

CULTURE OF PHARMACY THEFT IN ASIA WITH ITS PREVENTION AND CONTROL

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Abstract:

Pharmacy crime and theft in Asia have increased over the past decade, with unprincipled and resourceful criminals targeting pharmacies for narcotics and controlled drugs. Monetary losses in pharmacies can occur in many ways such as fire, flood, insufficient controls, stock shrinkage, and inside or outside robberies that may cause financial loss this should be prevented and consideration must be made according to the process. This article focuses on the losses that occur from robberies, shoplifting, burglary, and employee theft in the pharmacies. The objective is to determine the observations of the community and retail pharmacists concerning prescription fraud and pharmacy robbery as well as their awareness to handle such situations, with continuing education programs on pharmacy theft.

However, the major community concern of the public today involves "crime usually on streets and homes" -crime disturbing and concerning people and property in our communities. It is usually in terms of assaults, armed and unarmed robbery, burglary, and other types of crime. The bodies e.g. Drug Enforcement Administration (DEA), the government agencies that suppressed the illicit drug traffic affecting the country, have never been involved with suppressing such types of crime. However, in a limited way, we entered this arena due to the sudden increase in thefts of controlled drugs and narcotics from community pharmacies. Shoplifting is now the most frequent crime in the world, yet there is no arrangement for effective prevention procedures. Meanwhile, most prevention plans and policies aim to either increase

community awareness of the severity of the theft or increase the detection measures and procedures that contain these elements assessed. Pharmacy robbery is one of the major problems related to the illegal and illicit use of controlled and narcotic substances.

It is assumed that the recent application of time-locked safes and improved signage all over pharmacies had a noteworthy impact on the reported decrease in pharmacy robberies. The purpose of changing the laws and policies was aimed to increase and maintain pharmacy security, protection of patients, protection of pharmacy employees, and prevent the theft of drugs. Although countless research has focused on works to prevent and reduce similar crimes such as robberies and burglaries of pharmacies, violence against businesses and industries, and prescription drug misuse, there have been no studies assessing methods to prevent and reduce robberies of pharmacies. This crime problem is different from other crimes because pharmacy theft usually aims the robbery of drugs, not money.

1. Introduction

Several problems can create or contribute to inventory shrinkage (a reduction in the physical amount of inventory with no easy explanation), but the most common cause is theft. A survey by Ernst and Young found that U.S. retailers lose about \$46 billion in 2003 dollars annually to theft (1).

Pharmacy theft is violence. As they possess a serious risk to employees and customers present at the pharmacy, as well as to responding officers. Pharmacy theft is related to major problems associated with the misuse of prescription drugs and the robbery of retail pharmacies. Such problems some of which are covered by other Problem-Oriented Guides for Police include the following: Robbery of convenience stores, Prescription drug fraud, and misuse, Drug dealing in open-air drug markets, Drug dealing in privately owned apartment complexes, Marijuana growing operations, Rave parties, drug dealing, Drug-impaired driving, and Bank robbery (2-4).

Theft from pharmacies, hospitals, and doctor's offices is the most common type of crime nowadays. Pharmacy workers and healthcare providers both have easy access to prescription drugs and sometimes steal them, as do patients and relatives of patients who may have access to drugs because of proximity and poor security procedures. Individuals obtain prescription drugs in burglary by burglarizing homes, doctors' offices, and pharmacies. In medical fraud, Pharmacy

workers sometimes commit medical fraud, usually by substituting generic drugs for name brands, short-counting pills, or filling prescriptions without a refill and then overbilling Medicinal products. They may also bill Medicaid for drugs they never dispensed (2).

Over-the-counter (OTC) drug misuse includes those who purchase OTC drugs to achieve high are typically youth seeking cough and cold medicines, sleep aids, antihistamines, and anti-nausea agents. It is unknown to what extent OTC drug misuse increases the risk for prescription drug-related crimes, such as fraud, theft, or pharmacy burglary (3). Pharmacy theft to obtain prescription drugs can cause untold harm because the consumption and distribution of the drugs can progress into chronic substance use disorders and lead to further crime, overdoses, and even death. Indeed, deaths from overdoses of prescription drugs have risen dramatically in recent years (5).

Pharmacy theft also harms businesses, as some businesses have resorted to limiting the supply of controlled drugs such as Oxycodone to prevent robberies (6). This restriction of medication that is critical and crucial for palliative care creates challenges for citizens, who are unable to obtain legally prescribed medications to manage their chronic pain. The public should carefully consider these types of harm and the contexts in which they may play a leading role in crime control and prevention role versus other contexts in which they may play a secondary, or referral, role. In the context of pharmacy theft, secondary roles might include treatment providers to aid those who commit robberies because of their Opioid use disorder (7, 8).

Understanding the factors that cause pharmacy theft will help frame local analysis questions, regulate good effectiveness measures, recognize key intervention points, and select suitable responses. Prescription drug abuse is significant and increasing rapidly, with some perceiving that it is the world's fastest-growing drug problem (9). In addition, police play a limited role in changing the fact that some people abuse prescription drugs, which may develop into an Opioid use disorder and possibly be the cause of a large number of pharmacy robberies. Similar to prescription fraud, police must work with other stakeholders, in both the public and private sectors to reduce and prevent pharmacy robberies. The stakeholders are among the most critical in controlling pharmacy robbery. Several jurisdictions, at both the state and federal levels, have created task forces to respond to the problem of pharmacy robberies (7-9).

2. Types of pharmacy theft

Pharmacy theft may be of following types as illustrated in fig 1;



Fig 1.Type of Pharmacy Theft

2.1 Shoplifting

It is defined as “theft from the selling floor while a store is open for business” and is one of the most prevalent crimes in our society. Despite the seriousness of this common and frequently undetected crime, shoplifting has received little attention from the research community (10). Shoplifting may further be classified as under;

2.1.1 Boosters

Comprising about 10% of the sample of shoplifters is considered to differ little from other professional thieves. They steal to sell. They have well-defined contacts with criminal sub-cultures, and they shift from one form of illegal vocation to another. This grouping, in essence, is descriptive of the professional shoplifters/criminals (10, 11).

2.1.2 Snitches

The remaining 90% of sample is considered to be quite different from boosters. While snitches are chronic shoplifters, they are otherwise “respectable” citizens and have little or no contact with criminal groups. They do not resell the items they steal nor do they share in the values of the professional shoplifter. However, they are also not poor people stealing out of necessity nor were they observed to have obsessive, neurotic personalities (11).

2.2 Robbery and burglary

Pharmacy robbery is a growing concern for business holders across Asia including Pakistan (12). According to researchers, the use of illicit drugs in Asia is increasing while the methods for

obtaining these drugs are expanding (13, 14). More specifically pharmacy robberies have been increasing for several years, necessarily leading to an increase in the availability of illegal narcotics in the city (15). It was noted that over 1400 illicit drug-related overdose deaths were experienced, the highest in Asia, with significant increases in 2016 and 2017 (16, 17).

Pharmacies can be supposed a soft targets for robberies because they contain a large number of narcotics such as Opioids and Benzodiazepines have low levels of security and maintenance, and can promise a large number of drugs in a short period (18). With the rise of the Narcotics crisis in Asia and the associated increased abuse and trafficking of this class of drugs (19).

Monetary or financial loss means loss of money or decrease in financial value (20). Financial losses may occur due to inadequate supervision of inventory control or security systems. Financial loss, resulting from economic crimes has an important effect in all business sectors.

2.3 Employee theft

If administrative and paperwork errors, vendor errors, or shoplifting is eliminated as possible causes for inventory shrinkage, an employee or group of employees is probably stealing (19). In regular retail settings, shoplifting is a more frequent problem than employee theft (20). Although only one-tenth of thieves apprehended about inventory shrinkage are employees, employees steal goods valued at about seven times the cost of that stolen by shoplifters (1). And employees tend to start small but expand their operations if are undetected. Most employees who steal drugs get away with it (21). They may steal it for personal use, for family members, or for sale to other corrupt pharmacies or on the street. Drug diversion is a common and profitable crime, with prescription drugs sometimes selling for ten times their value (22). Prescription-grade pharmaceuticals are attractive to illicit drug users and abusers because they offer an illusion; abusers think that because they were manufactured legally, they are “safe” (23).

Most employees steal because they observe an opportunity, believing mistakenly or not they will suffer no penalties. They may steal because they feel authorized, like the excitement of stealing, have financial problems at home, want revenge for perceived mistreatment, or have a substance abuse problem. In the current stressful economy, managers need to be alert and aware that, in addition, financial pressure is a more likely motivator. Employees may observe theft as a victimless crime because they don't see any individual suffering. There are as many reasons for

stealing as employees with sticky fingers. Good management will, however, reduce the possibility that employees' theft. Employees who feel respected, rewarded, and recognized are less likely to steal (24, 25).

2.3.1 Types of stealing in employee theft

The type of stealing in employees' theft is illustrated in the tabular form as under in Table 1.

Table 1. Types of stealing in employee theft

Sr. No.	Type of stealing	Example	Watch for	References
1	Stealing or skimming money	<ol style="list-style-type: none"> 1. Fails to ring or under-ringing sales. 2. Diverting checks. 3. Taking money before it is entered into the record. 	<ol style="list-style-type: none"> 1. Lower revenues than expected. 2. Inventory shrinkage. 3. Declining cash sales as a 4. Percentage of total sales. 5. Customer complaints. 	(21, 22, 26)
2	Void/refund schemes	<ol style="list-style-type: none"> 1. Enter false refunds. 2. Void sales that were legitimately transacted and pocketing the cash. 3. An unusual number of coupons. 	<ol style="list-style-type: none"> 1. Increased refunds and voids. 2. Suspicious refunds or incomplete paperwork. 3. Voids or refunds are issued at the end of a shift. 	(21, 23, 26)
3	Larceny (taking money after it has been entered into the record)	<ol style="list-style-type: none"> 1. Take cash from the register or bank deposit bag. 2. Write a company checks payable to "cash" to himself. 3. Use the company credit card for personal purchases. 	<ol style="list-style-type: none"> 1. Cash drawers are short. 2. Checks that are out of sequence. 3. Unusual charges. 	(21, 24-26)
4	Property theft	<ol style="list-style-type: none"> 1. Undercounting items received. 2. Divert damaged or expired items. 3. Damage paperwork to explain where stock is going. 	<ol style="list-style-type: none"> 1. Employees, who arrive early, stay late, wear loose clothing or leave with bulky backpacks or packages. 2. Employees who take unusual phone calls or leave the premises at unusual times. 3. Inventory discrepancies. 	(21, 23, 26)
5	Bribes and kickbacks (taking money to help a vendor get business with the company)	<ol style="list-style-type: none"> 1. Increase inventory from one vendor, or an increasing percentage of business going to one vendor. 	<ol style="list-style-type: none"> 1. Vendor complaints. 2. New, unusual vendors. 3. Higher-than-usual costs for a product or line of products. 	(21, 22, 24-26)
6	Substitution or intentional under administration	<ol style="list-style-type: none"> 1. Remove a drug from its container and replace it with a 	<ol style="list-style-type: none"> 1. Patients complain that their medication does not deliver the expected outcome. 	(21, 23, 26)

substance that looks similar.
2. Administer a dose smaller than
that recorded, and steal the
difference.

3. Factors Associated with Pharmacy Theft

There are a vast variety of factors which govern the Pharmacy theft. Among them the prime factors are as under;

3.1 Substance Abuse

One known reason for shoplifting is that the shoplifters are involved in the street-level drug scene. A strong positive relationship between drug use and other criminal activity has been demonstrated (27, 28). Typically, these individuals have been identified as experiencing multiple difficulties. They come from economically deprived or poor backgrounds and have more psychosocial problems than nonusers (28). Various studies have described that shoplifting is the profession of many addicts in low-income neighborhoods (29-31). An interview was conducted with 149 heroin addicts. They revealed extensive involvement in the street culture of drug shoplifting and other types of crime (28-31).

3.2 Eating Disorders

Shoplifting has also been associated with another obsessive-compulsive group: individuals having an eating disorder. A small number of studies have shown that a significant number of women with anorexia or bulimia also engaged in stealing or shoplifting (32-35). Items stolen often appear to be directly related to these shoplifters' eating disorders, such as food, laxatives, diet pills, or money to purchase such goods. Among this group, shoplifting appears to be a secondary function to the eating disorder, and a primary motive for shoplifting may be to obtain the item when it cannot be afforded, or to avoid the embarrassment caused by purchasing such an item (34). As there is much common relationship between these compulsive disorders and uncontrolled substance abuse (32-35).

3.3 Social Class

Few studies that have assessed the socioeconomic status about shoplifting behavior is due to a high unemployment rate (41%) among male shoplifters. It was speculated that males were reluctant to reveal details about their employment to store personnel out of fear of threatening their jobs. In a study it was found that lower-class reported 10 to 20% more shoplifting than upper-class (36). It is also noted that low income was a contributing factor for 72% of the chronic shoplifters and found that 63% of sample of apprehended shoplifters were economically disadvantaged (37-40). Economic disadvantage serves as a motivational factor for shoplifting in many cases. As a major psychosocial stressor, it also enhances one's vulnerability to engage in such behavior, perhaps particularly if one has acquired the experience of being unfairly treated and deprived by others, yet lacks available channels by which to express or relieve this pain and frustration (36-40).

3.4 Race and Ethnicity

It has been noted that individuals who are racially or culturally different may be more prone to show aberrant behavior because of different lifestyles or because of prejudice or discrimination (41). It was found that Blacks were underrepresented in store as compared to the proportion of the city's population. This pattern, plus the fact that Blacks were apprehended for stealing less expensive items, concludes that a significant racial bias was operating. On a note, Robin (1963) found that Black shoplifters were more likely to be prosecuted than White shoplifters (36, 42). Self-report studies have shown no significant racial differences in shoplifting activity once socioeconomic status was taken into account (36, 43, 44). Thus, no conclusive evidence regarding the role of race or cultural background in shoplifting activity has emerged as of yet. Similarly, the extent to which this factor influences the likelihood of a shoplifter cannot be determined; although it appears evident that the same prejudices existing within society as a whole are also present within this area (36, 42).

3.4 Gender

A popular stereotype about shoplifting is that females are more involved in this activity than males (39, 45, 46). It is pointed out that historical sources and early-era store apprehension

studies have shown a higher proportion of female shoplifters, yet there was also a higher proportion of female shoppers that was not taken into account (36, 43, 44, 47, 48). Research that has shown a higher rate of female shoplifters includes those subjects who have been referred for psychological assessment or treatment (49-52). Thus, it may be that a greater proportion of female shoplifters were motivated to engage in this activity due to the influence of psychological factors. Societal views of seeing women committing deviant acts as “sick” and men committing similar acts as “bad” or “wild” may also play a role in these findings (36, 43, 44, 47, 48).

3.5 Age

There is a high degree of consent within the shoplifting research that individuals under 20 are most likely to be caught for shoplifting, as 40% of those apprehended are adolescents (37, 41, 46, 53-55). Self-report data have indicated that approximately 30 to 40% of adolescents engage in shoplifting activity repeatedly (47, 54, 55). In studies of teenage shoplifters, for example, younger high school students reported more involvement in recent shoplifting than did the older students, 38.8% of the freshmen reported shoplifting during the last school year, compared to 25% of the sophomores, 19% of the juniors, and 17.7% of the seniors. In addition, 73.8% of high school shoplifters began shoplifting before the age of 10 (37, 41, 46, 53-55).

4 Prevention and control of Pharmacy theft

Following ways are adapted to as prevention and control of pharmacy theft

4.1 Control of Employee theft

Establishing methods of maintaining internal responsibility is the best way to address a theft problem. In pharmacies, tight control is essential, and in many states, legislators have legally directed policies and procedures that maintain adequate security and integrity of pharmaceutical services (56). The presence of laws holding managers responsible for theft by employees varies among the states and is not uniformly enforced, but pharmacy managers need to know the pharmacy practice laws, state and federal acts under which they fall. Every pharmacy needs to maintain close vigilance over all prescription drugs, especially those that are considered controlled substances. In addition, pharmacy managers should stay abreast of changes in drug trafficking on the street (21, 23, 26).

Types of prevention programs include; Crime Prevention Through Environmental Design (CPTED), Police Records Information Management Environment (PRIME), Situational Crime Prevention (SCP), Rational Choice Theory (RCT) and Community Oriented Policing Services (COPS) (37, 41, 46, 53-55).

4.2 Changing pharmacy bylaws and security policies

Asia established a set of by-laws and security policies based on situational crime prevention techniques to reduce the rise in robberies and burglaries in pharmacies. The Bylaws state that a community pharmacy must have the following security measures (57, 58):

1. A Metallic lock safe with a time set at a minimum of 5 minutes for the storage of narcotics and controlled drugs
2. A security camera (CCTV) system that is checked daily for proper process and has date/time stamped images that are available for at least 30 days
3. Motion sensors in the dispensary area
4. Alarm in the dispensary area if a pharmacist is not present at all times
5. Physical barriers to protect schedule I and II drugs, controlled drug substances, and personal health information
6. Signage for the presence of a video surveillance system, limited drugs are on site, and that narcotics are stored in a time-delay lock safe

4.3 Preventive measures

Specific Responses to Reduce Pharmacy Theft (Robbery, shoplifting, burglary, and employee theft) are as under:

4.3.1 Increasing the Detection level

4.3.1.1 Informing pharmacy employees

Management must inform pharmacy employees about robbery trends. Some data exist for pharmacy robberies nationwide, and some may exist for the local authority. Pharmacy personnel should analyze these data, add knowledge, and educate pharmacies about the trends and patterns such as likely days and times for robbery, profiles, and types and locations of pharmacies and drugs that are being targeted.(58) With this knowledge, pharmacy staff can be more alert or, if

possible, increase staffing during higher-risk days and times or may be even modify procedures for handling the higher risk drugs (57, 58).

4.3.1.2 Providing prevention guidance

Prevention guidance must be provided to pharmacy employees. The more employees who are aware to identify suspicious customers and behaviors, security systems work, and appropriate procedures during a robbery, the greater the robberies can be prevented. The San Diego Police Department has a detailed document titled “Preventing and Dealing with Pharmacy Robberies,” available on its public website. The Saskatchewan Pharmaceutical Association created the “Pharmacy Security Guide,” which includes information on exterior security, alarm systems, interior security, robbery procedures, and checklists (59).

4.3.2.3 Managing risk factors

The risk of pharmacy robbery may be related to the physical design of the pharmacy, dispensing procedures, staffing and other factors. If employees are aware of risks, they can take steps to manage them. The UK Pharmacists’ Defense Association created a “Personal Safety Resource Pack” to educate pharmacists about violence and how to reduce and manage risk. This also includes a risk assessment tool (60). While not specific to pharmacy robberies, many points are relevant.

4.3.2.4 Installing a panic alarm

While a standard burglar alarm may help prevent the burglary of a pharmacy during hours it is closed, a panic alarm at the pharmacy counter can be used secretly notify authorities during a robbery in progress (58).

4.3.2.5 Using a video surveillance system

Cameras should cover entrances, exits, and high-risk areas such as the pharmacy counter. They need to be positioned to capture full facial views, and the monitor should be large enough

and positioned so that the offender will notice it. While there have been no evaluations of the use of closed-circuit televisions (CCTV) in pharmacies, an analysis of the 1,900 burglaries database revealed that in 77 percent of them, the pharmacy had no video surveillance cameras (12).

4.3.2.6 Tracking the stolen drugs/offender

Both GPS tracking units installed in pill bottles and DNA tracking spray have been used in a few cases. While there are success stories of post-robbery identification and conviction, caution should be taken as there is no evidence to show that either is effective in preventing the robbery from occurring (58).

4.3.2.7 Using deterrent signage

If individuals observe a pharmacy to be more aware of and better manage the pharmacy robbery problem through the use of federal action, they may choose to go to a different pharmacy (58).

4.3.2 Increasing the Effort Required to Commit Pharmacy Robbery

4.3.2.1 Employing security measures

Pharmacy owners and employees can use several strategies to control pharmacy robbery. There are several checklists available to assess the pharmacy's security. One such checklist is available and includes alarms, physical design and barriers, locks, CCTV, and restricting access. Another example is the "Security Assessment Template" from the Pharmaceutical Society of Ireland (58, 61). The assessment includes collecting information on the location, external grounds, building, building, building, and security procedures and controls (12, 58, 61). Specific measures include:

4.3.2.1a. Increasing pharmacy lighting

Having a brightly lit exterior as well as interior increases the natural surveillance and visibility of the potential offenders (12, 58, 61).

4.3.2.1b. Locking up drugs.

Whether in a locked cabinet or a safe, many pharmacies use this extra security for the drugs that are most often targeted. Another tactic might be to fill targeted-drug prescriptions only after closing hours and obviously notify customers of this practice. The location of the safe can also aid in protecting the drug from the target. In the same analysis of RxPATROL data described earlier, it was found that 84 percent of the pharmacies that were burgled had no safe. There are many types of safes; pharmacies should consider burglary-resistant over fire-resistant ones. Burglary-resistant safes have a rating system relating to how difficult and time-consuming breaking into it will be. One example, specially designed for dispensing drugs, is Pharma Safe™. The only way to open the safe is to process a prescription (12, 58, 61).

4.3.2.1c. Installing physical barriers

Some security experts recommend putting bullet-proof glass or steel barriers at the dispensary window. This strategy has been shown to have some effect in reducing robbery at banks and convenience stores (12, 58, 61).

4.3.2.1d. Ensuring front windows are clear

The extent of natural surveillance that allows people passing by to see inside may prevent a robbery. This method has proven to be effective in reducing store robberies and is similarly effective if the pharmacy is in a store where no one can see it due to advertising posters covering the front windows (12, 58, 61).

4.3.3 Decreasing Susceptibility to Robberies

4.3.3.1 Limiting the drugs available

Some pharmacies have chosen not to carry OxyContin or other illicit drugs that are common cause of the robberies. Other pharmacies limit the amount they have in stock (62).

4.3.3.2 Limiting the drug information available via telephone

Implementing a policy by which store employees do not tell people over the phone if they have any available prescription drugs (robbers are unlikely to hit a store when the supply of desired drugs is uncertain) (12, 58, 61).

4.3.4 Responses with Limited Effectiveness

4.3.4.1 Conducting focused surveillance and enforcement

Surveillance and enforcement may yield an abrupt but limited impact and often do not produce long-term results. Police focus on a specific pharmacy prone to robbery may catch one person or offender ring, but others may continue to rob a pharmacy that does not have sufficient prevention measures in place (63).

4.3.4.2 Increasing penalties for pharmacy robbery

The Safe Doses Act (H.R. 4223, enacted October 2012) increases penalties for robbing a pharmacy.(64) However, proof that this or other individual state legislation is effective is lacking (12, 58, 61).

4.4 Summary of Responses to Pharmacy Theft

Summary of the responses to pharmacy robbery, the method by which they are supposed to work, the circumstances under which they work best and factors that should consider before applying a particular response. In most cases, an effective and best strategy will involve applying several different responses. Law enforcement responses alone are also effective in reducing or solving the problem (12, 58, 61).

Table 2. Increasing the Risk of Detection (12, 58, 59, 61).

Response No.	Response	How It Works	Works Best If	Considerations
1	Informing pharmacy employees about robbery trends	Heightens pharmacy staff vigilance and preparedness to minimize harm in the event of a robbery	pharmacy provide routine training and updates to employees and communication with police	pharmacies provide routine training and updates to employees and communicate with police
2	Providing prevention guidance to pharmacy employees	Improves pharmacy staff compliance with robbery prevention policies and practices	training is conducted on a routine basis and is reinforced by posters, checklists, and other literature prominently posted in employee break areas	Pharmacy staff turnover can be high, underscoring the importance of including prevention guidance as a part of the new staff orientation processes
3	Managing risk factors	Reduces vulnerability of pharmacy to robbery	pharmacy staff is educated about potential harms and what should be done specifically for each risk	Risks vary for fraud, burglary, and robbery so there is a need to know each; risks also vary by pharmacy, depending on physical layout, staffing, etc.
4	Installing a panic alarm	Increases probability of police apprehension	the alarm is easily accessible, not obvious, and goes directly to the police	Panic alarms will only deter robbers if they know generally that such alarms exist
5	Using a video surveillance system	Deters potential robbers who are aware of the system; increases likelihood of identification and apprehension	The cameras as well as signs announcing the cameras are noticeable	Pharmacy owners must be persuaded to install high-quality systems
6	Tracking the stolen drugs/offender	Increase likelihood of identification and apprehension; may be a deterrent for those who are generally aware they may be tracked	All pharmacy staff are aware of and know how to use tracking methods, and police have the resources to	Tracking devices are primarily investigative tools, but may prevent robberies if offenders believe a pharmacy may be using these tools

			respond quickly	
7	Using deterrent signage	May deter individuals who calculate risks relatively carefully	signs are placed in prominent locations both at the entrance of the pharmacy and near the pharmacy counter	In other crime prevention contexts, these forms of deterrence alone has not had much of an impact on criminal behavior

Table 3. Increasing the Effort Required to Commit Pharmacy Robbery

Response No.	Response	How It Works	Works Best If	Considerations
8	Employing security measures	It includes the best protection measures	Includes lighting and alarm system	Measures will vary depending on store design (inside and out), staffing, and types of drugs that are dispensed
8a	Increasing pharmacy lighting	Increases the risk of detection by police and identification by witnesses	lighting is positioned to not cast shadows; lighting is combined a wide array of security measures	Brighter lights alone are unlikely to prevent pharmacy robberies
8b	Locking up drugs	Increases the difficulty in gaining access to desired drugs	accessibility is limited and offenders believe that pharmacy staff cannot access drugs	Some potential for violent reactions by offenders upon learning drugs are inaccessible; potentially higher costs for pharmacies and greater inconvenience for pharmacy staff in filling prescriptions
8c	Installing physical barriers	Denies access to drugs; reduces likelihood that pharmacy staff will be coerced into turning over drugs	pharmacy staff know how to use barriers and barriers are properly maintained	Higher costs for pharmacies and some reduction in “personal touch” of customer service
8d	Ensuring front windows are clear	Increases the likelihood that police or witnesses will detect a robbery in progress, which might be a deterrent	there is a clear line of sight from outside the store to the pharmacy counter	May increase costs to pharmacy if remodeling is required; some potential loss of advertising opportunities

Table 4. Decreasing Susceptibility to Robberies

Response No.	Response	How It Works	Works Best If	Considerations
9	Limiting the drugs available	Denies the desired drugs, at least in large quantities	the fact that targeted drugs are restricted is prominently advertised through signage at the pharmacy entrance	Pharmacies may lose legitimate customers to pharmacies where these drugs are more readily available
10	Limiting the drug information available via Telephone	Reduces the ability to determine whether robbery is worth the risk	all pharmacy staff abide by not discussing drug availability with customers	Pharmacies may lose legitimate customers to pharmacies where it is easier for them to determine whether these drugs are available

Table 4. Responses with Limited Effectiveness

Response No.	Response	How It Works	Works Best If	Considerations
11	Conducting focused surveillance and enforcement	Intended to increase likelihood of apprehension	a rash of robberies was concentrated at a few properties such that prospects of detection through surveillance were high, and there were few offenders in the community	Surveillance increases the knowledge of the particular prospect
12	Increasing penalties for pharmacy robbery	Intended to deter through threat of harsh punishment	Enhanced penalties are widely publicized and/or known offenders are notified, and potential offenders	Many studies of the deterrence value of enhanced penalties suggest they do not prevent crime, mainly

believe they will be
apprehended and
punished

because offenders
do not believe their
risk of apprehension
is high

5. Conclusion

The possibility must be considered that the introduction of preventive strategies may cause displacement in several ways. Temporal displacement could result in an increase in attacks during the opening and closing of branches. Staff interviewed suggested this might be prevented if external doors were fitted with computerized time locks. Finally, displacement might take the form of robbers taking hostages; either staff during the opening and closing of branches or customers during the robbery. Offenders might consider the former action too risky since it would involve them in negotiations which would increase the possibility of their recognition, and increase the length of time they needed to remain on the premises. To prevent the taking of customers as hostages, building societies might consider introducing automatic cash delivery systems at check-outs of pharmacies. An inquiry into bank premises protected by measures including automatic cash delivery systems suggested they reassured staff and reduced the risk of robbery. These measures have not yet been adequately evaluated and will need to be kept under review. Monitoring would provide important detail about changing patterns in branch robbery, concerning both geographical distribution and modus operandi. It could also assess security issues on which management opinion is currently divided. There are several measures to increase offenders' anxiety, uncertainty, and lack of control at the scene of the crime. Installing opaque partitions and one-way glass screens would reduce their visibility, and communication with, branch staff. This would impair their ability to gauge how staff might retaliate in an attack. It would also reduce their potential to derive power from negotiation or taking hostages. Other means of reducing offenders' sense of control include: developing staff confidence in and competence with anti-robbery measures; improving visibility into the branch from the street, by unobstructed windows or better lighting, and, impairing offenders' getaway from the branch (by foot or vehicle, as appropriate). The specific objective of undermining offenders' sense of control seems an under-appreciated facet of environmental management.

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