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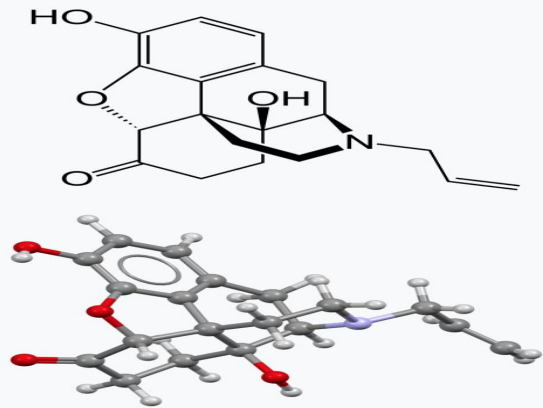
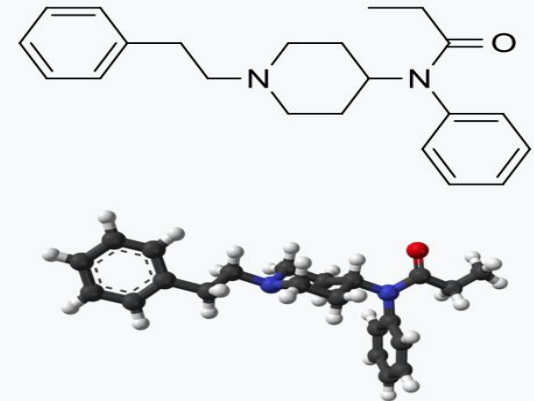# BUTTE-GLENN OPIOID SAFETY DATA NEWSLETTER

JUNE 2023

Naloxone

The Lancet Regional Health - Americas: "Promises and perils of the FDA's over-the-counter naloxone reclassification"

OTC Naloxone

The Lancet article is unique in the perspective it depicts. Based on various statistical models, there is evidence that OTC naloxone will help curb the opioid crisis by increasing naloxone availability. However, that should not undermine opioid education and naloxone distribution programs which can increase the odds of recovering from an opioid overdose nearly nine-fold. Hopefully, many naloxone manufacturers will enter the OTC market and drive down prices of OTC naloxone. The question remains, however, how effective will OTC naloxone be against the emerging polysubstance crisis.
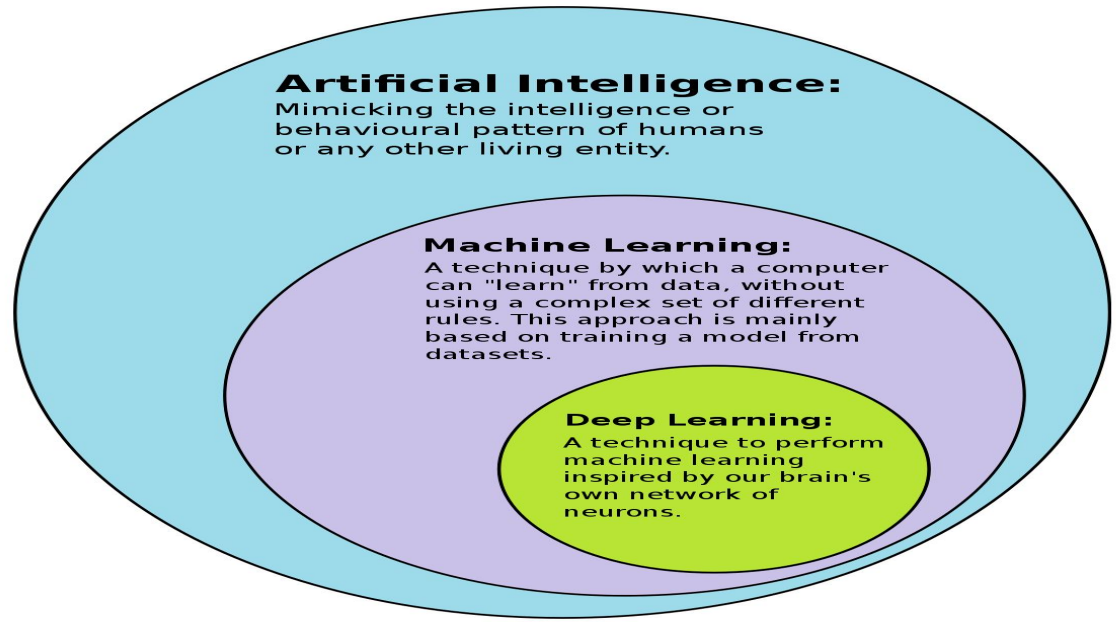
REFERENCE:

David T. Zhu, Suzanne Tamang, Keith Humphreys,
Promises and perils of the FDA's over-the-counter naloxone reclassification,
The Lancet Regional Health - Americas,
2023,
100518,
ISSN 2667-193X,
https://doi.org/10.1016/j.lana.2023.100518.
(https://www.sciencedirect.com/science/article/pii/S2667193X23000923)

Fentanyl

Article Overview

The article quoted below analyzed 16 published papers on machine learning aimed at predicting opioid use disorder from healthcare data. The various papers showed potential for machine learning to be used in real-world scenarios for opioid use disorder prediction, but at this point it would be premature. The obstacles that prevent these papers from being incorporated into real-world scenarios include lack of transparency about how the dataset was analyzed, how the machine learning model was trained, and how the machine learning model was built.

"Machine learning for predicting opioid use disorder from healthcare data"

Artificial Intelligence: Mimicking the intelligence or behavioural pattern of humans or any other living entity.

Machine Learning: A technique by which a computer can "learn" from data, without using a complex set of different rules. This approach is mainly based on training a model from datasets.

Deep Learning: A technique to perform machine learning inspired by our brain's own network of neurons.

References:

David T. Zhu, Suzanne Tamang, Keith Humphreys,
Promises and perils of the FDA's over-the-counter naloxone reclassification,
The Lancet Regional Health - Americas,
2023,
100518,
ISSN 2667-193X,
https://doi.org/10.1016/j.lana.2023.100518.
(https://www.sciencedirect.com/science/article/pii/S2667193X23000923)

Christian Garbin, Nicholas Marques, Oge Marques,
Machine learning for predicting opioid use disorder from healthcare data: A systematic review,
Computer Methods and Programs in Biomedicine,
Volume 236,
2023,
107573,
ISSN 0169-2607,
https://doi.org/10.1016/j.cmpb.2023.107573.
(https://www.sciencedirect.com/science/ar

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