

## An Overview about Drug Interaction

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### Abstract

A medicine commerce is a response between two (or further) medicines or between a medicine and a food, libation, or supplement. Taking a medicine while having certain medical conditions can also beget a medicine commerce. For illustration, taking a nasal decongestant if you have high blood pressure may beget an unwanted response. A medicine commerce can affect how a medicine works or beget unwanted side goods. Treatment with HIV drugs (called antiretroviral remedy or ART) helps people with HIV live longer, healthier lives and reduces the threat of HIV transmission. But medicine relations can complicate HIV treatment.

### Introduction

Health care providers precisely consider implicit medicine relations before recommending an HIV treatment authority. Before taking HIV drugs, tell your health care provider about all tradition and non-prescription drugs, vitamins, nutritive supplements, and herbal products you're taking or plan to take [1].

Treatment with HIV drugs (called antiretroviral remedy or ART) helps people with HIV live longer, healthier lives and reduces the threat of HIV transmission. But medicine relations, especially medicine-medicine relations, can complicate HIV treatment [2].

Medicine- medicine relations between different HIV drugs and between HIV drugs and other drugs are common. Before recommending an HIV treatment authority, health care providers precisely consider implicit medicine- medicine relations between HIV drugs. They also ask about other drugs a person may be taking. For illustration, some HIV drugs may make hormonal birth control less effective, so women using hormonal contraceptives may need to use a fresh or different system of birth control to help gestation. For further information about using birth control and HIV drugs at the same time, view the HIV and Birth Control infographic from HIV info. Yes, the use of HIV drugs can lead to both medicine- food relations and medicine- condition relations [3].

There are more openings moment than ever ahead to learn about your health and to take better care of yourself. It's also more important than ever to know about the drugs you take. However, see further than one croaker, or have certain health conditions, If you take several different drugs. Doing so will help you to avoid implicit problems similar as medicine relations [4].

Medicine relations may make your medicine less effective, beget unanticipated side goods, or increase the action of a particular medicine. Some medicine relations can indeed be dangerous to you. Reading the marker every time you use a non prescription or tradition medicine and taking the time to learn about medicine relations may be critical to your health. You can reduce the threat of potentially dangerous medicine relations and side goods with a little bit of knowledge and common sense. Medicine relations fall into three broad orders [5].

- Medicine- medicine relations do when two or further medicines reply with each other. This medicine- medicine commerce may beget you to witness an unanticipated side effect. For illustration, mixing a medicine you take to help you sleep (a opiate) and a medicine you take for disinclinations (an antihistamine) can decelerate your responses and make driving a auto or operating ministry dangerous [6].

- Medicine- food/ libation relations affect from medicines replying

with foods or potables. For illustration, mixing alcohol with some medicines may beget you to feel tired or decelerate your responses.

- Medicine- condition relations may do when an being medical condition makes certain medicines potentially dangerous. For illustration, if you have high blood pressure you could witness an unwanted response if you take a nasal decongestant [7].

Over-the-counter (OTC) medicine markers contain information about constituents, uses, warnings and directions that's important to read and understand. The marker also includes important information about possible medicine relations. Further, medicine markers may change as new information becomes given [8].

Whenever two or further medicines are being taken, there's a chance that there will be a commerce among the medicines. The commerce may increase or drop the effectiveness of the medicines or the side goods of the medicines. The liability of medicine relations increases as the number of medicines being taken increases. thus, people who take several medicines are at the topmost threat for relations. Medicine relations contribute to the cost of healthcare because of the costs of medical care that are needed to treat problems caused by changes in effectiveness or side goods. Relations also can lead to cerebral suffering that can be avoided. This review discusses the issue of medicine relations and several ways to avoid them [9].

There are several mechanisms by which medicines interact with other medicines, food, and other substances. An commerce can affect when there's an increase or drop in

- the immersion of a medicine into the body;
- distribution of the medicine within the body;
- differences made to the medicine by the body (metabolism); and
- elimination of the medicine from the body [10].

Utmost of the important medicine relations affect from a change

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in the immersion, metabolism, or elimination of a medicine. Medicine relations also may do when two medicines that have analogous (cumulative) goods or contrary (cancelling) goods on the body are administered together [11]. For illustration, there may be major sedation when two medicines that has sedation as side goods are given, for illustration, anaesthetics and antihistamines. Another source of medicine relations occurs when one medicine alters the attention of a substance that's typically present in the body. The revision of this substance reduces or enhances the effect of another medicine that's being taken. The medicine commerce between warfarin( Coumadin) and vitamin K- containing products is a good illustration of this type of commerce. Warfarin acts by reducing the attention of the active form of vitamin K in the body [12]. Thus, when vitamin K is taken, it reduces the effect of warfarin.

medicine relations can be categorised into 3 groups

- relations of medicines with other medicines( medicine- medicine relations),
- medicines with food( medicine- food relations)
- Medicine with complaint condition( medicine- complaint relations).

It's important to know the possible medicine relations as these can beget serious adverse responses or affect in failed remedy.

Medicine- medicine relations

Medicine- medicine relations affect when two or further medicines reply with each other. Similar medicines can be from a combination of tradition medicines and/ or over-the-counter (OTC) specifics. Medicines with a narrow remedial range (little difference between remedial and murderous cure) are more likely to face incidents of serious medicine relations.

For illustration Taking digoxin with antibiotics like erythromycin or clarithromycin will increase the toxin of digoxin because antibiotics affect the liver enzymes, causing digoxin to be metabolized( inactivated) slower. Also, the concurrent use of methotrexate and ibuprofen may affect in increased methotrexate toxin due to inhibition of order excretion by ibuprofen [13].

## Discussion

The effectiveness of medicines may be reduced in situations where the action of one medicine diminishes the action of the other. Some antibiotics reduce the effectiveness of oral contraceptive capsules by injuring the bacterial foliage responsible for recovering the hormone from the gut. Also, medicines like watercolor or magnesium carbonate should rather not be taken at the same time as other medicines as they may vitiate immersion.

Side goods of specifics are boosted when medicines with the same effect are taken together. For case, taking codeine( anodyne) with a cough saccharinity like procodin will increase the dreamy effect. Aspirin, which is anti-platelet, increases the threat of bleeding when given together with warfarin, heparin oranti-depressants. There's also an increased threat of hepatotoxicity (liver damage) when isoniazid and paracetamol are used together.

Medicine- food relations

These relations do when medicines reply with foods, salutary supplements or potables (including alcohol). Some medicines may intrude with the body's capability to absorb nutrients. In the same way, certain sauces and food can lessen or increase the impact of a medicine.

Smoking and drinking habits can have an adverse effect on medicines. Consumption of alcoholic drinks while on the antibiotic metronidazole will beget skin flushing, nausea, headache, and pulsations. Alcohol enhances the hypoglycaemic effect ofanti-diabetic drug, and the hypotensive effect of numerous blood pressure medicines. It's stylish to avoid alcohol while on specifics.

The tobacco in cigarettes can also dwindle the effectiveness of specifics by adding medicine metabolism. Caffeine, which is set up in tea, coffee, soft drinks and chocolate and some specifics, can increase the threat of theophylline( a medicine to treat asthma) toxin.

Certain foods Beget medicine relations. People on warfarin have to avoid eating large quantities of green lush vegetables like broccoli, spinach and watercress because the high vitamin K content of these foods counters the effect of warfarin.

Grapefruit juice enhances the effect of medicines like simvastatin, nifedipine and ciclosporin, and its consumption should best be avoided. Dairy products which contain calcium reduce the immersion of biphosphonates, oral iron, levothyroxine and certain antibiotics e.g. ciprofloxacin and tetracycline.

As for herbal or salutary supplements, there are some reports of commerce between warfarin and sauces similar as garlic, Danshen, Dong Quai, ginseng, and ginkgo. These sauces may compound or reduce the effect of warfarin [14].

medicine- complaint relations

Medicine- condition relations do when a medicine worsens or exacerbates an being medical condition. For illustration, a nasal decongestant containing pseudoephedrine increases blood pressure and therefore has to be avoided by people who are hypertensive( have high blood pressure).

Asthmatic cases should be careful when using buying untoward NSAIDs like ibuprofen as they may beget airway condensation.

Always inform your croaker about your condition/ complaint before the croaker prescribes a new medicine. Conditions that place cases at high threat for medicine relations include order or liver complaint, diabetes, asthma, cardiac problems, epilepsy, high or low blood pressure. medicine- complaint relations are more common among the senior, who tend to have further conditions.

## Conclusion

In conclusion, people should inform healthcare professionals of their condition and any specifics salutary supplements that they're taking when visiting the croaker or copping drugs at thepharmacy. However, the case will need to cover the safety and efficacy of the medicines, If a medicine commerce is necessary.

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## Conflict of Interest

There is no Conflict of Interest.

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