Study of Early Diagnosis in Healthcare System of Fatal Blood Disease through Artificial Intelligence (AI)

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Abstract: Artificial Intelligence proves to be of immense help when it comes to diagnosing of fatal blood-related diseases at an early stage. With the help of AI-enhanced microscopes, we are now able to scan for harmful substances and bacteria in samples of blood. AI is a trending development in science and technology to allow different machines and methodologies to understand such bacteria in the blood samples. The current research experiment is attempted to analyses the collective data from various sources available through the researches on the study of disease such as skin, pancreatic cancer, tuberculosis, diabetes, dementia and Alzheimer's. The experimental outcome effectively reflects the early detection of above-mentioned disease through the use of Artificial Intelligence technology further expanding the zone of scientific determining of such diseases.

Keywords: Artificial Intelligence, fatal blood diseases, early diagnosis.

I. INTRODUCTION

Artificial Intelligence is one of the innovations in the technological science for developing various aspects in the field of medical science. AI is one of an emerging advanced computer algorithm (Ghaffar Nia N., Kaplanoglu E. *et. al.*) widely used in the sectors of IT industry.

This is one of the emerging technologies which is over taking a vast scale in the development reformation. The use AI in relation to Mobile computing and sensor technology (Contreras I, Vehi J.) is developing on a huge scale in the sector of medical sciences. A varied amount of acceptance in a speedy way throughout the world in field of Artificial Intelligence in engulfing all sectors. Medical science is one of the major sectors where a huge world population throughout every nation id dependent. The sectors of different type of disease through traditional medical practices and western medical practices is quite to be upgraded by use of Artificial Intelligence. A huge number of medical imaging dataset (Kumar Y and Koul A *et.al*) through research experimentations have been generated by the scientist. AI has the ability to generate the advanced inferences based on a vague number of data-set worldwide (Nomura, A., Noguchi, M., Kometani, M. *et al.*).

The huge number of researches carried out by various scientists have projected a vague application of Artificial Intelligence such as Identifying the less-diagnosed disease in patients, Coronary artery disease, Disease associated with liver, skin, kidney, cancer, Diabetes, Brain stroke, Blood pressure, Parkinson's disease, Alzheimer's.

AI gives significant findings for health diagnosis of fatal blood diseases. It can provide excellent and accurate information related in terms of diagnosis. The complexity of different Disease can be made simple and apt. The current research attempt is made to generate and effective outcome of the data and the diagnosis performed by use of Artificial Intelligence.

II. MATERIAL AND METHOD

The data generated through the researches by Artificial intelligence and presented in an open-access journals was considered during the study. specifically, Disease such as skin, pancreatic cancer, tuberculosis, diabetes, dementia and Alzheimer's was taken into consideration. However, the early diagnosis of such Disease with the use of artificial intelligence technology was calculated to understand the efficacy.

III. RESULT AND DISCUSSION

Table1 represents the data of disease associated patients which are determined by Artificial Intelligence. However, the graphical presentation of table1 is presented in Figure 1.

Table 1

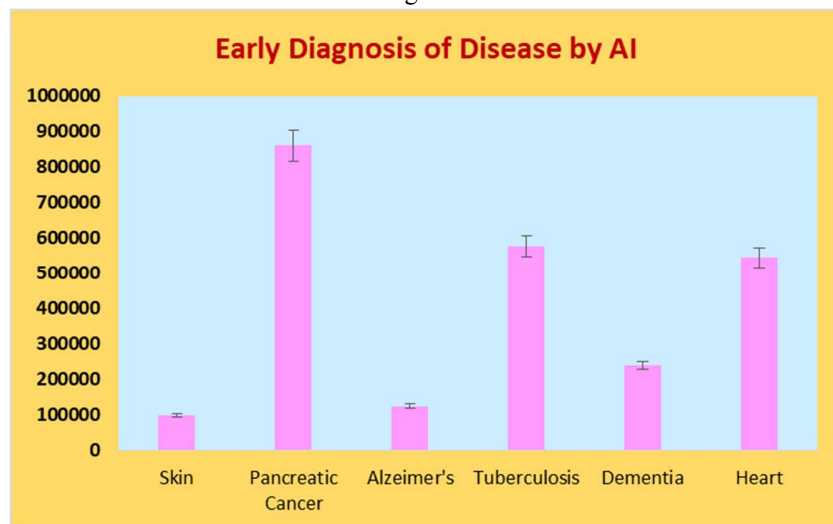| Disease Name	No of patient's detected by AI (Approximate)
Skin	1,00,000
Pancreatic Cancer	8,60,000
Alzheimer's	1,26,000
Diabetes	7,70,000
Tuberculosis	5,77,810
Dementia	2,40,000
Heart	5,45,000

Figure 1

Table1 expresses that pancreatic cancer (860000) > tuberculosis (577810) > Heart (545000) > dementia (240000) >Alzheimer's (126000) >skin (100000). The figure1 represents the data of pancreatic cancer >tuberculosis > Heart >dementia >Alzheimer's >skin. The diseases determined by the use of Artificial Intelligence for the early diagnostic of chronic disease are well effectively analyzed.

IV. CONCLUSION

The research experiment of the data collected for the study of effective use of Artificial Intelligence of chronic disease has generated an excellent outcome in a determination process. The use of AI on a vast scale is still to be outputted in a best way which will be extensive research that has to be on way in the near future. Thus, the use of AI for determination of diseases on large scale on human to early diagnose the patient along with the use of conventional methodologies forms a strong support for the study of medical cases of the patients. Hence, Artificial Intelligence may be devoted to be the **"Brain"** of the Machinery and evolving system in the field of science and technology. The case study thus proves to be an effective source to understand the data of various disease that is taken into consideration during this research.

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