

Substance Use Disorder (SUD) – The Impact of SUD in Utah

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Background

- Substance use disorder (SUD) is a manageable mental disorder that causes affected individuals to lose control over their use of substances such as drugs or alcohol. Patients with SUD have altered brain chemistry and actions due to the control held by highly addictive substances.² Substance use disorders cost these patients more than just money. Their careers, shelter, vital nutrients, and even their social lives are often lost to the disorder. However, the patients themselves do not pay the price alone and the cost reaches far into their communities. Drug poisoning is the leading cause of injury death in Utah.

HIV and SUD

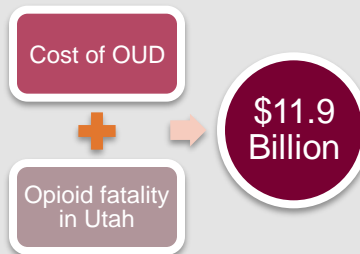
- Among people who use injectable substances, it is estimated that around 2500 new HIV infections occur yearly.
- According to the CDC, syringe service programs can lower this by as much as 50%. This is due to the reduction in needle sharing.³
- How does this help the cost of SUDs? Estimated lifetime cost of treatment for a patient with HIV ~\$450,000.⁴

Methods

- A comprehensive literature review was conducted to determine the costs surrounding substance use disorders in Utah and the United States. We utilized electronic databases such as PubMed. Manual searches were also performed in relevant journals and conference proceedings. Inclusion criteria focused on studies and reviews concerning the cost of illnesses relating to SUDs and setting up programs to help people with SUDs. This systematic review provides a concise overview of the current state of knowledge, aiming to identify gaps for future research in this domain.

True Cost of SUD

- In the United States, the total estimated medical cost in hospitals attributable to SUD in 2017 was \$13.2 billion.⁵
- The total cost of OUD in Utah was determined by adding the cost of OUD cases and the cost of fatal opioid overdoses. The number of cases were determined through estimates by the CDC WONDER database (deaths) and the National Survey on Drug Use and Health's 2-Year Restricted Use Data Analysis System (cases).^{1,5}
- The total cost of opioid use disorder includes variables aside from medical costs such as crime related costs, low productivity costs, and valuation of lost quality of life and life lost.
- The cost of combined OUD and fatal opioid overdose in Utah (2017) is **\$3,837 per capita** while there was a **total cost of \$11.9 billion**.¹



Mitigating Cost

- Comprehensive syringe exchange programs (SEPs) have been shown to be safe, cost-effective, and vital in reducing viral infections like hepatitis and HIV. They also contribute to lowering opioid overdose deaths through services such as providing naloxone. SEPs protect the public and first responders through facilitating the safe disposal of used needles and syringes.⁴
- Implementing an overdose education and naloxone distribution (OEND) program and a syringe exchange program (SSPs) would also be able to save lives & mitigate costs.

OEND Program Cost	SSP (Syringe Service Programs)	Cost
		\$874 start-up*
		\$1,579 median monthly cost
		\$90 per staff member trained
		\$19 per kit
	Non-SSP	\$2,548 start-up*
		\$2,529 median monthly cost
		\$150 per staff member trained
		\$36 per kit

Costs are excluding overhead *80% of the start-up costs attributed to time and travel for training staff

Wins in Utah

- Utah participates in the annual drug takeback day. In 2023, the DEA hosted a collection for expired prescription medications including opioids on October 28th so that people can safely dispose of their medications.⁶
- Naloxone is now available for purchase over the counter in Utah as of 2023. This makes naloxone more accessible for the public to potentially save lives.⁷
- Naloxone training courses are available through Utah Naloxone where free injectable naloxone is provided to increase awareness.

What's Next?

- Decreasing the cost of naloxone to improve accessibility. This can be done by requiring insurance payment of naloxone.
- Allow for safe use of opioids for people with OUD by implementing safe injection sites. This can allow for people who struggle with OUD to be able to use with drastically decreased risk of fatality from overdose.
- Expand access to fentanyl test strips to decrease the amount accidental overdoses with opioids that contain fentanyl.
- Expand free needle/pop-up clinics so that there will be less spread of bloodborne infections.

Discussion

- Substance use disorder is a costly condition that affects numerous patients in Utah and nationwide. While Utah has come a long way in supporting these individuals, there remains ongoing work. By understanding this condition and the burden it causes, we can diminish the cost not only on Utah, but on the United States as a whole.

References:

