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Artificial Intelligence and Person-Centred Care

This is the Presentation of the final output.

Artificial Intelligence (AI) & Person Centred Healthcare (PCH)

- problems/tensions?

Benefits of AI/machine learning/big data:

=> image-based diagnosis & screening (Aquino et al, 2023)

=> identification of hidden & complex patterns (Martin-Isla et al, 2020)

=> algorithms to remove 'cognitive biases or noise' – logical/rational decisions

Intuitive conflicts with PCH:

- mass data V uniqueness?

- AI-guided practice as "depersonalised"?

=> real doctor V chatbot? (Azevedo, 2023)

=> individual preferences (Spotify, Netflix, Youtube) V complex moral judgements

=> decisions in risky circumstances: algorithms V human reasoning/dialogue

=> law: sentencing/parole (COMPAS)

=> war: lethal weapons – targeting

=> accident reduction: autonomous cars

=> organ donation & transplantation

Distinguish: AI V theorising about AI (Transhumanism V anti-technology)

=> AI neither pro- nor anti-PCH

=> underlying problems/limitations of our 'problem-solving' systems

Big data=>patterns – "relevant" similarities

- Technology replacing or enhancing human reasoning/evaluation/decision-making?

- AI relies on data generated, collected & recorded by humans (Aquino, 2023)

- Social, clinical & cognitive biases (eg confirmation bias)

- Algorithmic bias – above biases embedded within AI systems

Illusory objectivity: system/application gap

- Analogies in theoretical systems used in bioethics, evidence-based practice, PCH (Loughlin, 2014, 2017)

- Need for critical dialogue, examination of underlying assumptions, conceptual frameworks

- Options for re-evaluation of our inventions ('particularism' V 'bad faith')

Implications for AI/PCH relationship:

- Reflect on fundamental assumptions of PCH and their application

- Relationship between PCH and scientific reasoning in practice

- Concept of person as relational

- Role of trust, shared decision-making and considerations of broader social context in person-centred practice

Conceptions of PCH (Tyreman, 2020):

(1) PCH as "humanitarian addition to good medicine" (patient compliance, outcomes)

=>Scientific reasoning (EBP, AI) in clinical practice to be "supplemented" by greater recognition of patient choices (listening, communication skills)

(2) scientific medicine (EBP, AI) to be subsumed within broader humanistic account of clinical reasoning – practitioners as persons!

Conceptions of PCH (Mitchell & Loughlin, 2023):

(1) "normal science plus" - need to "integrate" subjective/personal considerations into biomedical account of clinical reasoning

=>no fundamental philosophical challenge to "modern" world view, conceptions of:

science (reductionism);

personhood (individualism – "ego"; "preferences & values")

Scientific reductionism (machine metaphor):

- Underpinning physical medicine, psychology & sociology:

- "finding the building blocks of life"

- "genes provide a person's blue-print"

- psychology as "neurophysiological epiphenomenon"

- social behaviour as "applied psychology"

'Person-centred'/ 'personalised' medicine:

- Practice informed by science plus patient preferences

- GRADE (Mercuri & Gafnie, 2020)

- "two feet principle" (Fulford, Piele, 2014)

- AI: supplement clinical evidence with data about patient preferences

- Consumerism (Arnold et al, 2020); "big eye surgery" (Aquino, 2017)

Conceptions of PCH:

(2) anti-reductionism:

➢ revision of "modern" conceptual framework

➢ re-examination of "science" and "value" - underlying philosophical questions (epistemological & ontological)

➢ purpose as an ineliminable aspect of nature

➢ "putting the organic horse back in front of the mechanical cart"

Organisms V mechanisms

- essentially whole at all stages of development (V whole at critical stage of assembly)
- always in transition in response to ever-changing environment

Heidegger: capacities and organs

- mereological fallacy
- "complex adaptive system of dispositional elements performing in context"

Person: unique set of experiences together with a narrative that interprets/gives meaning

➢ complexity & uniqueness (process)

➢ focus on whole person, its essence as its internal & external relations

➢ value of all interventions understood in that context –including AI (chatbot V human practitioner)

➢ consideration of uses and limits of AI can help clarify the nature of PCH

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