



Room for Improvement in the New York State Pharmacy-Based Syringe Access Program

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Abstract

Pharmacies in New York State can opt-in to a pharmacy based syringe access program called the Expanded Syringe Access Program (ESAP). Washington Heights CORNER Project, a syringe exchange program in New York City, undertook a two-part survey of pharmacies located less than two miles from the program in Northern Manhattan. The study sought to determine whether pharmacies registered for the Expanded Syringe Access Program were a reliable source of syringes for populations who purchase syringes without a prescription, including people who inject drugs. The surveys found that 71.4% of pharmacies listed on the ESAP directory sold syringes to a Washington Heights CORNER Project participant acting as a secret shopper. A follow up survey assessed pharmacy attitudes toward the program and other harm reduction measures. In this survey, pharmacies demonstrated interest in harm reduction measures, with 92% of pharmacies reporting willingness to refer potential customers to a local syringe exchange program. The researchers make recommendations for improvement to pharmacy-based syringe access programs at the individual, community and policy level, including increasing face to face interactions between syringe exchange programs and pharmacies and requiring regular updates to the online directory of ESAP-registered pharmacies.

Background

Washington Heights CORNER Project (WHCP) is a New York City-based state-waivered syringe exchange program (SEP) located at 566 W 181st Street. WHCP's mission is to significantly improve the health and quality of life for people who use drugs and expands access to clean syringes through street-based outreach throughout Northern Manhattan. In 2014, WHCP undertook a two-part survey of pharmacies in Northern Manhattan. The first aim of the surveys was to determine whether pharmacies served as a source of syringes for customers without a prescription. The researchers' primary focus was to improve access for syringe customers from WHCP, who primarily are people who inject drugs. The second aim of the

project was to identify ways to make pharmacies better resources for syringe customers at both the policy and grassroots levels. By strengthening ties with SEPs, improving harm reduction policies, and educating syringe customers about resources, including substance abuse treatment, pharmacies can align themselves with the mission of reducing transmission of blood-borne disease.

Importance of Harm Reduction in New York State

Improving access to sterile syringes is an internationally recognized strategy for reducing risks associated with injection equipment sharing. Syringe access measures are situated in the context of harm

reduction, a human rights movement that understands drug use as a complex spectrum and calls for nonjudgmental and non-coercive treatment of users of illicit drugs.¹ Harm reduction principles are applied through evidence-based interventions, ranging from the implementation of motivational interviewing techniques to providing access to supervised injection sites or safer consumption rooms, as in Vancouver.² Such interventions aim to, and have in various instances, been noted to reduce the incidence of sharing injection equipment, the presence of discarded syringes in public areas, and of transmission of blood-borne infection such as HIV and Hepatitis C (HCV).² Both New York's SEP and Expanded Syringe Access Program (ESAP) laws derive from harm reduction principles.

reduction of this number, mirroring the results achieved in other harm reduction settings.

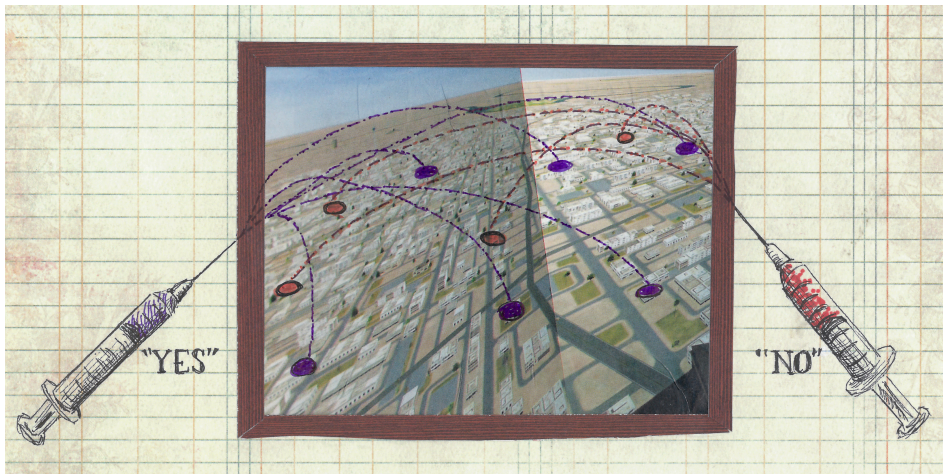
Development and preliminary evaluations of ESAP in New York State

ESAP authorizes licensed pharmacies, health care facilities and health care practitioners to furnish, at a price set by the provider, up to 10 hypodermic needles/syringes without prescription to people 18 years of age or older.⁴ The program was piloted in 2001 and became permanent in 2009.⁴ The stated purpose of the program is to prevent transmission of blood-borne diseases, primarily HIV, hepatitis B, and HCV.⁴ Pharmacies are an important resource for people who inject drugs because they offer syringes at times that SEPs may be closed, such as weekend hours

and evenings, and offer services to customers who may not know of an SEP in their area or feel comfortable going to an SEP. Studies have shown that people who inject drugs will not walk more than ten minutes to obtain a syringe,⁵ so pharmacies also provide enhanced geographical access for syringe distribution and other harm reduction services. Pharmacies are not currently allowed to advertise their ability

to sell syringes behind the counter,⁴ but may demonstrate their participation in ESAP by displaying an ESAP sticker on their window.

ESAP allows enrolled pharmacies to use their discretion when selling syringes and does not prohibit providers from refusing sale. A survey of 62 ESAP customers in 2009 found that 53% of ESAP customers surveyed had been refused at some point when trying to purchase a nonprescription syringe at an enrolled pharmacy.⁶ This finding was associated with both race and gender, but further reasons for turning away



Artwork by Hannah Singer

The importance of clean syringes in preventing the spread of blood-borne diseases like HIV and HCV cannot be overstated. Although new diagnoses are declining, New York City continues to have one of the highest rates of HIV prevalence in the United States and an increasing number of people living with HIV (PLHIV).³ As of 2012, people who inject drugs account for at least 4.4% of HIV diagnoses in New York City, and account for 17.0% of PLHIV, and 36.6% of related deaths.³ The availability of sterile syringes, even at cost, has played a tremendous role in the

customers seeking nonprescription syringes were not explored. Experiencing refusal when trying to participate in a legal program like ESAP may discourage syringe customers from participation in programs to obtain clean syringes in the future.

The ESAP program has demonstrated great success by gaining large numbers of registered pharmacies and improving awareness of available syringes. By August 2002, there were over 2,000 ESAP-registered providers.⁷ Of all registered providers, 98% were pharmacies, representing 62% of all eligible pharmacies in New York State.⁷ A 2003 survey of ESAP-registered pharmacies found that on average, pharmacies reported 22 ESAP customers per month.⁸ By comparison, WHCP typically fulfills over 600 syringe transactions per month.

In New York State, pharmacies and health care facilities or practitioners must register with the New York State Department of Health to participate in the ESAP program, but the process has been made purposefully simple and free of charge to encourage registration.⁴ The New York State Department of Health maintains an online directory of participants, who are required to alert the New York State Department of Health if they withdraw from the program.⁴ The last known update of this directory was July 31st, 2012.⁹ Previous evaluations of ESAP have been conducted by the government in 2003,⁷ the New York State AIDS Advisory Council,¹⁰ and others.⁶ The following study should not be assumed to be an evaluation of the ESAP program, and a thorough evaluation of ESAP should be conducted.

The Secret Shopper Survey

The initial phase of the study, the Secret Shopper Survey, sought to identify pharmacies willing to sell to syringe customers, and determine whether pharmacies are a reliable source of syringes for syringe customers in Northern Manhattan. The researchers hypothesized that some ESAP-registered pharmacies

would refuse to sell to the secret shopper and that the Directory of ESAP-registered pharmacies available online was outdated.

A secret shopper system was used to ascertain whether neighborhood pharmacies would sell syringes to syringe customers with the characteristics of typical WHCP program participants. A survey tool used on previous WHCP secret shopper assessments already existed, and minor alterations to this survey were made for its use in this project. The survey is attached here as Appendix 1.

A list of ESAP-registered pharmacies in Northern Manhattan was gathered from the Directory of ESAP Providers in New York State.⁹ According to this list, there were 35 ESAP-registered pharmacies in the five zip codes of Northern Manhattan (10031, 10032, 10033, 10040, 10034). To locate pharmacies not on the ESAP Directory in the area, a search was conducted on both Google Maps and YellowPages.com. A final list was compiled from these searches and an additional 56 pharmacies not on the ESAP Directory were located.

Northern Manhattan was divided into sections, and each section was surveyed street-by-street on foot by a team of WHCP volunteers partnered with WHCP participants acting as secret shoppers. All pharmacies on the map were visited, and any additional pharmacies discovered were added to the map. A total of 91 pharmacies were surveyed between January and June 2014. Four WHCP volunteers and 13 WHCP participants participated in the Secret Shopper Survey to determine whether the pharmacies were willing to sell syringes. WHCP provided round trip subway fare and a \$5 gift card for secret shoppers. WHCP participants were made aware of the opportunity through announcements in the drop in center.

The Attitude Survey

The second, or follow-up phase of the study, implemented an Attitude Survey to assess attitudes of pharmacies in Northern Manhattan toward syringe customers and ESAP itself to explore possibilities for program improvement through grassroots and policy approaches. The researchers hypothesized that pharmacy staff would have limited knowledge of harm reduction and mixed attitudes toward ESAP.

WHCP volunteers administered the Attitude Survey alone. An initial version of the survey tool was tested on 19 pharmacies in zip codes 10040 and 10034 in March 2014. Improvements were made to the tool, and questions from previous surveys published by Coffin, et al. in 2000¹¹ and another published by Klein, et al., in 2001¹² were incorporated into the final tool. This second tool was used for the remainder of the surveys in May and June 2014. Tools were prepared for pharmacies that sold to the secret shopper (Appendix 2) and for pharmacies that did not sell to the secret shopper (Appendix 3).

Attitude Surveys were conducted in 67 of the 91 pharmacies surveyed during the initial Secret Shopper phase of the project. 19 of these follow-up surveys were conducted using the original version, and 49 with the updated version. Five pharmacies refused to participate in the follow-up surveys. The other 18 unsurveyed pharmacies were busy or closed when revisited for follow-up. Not all pharmacies provided a response to each question.

Following procedures used in a previous survey of pharmacies in New York City,⁸ when conducting the Attitude Survey, the interviewer asked to speak to the pharmacist, briefly explained the purpose and confidentiality of the survey and requested consent.

In consultation with the IRB at Columbia Mailman School of Public Health, it was established that IRB approval was not necessary for either of the phases of this project, as the researchers would be collecting information about pharmacies but not individuals.

Researchers did not collect personal information about pharmacists during the surveys.

Figure 1 presents the number of pharmacies visited during each survey, stratified by ESAP participation, whether the pharmacy sold to the secret shopper, zip code and corporate status. Figure 2 compares demographic information for each zip code¹³ surveyed compared to the WHCP population.¹⁴

Strengths and Limitations of Methodology

Secret shoppers were WHCP participants of various physical appearances and racial backgrounds and gender presentation. Secret shoppers were not instructed on engagement strategies beyond task instruction. This is both a strength and a limitation of the methodology, as it created a representative sample of WHCP participants but limits our ability to generalize to other populations. Although every pharmacy was visited during the Secret Shopper Survey, not every pharmacy was willing to participate in the follow up Attitude Survey, limiting our sample size and ability to draw conclusions. Sample size was further limited by the changes made to the Attitude Survey midway through the implementation.

Results

Data analysis was conducted in Stata v 13.1 using Pearson chi-square and linear regression analysis (StataCorp. 2013. Stata Statistical Software: Release 13. College Station, TX: StataCorp LP).

Of the 35 pharmacies listed on the ESAP Directory located in Northern Manhattan, 25 sold syringes to the secret shopper (71.4%). An additional 10 pharmacies not listed on the Directory sold to the secret shopper. Each of these 10 pharmacies claimed to be ESAP-enrolled. Out of 91 total Northern Manhattan pharmacies, 35 pharmacies (38.5%) sold syringes over the counter to the secret shopper.

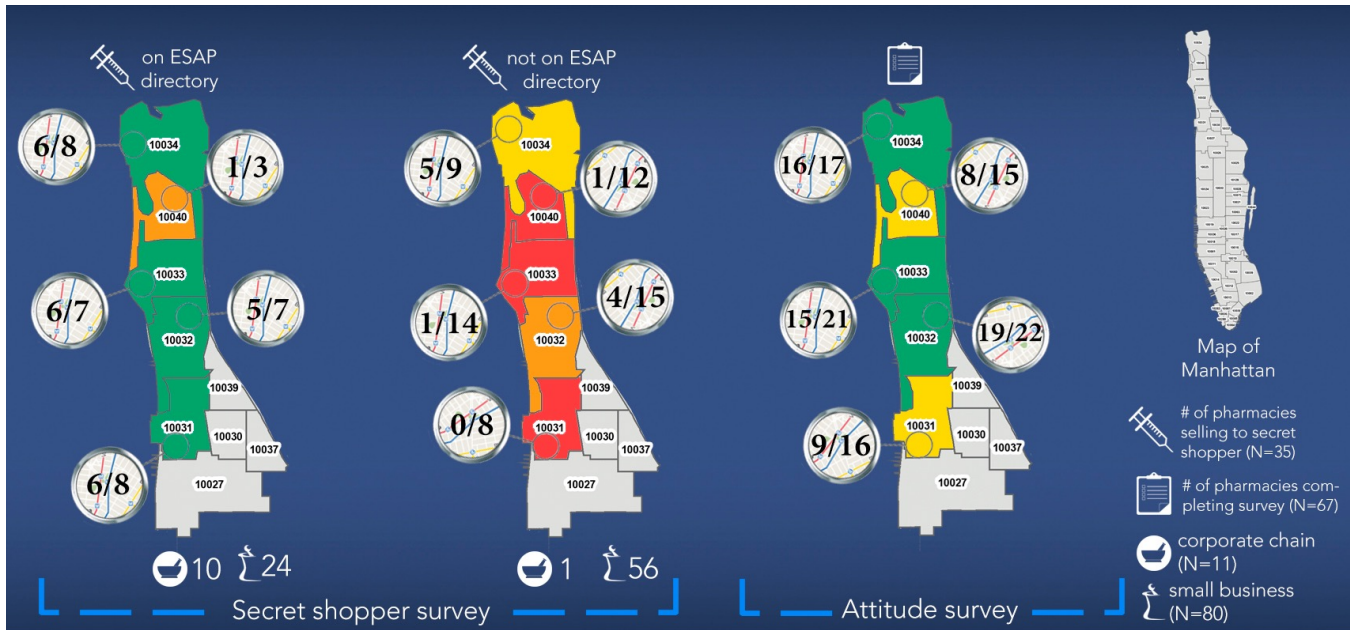


Figure 1. Characteristics of pharmacies surveyed over the course of both surveys. Secret shopper surveys show the number of pharmacies, stratified by ESAP directory status, that sold to secret shoppers. The attitude survey shows the number of pharmacies that provided responses to the survey. A total of 91 pharmacies across 5 zip codes were studied.

When asked whether they would be willing to sell syringes without prescription to a customer claiming to be diabetic, 44 out of 49 pharmacies (90%) said they would be willing to sell. When pharmacists were asked if they would be willing to sell to someone “claiming to be diabetic who looked like a drug user,” this number decreased to 29 out of 49 (59%), demonstrating how critical a factor physical appearance can be. Both of these attitudes were associated with selling to the secret shopper ($p=0.026$, $p=0.011$, respectively), but were not significantly different from each other ($p=0.357$), potentially due to the small sample size of this study.

Awareness of ESAP is high among pharmacies in Northern Manhattan, with 44 of the 49 pharmacies surveyed during Attitude Survey phase (90%) having heard of the program. A majority of the pharmacies surveyed during the Attitude Survey, 40 out of 49 (82%) agreed with ESAP’s goal “that members of your community, including drug users, should be able to obtain syringes over the counter from pharmacies in order to prevent disease transmission.” Agreement

with this goal was strongly associated with selling to the secret shopper ($p=0.002$).

Compared to familiarity with ESAP, upon initial contact during the Secret Shopper Survey fewer pharmacies knew what a Syringe Exchange Program was (48%), and 5% of the pharmacies surveyed had heard of Washington Heights CORNER Project, the nearest geographical SEP. Knowledge of an SEP was not associated with willingness to sell to the secret shopper ($p=0.276$). During the Attitude Survey, the number of pharmacies reporting that they had heard of WHCP increased to 23 out of 48 (48%).

Only 15 of the 87 pharmacies displayed the optional ESAP sticker in their window (17%). The presence of a sticker was strongly associated with a pharmacy selling to the secret shopper ($p<0.001$) but was not a guarantee that a sale would occur. Two of the 10 pharmacies that were on the ESAP Directory but did not sell to the secret shopper had an ESAP sticker in their window. The majority of pharmacies (76%) said they would not be willing to advertise ESAP services, whether they sold to the secret shopper or not.

Willingness to advertise ESAP services was not associated with selling to the secret shopper (p=0.666).

per month, while the pharmacies selling syringes at \$1 (n=13) sold an average of 16.8 syringes per month. However, the relationship between cost of a single

Demographics of WHCP and Surrounding Neighborhoods

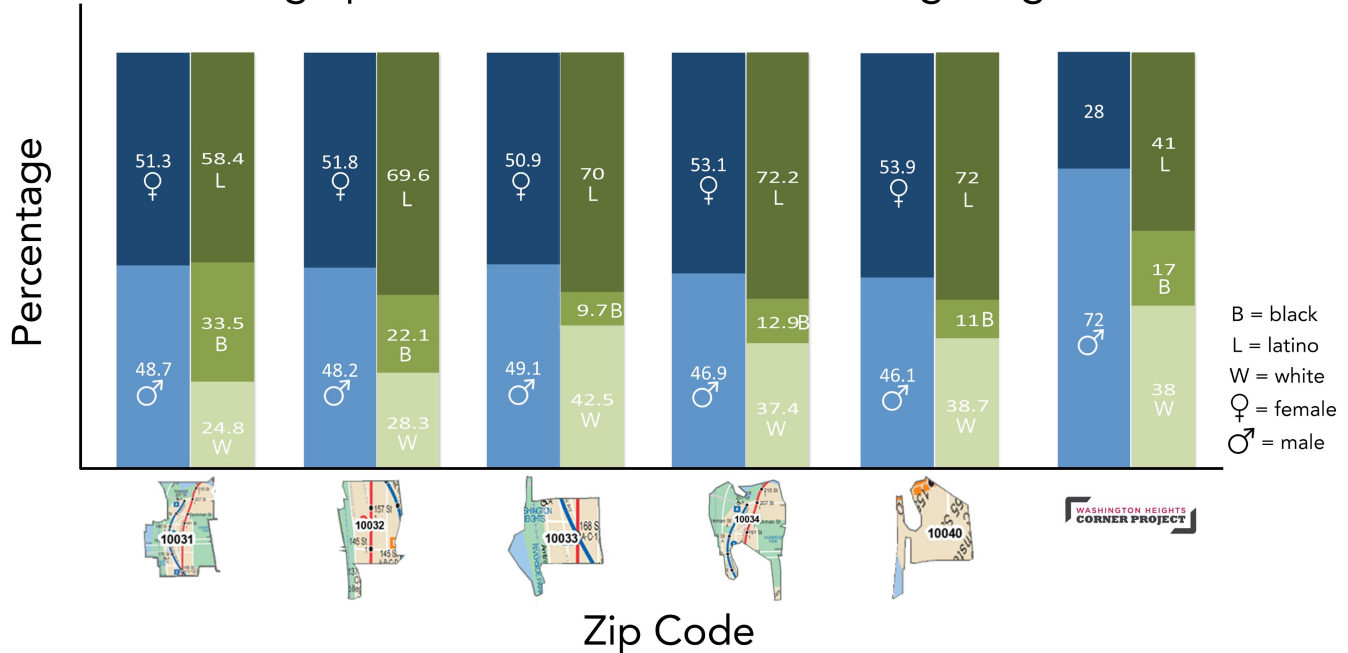


Figure 2. Demographics of WHCP and surrounding neighborhoods. Gender and racial demographics are given for the 5 zip codes studied.

Pharmacies that sold to the secret shopper were asked during follow up with the Attitude Survey if a list of factors influenced their willingness to sell syringes to a given customer. Factors included possible influences used in a previous survey published by Coffin, et al. in 2000.¹¹ Results are presented in Figure 3. During the Attitude Survey, unregistered pharmacies were asked why they had chosen not to register. Results are presented in Table 1.

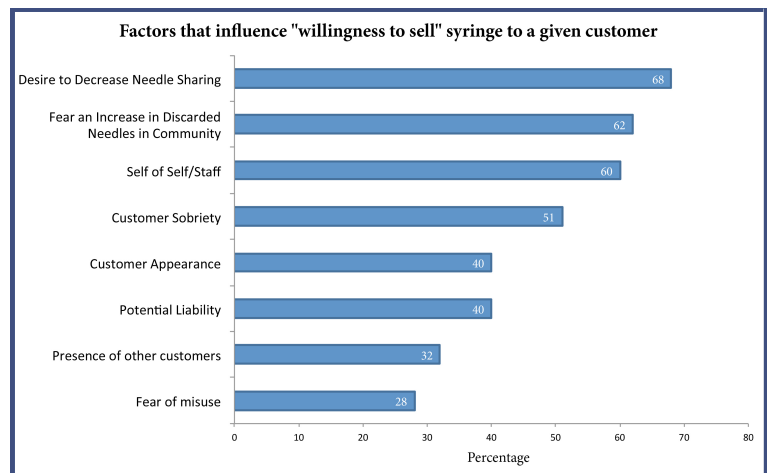


Figure 3. Factors that influence “willingness to sell” syringe to a given customer. All percentages out of n=25 respondents.

Type, Number and Price of Syringes Sold

Of the 35 pharmacies that sold syringes to the secret shopper, 27 sold syringes one at a time (77%). The price of a single syringe in Northern Manhattan ranged from \$0.29 to \$1. The pharmacies selling syringes at \$0.29 (n=2) sold an average of 50 syringes

syringe and number of syringes sold per month was not found to be statistically significant following a linear regression analysis (p=0.134). Syringes were sold in packs of 10 by 31 of the 35 pharmacies that sold syringes to the secret shopper (89%) in Northern

Manhattan, ranging in price from \$2.90 to \$10. The pharmacy selling packs of ten syringes at \$2.90 (n=1) sold 50 syringes a month. The pharmacies selling packs of ten syringes at \$10.00 (n=8) sold an average of sixteen syringes per month. Again, the relationship between price of a pack of syringes and number of syringes sold per month was not found to be statistically significant following a linear regression analysis (p=0.07). The average number of syringes sold per month was 100.5, with one outlier of 2000 syringes per month, replaced by the mean for linear regression analyses.

	# "Yes"	# "No"	% Pharmacies responded "yes"
No demand for syringes	5	17	23
Have never been approached to register	5	17	23
Too much regulation	9	12	43
Fear of liability	12	9	57
Dislike injecting drug users	14	9	61
Don't want to alienate existing customers	14	9	61
Syringes available nearby	15	8	65

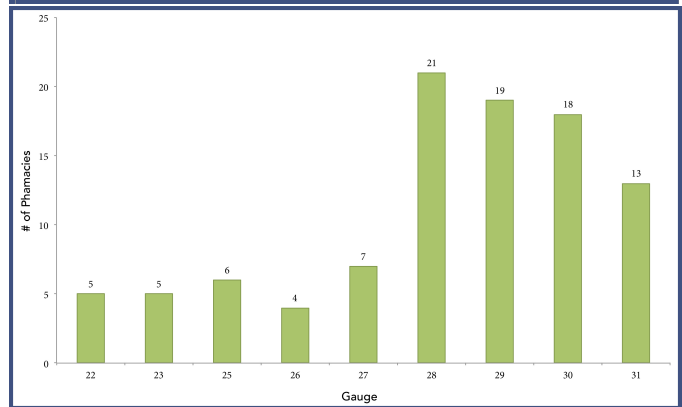
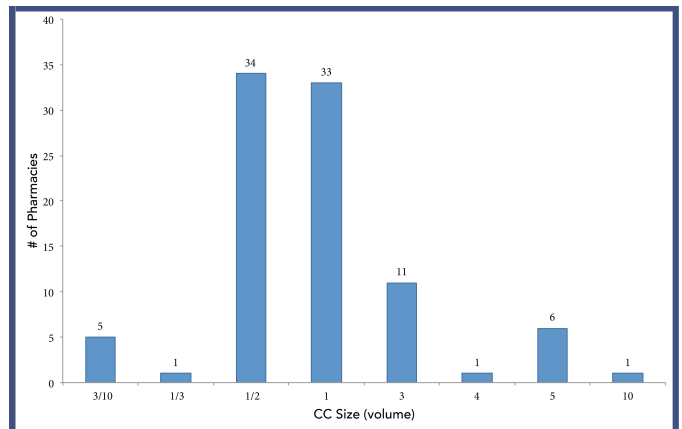
Table 1. Reasons pharmacies provided for not registering for ESAP.

Pharmacies in Northern Manhattan estimated that they sold a total of 3922 syringes each month, including the outlier. By comparison, WHCP, serving the same geographical area between January and June 2014, distributed an average of 6873 syringes per month. It is clear that, while pharmacies are being utilized, a greater need exists in this community. Increasing the number of pharmacies registered for ESAP would expand geographical access to syringes. Information on available syringes by gauge and volume as reported by pharmacies are presented in Figures 4 and 5.

Interest in Further Public Health Initiatives

Informed by a study conducted by Coffin, et al.,¹¹ researchers included questions assessing pharmacies' interest in implementing other public health initiatives.

- 86% of pharmacies (42/49) said they would distribute free sharps disposal containers.
- 94% of pharmacies (45/48) said they would distribute pamphlets on safer sex.
- 0% of pharmacies (44/49) said they would distribute pamphlets on safer intravenous drug use.
- 92% of pharmacies (45/49) said they would provide referrals to syringe exchange programs.
- 92% of pharmacies (45/49) said they would make referrals to substance abuse treatment programs.



Figures 4 and 5. Syringes available at pharmacies by CC size and gauge, respectively.

Recommendations

The findings of the surveys have allowed the researchers to develop recommendations to improve ESAP and pharmacy-based syringe access. These recommendations include interventions at the individual, community and policy level.

Individual Level

Researchers hypothesized that pharmacies would have limited knowledge of harm reduction and that pharmacies would have mixed attitudes toward ESAP. Despite low participation levels in ESAP in Northern Manhattan (38.5%), most pharmacies had heard of the program (90%) and even agreed with the program goals (82%). Knowledge of other harm reduction measures was low. Just under 50% of pharmacies knew what an SEP was, and 5% of the pharmacies surveyed had heard of WHCP during the first phase of the study. If pharmacies were given a more comprehensive education on harm reduction policies and made better aware of SEPs, they would better understand their role in harm reduction.

Pharmacy education should seek to increase the number of “supportive pharmacies” in a community. The researchers define supportive pharmacies as those pharmacies that are willing to enroll in ESAP program, sell to people who inject drugs, and participate in a referrals program to drug treatment and/or syringe exchange. Pharmacy education would be most effective if personalized to the individual pharmacy level, so phone calls and canvassing should be used whenever possible. The burden of pharmacy education should not fall to New York State Department of Health. SEPs should seek to strengthen ties with the pharmacies in the neighborhoods they serve. During Attitude Survey 50% of pharmacies had heard of WHCP, demonstrating that face-to-face outreach can be successful in raising awareness about nearby SEPs. Other SEPs should coordinate with individual pharmacies nearby to inform them of neighborhood syringe customers-preferred syringes to ensure they are kept in stock. SEPs can also provide education about harm reduction on the individual level to pharmacists and pharmacy staff. This may also pave the way for implementation of further harm reduction measures, such as naloxone or overdose prevention programs. These programs will soon be made possible in New York by the recent passage of a New York State standing order prescription authorizing pharmacies to train and distribute

naloxone as necessary to customers filling prescriptions for opioid analgesics.¹⁵

Community Level

The researchers were interested in the types of syringes available in Northern Manhattan pharmacies. The information gathered indicates disconnect between pharmacies and populations of syringe customers, especially people who inject drugs. In pharmacies, the most commonly available syringes were 28 and 29 gauges. By contrast, WHCP distributes 27 gauge syringes about 90% of the time. Pharmacies purchase their syringes based on the most commonly prescribed varieties, which are usually for administration of insulin and other medications. Therefore the syringes preferred by people who inject drugs may not be kept in stock. Injection norms become instituted in populations of people who inject drugs over time.¹⁶ If syringe customers could access the preferred type of syringe from a pharmacy, they may be more likely to be a customer. If the syringe of choice is not kept in stock, word-of-mouth may act as a deterrent to other syringe customers within the community of people who inject drugs.

Previous evaluations of ESAP have also suggested increased increased outreach and collaboration between pharmacies and community-based coalitions.^{6,7,10} Several steps can be taken to strengthen relationships on the community level. WHCP has provided neighboring pharmacies with materials developed specifically for customers who may not know that access to free syringes exists at SEPs. WHCP also makes “Friendly Pharmacy” lists available to participants who are likely to be syringe customers at neighborhood pharmacies. Pharmacies surveyed expressed interest in other public health initiatives. Over 85% of pharmacies indicated they would distribute free sharps disposal containers and pamphlets on safer intravenous drug use if these were made available to them and over 90% of pharmacies indicating they would distribute pamphlets on safer

sex and provide referrals to syringe exchange programs and/or substance abuse treatment programs. Each of these harm reduction interventions could be implemented in pharmacy settings and used to deepen relationships between pharmacies, the New York State Department of Health and SEPs.

Policy Level

Researchers hypothesized that some ESAP-registered pharmacies would refuse to sell to the secret shopper and that the Directory of ESAP-registered pharmacies available online was outdated. Only 71.4% of pharmacies listed on the ESAP Directory sold syringes to the secret shopper, and 10 pharmacies not listed on the Directory sold to the secret shopper but claimed ESAP-enrollment. The ESAP Directory has not been kept up to date. Of 26 registered pharmacies surveyed, 6 (23%) reported being contacted by the New York State Department of Health within the past year about ESAP. Pharmacies may not be aware that they are required to update New York State Department of Health if they have opted out of the program. Pharmacies may also have relocated since the last

publication of the Directory in 2012. Previous evaluations have focused policy recommendations on encouraging the lifting of the restriction on pharmacy advertising,^{6,7,10} but our findings suggest this emphasis is misplaced, with the majority of pharmacies (76%) stating they would not be willing to advertise ESAP services, whether they sold to the secret shopper or not.

Policy level interventions could include abandoning the ESAP program altogether in favor of legislation allowing all pharmacies to sell syringes to customers without a prescription as many states across the US have.¹⁷ This would remove confusion among pharmacists of the legality of selling syringes and expand geographical access to syringes for syringe customers. If this were not feasible, possible improvements could include increasing the number of syringes sold per transaction with syringe customers, from 10 to unlimited. Finally, the New York State Department of Health should conduct routine check-ups on participating pharmacies to ensure adherence to the program and an up-to-date registry.

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Conflicts of Interest

This author has completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

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