, people are living longer, moving to cities and living in smaller households. This is leading to changing social and economic conditions, and as a result, the number of elderly people is also increasing. Many of them are now living in old-age homes or similar facilities. Many technologies are now being used in these facilities to provide safety, security, better work and better care for the elderly. However, the problem is that the use of these technologies, the complexity of their permissions and the differences in wealth - all these things together create a very difficult ethical situation, where great care needs to be taken. The rate of ageing of the population around the world is now at a rate that has never been seen before. As a result, there is a huge impact on the health system and society around the world. In the case of India, this demographic change is even more important because India will have a large elderly population in the next few decades. Experts say that by 2026, about 12.16 per cent of the total population of India will be elderly. And this number is expected to increase to an incredible 20 per cent by 2047 (Rajan & Mishra, 2015). This shift is a major shift from the previous "demographic dividend," where a large number of working people cared for fewer dependents. Now the opposite is happening: society is aging and the number of dependents is increasing. This demographic shift has made it imperative to find new caregiving solutions that go beyond the traditional family-based model.

New developments in information and communication technology (ICT) are revolutionising the way we care for the elderly. These new technologies are expected to help them receive better care, make better decisions, and keep track of everything faster. They will also help them make better use of money, time, and people. Many new technologies are changing the way we care for the elderly. For example, "Clinical Decision Support Systems (CDSS)", telemedicine, electronic vital signs monitoring systems, "Electronic Health Records (EHR)", the Internet of Medical Things (IoM) and smart wearable wristbands. The main purpose of these technologies is to help the elderly take better care of themselves, improve the quality of healthcare, and reduce the burden on those who care for the elderly and the healthcare system. Older people often face some problems, such as most older people do not know much about the new systems; Physical limitations make it difficult for them to use technological gadgets; and being unfamiliar with digital devices can make them feel isolated or have trouble connecting with others. In addition, privacy, accessibility, and a reluctance to use technology among some

older people, unless these major issues are well addressed, will make it difficult to make these technologies widely and equitably accessible to everyone.

Technology can certainly improve care for the elderly. It has been observed that if there is an excessive amount of technology and surveillance infrastructure in places like nursing homes, then an environment of moral and financial problems can be created, which becomes quite difficult for the common man to deal with. India is a diverse country, and in states like West Bengal, where people of different castes and religions live, the condition of the people and their problems in terms of cultural and economic background are much more multifaceted and present a complex picture of the society. Older people in India face many challenges, including financial hardship, digital literacy, and the inability to give informed consent. These challenges are compounded by the power and limitations of new technologies.

2. Effective Literature Review

Here is the brief literature review of the study:

2.1. Principles of Biomedical Ethics (2019) by Beauchamp & Childress

Beauchamp and Childress express about four significant ideas: 1. justice, 2. autonomy, 3. beneficence, and 4. non-maleficence. These are the most imperative things to discussed about when it comes to technology in elder care (Beauchamp & Childress, 2019). Surveillance-based technologies may be good for security and safety, but they may also hamper privacy and freedom if they are employed without permission. Their framework is significant for judging how ethical the procedures are in West Bengal's old age facilities.

2.2. Surveillance in Care Settings (2000) by Sixsmith

This research article focused on how surveillance technology may be used as a tool to stop crime. Sixsmith proclaims that even if technology makes things safer, it turns care into a clinical operation, which might make people feel less like themselves (Sixsmith, 2000). This has led to a strong debate in West Bengal among care workers and families over whether safety in institutions should come before personal freedom.

2.3. Digital Divide and Elderly Care in Eastern India (2019) by Banerjee, P. & Chakraborty, S.

This research article looks at how the technological infrastructure in Bihar and West Bengal's urban and rural old age homes is not properly distributed. It emphasises that elderly people who live over there don't know about their appropriate rights (Banerjee & Chakraborty, 2019). It is also explored that there are problems with

permission standards and that tech-based therapies in local households may not be financially viable.

2.4. Surveillance Capitalism and Vulnerable Populations (2021) by Bhattacharya, R.

Surveillance technologies are essential tools that are now which are regulating everything smoothly and systematically. Bhattacharya expresses that due to the rapid application of modern surveillance care in different fields, as well as in elderly care home sometimes it violates the rules and regulations of the ethical dimension. Though it is associated with the capitalistic profit mechanism (Bhattacharya, 2021). Violating privacy destroys the care ideology, trust and friendly environment.

2.5. Technology in Indian Elder Care (2021) by Kumar & Singh

As per the author's concern, in Indian private organization are more dependence on technological surveillance, and they are also applying into elderly care home also. Life of elderly people are getting easier and more secure with the use of technological gadgets. In West Bengal, families with a lot of money are using more modern instruments, while those with less money are falling behind, which creates inequality (Kumar, Opportunities and ethical dilemmas, 2021). Also, the growing expenses of technology frequently put a strain on inhabitants and their families.

3. Research Gap

Beauchamp and Childress talk about justice, autonomy, and ethics, but they place less importance on modern surveillance and more importance on elder care and safety. Sixsmith pays attention to uses of technology and surveillance for protection from crime. But his writing did not pay attention to how to protect people from crime. He did not systematically address how modern technology can be used to protect people from crime. Banerjee, P. & Chakraborty, S. proclaimed that one of the essential problems of elderly people in contemporary times is the digital divide. Digitally savvy family members spend more time in the digital world and neglect to maintain proper connections with elderly individuals. They prioritise other connections over helping elderly people connect with the digital world. In this research, I have tried to overcome these issues and wanted to find out about proper exploration.

4. Research Objectives

The main thematic objectives of this research are

To execute the types of surveillance technologies employed in old age homes in West Bengal

To explore the experiences and comprehension of elderly residents regarding digital surveillance

To evaluate the ethical inferences related to consent and privacy

To execute the influence of capitalist principles on caregiving through technological interventions

5.   Research Methodology

In this research, a qualitative research design has been used. The research covered in-depth interviews with 50 senior citizens, 10 elderly caregivers, and 10 old age home administrators from 10 old age homes in Kolkata, Howrah, and Hooghly. Participant observation technique and document analysis were utilised to triangulate findings. The data were solely subjected to thematic analysis utilising grounded theory.

6.   Major Findings of the Research

A look at some important technologies such as telemedicine, smart home devices, the Internet of Things (IoT), AI-driven robots, and assistive technologies. The use of new technology is quickly changing how elderly care is provided for older persons, giving them a range of options to improve their health and independence.

6.1. Technological Implementation in Old Age Homes for the Elderly Care

Telemedicine and telehealth have become a great thing, especially during times like the COVID-19 pandemic. There has been a significant change in the way older adults access healthcare. These can be used in almost any setting, be it managing chronic conditions like type 2 diabetes or virtual healthcare, where their use has increased. With the advancement of technology, it has become possible to provide appropriate advice on health issues to patients in remote areas through video calls and virtual communication (RHCF, 2021).

The Internet of Medical Things (IoMT) has completely changed our awareness and concept of taking care of health. The latest smart gadgets are not only presenting us with daily news or information but also keeping an eye on our body and providing us with body-related information every moment by keeping in front of various types of applications. Nowadays, people associated with medical science are easily exchanging health-related information by using the Internet. In this context, we can talk about devices like smart watches and fitness trackers that are constantly monitoring the health situation. They record various body activities based on specific times, such as heart rate and blood pressure. And in this context, it can be said that such real-time information also detects common problems like irregular

heartbeat, stroke, blood pressure, heart disease or falls in the elderly and makes it easier for doctors to treat them. Naturally, it is seen that all these devices are helping doctors and other health workers to make appropriate and correct decisions.

These types of healthcare gadgets have made daily life much easier, usually through voice commands, touch screens, or various types of mobile applications. Health apps have become much easier to operate. They are used in various ways to make the lives of the elderly easier. In this context, it can be said that specific alarms for falls or seizures, while services such as video calls, smart speakers, voice assistants, etc., are observed to make communication easier and faster. Such apps have made daily life much easier and are organising tasks. They usually help doctors to keep an eye on various types of urgent symptoms and specific health problems. Smart home gadgets are very useful for the idea of "ageing at home."

Nowadays, AI robots are offering new, specific, and great solutions to the growing problems of elderly care. These AI robots can help people communicate better with each other, help with daily tasks like cleaning, cooking, and self-care, and remind them to take their medications on time. When used together, they can greatly reduce the mental and physical stress on human caregivers, provide great emotional support, and give the elderly more independence. This research will explore new ways to keep older people healthy and safe. How are technology and caregiving evolving to provide new ways to care for older people? When new technologies, such as smart devices and modern home systems, work together with caregiving, older people can live independently, and their loved ones can feel secure. Assistive technology (AT) is a broad term that encompasses a wide range of devices and services that help people with disabilities (those with mental or physical disabilities). These include physical devices such as hearing aids, wheelchairs and prosthetic limbs, as well as digital devices such as speech recognition software, captioning services and time management apps. Assistive technology is essential for maintaining or enhancing a person's ability to do many things, such as speaking, listening, thinking, seeing, taking care of themselves and moving around.

6.2. Application of Technology

There are many benefits to using health and technology gadgets, such as more independence, better quality of care, and tasks being done better and faster. Using health-related technology for the elderly in nursing homes can yield many good results.

Good monitoring and good health are both essential. Telemedicine and health information systems are technologies that allow people to monitor their health at

all times, whenever they need it. This allows health workers to provide better care and make more informed decisions. A system called "remote patient monitoring (RPM)" is helping to improve the care of people who have been ill for a long time. This has resulted in fewer sudden major problems and fewer hospital admissions (Dobransky & Hargittai, 2006). One of the positive aspects of technology is that it improves the lives of the elderly and provides them with more convenience. It also provides long-term health care to the elderly, whether they live in their own homes or in nursing homes. Smart devices free the elderly from the tendency to become dependent on others and become a burden. The use of such smart gadgets in nursing homes and healthcare centres has a positive impact and increases their independence and confidence. They have not only increased the speed of work but also reduced the stress at work to a great extent. The application of technology and the application of robots in the healthcare sector is gaining more acceptance in the global market.

Technology has a lot of positive effects, especially when it comes to making a task easier and faster. However, it should be kept in mind that it is an important means of providing care to people, but it is not right to become too dependent on it. If we become too dependent on technology, then we will be deprived of the creative mindset of people and the responsibility and affection that they have to take care of them. It should not be forgotten that the emergence of new gadgets is designed to provide convenience to people, rather than being designed to replace people and occupy their place. It is necessary to ensure that the application of technology will make the relationship with the elderly more sincere and improve it, and not destroy it. Therefore, we need to remember that an important bond between technology and human care is needed to provide holistic care to the elderly.

There is no reason to think that it will be easy for everyone to control the use of technology. Along with the benefits of modern technology, there are also several complications associated with its use. Also, the old technologies that were used are quite different from the new technologies today. In many cases, it is seen in third-world countries like India that the elderly are not able to connect themselves with the new technologies in a simple way. As a result, in many cases, they are deprived of the benefits of such technologies. Although there are many reasons behind this, such as there are some elderly people who do not want to use technology, on the other hand, they do not show interest in using it for fear of failure. In many cases, they give more importance to the fact that they are 'old' for not being able to use them. In addition, various studies have shown that elderly people need the help of another person to use any new technical gadget (Bhattacharya, 2021). There are very few elderly people who can learn new technologies easily and comfortably.

In this context, it is important to remember that the digital divide is one of the biggest problems in third-world countries like India. As a result, access to technology and knowledge related to it among the elderly is considerably less than that of the so-called young people. Although this problem is not the same in all cases. All the factors associated with this problem are age, gender, educational qualification, income and environmental location. It is seen that the lack of interest towards technology is more observed among elderly women. The 'Agewell Foundation' has tried to show through a study that more than 85% of elderly adults in India cannot use a computer. On the other hand, the number of elderly women is 95 per cent (Sharma, 2017). Also, one of the victims of this digital divide is the elderly people in the villages. It is seen that compared to urban areas, people in rural areas are much more exposed to the digital divide; they do not get access to technology properly compared to the elderly people in the cities. However, apart from these, there are some physical problems that keep the elderly away from technology. In this regard, we can say that vision impairment, dementia, etc. Where physical disabilities hinder older people from carrying out their daily activities, they often become the reason behind their reluctance to embrace technology.
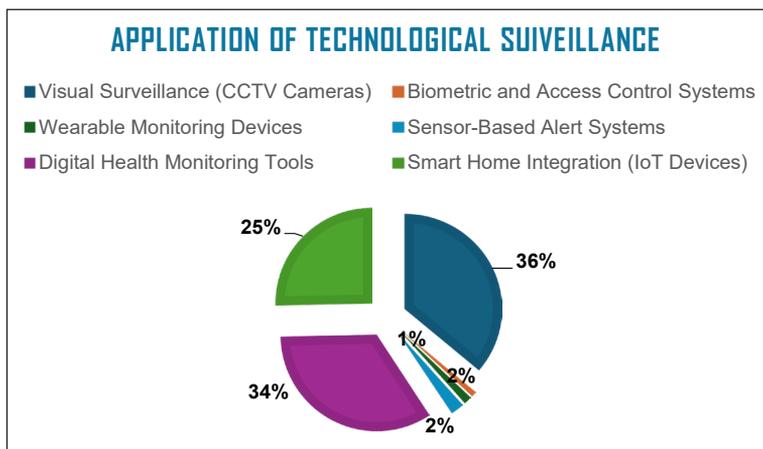
As society becomes more technologically advanced, an elderly class is being created in society who are deprived of the use of technology. In everyday essentials where technology is taking its place, such as ticketing, getting old age allowance, in all these areas where technology has taken its place, they have to depend on other people. Also, due to various problems like online fraud, withdrawing money from banks, etc., elderly people show aversion to technology. This isolation of elderly people from technology makes them lonely and creates a cultural lag between generations. Which often hurts the mind and body of elderly people. This shows that the digital divide is not just a technological problem, but also highlights a key message of how comfortable people can live in old age. Therefore, eliminating the digital divide in nursing homes is not just a technical issue but is one of the main aspects of social justice. It directly affects the quality of life and independence of the elderly residents there. It is not enough to just hand over gadgets to the elderly. Digital literacy programs must be introduced that are easy to use and tailored to their specific needs. The aim of these programs will be to show the practical benefits of technology to build confidence, eliminate loneliness and encourage independence.

6.3. Technological Surveillance

Their social, cultural, and medical checkups and activities are monitored through the process of digital surveillance. This research pays attention to those technological

surveillance processes that are associated with old-age homes. I have included a chart that explores the executions.

Figure 1: Application of Technological Surveillance

APPLICATION OF TECHNOLOGICAL SUIVEILLANCE

- Visual Surveillance (CCTV Cameras)
- Biometric and Access Control Systems
- Wearable Monitoring Devices
- Sensor-Based Alert Systems
- Digital Health Monitoring Tools
- Smart Home Integration (IoT Devices)

25% — 36% — 1% — 2% — 34% — 2%

Source: Researcher field investigation (2025)

There are multiple healthcare gadgets available in society for care and health tracking. The pie chart above provides essential information about healthcare surveillance technology and its importance. At present, old age homes are using different health gadgets to monitor the daily health activities of elderly people. Those old age homes situated in urban areas are more familiar with these health gadgets, but rural old age homes are also using daily health monitoring gadgets and applications for better and more assured health services. The development of medical services and information and communication technology is responsible for the exponential growth of the elderly population in India. Conversely, the elderly are no longer receiving joint family care. In this regard, people are searching for alternatives to care for the elderly that offer long-term services.

Some of these include having a helper at home, access to home health care, and new technologies that allow older adults to live independently and get the help they need. Families can rest assured that their loved ones are receiving good care even when they are far away. Good care for the elderly is not only about meeting their physical needs, but also about keeping them involved in social activities and maintaining good mental health. In this case, families can be assured that their family members, including the elderly, are in a safe shelter. And by taking care of all these various things, not only does the interest of the elderly in their work increase, but their sense of kinship also becomes much richer, which makes their overall life better and more beautiful.

7. Conclusion and Future Research Scope

The use of technology and health-centric technology in nursing homes in West Bengal has completely changed the picture of health in the society. People's trust and confidence in nursing homes have increased a lot. The use of surveillance technology has not only provided security to the elderly but also improved their facilities and communication with their neighbours. In this context, it is important to remember that in nursing homes, there is a specific bond between these three things: surveillance, facilities and money. CCTV cameras, health monitors and AI-powered support systems are some examples of surveillance technologies that have improved the quality of care by monitoring people's health in real time and ensuring that they are well. However, there are some rules that should be followed while using such technologies to protect the privacy of residents and avoid unduly infringing on their freedom. The real challenge is to find a balance between security and dignity, where surveillance does not infringe on people's freedom.

Consent for the use of technology in senior care facilities is still crucial. The historical picture of care has completely changed with the advent of technology. Nowadays, adapting to technology has become one of the biggest challenges for the elderly. However, it is necessary to provide all the facilities to the elderly in nursing homes so that they can easily connect themselves with technology. Also, if necessary, the elderly need to be trained in the use of simple technology so that they can do small things themselves with the help of technology and do health awareness activities. However, it is also observed that advanced services mean spending a lot of money, which is often not possible for many people to spend that amount of money and receive services in many cases.

In this context, it can be said that if government policies, subsidies and various technology-centric IT companies take appropriate positive steps, it may be possible to provide services to the elderly at a low cost. Incidentally, maintaining ethical and financial standards is quite necessary to protect the elderly from financial exploitation. One of the major reasons for using technology in nursing homes is to make services more accessible and reduce the risks to the lives of the elderly. Making their lives easier by providing them with proper healthcare, providing security, facilitating communication with relatives, and providing all kinds of information are the positive aspects and uses of technology. Together, we can build a caring future for the elderly where technology is not just a material element but a caring partner and companion.

8.   Future Research Scope

This Research needs to explore new ways to keep older adults healthy and safe. How are current technologies and surveillance infrastructures responding to new ways to care for older adults? The extent to which smart devices and modern family systems, together, affect the independence of older adults and the extent to which they shape their relationships with their loved ones is a matter of debate.

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