

Background

In response to the lack of options for proper drug disposal in the U.S., drug disposal pouches were developed by researchers for effective at-home drug deactivation and disposal. Unused prescription drugs stored in homes create a risk of harm for both adults and children. Prior to drug disposal pouches, many of the suggested “proper” drug disposal tactics did not fully de-activate drugs before being disposed of which failed to eliminate the forementioned risk of harm from the products. Improperly disposed of drugs also harm and contaminate water supply.

Drug disposal pouches deactivate prescription drugs by using a mixture of activated carbon and warm water to be added by the pouch user. When tested with 20 different opiates and other psychoactive medications, drug disposal pouches were successful at deactivating 89% of active ingredients in the first eight hours, and more than 99% of active ingredients after 14 days (Torrance, 2022).

Summary of Research

Preventing and reducing the misuse of prescription medications requires a multifaceted approach in a community, including providing a safe and convenient way to dispose of unwanted and expired medications. As a strategy, prescription drug disposal bags have been shown to be effective in increasing the likelihood of excess prescription drug disposal (Stokes et. al., 2020). Most research studies conducted on drug disposal pouches involve sending disposal kits home with patients after having a surgery where opioids are prescribed to manage pain. Cooper et. al. (2020) and Stokes et. al. (2020) both reported an increase of proper drug disposal after adult and pediatric surgeries after receiving drug disposal pouches with their opiate prescription. In addition, interventions encouraging and distributing drug disposal pouches had higher rates of proper opioid disposal when compared to control samples. Lastly, drug disposal interventions in general are lacking in research on their effectiveness and further research is needed to improve and further expand related interventions (Schäfer et. al., 2021).

Conclusion

Preliminary research on drug disposal pouches as an intervention is positive, with most showing an increased rate of proper drug disposal. Proper drug disposal is an important opioid misuse prevention tool, as storing unused prescriptions drugs at home leads to an increased risk of harm for both adults and children. Though most studies show drug disposal pouches to be an effective intervention tool more research is needed to provide strategy improvements and to further evaluate effectiveness.

References

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