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ORIGINAL ARTICLE

An Exposition of Moral Issues in the Use of Sensor Technology on Psychiatric Patients

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Abstract: The advance of scientific approaches to life has recorded a plethora of successes as well as failures. Man being at the center of its experiment is tossed toe and fro by the result of its inquiry. Predictions are that in the nearest time, humanity might be living absolutely under the directives of Technology based on Artificial intelligence. At present, Technology based on Artificial Intelligence is quickly finding its way into various areas of life including health and social services. This spread and or interplay connotes the relinquishing of health responsibilities from man to sensor technology as well as dependency on the data and result of this technology. This effort questions this unethical dependency as well as raises moral issues associated with the use of Technology base on artificial intelligence on psychiatric patient. It dabbles into medical values such as; autonomy of the patient cum consent, Kantian universal principle and its implication to implementing the universal usage of technology in mental health care services, and so on. The work of Patricia A. Arean (2016) titled *Mobile Technology for Mental Health Assessment* gave an in-depth analysis of the available approaches, doting advantages of sensor technology on psychiatric patient. The paper applied the analytic, descriptive and prescriptive method of philosophy to achieve its objective. To this end, it is in the view of this work imperative for the mental-medical community to consider reflectively these issues and the philosophic recommendations provided herein.

Keywords: Moral, Issues, Sensor, Psychiatric.

INTRODUCTION

Philosophy has been periscope by James K. Feibleman as "the science of science: the criticism and systematization of all knowledge, drawn from empirical science, rational learning, common experience or whatever" (Karo Obinaka, 8). Following James definition, it is imperative to stress the urgent need for intervention by the twenty-first-century philosophers to current issues emanating from all facet of human existence as this is its optimum function (Owan, 11). The function of criticizing issues takes solace under the branch of applied ethics, as correctly articulated by Simon Blackburn (121). Therefore, it would be logically valid that whereas philosophy plays the vital role of a guard-fly, and the mother of all other sciences as argued (Uduigwomen, concise, 22). It has the freedom to question and or discuss the many issues growing from the philosophy of science and philosophy of medicine as well.

It is no more surprising for this age to invent structure and ideas that are not born out of the natural arrangement. As Kyrian stated in his scientific piece: A philosophy of science for Africa:

> Humanity is presently celebrating the progress and achievements of science, especially in technological development. The life of mankind has been greatly improved by man's ability to subdue and control nature, predict and manage hazards, devise and utilize sophisticated technological gadgets that are even helping man to expand his horizon beyond the planet earth. In the realm of medical sciences, life expectancy has improved tremendously because of the discovery of a new mean of therapy and longevity. The possibility of duplicating human beings scientifically by the process of cloning has brought to the fore the notion that man is playing God (1).

Aligning with Ojong, it can be affirmed that science has recorded tremendous impact in the various field, especially in medicine. It has helped to improve diagnosis to health care (Daniel Essin, 2) and like BC Mudd echoed the voice of McCormick:

> …Generally speaking, modern medicine is a more effective methodology for curing physical ailments… modern medicine can cure cancer with an incredibly higher rate of success than folk remedies can. Empirically, chemotherapy reduces far more cancer than Christian Science prayer sessions or chicken heart soup. As every American knows, this is proven, undesirable fact (3).

With the above assumption, little will one wonders why modern science has been termed the "god" of this world, owing to its miraculous performance via invention and curing of critical ailments. This work wholly disassociates from the belief that science is "God", even though it admits the many wonderful things science has done to make life better for man. Mudd explicates this disassociation thus:

> Science has produced some amazing miracles, but it also produces honors. Atomic bombs, global warming and mass extinctions all result from science, the scientific method and how modern society practices them… science is not a god. It is not well-intentioned, it is not beneficent, and it is not magical. It is a human process, identical in nature to all other human processes. It is imperfect, it is flawed and it is only as good or evil as the humans who practice it (15).

In tandem with Mudd position, this work argues that psychiatric medicine, which according to Wikipedia, is "a list of psychiatric medications used by psychiatrists and other physicians to treat mental illness, distress and exert on the chemical makeup of the brain and nervous system" (2), is unique in itself.

Whereas psychiatric medicine is currently in intercourse with science vis-à-vis sensor technology, to the point that sensor is been used to handle the treatment of psychiatric patient, philosophy, in this work, uses ethics to prescribe the way forward for the psychiatrist.

DOES THE USE OF SENSOR TECHNOLOGY IN PSYCHIATRIC PATIENT CONNOTE ETHICAL ACCEPTANCE?

According to A. F. Uduigwomen, "Ethics deals with problems or questions which normally arise in everyday life" (2006). The question; Does artificial intelligence have any benefit in the evolving sphere of mental care? Should we rely on technology as against the manual cum human-to human diagnostic approach of data collection and administration of treatment? And should morality be downplayed in the scientific treatment of psychiatric patients? are everyday-life questions.

The need for quick moral intervention on the above question is timely, bearing in mind the fast-moving pace of development. This task which falls on the desk of professional ethics must consider efficiently deliberations hinging on the ills of basing sensitive mental judgment on sensor technology.

Professional ethics concerns one's conduct or behaviour and practice when carrying out a professional job. Asira et al (2009). Professional Ethics and Ethics are valuable words attributed to human beings only as against animals and non-human beings. According to Robertson's world view, professional ethics has three core components – specialized training and the acquisition of specialized skills; the provision of expert assistance to those who are vulnerable and in need; and the virtues of trustworthiness, efficacy, and knowledge which ultimately enhance the common good and aggregate wellbeing (8).

The above description strengthens the view that such characteristics and attribute can only be used to furnish human beings, not man-made beings. In that, in some sensitive cases, humans should be given the only benefits of taking charge of specific areas of health conditions-mental health notwithstanding.

Psychiatric which is one of the brain child of biomedical ethics by default has a social contract with the patient and in close relations the society. Before the early nineteen century physicians rely on Ecological momentary assessment (EMA) which holds promise as a method for capturing more accurate accounts of a client's emotions, functioning, and activity. Examples of EMA commonly used are daily diary methods, signal-dependent reporting, and event-dependent reporting.

Daily diaries require the client to report on events and mood at the end of the day and are thus still subject to some recollection bias. Signal-dependent reporting involves the client reporting on symptoms at random intervals during the day in response to an alarm. Event-dependent reporting has the client report on symptoms after predetermined interpersonal or challenging events during the day. Patricia et al (11).

A sensor is a device that detects and response to some type of input from the physical environment. Sensor Technology, on the other hand, connotes the use of gadgets such as smartphones, chips, sophisticated machines and other artificial intelligence in carrying out tasked originally known to be carried out by human being.

On Psychiatric patients, this connotes the objective transfer of diagnostic and prescriptive intelligence from man to robots or non-human machines to carry out treatment functions. It

has been argued by Patricia Arean and many scholars that Artificial intelligence or sensor technology possess the capacity to deliver effectively and efficiently the task given to it as it regards to care and treatment of a psychiatric patient.

They advanced reasons such as; the advantage of accuracy in data collection and analysis, report delivery, scientific assessment and technical upgrading system adequate to handle future symptoms and possible psychiatric patient disorder.

In line with this school of thought, Bauer et al's (2017) in their article on *Ethics of digital technology for mental health: is this the end of the digital dilettante?*:

> The potential of digital technology to make the lives of people with mental health difficulties better has never been greater. The advent of the smartphone and mobile internet access has created the conditions for an ever-expanding range of opportunities for the use of technology to influence outcomes in health. However, ethical considerations remain for professionals in suggesting the use of such technologies (7).

The view of Patricia and Bauer points directly towards the many progressive results that sensor technology has recorded over time. And the ease of operation it has brought to the milieu of psychiatric medicine. Contrary to their argument, we assert the undeniable fact that sensor technology has brought more harm than good to our culture, traditions, and values. It has extinct efficacious cultural practices which wherein tandem with our identity and history, thereby reducing orthodox medicine to the background.

Again, arguing against the above platform Michael Robertson in his work titled *An Overview of Psychiatric Ethics,* challenged the view of Patricia and Bauer, doting that sensor technology does not possess moral instincts, feeling of human concern, moral consciousness, and moral responsibility. He went on to adumbrate that special virtues required of the psychiatrist are compassion, humility, fidelity, trustworthiness, respect for confidentiality, veracity, prudence, warmth, sensitivity, humility, and perseverance (6). And as such a robot does not possess such virtues, as it is not in its constructive make-up to do so.

It is the sequel to the need for these considerations that the paper response in negation to the question in context. The moving spring upon which this response hinges on are subsumed below:

a. Kantian Ethics and psychiatric practice

Immanuel Kant's personhood was influenced by the age of enlightenment. The period beginning in the late Eighteenth Century around the time of the French Revolution, in which the principles of liberty, fraternity and equality challenged the divine right of kings and religion to control society.

Leaning credence to this century concern of the which he was part of, Kant directed his philosophic jigsaw towards the Socratic-idealistic parlance of question and answers. Joseph Omoregbe (2008) in his work titled *Ethics A systematic and Historical Study,* espouse:

> *How can I find out whether the action I intend to perform is morally right or wrong? What is the yardstick for distinguishing right from wrong actions? According to Kant, the yardstick is the principle of universalization. If you want to know whether the action*
> *you want to perform is morally right or wrong, look at the maxim of the action-*

> *i.e, the underlying principle- and universalize it. Would you wish the maxim of your action to become a universal law? (220).*

From the above issue of duty was carved out Kant's Categorical Imperative. The Categorical Imperative has multiple formulations. The First Formulation articulates the principle of universalibility by directing: "Act only according to that maxim whereby you can at the same time will that it should become a universal law" (p.421). The Second Formulation of the Categorical Imperative is the injunction: "Act as if the maxim of your action were to become through your will a universal law of nature" (p.421).

As it relates to the focus of this work, the question of universalibility is been asked. Is it ideal to universalize the practice of sensor technology in psychiatric care? That is to say, having a condition whereby all the psychiatric wards in the universe will be controlled by Robot and other scientific systems. Kant is of the view that our actions and resolves should center around what we would be comfortable with if it is applied anywhere, anytime.

It would be glaringly out of place to answer the above question in affirmation. Basing the care of a mentally ill person on a machine that does not bear the same anatomy with human beings is worthy enough to constitute an ethical concern.

The moral issue that quickly arises in such a scenario is that humans all over the world will immediately lose their jobs to sensor technology. One attendant implication for this would be that humans will be relegated to a state of global idleness, fatigue, and depression- a mental condition. This is our opinion leads to the recycling condition of infinite regress as man will perpetually remain under the mercy of artificial intelligence for resuscitation.

In the opinion of Glenn Luk in online Forbe data, "If humans lost 90% of all jobs in the world to robots, automation, and technology, we will be where we are today" (2). My analysis of his position is that over the years, human beings have used technology to bring the good life. But the perennial dangers stand tall, that we have not accessed the intelligence to manipulate and circulate these good fortunes that technology has brought our ways as well as drowned the limits of operation.

Hence, these have given birth to negative values such as greed, human enslavement, idleness, the lacuna between the rich and the poor and sensor slavery.

Moreso, the growing agitation in the space of scientific wave regarding the need for breaking more grounds and spreading into virgin areas would lead to the reduction of human creative potential to skillfully demonstrate his will in connection to his existence.

b. The Issue Of Autonomy Of A Psychiatric Patient

The word autonomy is a legal word that is synonymous with freedom. It is the capacity to make an informed, uncoerced decision, and without the involvement of another system or operation (Wiktionary, 3). It application speaks for all humans, and back-up the right and privileges every human enjoys. Taking away this legal value from a person connotes slavery and dehumanization. Asira and Ogar clarify the meaning of the word further by noting that:

> The principle of autonomy recognizes the rights of individuals to self-determination. This is rooted in society's respect for individuals' ability to make informed decisions about personal matters. Autonomy has become more important as social values

> have shifted to define medical quality in terms of outcomes that are important to the patient rather than medical professionals (8).

Collating from their explanation above, it is resolved that every individual has the right to make an informed decision about personal matters. It is a philosophic concern to this end that some individual's in the medical field are not considered individual, which is a violation of the law of thought-Identity. They have been given so many names including "vegetable human", and to the extent of being used as tools for an experiment.

As it borders on the right of a psychiatric patient, we seek to know if it is the case that the individual's right to decision making does not have any bearing or count. Caught in this dilemma, Rebecca Brendel remarked:

> By virtue of an illness that by definition, affects one's capacity for logic, reason, reality testing, and perception of self vis-à-vis the world, the person who becomes a psychiatric patient often challenges care providers and loved ones with profound questions about what ought to be done…what are we to do in service of respecting the person? Are we to persuade, require, and even demand that she take medication so that she can return to life as she had known and built it? Or do we follow her wish to be free from medication and decline treatment, even if it leads to a partial or total departure from what used to matter to her? (26).

Although we can admit that this issue is vital and extreme, we should still consider the absolute authority the power of autonomy possesses. We mention that it is critical to understudy a patient to the point of understanding his/her ultimate value and reason before his/her illness and during his/her illness. This will give the breathing environment to suggest decisions to the patient. And it still rests on the patient to accept or reject suggested decisions, doting that the patient is still categorized as a human being. Anything short of this will be a crime, and against the right freedom benefits of the individual.

Consequently, it is germane to note herein, that a psychiatric patient has the autonomy as it concerns the use of sensor technology during his/her treatment process. This can be supported by the fact that the patient practices a belief system. And in cases where he/she is a psychiatric patient, his values should be consulted and not be overruled. It is argued herein that, under the laws of thought, "A thing is a thing", hence, a person remains so, irrespective of his condition. He/she deserve the right to decision making regarding technological involvement in his/her treatment method, and the psychiatrist has to respect such human right.

ISSUES OF SENSOR TECHNOLOGY AND MORAL EDUCATION

The influx of sensor technology in the treatment of a patient in close relation, psychiatric patients leaves one with these moral questions; Does technology possess the language of morality? Can they understand and objectively explain human feelings? Do they have the capacity to learn the active behavioural complex intelligence of humans, to gather such data and produce results in this regards? We question to know the possibility if necessary of installing in sensor technology a moral education.

The concept of education like every linguistic term does not subscribe to an acceptable definition. It is like a diamond which appears to be of a different colour when seen

from a different angle, or like the concept of the proverbial elephant as described by blind men. Synthetically "education is drawing out and leading out something from within the individual by bringing up, narrowing, raising and training him"(Vashishtha, Hemarnt, and Anshu, 3).

Moral education by explanation refers to "helping children acquire those virtues or moral habits that will help them individually live good lives and at the same time become productive, contributing members of their communities" (Ashmund, 5). It is an umbrella name as many scholars have said, for character education. Therefore, in such training, children are taught in such a manner that they will be good citizens, civic, well mannered, non-bully, healthy, critical, successful, traditional, compliant and socially accepted.

Judging from the above, the questions that may ensue are directed to the morality of sensor and or artificial intelligence, doting that morality and moral education are two divides directed at the same subject-man. That is to assert that only a man possesses the mental and moral capacity to respond to moral training principally on the bearing that man possesses abilities for emotion, feeling and human virtues.

On the other hand, it is imperative that whereas sensor technology is already in practice in many psychiatric hospitals of the world, psychiatrists are admonished to understudy the makeup of sensor technology to understand objectively their functions. This education is to militate against accident cases between the technology, psychiatrist and the patient.

CONCLUSION AND RECOMMENDATION

Conclusively, there is a consensus that technology has done great good in alleviating life struggle and aiding work success in various areas of human existence.

However, this work focus has been on the moral issues that spring from handing over the responsibility of psychiatric patient treatment to sensor technology, robot or artificial intelligence. We argue that there are attendant dangers of infinite regress with regards to mental cases, thus some of these issues raised in the work should be considered.

Emphatically the work recommends that human being be it in any condition, still have the right to life, autonomy and so on, and it is the responsibility of practitioners of all stakeholders to respect these right. The work also acknowledges the fact that artificial intelligence does not have the capacity for virtues, human feelings and so on. Hence, the issue of inappropriate moral intelligence and which will tantamount to violation of the moral law if robots are allowed to handle psychiatric patients.

We submit that proper education and moral reorientation should be given to stakeholders as well as the society on the functioning and or poor functioning of sensor technology.

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