Assessing the Validity of Pharmacy Syringe Sales Data to Inform Opioid Addiction Trends and Response

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Background

- The role pharmacies play in addressing the opioid crisis and drug-related risks like injection drug use is evolving.
- Estimating the prevalence of injection drug use at the community level is challenging due to the hidden nature of drug use.
- Many community pharmacies sell nonprescription syringes (NPS), thus pharmacy-level sales of injection equipment may be an indicator of drug-related harm and unmet need from high-risk populations.

Objective

- Assess the convergent validity of staff-reported NPS sales volume and NPS sales data from community pharmacies in Massachusetts and Rhode Island.

Results

- Pharmacy staff tended to under-report their store’s nonprescription syringe sales volume per week by 3,040 compared with the administrative pharmacy sales data.

Methods

- CVS Pharmacy is the largest retail pharmacy chain in both study states. Between November 2017 and January 2018, we conducted a telephone-based survey to self-report average weekly nonprescription syringe sale type and volume for 191 retail chain (CVS) pharmacies in the two states.
- For the same period, we obtained nonprescription syringe sales administrative data from surveyed pharmacies and all CVS pharmacies in the two states.
- We conducted Spearman correlations to assess convergence of average weekly volume between pharmacy staff reports and sales data.

Conclusion

- Pharmacy syringe sales data can provide a geographically specific, anonymous, real-time data surveillance tool to track emerging trends and tailor local responses.
- The counts of administrative pharmacy nonprescription syringe sales data in Massachusetts and Rhode Island indicate:
  - High need
  - Substantial volume
  - Notable access at community pharmacies