

“Awareness Of Artificial Intelligence in Healthcare among Healthcare Professionals ”

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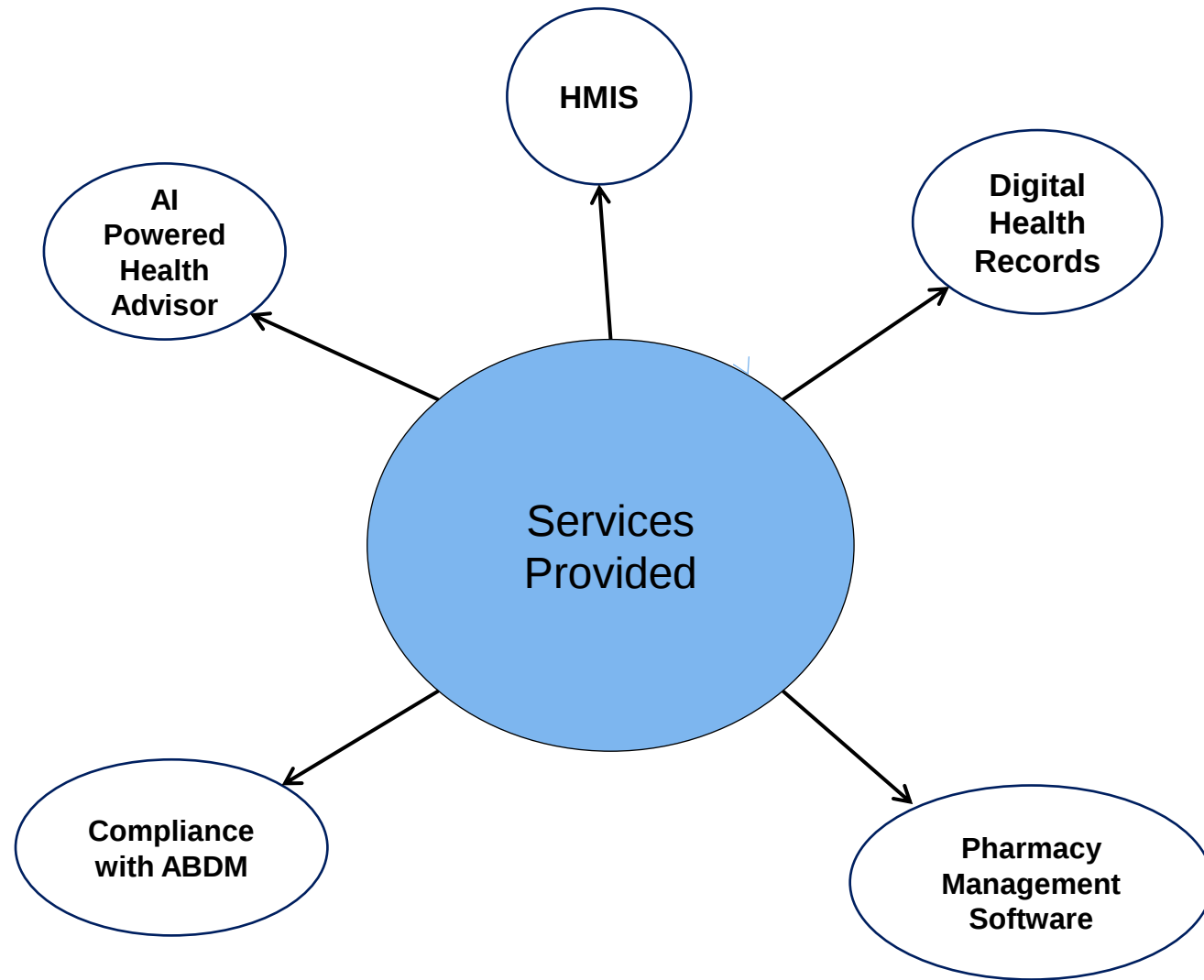
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Organization Introduction – Roojh

- Roojh is a pioneering digital health platform dedicated to transforming healthcare in India by integrating cutting-edge technology and comprehensive solutions for both patients and healthcare providers.
- The platform features secure ***Personal Health Records (PHR)*** for patients, enabling them to manage and share their medical information effortlessly. For healthcare providers, Roojh offers an advanced ***Hospital Management Information System (HMIS)*** that streamlines patient data management, appointment scheduling, and follow-up reminders.
- Roojh leverages AI to provide personalized health advisories and ensures compliance with the ***Ayushman Bharat Digital Mission (ABDM)***, enhancing the overall efficiency and quality of healthcare delivery. By focusing on both the patient and provider sides of the healthcare system, Roojh aims to create a seamless and efficient healthcare experience, improving outcomes and fostering a more connected and informed healthcare community.



Introduction

- AI is proving to be a powerful tool in medicine, changing many aspects of medical practice
- The healthcare sector is on the brink of a major transformation due to artificial intelligence (AI).
- AI can revolutionize patient care, diagnosis, treatment, and operational efficiency worldwide by using advanced algorithms to replicate human
- This will require the best outcomes possible from health professionals at all levels, from primary care staff to specialized experts adopt these technologies.
- This makes assessing their level of awareness about AI-based technology very important, and it is precisely what this study will seek to do in a clinical context.

Role of AI in Health care :

- ✓ Improving medical diagnosis
- ✓ Speeding up drug discovery
- ✓ Transforming patient experience
- ✓ Personalized medicine
- ✓ Outbreak prediction
- ✓ Managing healthcare data
- ✓ Performing robotic surgery

Aim To determine the awareness level of artificial intelligence (AI) in healthcare among healthcare professionals

Objective : The purpose of this study is to find out the level of awareness and acceptance of artificial intelligence (AI).

Research Question :

What is the awareness level of AI in healthcare among healthcare professionals?

Methods :

Research Approach : Quantitative approach

Study Design : Descriptive Cross-sectional Study

Study Population : Healthcare professionals

Study Duration : 3 months

Sample Size : 100

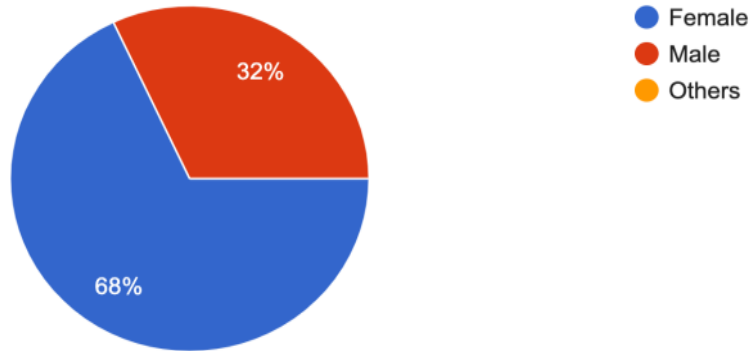
Sampling technique : Participants were recruited using a snowball sampling technique. A Google Form questionnaire was distributed online via emails, text messages, WhatsApp statuses, and social circles.

- ***Statistical methods*** : Basic analysis was done using pie charts generated by the google form.
- ***Data Collection Method*** : A survey of 31 close ended questions Google Forms (online platform).
- ***Data Collection type*** : Quantitative type.
- ***Ethical consideration*** : The data collected is handled with confidentiality.

Results : *Demographics*

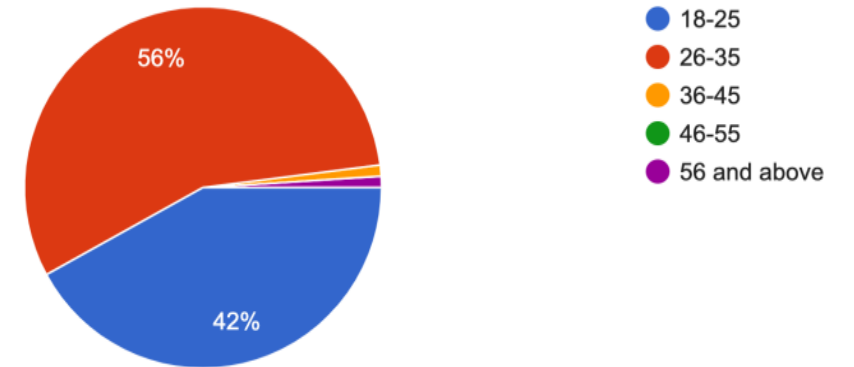
1. Gender

100 responses



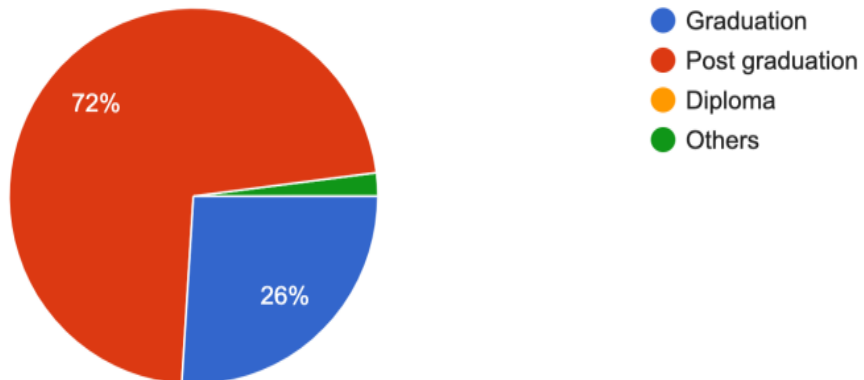
2. What is your current age?

100 responses



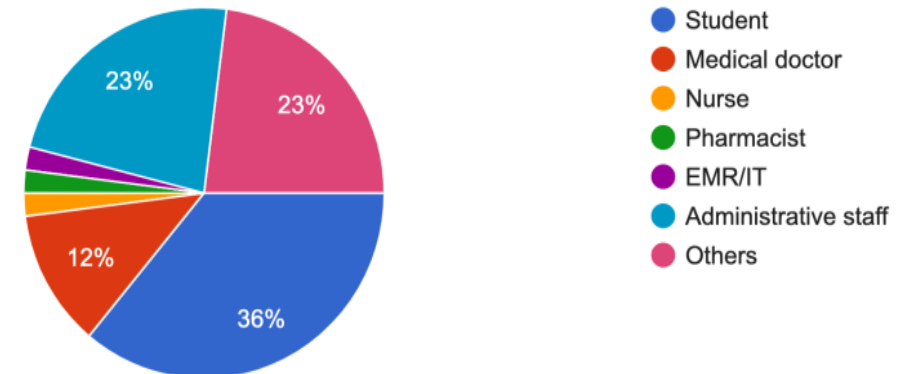
3. What is your highest education?

100 responses



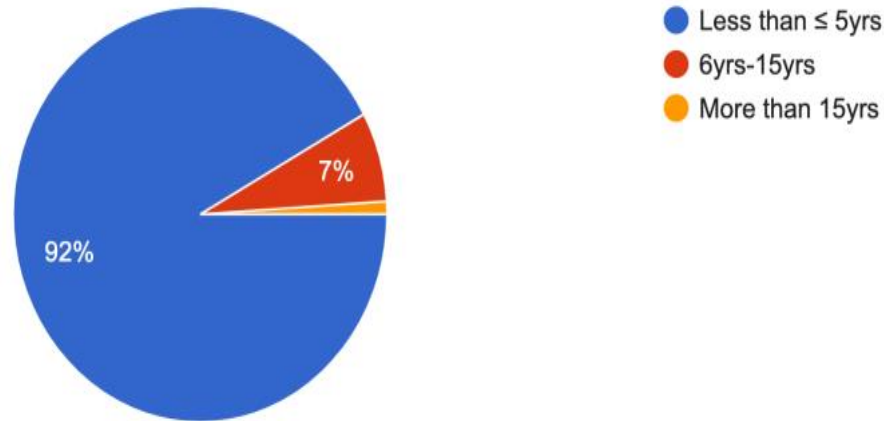
4. What is your profession?

100 responses



5.How many years of work experience do you have?

100 responses

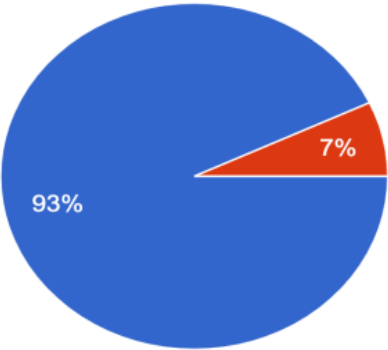


In a survey of 100 healthcare professionals, ***predominantly young*** (56% aged 26-35) and ***highly educated*** (72% with post-graduate degrees), 68% were female and 32% male. Most respondents (92%) had ***less than 5 years of experience***, encompassing roles such as students (36%), administrative staff (23%), and medical doctors (12%). This demographic's show awareness of AI is crucial for tackling healthcare challenges such as low doctor-patient ratios and inefficiencies.

Awareness level :

6.Do you know what Artificial Intelligence (AI) is?

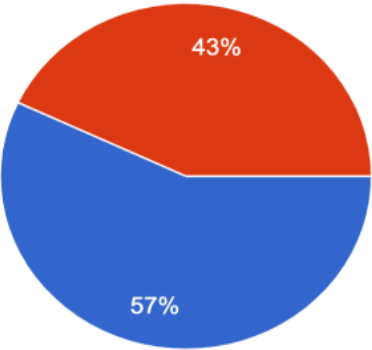
100 responses



● Yes
● No

7.Have you ever used AI-powered health chatbots?

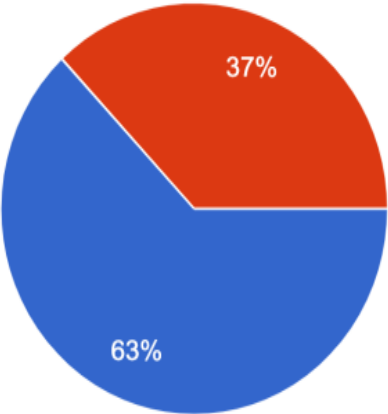
100 responses



● Yes
● No

8.Do you know any app of Artificial Intelligence in the medical field?

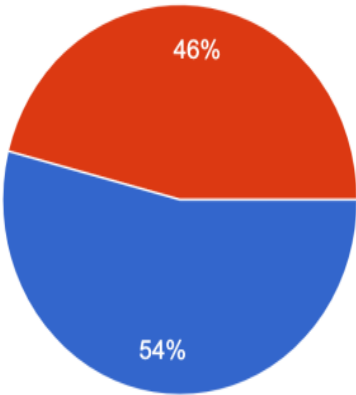
100 responses



● Yes
● No

9.Is AI being used in your organization?

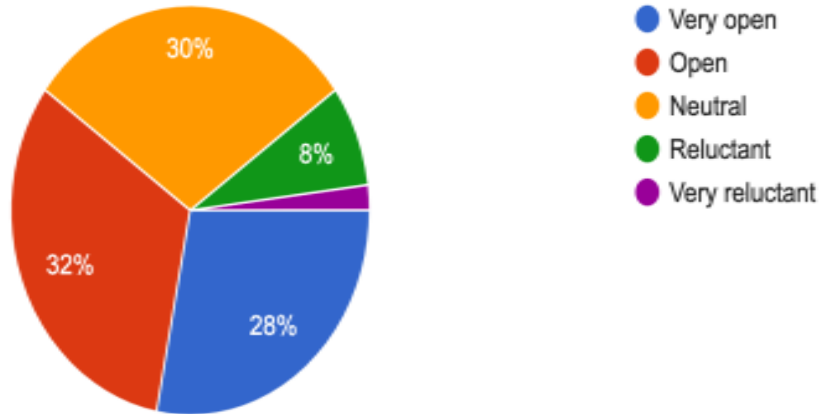
100 responses



● Yes
● No

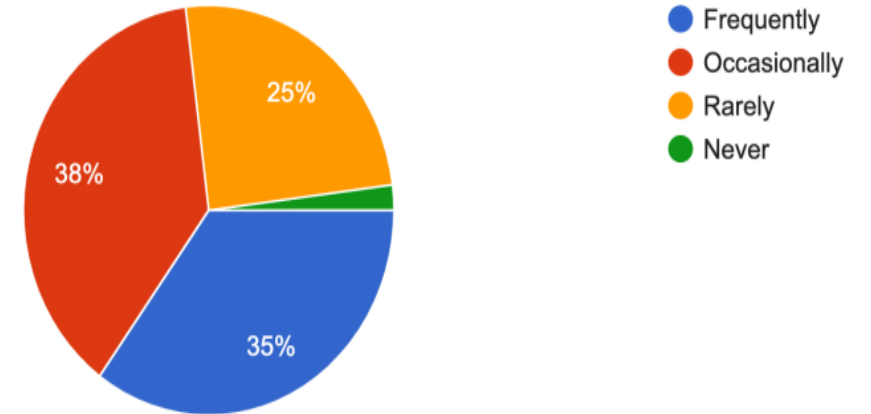
10.How open are you to adopting new AI technologies in your practice?

100 responses



11.How often do you read about AI advancements in healthcare?

100 responses

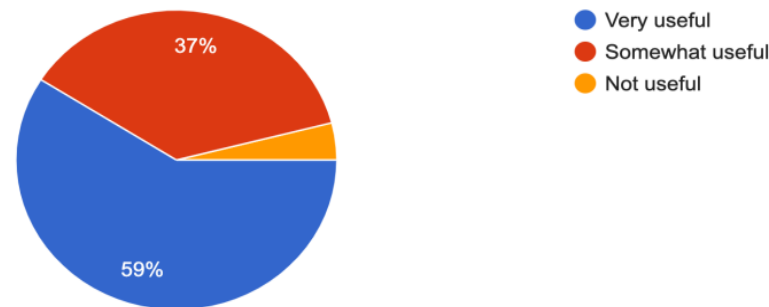


- The survey reveals a strong AI awareness among healthcare professionals, with 93% acknowledging its presence. A notable **57% have utilized AI-powered health chatbots, and 63% are knowledgeable about AI applications in medicine.** Within their workplaces, **54% reported active AI utilization.** . When it comes to staying informed about AI advancements in healthcare, **35% frequently read about them,** 38% do so occasionally, while 25% do it rarely, and only 2% never engage with such information

Healthcare professionals Attitudes towards AI

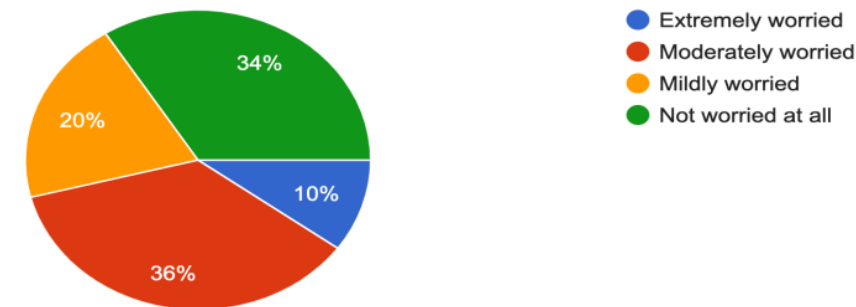
12.How useful could Artificial Intelligence be at your workplace?

100 responses



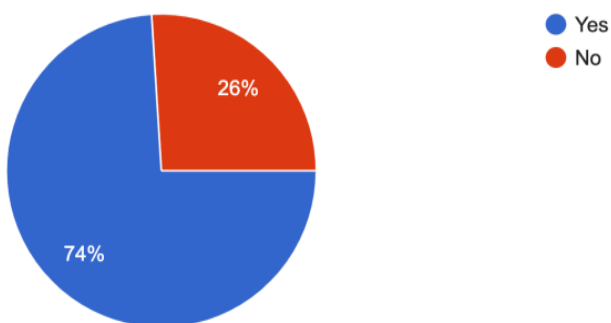
13.How worried are you that AI will replace you at your job?

100 responses



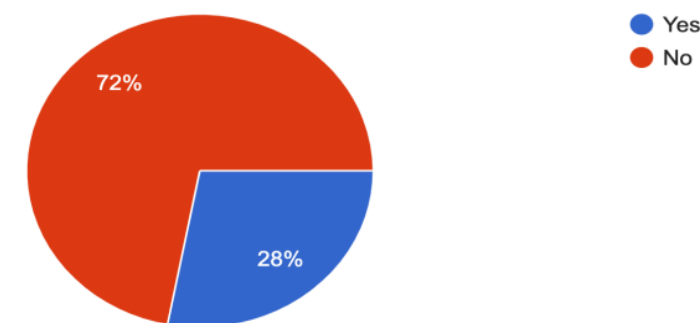
14.Do you feel that using Artificial Intelligence can make you feel less stressed?

100 responses



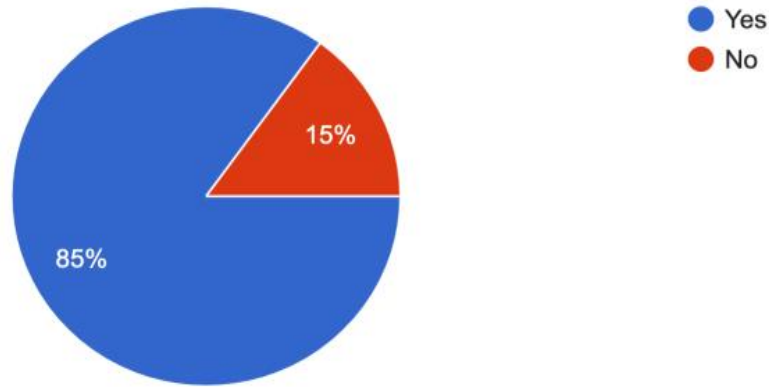
15.Have you ever attended a session of AI training?

100 responses



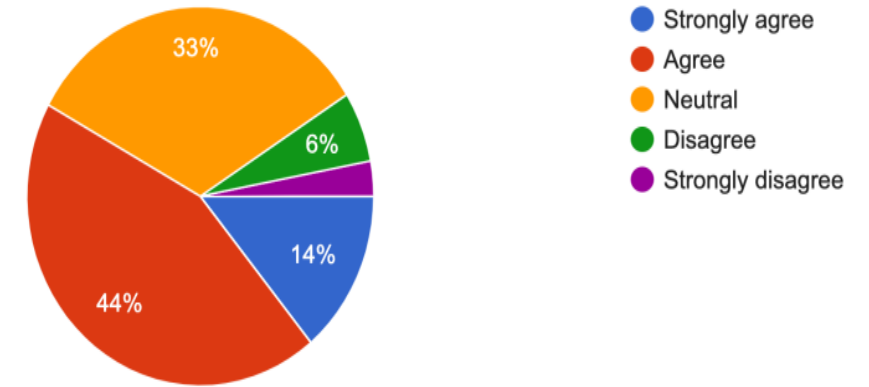
16.Should AI be included in medical education?

100 responses



17.Do you believe AI can reduce medical errors?

100 responses

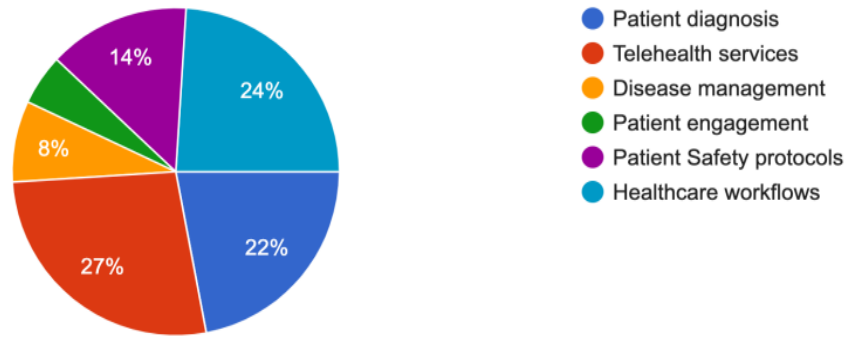


- Key findings from the survey of healthcare professionals reveal a mix of attitudes towards AI adoption and its potential impacts. Concerns about job security vary, with **66% expressing some level of worry** about AI replacing them, while 74% believe AI can alleviate workplace stress. A significant majority, **96%, find AI useful** to varying degrees in their roles. **Engagement with AI education sessions is moderate**, with 28% having attended such sessions. There is strong support, at 85%, for integrating AI into medical education

Perception of AI

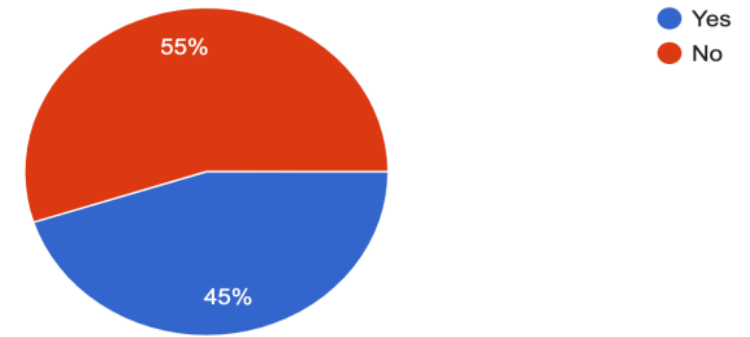
20.Which of the following do you think AI is more useful in healthcare settings?

100 responses



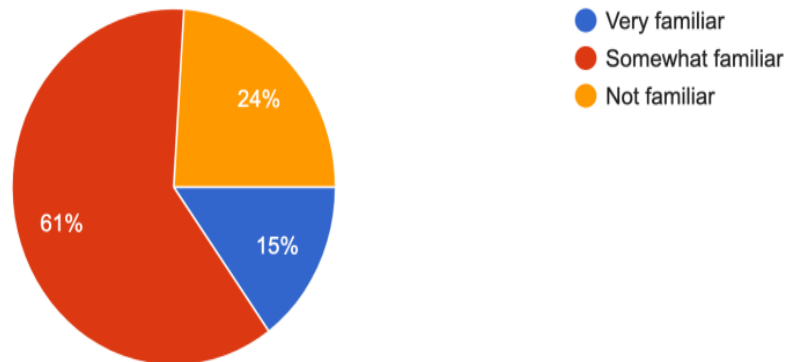
21.Are you aware of AI technologies for managing health insurance claims?

100 responses



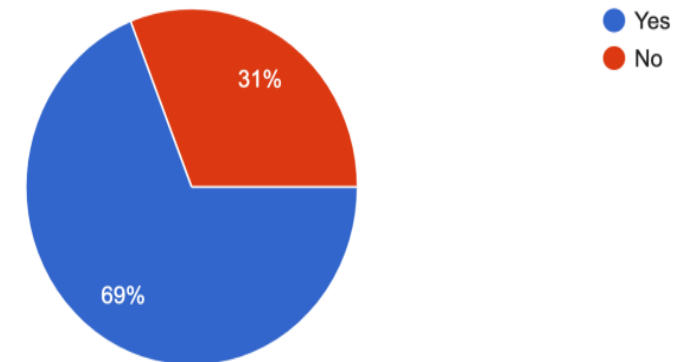
22.How familiar are you with the ethical considerations of AI in healthcare?

100 responses



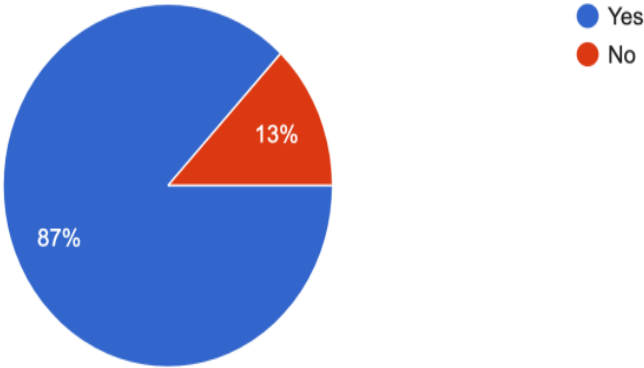
23.Are you particularly worried about completely trusting AI algorithms with patients lives?

100 responses



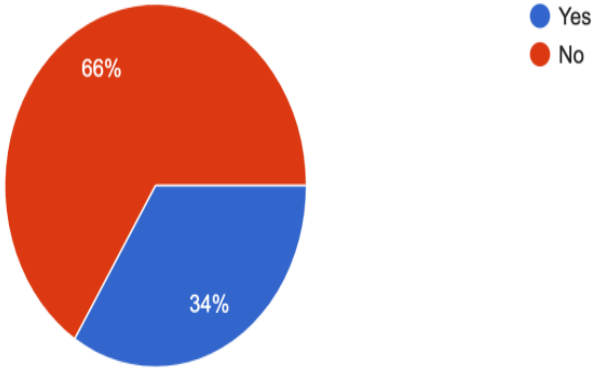
24.Do you think patients data management would be improved if managed by AI?

100 responses



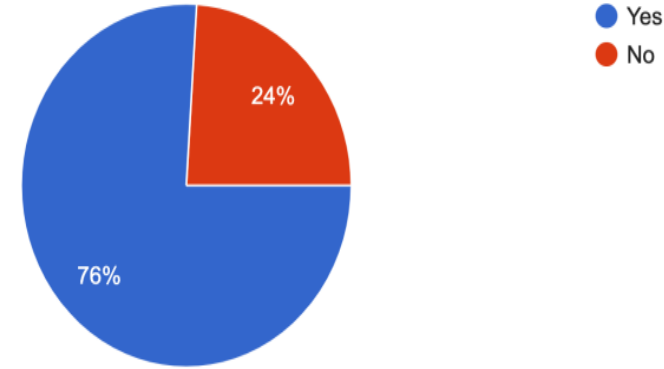
25.Do you think AI systems would be superior to the doctors in making diagnosis and treatments?

100 responses



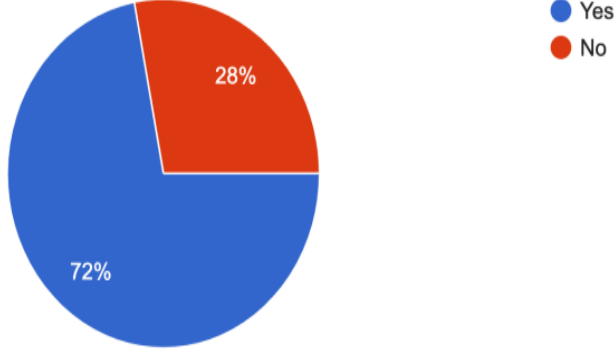
26.Do you think there may be serious privacy issues with the use of AI?

100 responses



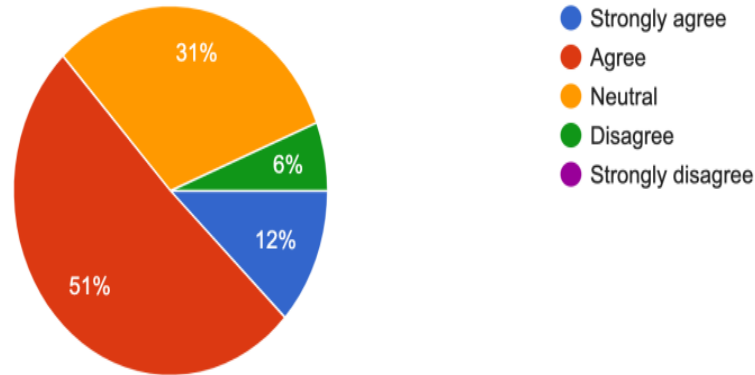
27.Do you think inclusion of AI can solve the current problems faced by the healthcare system (low doctor-patient ratio, lack of efficiency and accuracy, financial burden)?

100 responses



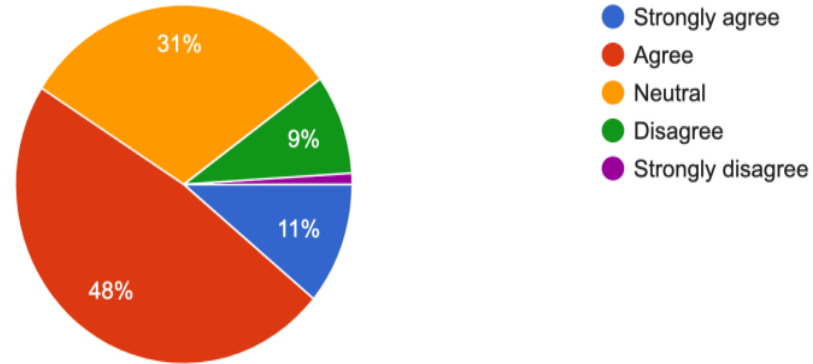
28.Do you think AI can improve patient outcomes?

100 responses



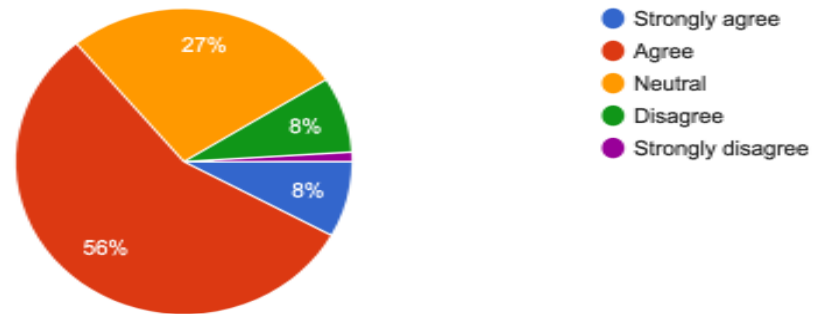
29.Do you believe AI can assist in personalized medicine?*

100 responses



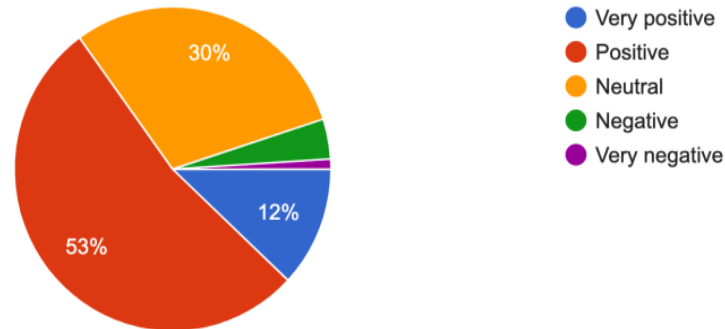
30.Do you believe AI can help in reducing healthcare costs?

100 responses



31.What is your overall perception of AI in healthcare?

100 responses



- **76% of respondents worry about privacy issues** with AI, while 24% do not. **72% believe AI can solve healthcare problems** like low doctor-patient ratios and inefficiency, with 28% disagreeing. Regarding patient outcomes, **63% think AI can improve** them, while 31% are neutral, and 6% disagree.
- For personalized medicine, 59% see AI as helpful, 31% are neutral, and 10% disagree. Additionally, **64% believe AI can reduce healthcare costs**, with 27% neutral, and 8% disagreeing. Overall, **65% have a positive view of AI in healthcare**, 30% are neutral, and 5% have a negative view.

Conclusion:

- The poll of 100 young, highly educated health professionals will turn out to have an extremely strong awareness and realization of AI's potential in healthcare, particularly about telehealth, workflows, and patient diagnosis. While there are misgivings about job security and privacy, the overall attitude remains very distinctly positive, with many believing AI can enhance data management, reduce costs, and alleviate stress.
- Support for integrating AI in medical education is very high, thus proving the readiness to these technologies need to be embraced, though ethical considerations and trust issues must be addressed for successful implementation. On the safety of patients, 58% agree that AI can help reduce medical errors, thus showing cautious optimism about the role AI would play in improving healthcare practice.
- Attitudes to adopting new AI technologies range from enthusiastic to very hesitant. The results underscore a general recognition of potential perspectives of AI in health care, while there is variable readiness among professionals to adopt these technologies.

References :

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Thank you!

