

and will not bias the recommendations. The role of mediators are perhaps the most crucial component in fostering the linkage of research to policy. They could be researchers themselves, academic groups that support evidence-based decision-making, national research coordinating bodies, or international agencies.⁴ Trostle et al² looked for factors that promoted or impeded exchanges between researchers and policy makers. These were in turn divided into emphasis on content, actors, process, and context, summarized in **Table 1**. They finally recommended improving communication between researchers and policy makers via training of both parties: assisting researchers to communicate their findings in an understandable and stimulating way, or synthesizing policy makers on the usefulness of research results as an input to decision making. They also recommended that research should be evaluated in terms of their cost

and effectiveness before they are considered as the basis for a policy or program. However, this type of evaluation is still underdeveloped internationally.²

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Table 1 - Some factors that promoted or impeded exchanges between researchers and policy makers with emphasis on content, actors, process and context.²

Category	Promoting factors	Impediments
Content	Research quality	Vocabulary of researchers and decision makers is different
	Agreement of both researchers and policy makers to give more attentions to biomedical than social	
	Specificity, concreteness and cost- effectiveness	
Actors	Both researchers and policy makers identify priority together	Lack of technical background of policy makers or media
	International support	Policy makers value experience more than information
	Official research organizations namely research department	Agenda brought to bear by non academic interest group
Process	Informal ties	Difficulty in selling research questions and results to policy makers
	Balanced interests	
	Formal communications	
Context	Political stability	Excessive centralization
	Homogeneity of research community	Hierarchal management of information
		Restricted economic resources

A pilot study to investigate over-the-counter drug abuse and misuse in Palestine

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The majority of nonprescription drugs, which are sold over-the-counter (OTC) in community pharmacies are assumed to be used appropriately by patients. However, a small minority of patients can misuse or abuse these products. For example, studies in many countries have shown that a significant number of OTC customers misuse/abuse these drugs.^{1,2} The term abuse is used here to describe the use of drugs for non-medical purposes,

while misuse is applied to describe the use of a drug for medical purposes, but in an incorrect manner. Examples of OTC products that could be misused/abused include a wide variety of drugs like amphetamines, ephedrine, caffeine, which are stimulants used primarily to delay the onset of mental and physical fatigue; antitussives and expectorants, which may contain alcohol and some even may contain narcotics such as codeine; dextromethorphan, an opioid with psychoactive effects, present in a variety of cold and cough medications; laxatives used to induce weight loss; anabolic steroids used to increase the muscle mass in conjugation with vigorous training,^{3,4} and even sildenafil could be overly used especially by addicts to counteract the sexual depressing effects of opioids. Although the potential for misuse and abuse of OTC medicines is clear, no methods to discover the extent of the problem have been developed. Quantification is complicated by the fact that abusers can visit several different pharmacies in an attempt to obtain supplies and avoid detection. Furthermore, no research has been conducted in Palestine to assess this problem. The aim of the present study was to obtain information directly from the community pharmacists regarding their perception of the extent of OTC drug abuse, the drugs involved, the type of customers whom they suspect of abusing medicines together with suggested methods to deal with this problem.

A questionnaire to be completed anonymously by community pharmacists was developed. The questionnaire was delivered to all community pharmacists in Nablus district, Palestine and were collected back within one week. In the first part of the questionnaire, respondents were asked to fill specific personal information on the pharmacist himself including gender, age, responsibility, the number of years spent in this job field, and location of the pharmacy. In the second part, community pharmacists have been asked if they suspected abuse in their pharmacies and if the clients were strangers or customers. Then they were asked to give a profile of the typical abuser for each product or group of products. Respondents were also requested to indicate the age, gender and approximate number of clients they had suspected for each drug category. Then they were also asked to provide information on any system they had provided in their pharmacies, which limits the access of suspected abusers to identify OTC products and to indicate if they had contacted other pharmacist in their area regarding clients they suspected abusing OTC medicines. The returned questionnaires were coded and were transferred to Statistical Package for Social Sciences for descriptive and statistical analysis.

Table 1 - Distribution of clients according to age group, gender and abused/misused drugs.

Product group and client's characteristics	Relationships
Antitussives	
Age	20-40 years age group is more likely to be suspected than all other age groups.
Gender	Males are more likely to be suspected than females. Only 9.3% respondents mentioned that abuse/misuse is gender insensitive.
Antihistamines	
Age	20-40 years age group is more likely to be suspected than all other age groups.
Gender	Males are more likely to be suspected than females.
Laxatives	
Age	20-40 years age group is more likely to be suspected than all other age groups. 40-60 years age group is more likely to be suspected than under 20 years of age.
Gender	Females are more likely to be suspected than males.
Combination products	
Age	20-40 years age group is more likely to be suspected than all other age groups. <20 and 40-60 years age group are equally suspected.
Gender	Males are more likely to be suspected than females.
Decongestants	
Age	20-40 years age group is more likely to be suspected than all other age groups.
Gender	Males are more likely to be suspected than females.
Simple analgesics	
Age	20-40 years age group is more likely to be suspected than all other age groups.
Gender	Males are more likely to be suspected than females.
Sedatives hypnotics and tranquilizers	
Age	20-40 years age group is more likely to be suspected than all other age groups.
Gender	Males are more likely to be suspected than females.
Alcohol 70%	
Gender	20-40 years age group is more likely to be suspected than all other age groups.
Age	Males are more likely to be suspected than females.

I. Suspected drug classes and characteristics of abusers/misusers. Out of 111 questionnaires distributed, 98 questionnaires were returned. One questionnaire of the 98 was returned and excluded as it was filled inappropriately. The respondents were 53.6% females and 44.3% males, while 2.1% of the respondents did not mention their gender. The respondents (41.2%) were between 25-35 years of age. Analysis of the years of experience of respondents shows that the average experience in years was 10.4 ± 8.85 years (range 33 years). The geographic distribution of the responded pharmacies was as follows: 51.5% were in the city center, 41.2% were in the suburbs and 6.2% were in refugee camps. The majority of the respondents (66%) believe that there is an increase in misuse/abuse of OTC products these days that might be attributed to the social, economical and psychological impact of the political instability in Palestine. Responding pharmacists indicated that 78.4% of suspected abusers were foreigners to their pharmacies, while 15.5% of the responding pharmacists indicated that the abusers were among their regular customers. A third group of community pharmacists (6.2%) indicated that it is very difficult to estimate this figure due to the large number of suspected clients. When asked about the drug classes being abused/misused, 80.34% of the respondents mentioned that antitussives were the most commonly abused/misused class. The majority (52.6%) of suspected clients of antitussives were between 20-40 years of age and mostly males, although female abusers were noticed by some respondents. The most antitussive product being abused/misused were those containing the following combination: (codeine phosphate/pseudoephedrine/triprolidine) (53.6%) or (ephedrine/ammonium chloride/codeine phosphate/pheniramine maleate) (5.2%) while 10.3% of the respondents believe that both mentioned combination products are abused. Approximately 30.9% of respondents did not mention any product's name. This suggests that the most commonly abused antitussive products were those containing codeine (opioids). Another class of drug believed by 41.2% of responding pharmacists to be abused/misused was antihistamines with 23.7% of clients being within the age range of 20-40 years and mostly males. Of the antihistamines mentioned were those containing: chlorpheniramine maleate or loratadine or cyproheptadine or dimethindene maleate. When asked on the possible abuse/misuse of laxatives, 67% of respondents mentioned that there is abuse/misuse of laxatives detected in their pharmacies with, 33% of abusers/misusers were within 20-40 years of age and were mostly females. Patients who abuse laxative preparations were either attempting to

control their weight (females) or have a need to defecate regularly. The most widely abused/misused laxative drug was that containing bisacodyl with a percentage of 44.3%, while those containing senna leaves has a percentage of 5.2% and 7.2% have an abuse/misuse in their pharmacies of both of the above products. Combination products (products containing more than one active ingredient such as, analgesics and decongestants or antihistamines in cold and flu preparations) were mentioned by 49.5% of respondents as possible drug of abuse/misuse. Simple analgesics, including nonsteroidal anti-inflammatory drugs, paracetamol and paracetamol containing products were also mentioned by 70.1% as a suspected class of abuse/misuse. Other classes of possible abuse/misuse are mentioned in **Table 1**. Alcohol for external use was mentioned by some respondents as a suspected product of abuse/misuse. Few respondents mentioned that some alcoholics might abuse/misuse mouthwash to get alcohol.

II. Strategies to limit abuse/misuse. Pharmacist reported that they had devised a number of systems to limit the access of suspected abuser/misusers to OTC medicines. The most common strategy was to advise the suspected client to refer to his physician. When questioned about their role in dealing with OTC drug abuse/misuse, the majority of respondents (87.6%) indicated that it was appropriate to advise the patients on the correct use, dose and abuse problem, while 86.6% found it's appropriate to alert pharmacy staff on the products commonly abused or misused and suspected clients. A majority (84.5%) found it's appropriate to keep the product out of sight and hence, potential purchasers had to ask for it by name. Other important methods mentioned by respondents include telling the abusers that the product is out of stock, advising the patient to refer to a general practitioner, limiting the quantity sold and refusing to sell. Self-medication, using OTC drugs, is economical and beneficial to patients, healthcare professionals, the pharmaceutical industry and government. However, misuse and abuse of OTC products can arise, which requires close monitoring of specific client population and products. This pilot study requested information from community pharmacists on the current situation in Nablus, Palestine pertaining to the abuse/misuse of OTC products. It is recognized that the use of this method is limited in that results are based on the pharmacists' perception which are subjective. However, it is evident from the data that there is a perception of misuse and abuse of the OTC products. The most commonly identified abused/misused OTC product groups were antitussives, laxatives, simple analgesics, and

sedatives in addition to alcohol. Among the suspected clients, the group with age 20-40 years was more likely to be suspected abusers/misusers than all other age groups. Among the laxatives abusers/misusers, females were more likely to be suspected than males. While among the other OTC products, males were more likely to be suspected than females. Current guidelines in the practice of dealing with such requests recommended that pharmacists used their professional judgment in order to prevent the supply of products which are reliable to abuse/misuse and if necessary the sale of such products should be refused. A variety of methods and policies for dealing with such requests were suggested. Common policies such as: advising the client to refer to his physician, alerting staff to any potential abusers/misusers, advise the patients on the correct use, dose and abuse problem, keeping the product out of sight, or telling the abuser/misusers that the product is out of stock were the most used policies. However, such policies may encourage individuals to go to another pharmacy in the area where they may be able to obtain the products. This problem could be elevated if the pharmacists networked more frequently with one another whereby, a suspected abuser/misusers would be reported to other pharmacies in the locality. In the present survey, pharmacists indicated that approximately 78.4% of the suspicious requests came from strangers, perhaps suggesting that people may be going from pharmacy to pharmacy in order to minimize the detection of their problem, suggesting that indicated strategies to limit abuse/misuse are unlikely to be effective in the longer term. In an international study designed to explore the views of experts within the fields of pharmacy and addiction reach an agreement on best practice in the sale of over-the-counter (OTC) medicines, which are liable to misuse. Key findings include improving access to current information, improved staff training, addressing the issues of non-pharmacy outlets and internet pharmacy sites. Concerns were expressed regarding the possible conflict between commercial and customer interests.⁵ Health care professionals should be aware of abuse and misuse as potential problem and research into methods for quantification, identification and treatment should be conducted.

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Gastric volvulus with identifiable cause in adults. Presentation and management

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Gastric volvulus, an abnormal rotation of one portion of the stomach around itself, is a rare condition, which is often difficult to diagnose and treat. We report our experience of patients with gastric volvulus and discuss the pathogenesis, presentation and management. In a retrospective analysis of all patients with gastric volvulus seen at Kasturba Medical College Hospital, Manipal, South India, between the period 1986-2000, the files of the patients with the diagnosis of gastric volvulus were identified and reviewed. The specific issues addressed included patients demographic details, etiology, presentation, investigations and treatment, **Table 1.** Eight patients (6 men and 2 women) with gastric volvulus were identified. The mean age was 29 years (range 18-59 years). Volvulus was secondary in 7 patients and primary in one. The underlying causes included Bochdalek diaphragmatic hernia (3 patients), eventration of diaphragm (3 patients) and a large epigastric incisional hernia (following previous perforated duodenal ulcer closure) in one patient. Two of 3 patients with large left diaphragmatic hernia with herniation of stomach, small gut, transverse colon and spleen had in addition underdeveloped lower lobe of the left lung. Five patients had organoaxial volvulus and 3 mesenteric-axial volvulus.

The presentation included recurrent colicky abdominal pain of more than 6 months (range 3 months - 1 year), which was seen in all the 8