

“The Role of AI in Identifying and Preventing Old Age Exploitation: Legal and Ethical Considerations”

¹Kajal Kushwaha ²Dr. Vir Vikram Bahadur Singh

¹Research Scholar, Faculty of Juridical Sciences, Rama University, Mandhana, Kanpur

²Associate Professor, Faculty of Juridical Sciences, Rama University, Mandhana, Kanpur

Email: kajal.sng.1990@gmail.com (Corresponding Email)

Abstract: *With the increase in the elderly population on the global landscape, issues concerning exploitation of the older adults are also among concerns which include financial fraud and professional negligence, legal and emotional abuse. Such exploitation has proven to be too difficult to effectively prevent traditional legal and social methods. Consequently, innovative technological interventions have become necessary. At the moment we are emerging in Artificial Intelligence (AI) as a strong tool for elder abuse detection, prediction, and mitigation in applications such as financial fraud detection, healthcare monitoring, legal assistance, and predictive justice models. With a focus on legal and ethical implications, this paper explores the multifaceted role of AI in exploiting and combating exploitation of the old age. It studies how AI takes away fin tech fraud, tele health fraud and smart health fraud; how it detects health neglect using AI in the telemedicine and smart monitoring systems; how AI enabled tools in law can help senior citizens have equitable access to justice. The legal frameworks for the protection of elders in India and in the rest of the world are assessed critically for the maintenance and welfare of parents and senior citizens act, 2007, the Elder Justice act (USA, 2010), AI act (European 2023). While AI is potential to respond against elder exploitation, problems, like privacy holes, lousy algorithmic concluded making out, and lawful points of interest require severe AI governance insurance policies. Concluding the study, we propose key policy recommendations on how one can best integrate AI into the elder protection mechanisms, educate senior citizens on AI literacy, and how to improve ethical AI deployment in the legal and social justice context. However, through responsible use of AI, societies can progress in shaping a safer, more secure and a dignified environment in which to grow old in all corners of the world.*

Key Words: *Elder Abuse Prevention, AI Ethics and Governance, Financial Fraud Detection, AI Legal Assistance, Healthcare Monitoring Technologies, Senior Citizen Rights, AI and Privacy Concerns, etc.*

I. Introduction

Background and Context

A phenomenon of setting that marks the time of a change in the global demographic structure: seeing the rise of an elderly individual population. As per the United Nations World Population Aging Report, it is expected that the number of people aged 60 years and above is going to burgeon from 962 million in 2017 to over 2.1 billion by 2050¹. Such demographic shift faces multiple socioeconomic, health care and legal consequences, most notably in the area of elder exploitation that is now recognized as a key global concern. Financial, healthcare negligence, legal manipulation, emotional mistreatment and a range of other exploitative practices are not the only avenues through which the vulnerable are victimized in elder abuse—it is not restricted to physical harm.

Financial exploitation, however, is one of the most prevalent forms and common ways this happens include unauthorized bank transactions, coercive asset transfer, or scamming seniors who are vulnerable. Similarly, elder neglect in care settings include denial of the essential medical services, substandard caregiving and abandonment². Legal abuse is the manipulation of contractual obligations and pensions, and in the case of separation, the exploitation of the deceased by their relatives and repugnant exploitation of the will. Also, emotional and physical abuse like isolation, verbal threats, psychological coercion causes great mental health problems that lead to depression affecting the quality of life among elderly.

¹ XinQi Dong & Melissa A. Simon, Elder Abuse as a Risk Factor for Hospitalization in Older Persons, 173 JAMA INTERNAL MED. 911 (2013).

² Neil Charness & Walter R. Boot, Aging and Information Technology Use: Potential and Barriers, 25 CURRENT DIRECTIONS IN PSYCHOL. SCI. 340 (2016).

The Role of AI in Elder Protection

As elder abuse continues to be a growing challenge in detecting and preventing it through traditional methods, Artificial Intelligence (AI) is signalling as the transformative tool. Several domains exist where AI is applied to elder protection such as identifying, predicting and mitigating instances of abuse more efficiently and more precisely. In the financial sector, machine learning algorithms are used in AI powered fraud detection system to analyse elderly individual’s transaction patterns for anomalies and suspicious activities³. Voices that use NLP tools further help when it comes to detecting coercion or stress in financial decision making. In addition to preventing their fraud, these technologies also instil trust in older adults about digital banking.

In the area of healthcare, there are AI device such as smart wearables or remote monitoring system that has capabilities to track real-time vitals and detect abnormal health pattern which can be the sign of neglect or abuse. Similarly, AI helps telemedicine platforms with intelligent diagnostics, and predictive health modelling to know exactly what to intervene upon and this lessens the need to rely on overburdened caregivers. In this way, AI-based chatbots give legal assistance to the elderly in legal contexts and enable them to know their rights and lodge complaints without bureaucratic delays⁴. The data analytic predictive justice models enable courts to find patterns in elder abuse cases so they can develop quicker and knowing decisions.

Important as well will be the use of AI to take care of the old when it comes to their emotional well-being. Social interaction is given by companion robots with conversational AI and sentiment analysis aimed at reducing the feeling of loneliness and isolation. Especially useful in elder care homes and for seniors living alone are these technological interventions. This paper focuses a comparative approach with respect to investigation of AI frame work regarding elder protection across India and the international models such as the Elder Justice Act (2010) of the USA and the European Union's AI Act (2023).

II. AI in Identifying and Preventing Old Age Exploitation

AI in Financial Fraud Detection

Financial exploitation is one of the most widespread forms of elder abuse and frequently perpetrated by people the elderly find they can trust or through cyber fraud. Older adults who-utilize digital banking and online transactions are becoming more susceptible to being financially exploited. Among all things, Artificial Intelligence (AI) using Machine Learning (ML) is particularly necessary to detect such financial anomalies as indication of financial exploitation⁵. This means that ML algorithms are trained on large amounts of data about people’s transactional behaviour, which allows for the identification of deviations from people’s typical spending patterns. An example of red flag seems to be a high value transfer that materialises at once, frequent failures of logins or withdrawals from an old person’s account. These irregularities have already been flagged for Banks and fintech institutions which have already incorporated AI to enhance the ability to flag these irregularities in real time with prompt alerts and account freezes so as to prevent any further damage from arising.

Also, the voice-attached technologies such as AI enabled customer service and diverse financial advisory bots are using Natural Language Processing (NLP). Institutions are alerted of stress or coercive patterns of language when elderly users are pressured into making financial decisions, which systems can then detect, and in some circumstances intervene, or they can request verification⁶. For instance, an NLP algorithm would detect hesitancy or distress in the voice of a senior person who made a call about a fund transfer and would mark it as possibly coercive behaviour. However, this area has been served by another innovative tool such as blockchain technology that provides decentralized and tamper-proof recordkeeping of the financial transactions. Blockchain secures, by technology, pension disbursements, asset ownership documents, property transfers, thereby reducing fraud risk to a great extent. The ingredients are thus these technologies in combination: a multi layered AI defence to protect elderly people from financial exploitation.

³ Teresa Budd & Nigel Shadbolt, AI, Ethics, and Older Adults: The Promise and Perils of Digital Caregiving, 36 AI & SOC’Y 977 (2021).

⁴ Peter A. Lichtenberg et al., Development of the Lichtenberg Financial Decision Screening Scale, 56 THE GERONTOLOGIST 701 (2016).

⁵ ERIC TOPOL, DEEP MEDICINE: HOW ARTIFICIAL INTELLIGENCE CAN MAKE HEALTHCARE HUMAN AGAIN (2019).

⁶ U.N. DEP’T OF ECON. & SOC. AFFAIRS, WORLD POPULATION AGEING REPORT (2017).

AI in Healthcare Monitoring and Elder Safety

Neglect of healthcare is another critical form of elder abuse that is not detected too often, especially in settings or institutions that cater to the isolated and under resources in elder healthcare⁷. Continuous, self-learning and monitoring systems are offered by these AI driven healthcare solutions that are often used to fill these gaps. Health trackers, as well as AI enabled fitness bands, fall detectors, etc. can smartly monitor the vital parameters such as heart rate, body temperature and the movement. They are designed to warn caregivers or emergency service if abnormal patterns, like long period of immobility or fast pulse are detected so timely intervention can happen.

In addition, AI based remote monitoring systems are to be found commonly in assisted living facilities and home care setups. The systems in use for these patients use sensors, cameras, and predictive algorithms to observe behavioural and physical changes of elderly patients. One of the things that AI models are able to capture is sudden shifts in sleeping patterns, reduced mobility, or signs of physical harm and then report these to caretakers. Beyond monitoring, AI also supports diagnostics and early disease prediction in telemedicine platforms. AI-driven tools can analyse symptoms, suggest possible conditions and recommend when an elderly person should seek immediate medical attention if affected individuals, who may not have often enough physical access to physicians⁸.

These AI apps serve as an important bridge between the elderly and credible healthcare in those regions lacking adequate healthcare infrastructure. Also, during pandemics or emergencies when elders cannot visit in person, such technologies make sure that they are not left out. Of course, supporting elder healthcare with AI is both economical and lifesaving, as it is in cases where the patient is at high risk or is immobile.

AI in Legal Assistance and Predictive Justice

In spite of some form of citizenship, there continues to be great disparity in the access to justice for senior citizens and this often inhibits them from addressing issues of legal exploitation, including unfair contracts, denial of inheritance rights, and pension related dispute. From redlining hearings to helping write funerals, AI is transforming the legal space into the most useful products on the planet smart, accessible apps which allow the old to comprehend, read, and act on their own remaining benefits. Legal chatbot powered by artificial intelligence is designed to help filing complaints, understand the legal notices and avail the welfare schemes in step-by-step manner by a robot like DoNotPay and India’s “Supreme Court Vidhik Sewa.” Conversational AI in these systems makes legal language simpler, and helps users understand legal language in their language, thus, they become more inclusive and elder friendly⁹.

Next, predictive justice models based on judicial data about past elder abuse cases are another promising development that predicts the probable outcome of such cases. According to AI, elderly litigants and their lawyers can get insights into the strength of a case and probable rulings by analysing previous verdicts, sentencing patterns and legal provisions¹⁰. This information helps in taking faster decisions which is very timely, particularly because delays are stressful for seniors and can dissolve into court or out of court settlements. And some elders are also being utilized in online dispute resolution (ODR) platforms which allow them to settle financial or property related cases without the hassle of courtyards visits. The systems operate an algorithmic logic to propose based on the inputs of both parties and precedent legal norms alike, fair solutions.

AI cannot substitute human legal expertise and judicial discretion, yet helps while being more accessible, particularly for seniors living in rural or remote area. It shortens the legal process and helps elderly citizens not get left defenceless in a complicated legal morass.

AI for Emotional and Psychological Well-being

However, subtle but still harmful forms of elder abuse include emotional neglect and isolation. The breakdown of traditional family and with more of our seniors working and living alone, loneliness, anxiety and depression is on the rise with no traditional family support. The psychological challenge of solving these problems is currently addressed by AI technologies. Interactive support via conversations, games, reminders, therapy prompts are provided by social robots like Paro (a robotic seal) used by Japanese elder care, and ElliQ, a robotic companion with Artificial Intelligence. Facial recognition and NLP capabilities in these robots allow them to adapt

⁷ WORLD HEALTH ORG., GLOBAL REPORT ON AGEISM (2021).

⁸ NAT’L CTR. ON ELDER ABUSE, ELDER ABUSE FACT SHEET (2020).

⁹ WORLD ECON. FORUM, ETHICS AND AI: PROTECTING THE RIGHTS OF OLDER ADULTS (2021).

¹⁰ BROOKINGS INST., AI AND THE FUTURE OF ELDER CARE (2022).

to the needs and behavioural patterns of the user in order to stimulate cognitive activity as well as to entertain with playfulness.

Another AI application is called sentiment analysis that analyses a person’s tone of voice, written text, visual expressions to uncover signs in those individuals who are depressed¹¹. These tools become integrated with mobile apps or wearable devices and can detect sadness, anger, or confusion; the family members or mental health professionals will be alerted. The kind of real time emotional monitoring is useful in elder care facility to reduce escalation of abuse and create a more empathetic reducing environment for caregiving.

III. Legal Frameworks for Elder Protection

Legal Safeguards in India

Thus, India has recognized the urgent need to legally protect an increasing elderly population against abuse, neglect and exploitation. In this regard, The Maintenance and Welfare of Parents and Senior Citizens Act, 2007 is one of the most significant legislative steps. This Act obliges the children and the heirs to provide retirement maintenance for the senior citizens to guarantee their financial as well as their social security. It also demands the setting up of old age homes and sanctions the remedies in the form of tribunals and tribunals of exclusive cognizance of the complaints of non-maintenance or neglect of maintenance¹². In the Indian socio-cultural context where the joint families are disintegrating and a large number of elderly parents are financially and emotionally abandoned, this Act is most important.

There are also provisions under the Indian Penal Code (IPC) which are added to penalize elder abuse in several ways. Voluntarily, Section 323, criminal breach of trust Section 406, cheating Section 420, cruelty towards women by or of her husband or any relative of either Section 498A and old women who has to endure familial abuse. While these sections are not just specific to elder abuse narratives, they were successful in use to cases involving elder abuse¹³.

Besides, since the Information Technology Act, 2000 provides highly necessary legal leverage in the digital era when financial and cyber exploitation of the elderly has become on the increase, the bill challenges the bias. Penalized under this Act are cyber fraud, identity theft and unauthorized access of digital financial data when elderly people expand usage of online banking and e governance services. Certain provisions like Sections 66C (identity theft) and 66D (cheating by personation with the aid of computer resources) have been necessary to fight off the complicated frauds against seniors.

However, there is a big gap between these frameworks and implementation. Unfortunately, many of these elderly people don’t know their rights or have the legal literacy and access necessary to claim justice. With these laws, therefore, AI assisted legal platforms and elder helplines could be used in conjunction to reach out, educate and inform people about such laws to greater levels of outreach, awareness and accessibility.

Global Legal Frameworks

There are growing numbers of countries that have established comprehensive frameworks that protect a population’s rights and dignity of elderly people and many of those frameworks now utilize AI tools in enforcement and monitoring. While not legally binding, the United Nations Principles for Older Persons (1991) constitute an international moral charter that calls upon the world to respect independence, participation, care, self-fulfilment, dignity, and taking into full account the complexity of family situations for older persons¹⁴. The principles urge member states to respect protection of the elderly from exploitation and to incorporate the elderly voices in the policy making process.

Among most robust federal elder abuse, neglect, and exploitation statutes in United States, is the Elder Justice Act of 2010. The Act encourages the government departments to coordinate the activities regarding elder justice and urges for AI and data driven use for detecting abuse patterns, monitoring the institutions of the caregivers and spotting suspicious financial activities. The role of AI-powered data analytics is more evident in the U.S. agencies such as Adult Protective Services (APS) and from the Department of Health and Human Services (HHS) to identify the risk indicators early and then intervene on abuse cases. The Act also supplies money for

¹¹ The Maintenance and Welfare of Parents and Senior Citizens Act, No. 56 of 2007, INDIA CODE (2007).

¹² Elder Justice Act, 42 U.S.C. §§ 1397j–1397m (2010).

¹³ Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act), COM (2021) 206 final.

¹⁴ MINISTRY OF ELECTRONICS & INFO. TECH., GOV’T OF INDIA, INDIAAI REPORT (2023).

creating forensic centres for elder abuse and raises awareness of elder abuse and training for professionals in health care and law enforcement so that they can make use of AI tools for elder protection¹⁵.

The European Union Act on Regulation of the Use of Artificial Intelligence Technology and other Advanced Technologies, which was adopted in Europe recently in 2023, suggests a proactive approach to regulating the ethical use of AI, in particular when pertaining to the elderly. It is this landmark legislation because it classifies AI systems by risk level and has high requirements for high-risk applications including those in biometric surveillance, healthcare diagnostics and automated legal decision making. When it comes to senior care, the use of AI, must be transparent and accountable, with data privacy, in terms of core values that hitherto human rights have encompassed. In addition, the regulation obligates human oversight of all such decision-making processes in the hand of AI, which means that there would be no chance of algorithmic bias or unfair outcomes of elder related services.

There are also many of these elder protection statutes in many European countries, such as, for example, Germany’s Long Term Care Insurance Act and Sweden’s Social Services Act, focusing on both welfare as well as the psychological and emotional well-being of the elderly. However, AI is applied in the predictive healthcare, remote monitoring and the fight against financial fraud in these jurisdictions under the strict legal and ethical guidelines to prevent abuse¹⁶.

Together, these serve as a campaigning benchmark for integrated elder protection strategies that are based on human rights values and the emerging use of technology. Finally, they show how the law can change along with AI to ensure to senior citizens that justice and security are delivered.

IV. Ethical and Human Rights Considerations

AI and Privacy Concerns

Privacy is one of the most difficult ethical issues revolving around applying Artificial Intelligence to elder care. Using AI powered elder monitoring systems such as wearables, surveillance devices and digital health trackers, collects enormous amount of sensitive personal data. For instance, financial transactions, health records, updates on real-time location, and even aspects such as behavioural patterns are among the data included in these. These technologies' uses are to protect and assist elderly population presented them to vulnerabilities in the case of data security breach, particularly where an elderly individual interacts with the technology's cybersecurity infrastructure and can be very weak or outdated¹⁷. Such data becomes a target for hackers or even malicious insiders, as they can exploit the data causing identity theft, financial fraud or even psychological manipulation of seniors.

A second major concern is that in institutional elder care settings such unethical surveillance practices are used. Localized experiential analysis of these cameras and sensors revealed how they can be deployed without informed consent of the elderly residents, making use of safety and operational efficiency arguments. But constant surveillance can be dehumanizing and making life horrible; it violates an individual’s right to human dignity and privacy. The increasing trend of using AI decision-making tools in elder care facilities and insurance companies to decide regardless of human consultation or consent, are particularly worrying¹⁸. Such lack of informed consent can, in fact, contradict the principle of autonomy and even go against the patient’s preferences or best interests, undermining informed consent.

AI Bias and Discrimination Risks

An important ethical issue is that there is a high likelihood that AI algorithms are biased. However, for example, if the historical data from which an AI system trains to make decisions is skewed against an ethnic or age group (or any other arbitrary socially construct), then the models built off of this skewed data will find ways to enact what is already embedded in these biases that are ultimately perpetuated¹⁹. For instance, let’s assume that the training dataset tends to consist of urban or economically developed elderly people more, then the AI model may not produce expected or incorrect behaviour from people residing in rural, tribal, or economically compromised communities. Such an outcome could include discrimination, for example, by not recognizing true distress signals in people of underrepresented groups or identifying normal behaviour as suspicious with a group.

¹⁵ G.A. Res. 46/91, U.N. Principles for Older Persons (Dec. 16, 1991).

¹⁶ IBM CORP., AI IN FRAUD DETECTION (2020).

¹⁷ DELOITTE, AI IN HEALTH CARE: BALANCING INNOVATION AND RISK (2021).

¹⁸ MIT TECH. REV., HOW AI CAN SPOT FINANCIAL ABUSE OF ELDERS (2020).

¹⁹ MCKINSEY & CO., AI TRANSFORMING FINANCIAL SERVICES (2022).

The legal and healthcare AIs also create biases. If the past judicial data consists of socio-economic or gender-based discrimination, predictive justice models used to make case outcomes predictions may result in inaccurate assessments²⁰. Similarly, AI in healthcare diagnostics could lead to misdiagnoses or underdiagnoses of conditions when dataset varies are not represented well for the differences in aging patterns by ethnicity and gender. Such inaccuracies have serious consequences ranging from involuntary legal proceedings or wrongful medical judgments that could severely damage the dignity and rights of elderly people.

But technical bias is only the first of two ethics concerns in transforming decisions delegated to algorithms which so far require human judgment and empathy. Empirical logic cannot cover the emotional nuances, nor the lived experiences of elderly people²¹. Hence, algorithmic logic cannot be applied. If elder abuse cases and medical interventions are outsourced to machines, they render the discretion of humans who make decisions to cold data analysis, and may yield insensitive or unjust outcomes.

Autonomy and Ethical AI Decision-Making

Despite the provision of such support, AI may end up undermining seniors’ autonomy, in particular when AI tools give preference to their data over input from the individual in matters of their health, finances, or in legal matters. As an example, to provide that elder one aspect of spring, a smart home system that alerts authorities automatically because of a fall detection may have passed over the elder’s preference for on their private and their own, supervised care. Precedent should also be taken from predictive legal tools, which might advise appropriate settlements or legal paths that don’t match an individual’s values, unless they are clearly explained or don’t allow for challenge²².

However, it raises an important question regarding a grey area that is legally impossible: how courts might find legal flaws in AI led decisions. If an elderly care institution takes an AI’s recommendation into account and acts on it, but it leads to harm or neglect, who is at blame—the developers, the carers or the institution itself? Such accountability issues are more ethically precarious because current legal frameworks are not yet fully developed to deal adequately with them, so much so that the use of AI in this field is ethically precarious.

In addition, the fact that human oversight is not utilized with AI systems fosters a lack of trust and transparent usage. To truly be a supportive mechanism for AI in the elder care area there must be balance between automation and human involvement. Human review of AI related recommendations, transparent algorithm, grievance redressal machinery against harm must be provided in this²³. Legal and procedural safeguards are necessary to protect elderly individuals’ decision-making agency in an ethically deployed AI.

V. Policy Recommendations and Future Directions

Strengthening AI Integration in Elder Protection Laws

The first step towards building an AI driven elder protection ecosystem is coming up with a process of formal integrating technological advancements into the already existing both legal and social settings. Offering real time help to senior citizens in terms of legal queries, filing of complaints, and accessing the welfare schemes is the best way to establish AI powered legal assistance centres for senior citizens²⁴. These centres that combine AI chatbot and human legal advisor would fill the gap between law and accessibility especially in remote areas. The other reform that is vital is to incorporate AI fraud detection algorithms into national banking and pension systems. By doing so, we can monitor transactions in real time so it can prevent unauthorized withdrawals and coercive transfers that neither are reported. Finally, a deployment of smart surveillance systems to elder care homes will enhance the safety standards by recording caregiver transactions, raising an alarm in the case of abuse and creating verifiability²⁵. Nevertheless, these systems need to be governed by ethical surveillance policy so they can't be used or invaded.

²⁰ ACCENTURE, AI AND ETHICAL CARE FOR THE AGING POPULATION (2020).

²¹ EUR. UNION AGENCY FOR FUNDAMENTAL RTS., FUNDAMENTAL RIGHTS IMPLICATIONS OF AI (2021).

²² Luciano Floridi & Josh Cowls, A Unified Framework of Five Principles for AI in Society, HARV. DATA SCI. REV. (2019).

²³ Reuben Binns, Fairness in Machine Learning: Lessons from Political Philosophy, in PROCEEDINGS OF THE 2018 CONF. ON FAIRNESS, ACCOUNTABILITY AND TRANSPARENCY (2018).

²⁴ DONOTPAY, AI LEGAL ASSISTANCE TOOL (2023).

²⁵ INTUITION ROBOTICS, ELLIQ: THE ROBOTIC COMPANION FOR SENIORS (2023).

Ensuring Ethical AI Deployment

However, despite its potential to improve service delivery and protection, the use of AI has to be led by ethical standards. Governments need to adopt very strict AI ethics guidelines, aiming for elder care such as data privacy, transparency and informed consent. All AI systems in elder protection should be periodically audited and evaluated to hunt for algorithmic errors or discriminatory patterns given that biases in AI models can also jeopardize such vulnerable groups disproportionately. It can be performed through regulatory or ethics committees. In addition, it is suggested that AI should be utilized in conjunction with (not against) human judgment, with such models as AI-human hybrid decision making (AI-human hybrid system where AI assists but does not substitute for human judgment)²⁶. This is to retain, in decisions concerning elderly healthcare, financial management, as well as legal justice, empathy, discretion, and the sensitivity of the context. The idea was to have such hybrid systems: speed and efficiency of AI, but the moral and emotional intelligence of human oversight.

Public Awareness and AI Literacy for Senior Citizens

In order for AI to really work in protecting the elderly, public awareness and digital literacy must be improved particularly among elderly people themselves. These should take the form of community centres, NGOs, digital platforms that teach seniors to recognize scams, understand the use of automated tools and to assert their digital rights²⁷. Further, government departments and social welfare agencies need to construct AI enabled elder helplines through which the seniors can report a case of fraud, abuse or neglect; and if they need navigation through services that are provided in their preferred language using the power of AI. Furthermore, legal aid NGOs need to cooperate with AI developers in designing non-excluded, accessible legal tools for the elderly. These partnerships can make sure that elderly user input goes into the design of AI technologies for them to feel more intuitive and trustworthy²⁸. Furthermore, community driven outreach via workshops, awareness drives and social media campaigns can also be really helpful in acquainting seniors with the advantages, disadvantages of AI.

VI. Conclusion

In essence, Artificial Intelligence is completely changing how societies make efforts to protect older adults. AI technologies hold the potential to solve numerous uses of elder exploitation, from identifying fraud to predicting abuse to giving seniors access to legal support. These financial security, smart surveillance and health monitoring tools improve the physical safety, machine learning models help to improve financial security as well as legal chatbots that enable the access to justice. Sentiment analysis leaning on AI also helps elderly care by enhancing emotional well-being, as well as enhancing care by using companions' robots.

These advancements do not mean that integration of AI in elder protection is painless, however. There are indeed several high-risk ethical issues that include data breaches, algorithmic bias, non-consensual surveillance and erosion of autonomy. Such risks demand strict governance, ethical design of AI, as well as much oversight. To provide us with clarity in understanding this development, the use of AI's legal and ethical impact in health care, law, and social services targeting seniors, national and international legal frameworks must be updated to identify and regulate the significance of the AI impact in all activities. India's IT Act, the Elder Justice Act (USA), are but a few of the important milestones in regulations but global consensus and continuing refinement is needed.

For the future, we need to walk a line between the human side of things and the automatic side of things. At the dawn of AI, it is not AI that will replace human judgment, but that judgment will need to be augmented by AI, most especially when it comes to sensitive domains such as elder care. Therefore, governments and institutions should put money in hybrid models of AI and humans, robust legal policies that safeguard human dignity, public AI literacy programs that help everyone embrace these new technologies, and inclusive design that favours the dignity and social integration of seniors. This means that when responsible AI deployment occurs, old age will not confer vulnerability, but rather, the opposite: support from intelligent, ethical and fair systems to protect, include, and respect.

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²⁶ PARO ROBOTICS, PARO THERAPEUTIC ROBOT: EMOTIONAL SUPPORT FOR THE ELDERLY (2022).

²⁷ AARP, AI AND DIGITAL LITERACY FOR OLDER ADULTS (2021).

²⁸ Algorithmic Accountability and Legal Liability in AI Use, 133 HARV. L. REV. 1465 (2020).

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