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Pharmacist's assistants – essential partners in patient care

Natalie Schellack

The pharmacy profession stands at a crossroads, and this is as true for pharmacist's assistants as it is for pharmacists. Every day, pharmacist's assistants are on the front lines serving patients, supporting the pharmacy team, and helping to keep our communities healthy. But the landscape is changing. We are seeing new technologies, new regulations, and new pressures on the workforce, from unemployment to ethical challenges in practice.

Recent media reports have put a spotlight on the profession, especially around illegal dispensing and the sale of scheduled medicines without prescriptions. It's a reminder that, as the saying goes, *"one rotten apple spoils the whole barrel"*. The actions of a few can affect the reputation of many, and it's up to all of us to protect the trust that patients place in their pharmacy team. Most pharmacist's assistants and pharmacists work with great care and integrity, and we must continue to uphold these high standards every day.

At the same time, there is much to celebrate. Our profession is growing in visibility and importance. The South African Pharmaceutical Journal (SAPJ) has just been indexed on Scopus, a

major achievement that highlights the quality of pharmacy research and practice in our country. We are also welcoming a new SAAHIP President, Dr Seshnee Moodley, who brings passion, vision, and a commitment to leading with excellence and compassion.

We also pause to remember the sad loss of Michéle Coleman – a pharmacist whose kindness, leadership, and dedication touched so many lives. Her example reminds us of the difference one person can make, not just in the dispensary but in the lives of colleagues and patients.

Looking ahead, I encourage all pharmacist's assistants to keep learning, keep asking questions, and keep supporting each other. You are an essential part of the pharmacy team, and your contribution matters now more than ever. Let's continue to work together, uphold our ethical responsibilities, and put patients first as we navigate the changes and opportunities ahead.

Warm wishes

Natalie

Focus on diclofenac OTC

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Introduction

Nonsteroidal anti-inflammatory drugs (NSAIDs) are commonly prescribed for the treatment of inflammatory conditions, to relieve pain and reduce fever.¹⁻⁴ They are used in the management of a variety of conditions including painful musculoskeletal conditions, dysmenorrhoea, fever, gout and arthritic conditions.^{3,4} Due to their role as opioid-sparing agents, they are also used as analgesics in certain cases where opioids are currently being used.^{3,4} Although diclofenac is a Schedule 3 (S3) medicine, it may be sold under certain circumstances without a prescription as a Schedule 2 (S2) medicine.⁵⁻⁷

The role of NSAIDs

How NSAIDs work, as well as their side effects, can probably be attributed to their ability to inhibit an enzyme called cyclooxygenases (COX) which is essential for the production of prostaglandins.^{1-4,6,7} Non-selective NSAIDs, such as diclofenac, inhibit both COX-1 and COX-2 enzymes.⁴

- COX-2 enzymes (found at sites of inflammation) are primarily responsible for the production of prostaglandins that promote inflammation and subsequent pain. By inhibiting COX-2, NSAIDs help to alleviate inflammation, pain and fever.^{1,2}
- COX-1, also produces prostaglandins, but these prostaglandins play a different role in the body. They are normally found in the stomach, blood platelets, and blood vessels and play a role in blood clotting and protecting the digestive tract from stomach acid.¹ Many of the side effects of NSAIDs such as digestive upsets, ulcers and gastrointestinal (GI) bleeding are related to the inhibition of COX-1 enzymes.^{1,2}

Indications for diclofenac OTC use

The registration of diclofenac as a S2 medicine is subject to specific rules relating to the indication, maximum daily dose as well as

maximum duration of treatment.⁵

As per the South African Health Products Regulatory Authority (SAHPRA), diclofenac may be sold without a prescription, when intended for:

- The emergency treatment of acute gout attacks. This is subject to a maximum daily dose of 150 mg for a maximum period of three days.⁵
- The treatment of fever or mild to moderate pain of inflammatory origin or for the treatment of post-traumatic conditions. This is subject to a maximum daily dose of 75 mg for a maximum period of five days.⁵

Focus on K-Fenak OTC®

Although both K-Fenak® tablets and K-Fenak OTC® tablets contain diclofenac potassium as the active ingredient, K-Fenak® tablets are registered as a 3 product, while K-Fenak OTC® is registered as a S2 product and may be sold over-the-counter (OTC), without a prescription (see above indications for diclofenac OTC use).⁶⁻⁸

Safety considerations

Contraindications and precautions

K-Fenak OTC® is contraindicated in people:^{3,6-8}

- Who are allergic (hypersensitive) to diclofenac or any of the ingredients in the tablet.
- With a history of an allergic reaction to another NSAID including aspirin. This is due to the possibility of cross-reactivity.
- With asthma or history of asthma, urticaria, acute rhinitis or other allergic-type reactions after taking aspirin or other NSAIDs. They are more prone to side effects such as exacerbations (worsening) of asthma, urticaria (hives) or angioedema (swelling of the face, lips, or tongue).
- Who currently have, or previously had, recurrent ulcers, bleeding, or GI perforations.

- With a history of cardiac (heart) failure, angina, stroke or peripheral arterial disease (reduced blood flow to limbs). Diclofenac may cause oedema (fluid retention) that may lead to heart failure. NSAIDs (except aspirin) may increase the risk of serious cardiovascular events including heart attack or stroke.
- With porphyria.
- With renal (kidney) or liver failure.

K-Fenak OTC® is also contraindicated during pregnancy and breastfeeding.⁶⁻⁸

Side effects

Side effects include GI irritation, cardiovascular events and renal impairment.³

The risk of side effects increases with increased dose and duration. It is therefore recommended that NSAIDs be used at the lowest effective dose for the shortest possible period.^{3,6-8}

Side-effects can occur at any time while using NSAIDs. Discontinuing K-Fenak OTC® treatment and consulting a doctor may be necessary in certain cases, for example, if the patient develops:^{1-3,6-8}

- Asthma-like symptoms, urticaria or other allergic-type reactions.
- Stomach pain, heartburn, reflux or passes black, foul-smelling, tarry stools. Minor GI effects, e.g. dyspepsia may occur early in treatment. Serious GI effects such as bleeding, ulceration and perforation can occur at any time, irrespective of duration of treatment. The risk is higher with increasing doses.
- Signs or symptoms associated with a heart attack, stroke or oedema.
- Unusual bleeding (e.g. blood in the urine, bleeding of the gums), easy bruising or vomits blood or a substance resembling coffee grounds.
- Difficulty or inability to pass urine.

Interactions

Due to the risk of drug-drug interactions it may be prudent for patients who are currently using other medications to first consult with their doctor or pharmacist before they use K-Fenak OTC®.⁸ Examples of interactions include (but are not limited to):^{1-3,6-8}

- Concomitant use of two or more NSAIDs should be avoided as there is no additional benefit as it may lead to increased side-effects or severe toxicity.
- There is an increased risk of bleeding or ulceration when diclofenac is used concomitantly with corticosteroids, blood thinning medicines (e.g. warfarin), medicines that reduce platelet function (e.g. aspirin or clopidogrel), or certain antidepressants (e.g. selective serotonin reuptake inhibitors [SSRIs]).
- Concomitant use may reduce the blood pressure lowering effect of diuretics ("water pills") and certain antihypertensive medicines (e.g. angiotensin-converting enzyme [ACE] inhibitors,

beta-blockers).

- Concomitant use of alcohol may aggravate GI irritation.

Safety considerations listed in this article are not all-inclusive. Please refer to the package insert for additional information regarding dosing, side effects, special precautions, contraindications, and monitoring instructions.

From a practical point of view

- K-Fenak OTC® should ideally be taken with or after food.^{7,8}
- NSAIDs should be used at the lowest effective dose for the shortest possible duration of treatment.^{3,6}
- Side effects can occur at any time while using NSAIDs. The risk of side effects increases with increased dose and duration.^{1-3,6-8}
- Elderly people, especially those who are frail, are at increased risk of developing side effects and should use the lowest effective dose.^{1-3,6-8}
- Patients should be advised to stay adequately hydrated while using NSAIDs.⁶

Conclusion

It is important to be aware of the regulations pertaining to the OTC use of diclofenac.⁵ NSAIDs are commonly used for a variety of conditions. However, they may not be suitable for all people.^{1-4,6-8} In addition, in some cases, medical supervision or special precautions may be required, for example, in older people, in people with underlying medical conditions, in people taking medicines that may interact with diclofenac, or if the patient experiences side effects while using K-Fenak OTC®.^{2,6-8}

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K-Fenak OTC contains diclofenac **potassium**, which **dissolves and absorbs faster** than diclofenac **sodium**.¹

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Colds and flu

Jacky van Schoor

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Abstract

Viral infections of the upper respiratory tract, such as the common cold and influenza, are the most common syndromes of infection in humans. For most people, symptoms are self-limited. However, these ailments are frequent reasons for which patients seek counselling from healthcare providers, particularly in community pharmacies. While many over-the-counter (OTC) cold and flu remedies have not been shown to be clinically effective, they do appear to lessen the immune response to the infecting virus, and there is little doubt that appropriate symptomatic treatment can make the patient feel better. Choice of therapy depends on which symptoms predominate.

Introduction

The common cold and influenza (flu) are common respiratory infections in humans, with adults having two to five colds each year and school children having from seven to 10 colds per year.¹ Influenza is relatively uncommon compared with the large number of common colds that occur.² Many patients will report having “flu” when it is far more likely that the person has a cold.

While the common cold and flu share many symptoms, they are caused by different viruses.³ Flu is caused by influenza viruses only, whereas the common cold can be caused by more than 200 different viruses.^{3,4}

Rhinoviruses, which include more than 100 serotypes, are the most common viruses associated with cold symptoms and cause 30 to 50% of colds.⁴ Coronaviruses may cause 10 to 15% of colds, although this percentage may be higher since the arrival of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and its evolution into variants that generally cause less severe disease.⁴

Symptoms of colds and flu

It is not possible to determine which virus caused the cold or flu based on symptoms alone, because all likely viral pathogens may cause similar symptoms.⁴ In general:

- Flu symptoms begin abruptly and are more intense.³ People with flu are more likely to have a fever, sweats and chills, headaches and muscle aches and pains, be bedbound and unable to go about their usual daily activities.^{2,3,4}
- Cold symptoms have a more gradual onset and symptoms are usually milder.² People with colds are more likely to have a runny or blocked nose than people who have flu.³

Symptoms of the common cold are largely due to the response of the immune system to the infection, rather than to direct viral damage to the respiratory tract.⁴ Symptoms vary from person to person, but runny nose and nasal congestion are the most common symptoms.⁴ Other common symptoms include sore throat, cough and malaise (a general feeling of discomfort or illness).⁴ Colds generally do not lead to serious complications such as pneumonia.³

The intensity and type of symptoms of the common cold may also be related to the age of the patient, underlying illnesses and the infecting virus.⁴ Most of the viruses that cause colds are capable of reinfection after re-exposure, but subsequent infections with the same or similar viruses are usually milder and of shorter duration.⁴

Influenza should be suspected in patients with abrupt onset of fever, cough, and muscle pain during the influenza season (usually between May and September in South Africa).^{5,6,7} Other common symptoms include malaise, sore throat, headache, nausea, and nasal congestion.⁶

In most people, influenza is an uncomplicated illness that resolves after three to seven days.⁷ However, because of the damage caused to the airways by the influenza virus, influenza can be complicated by secondary lung infections such as pneumonia, particularly in high-risk patients such as children under five years of age and older people (65 years of age and older).^{2,3,7}

Table I: Comparison of the symptoms of colds and flu^{5,6}

Symptom	Common cold	Influenza
Fever	Rare	Usual; sudden onset and may last 2–5 days
Headache	Rare	Common
Muscle aches and pains	Slight	Usual, often severe
Fatigue, weakness	Sometimes	Usual, can last up to 2–3 weeks
Blocked or runny nose*	Common	Sometimes
Sneezing	Usual	Sometimes
Sore throat	Common	Sometimes
Cough	Common	Common
Extreme exhaustion	Never	Usual, at the beginning of the illness

*Nasal discharge in patients with the common cold may be clear or thick, white, yellow or green.⁴ Many patients place importance on the colour of the nasal discharge, but coloured nasal discharge is a normal self-limited phase of the common cold and does not mean that the patient has bacterial sinusitis or that the patient needs an antibiotic.⁴

- High-risk patients with symptoms of influenza and patients with severe or persistent symptoms, fever that improves and then returns, severe or productive cough, chest pain, difficult or painful breathing and shortness of breath should be referred to the doctor immediately.^{2,6,7}

Managing the symptoms of colds and flu

Although symptoms of the common cold and influenza are usually self-limited and resolve without treatment, the use of over-the-counter (OTC) medicines in the treatment of cold and flu symptoms is widespread.² There is little doubt that appropriate management of the symptoms of the common cold or flu can make the patient feel better and it is therefore important to select treatment based on the patient's symptoms, and taking into account the patient's preferences.²

Nasal symptoms

Topical saline applied to the nasal cavity may help remove bothersome nasal secretions.⁸ In infants and young children, topical saline may be applied using saline nose drops while a saline nasal spray or saline nasal irrigation may be suitable in older children and adults.⁸

Topical decongestants such as xylometazoline (e.g. Otrivin[®] or oxymetazoline e.g. Iliadin[®]) may be used short-term (no longer than three to five days) to relieve nasal congestion associated with the common cold.⁹

Oral decongestants such as phenylpropanolamine and pseudoephedrine are no longer available OTC as single-ingredient preparations in South Africa but are available in combination with

an analgesic or an antihistamine or in combination with an analgesic and an antihistamine. While antihistamines alone are of minimal benefit in patients with the common cold, the combination of an antihistamine and a decongestant appears to be more beneficial than either component alone.⁹

While combination cold and flu medicines may be considered in children 12 years of age and over and in adults with moderate to severe symptoms, they should be avoided in children under two years of age.^{10,11} For children over two years of age, these medicines may only be prescribed by a doctor or a pharmacist.¹⁰

Fever, headache and malaise

Paracetamol and nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, may be used for the treatment of fever, headache, malaise, muscle and joint pains.⁹ Short courses of standard doses are generally effective and well-tolerated in children and adults.^{9,11} Aspirin is included in some combination cold and flu medicines but should be avoided in children under 16 years of age.^{12,13}

Sore throat

Paracetamol and NSAIDs such as ibuprofen have been shown to relieve sore throat associated with colds and flu.¹⁴ Several topical therapies are also available to treat a sore throat and are supplied in the form of throat sprays, oral rinses or gargles, and lozenges.¹⁴ The advantages of local therapies for sore throat include direct application to the site of pain and the reduced risk of side effects.¹⁴

Several products used to treat sore throat are combination products that contain an antiseptic such as chlorhexidine and a local anaesthetic such as benzocaine, or an analgesic.¹⁴

Table II: Symptom-based treatment of colds and flu

Nasal symptoms	Fever, headache, malaise	Sore throat
Topical saline e.g. Salex [®] Metered Nasal Spray	Paracetamol e.g. Panado [®]	Antiseptic/anaesthetic sprays or gargles e.g. benzocaine/chlorhexidine (Coryx [®] Throat Solution) Throat lozenges
Topical decongestants* e.g. oxymetazoline (Oxymist [®]) e.g. xylometazoline (Sinutab Nasal Spray [®])	NSAIDs such as ibuprofen e.g. Brufen [®]	
Oral decongestant in combination with an antihistamine* e.g. pseudoephedrine/ triprolidine (Actifed [®] Cold)	Aspirin (in children > 16 years)	
Analgesic/decongestant combination* e.g. ibuprofen/pseudoephedrine (Advil [®] Cold & Sinus Tablets)		

*Use under the doctor or pharmacist's supervision in children under 12 years of age.¹¹ Do not use for longer than three to five days. *Do not use in children under two years of age. Use under the doctor or pharmacist's supervision in children over two years of age.

Cough

There is no good evidence for or against the effectiveness of OTC medicines for acute cough.^{2,9} While the clinical effectiveness of cough remedies is debatable, many people who visit the pharmacy for advice do so because they want some relief from their symptoms, and cough remedies can have a useful placebo effect.² Nonetheless, cough and cold medicines containing antihistamines, decongestants, dextromethorphan, guaifenesin, or pholcodine should not be used in children under two years of age and may only be prescribed by a doctor or pharmacist for children over two years of age.¹⁰

Please check the manufacturer's professional information for indications, contraindications and dosage instructions. If using a combination of medicines, ensure that products selected do not contain the same or similar ingredients to avoid doubling-up on the doses of these medicines.

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[S] W/16.3/58. Coryx Throat (Solution). Each 100 mL of solution contains: benzocaine 266,667 mg, chlorhexidine gluconate solution (20 % v/v) 1,0 mL. For full prescribing information, refer to the Professional Information approved by the medicines regulatory authority. References: 1. Professional Information: Coryx Throat (Solution). CIPLA MEDPRO (PTY) LTD. Co. Reg. No. 1995/004182/07. Building 9, Parc du Cap, Mispel Street, Bellville, 7530, RSA. Website: www.cipla.co.za Customer Care: 080 222 6662. [1630358304]



Managing that winter cough

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Abstract

An acute cough is a common symptom associated with colds and influenza. When assessing patients presenting with a cough in the pharmacy, it is important to identify if the cough is acute or chronic and whether there are any red flag symptoms that require referral to the doctor. Over-the-counter (OTC) medicines for coughs and colds should be avoided in children under the age of two years. Older children and adults may be treated with an OTC product, taking into consideration the nature of the cough and after referring to the manufacturer's prescribing information.

Introduction

Cough is normally a protective reflex that prevents the aspiration of food and fluid into the airways and helps remove mucus (phlegm) and foreign substances from the airways.¹ It is also a common symptom associated with colds and influenza (flu) and may persist for three weeks or more.¹

The first days of an upper respiratory tract infection (URTI) such as a cold or flu are often associated with a dry and un-productive cough that serves no useful purpose and may cause loss of sleep and exhaustion.¹ This cough may be voluntary (rather than reflex) and be related to a sensation of airway irritation.¹

Productive cough usually occurs later during the URTI and may be related to inflammation spreading to the lower airways and triggering mucus production.¹

Wet or dry – an outdated classification?

Traditionally, coughs have been described as being either “wet” (productive, chesty and producing phlegm) or “dry” (non-productive,

tickly, tight and not producing phlegm).^{2,3} This classification into “wet” and “dry” cough has been challenged and instead of asking patients whether their cough is “wet” or “dry”, the important thing to identify is whether the cough is acute (has lasted less than three weeks) or chronic (has lasted more than eight weeks), together with an assessment of red flag symptoms, which require referral to the doctor.^{2,3} A cough that lasts longer than three weeks following a viral URTI is often called a “post-viral” or post-infectious cough and may affect up to 25 % of adults after a respiratory infection.⁴

Table 1: Red flag signs and symptoms accompanying cough that require referral to the doctor³

Cough that lasts more than three weeks
Coughing blood or blood present in phlegm
Unexplained cough that recurs on a regular basis
New or altered cough in a smoker or a patient with poor immunity
Chest pain, difficulty or painful breathing or shortness of breath
Stridor (high-pitched noise) or other respiratory noises
Distressing cough in frail, older people

Acute cough – is treatment required?

Acute cough associated with a cold or flu is usually self-limiting and will get better with or without treatment.³

The evidence to support the use of over-the-counter (OTC) medicines for acute cough is not strong, and because these medicines can have side effects, cough and cold medicines that contain antihistamines, decongestants, expectorants or suppressants are contraindicated for use in children under the age of two years in South Africa and may only be used in children over the age of two years when prescribed by a doctor or pharmacist.⁵ Indeed, OTC medicines for common cold symptoms are best avoided in children under six years of age.⁶

- Warm fluids and honey (only in children over one year) given straight or diluted in liquid are options for treating acute cough in young children.⁶

While their effectiveness remains debatable, cough remedies for an acute cough can have a useful placebo effect in older children and adults and many patients report finding them helpful.⁷

- A cough suppressant such as dextromethorphan may be useful for acute cough if sleep is disturbed.⁷ Cough suppressants, however, may cause retention of phlegm, which may be harmful in patients with bronchitis.⁷
- Guaifenesin and ammonium chloride are thought to exert an expectorant effect by loosening phlegm.²

While single-ingredient preparations for acute cough are preferred, some patients may prefer to use combination products.³ Pharmacists and pharmacist's assistants should refer to the manufacturer's prescribing information and use their professional judgement to guide patients in the selection of the most appropriate products.³

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From Ancient Remedy to Clinical Tool: Silver in Wound Healing

One of the most effective wound treatments in modern medicine has been around for over 2 400 years! When Hippocrates recommended silver for treating wounds in his 400 BC book *On Ulcers*, he could hardly have imagined that this remedy would still be widely used in 2025. What's even more fascinating is that modern science now backs what he intuitively knew, with the effects of silver in wound healing well documented in contemporary research.

So, why has silver stood the test of time? The answer lies in its near-miraculous, multimodal action in wound care.

Pathogens don't stand a chance

Silver's first line of action in wound care is its potent ability to destroy pathogens. And it's not just limited to bacteria, silver effectively targets viruses and fungi as well, all of which can hinder proper wound healing.

The science behind silver's healing power

Research reveals that silver does far more than just fend off harmful microbes. When applied to a wound, it triggers a series of events that significantly boost the likelihood of successful healing.

The fibroblast connection.

These specialised connective tissue cells produce collagen and other essential fibres crucial for tissue repair and recovery. Silver binds to fibroblasts, encouraging them to revert to a more primitive state, making them more adaptable and efficient in the wound-healing process. This ultimately leads to enhanced collagen production and faster recovery.

Can any silver product be used safely to achieve these wound healing benefits? The short answer is no, not all silver products are created equal, and some may even be harmful. The risks are

primarily linked to unregulated or inappropriate forms of silver, such as high-concentration colloidal silver, banned nano silver formats, or silver compounds produced without proper quality control.

What sets Silverlab Healthcare apart

Silverlab Healthcare has addressed these concerns by formulating a pharmaceutical-grade ionic silver (Ag^+) suspended in purified, deionised water. Manufactured under validated GMP (Good Manufacturing Practice) conditions, Silverlab products are free from stabilisers, carriers, and excipients. The typical concentration remains below 0.003%, offering a remarkably safe profile. Toxicology assessments, ranging from lung cell line studies to animal oral and inhalation models, consistently demonstrate minimal risk, even at higher exposure levels.

Wound care that works

For practical clinical use, Silverlab offers a convenient and effective product line suitable for various wound types and stages:

- Silverlab Healing Gel: For open wounds, cuts, and abrasions
- Silverlab Healing Cream: For dry or cracked skin requiring repair
- Silverlab Skin Rescue: A multipurpose option for skin conditions
- Silverlab Burn Rescue: For soothing and treating thermal injuries
- Silverlab Healing Spray: Ideal for broad application across all wound types, especially where gentle, touch-free coverage is preferred

The bottom line

Silverlab's ionic silver formulations not only guard wounds against infection but also actively support faster healing and reduced scarring, making them a smart, science-backed addition to any pharmacy's wound care offering.

Clinically Trusted. Naturally Formulated.

- ✓ Burns & wounds
- ✓ Oral infections & eye infections
- ✓ Rashes & fungal infections



Silverlab's **HEALING SPRAY** is a versatile product for burns, wounds, acne, rashes and fungal conditions like athlete's foot. **HEALING SPRAY** targets areas directly by spraying it onto an affected area, and is clinically proven to repair damaged tissues in open wounds and burns.



More info



Seasonal influenza in high-risk individuals

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Abstract

Seasonal influenza can result in severe or complicated disease, especially in certain high-risk individuals. Those at higher risk of severe disease include individuals older than 65 years of age, pregnant women, those with chronic conditions such as diabetes, chronic heart and lung disease, those with immunosuppression such as HIV and AIDS, cancer, and children younger than five years of age. These high-risk individuals may develop worsening of their chronic conditions, secondary infections such as pneumonia, inflammation of the brain and heart, Reye's syndrome and multi-organ failure. Influenza complications can even result in death. It is of utmost importance that individuals, especially those at high risk of severe or complicated disease, are vaccinated as soon as the new flu vaccine becomes available every year to help prevent influenza.

Introduction

Globally, there are around a billion cases of seasonal influenza annually. For most people, flu symptoms are mild and resolve in a few days, but for some people influenza can lead to severe illness, hospitalisation and even death. Globally, influenza results in three to five million cases of severe illness and between 290 000 and 650 000 deaths every year.¹ In South Africa, influenza accounts for over 56 000 hospitalisations² and between 6 000 to 11 000 deaths every year, with around half of these deaths occurring in the elderly and around 30% occurring in HIV-infected individuals.³

Who is at high risk of severe or complicated influenza?

The flu season this year started early, during the week of 24 March 2025, and although the early start does not necessarily mean that

the flu season will be more severe, it does mean that people are already at risk of contracting influenza.⁴ Those who are at greater risk of severe illness and complications from influenza include:^{4,5}

- Pregnant women
- People living with HIV
- Individuals with chronic conditions such as
 - diabetes
 - lung disease (e.g. asthma, chronic obstructive pulmonary disease [COPD])
 - heart disease (congestive heart disease)
 - tuberculosis
 - immunosuppression (cancer, treatment with immunosuppressive medicines such as chemotherapy or steroids)
 - kidney disease
 - liver disease
 - blood disorders (e.g. sickle cell disease)
 - neurological and neurodevelopmental conditions (e.g. epilepsy, cerebral palsy, stroke, mental disability, moderate to severe developmental delay, spinal cord injury, muscular dystrophy, etc.)
- People who are morbidly obese
- People older than 65 years of age
- Children younger than 18 years of age receiving chronic aspirin therapy
- Children younger than five years of age (particularly those younger than one year)

What are the risks?

Most people will present with non-severe or uncomplicated influenza with symptoms that may include fever, cough, sore throat, runny nose, headache, joint and muscle pains and feeling unwell which lasts around a week.^{1,5}

Table I: Flu vaccines available in South Africa in 2025 and recommended dosing^{6,7}

Age	Vaxigrip Tetra [®]	Influvac [®]
6 months – 3 years	0.5 ml (1 or 2* doses)	0.25 ml (1 or 2* doses)
3–9 years	0.5 ml (1 or 2* doses)	0.5 ml (1 or 2* doses)
≥ 9 years	0.5 ml (single dose)	0.5 ml (single dose)

*All children six months to nine years of age need a second, age-appropriate dose of the influenza vaccine at least four weeks later if it is the first time ever that they are receiving a flu vaccine. Thereafter and for children nine years of age and older, only a single dose of the influenza vaccine is recommended per season.^{5,6,7}

Some patients, particularly high-risk patients, are at increased risk of developing complications from influenza, such as pneumonia and may require hospitalisation. Signs and symptoms of pneumonia include fever, fast and painful breathing, inability to feed and indrawing of the lower chest wall. Influenza can also lead to other complications such as:⁵

- Secondary infections such as sinusitis and otitis media
- Multi-organ failure
- Worsening of underlying diseases such as diabetes, lung and heart conditions
- Inflammation of the brain
- Inflammation of the heart
- Reye's syndrome (swelling in the liver and brain)

High-risk patients presenting with symptoms of influenza should be referred to the doctor. Antiviral medicines (available on prescription from a doctor) administered within 48 hours of the onset of symptoms may reduce the severity and the duration of influenza symptoms.

Since complications from influenza can be severe and since the flu season has already started, it is important to try to prevent influenza infection, especially in high-risk individuals.^{4,5}

How to prevent influenza

To help prevent transmission of influenza to other people, people should:⁴

- Wash their hands often
- Cover coughs and sneezes with their elbows or a tissue
- Avoid close contact (such as kissing or sharing drinks) with people who are sick
- Stay at home if they are feeling unwell

The most effective method for prevention and control of influenza is through vaccination. The vaccine was 72,7% effective in preventing influenza in individuals of all ages in 2024.⁵

The National Department of Health provides influenza vaccination free of charge to individuals 65 years and older, pregnant women, those with diabetes, chronic heart disease, chronic lung

disease, kidney disease and patients with immunosuppressive conditions such as HIV and AIDS or cancer. However, vaccination is recommended for all individuals (especially if they have any risk factors) and healthcare workers.^{4,5}

For vaccination with the quadrivalent influenza vaccine (QIV) Vaxigrip Tetra[®], patients six months and older should be vaccinated with a full dose (0,5 ml) of the vaccine. When using Influvac[®], patients six months to three years of age need half a dose (0,25 ml) of this trivalent influenza vaccine (TIV) whilst patients three years of age and older need a full dose (0,5 ml) (See Table I). All children six months to nine years of age need a second, age-appropriate dose of the influenza vaccine at least four weeks later, if it is the first time ever that they are receiving a flu vaccine, thereafter only one dose per season. A single dose of the influenza vaccine is recommended every season for children nine years of age and older, as well as for adults.^{5,6,7}

Conclusion

Influenza season has started early this year, and individuals are already at risk of becoming infected. Everybody, but especially those at high risk, should be vaccinated as soon as possible with a 2025 influenza vaccine to help prevent influenza and its associated complications.

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Dry Eye

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Abstract

Eyes receive moisture and protection from the tear film each time one blinks, but several conditions can affect this tear film. A patient presenting in the pharmacy with the common condition of dry eyes may be advised to use one of the many lubricating eye drops on the market, but often a nutritional approach will complement and support the treatment.

Introduction

The causes of dry eyes are often complex involving various factors that disrupt the normal functioning of the tear film which is composed of three layers (lipid, aqueous, and mucin). The tear film is essential for maintaining eye health and good vision. Any changes in the production, composition, or drainage of tears can lead to the development of dry eye disease. There are glands on the edge of the eyelids called meibomian glands which secrete the lipid layer of the tear film. If these glands become blocked, an unstable tear film and increased tear evaporation results. Environmental factors, such as low humidity, air pollution, and exposure to cigarette smoke, can contribute to dry eye symptoms. Ageing is another significant factor: as individuals grow older, the production of tears may decrease, and the tear film quality may change. Hormonal changes, particularly in women, experienced during pregnancy, oral contraceptive use, hormone replacement therapy, and menopause can also contribute to dry eye development. Certain medical conditions, particularly autoimmune disorders, can directly impact the production of tears. Additionally, some medications, including antihistamines, decongestants, antidepressants, and certain eye drops used to treat glaucoma, can reduce tear production, and contribute to dry eye symptoms.

Eye surgeries can also cause dry eyes by disrupting the nerves and altering tear film production. Contact lens wear, particularly if the

lenses are not properly fitted or maintained, can lead to dry eye symptoms due to decreased oxygen flow to the eye surface and altered tear film quality.^{1,2}

Signs and symptoms

The hallmark symptoms of dry eyes include a stinging, burning, or scratchy sensation in the eyes, often accompanied by a gritty feeling. Individuals with dry eyes may also experience stringy mucus in or around the eyes, sensitivity to light, eye redness, and a sensation of having something in the eyes. Moreover, dry eyes can present as difficulty wearing contact lenses, challenges with nighttime driving, watery eyes (an attempt by the body to settle the irritation), blurred vision, and eye fatigue. The sensation of having a foreign body in the eyes is a common complaint among individuals with dry eyes, contributing to discomfort and visual disturbances.² Although the symptoms may improve or worsen over the natural course of the disease, dry eye disease is considered a lifelong condition. Symptoms can become very uncomfortable and interfere with daily activities if they are left untreated.

Causes

Dry eyes are caused by disruptions to the healthy tear film's three layers: fatty oils, aqueous fluid and mucus, which usually keep the eye surface lubricated, smooth and clear. The cause is either decreased tear production or increased tear evaporation, or a combination.³

Decreased tear production is commonly caused by:

- Ageing
- Certain conditions, especially autoimmune diseases
- Some medications, for example antidepressants, antihistamines and decongestants
- Corneal nerve desensitivity

Table I: Examples of drops to relieve dry eye symptoms

Brand name range	Quick short-term relief	Sustained relief	Evaporative Prevention	Nighttime use
<i>Artelac™</i>	Splash Moisture	Intense	Advanced Complete	Advanced gel
<i>Blink™</i>	Refreshing Contacts	Intensive Plus		
<i>Optive™</i>	Original	Fusion	Plus Omega	Gel drops
<i>Systane™</i>	Ultra Ultra-fast acting	Complete Hydration-long lasting	Balance	Gel drops
<i>Xailin™</i>	Fresh Hydrate	HA/Plus Gel		Night

Increased tear evaporation is often due to²:

- Meibomian gland dysfunction
- Blinking infrequently
- Eyelid disorders, where the eyelids either turn inward or outward
- Allergies
- Preservatives in eye drops
- Poor air quality
- Vitamin A deficiency
- Contact lens use

Treatment

Eye drops known as artificial tears, are one of the primary treatments for dry eyes and help reduce inflammation and improve lubrication.⁴ The main types of ingredients used in tear substitutes are described below:

1. *Lubricants* such as cellulose, carbomers, hyaluronic acid and povidone, increase the tear film thickness and prevent evaporation by creating a gel-like cushion.
2. *Electrolytes* help maintain the moisture balance of the eye surface. Agents include sodium, potassium, and chloride.
3. *Osmoprotectants* protect against loss of moisture from the eye surface and subsequent damage. Betaine, sorbitol, and glycerin are examples.
4. *Oily agents and surfactants* help replenish the lipid layer and prevent further moisture loss. Examples include castor oil, paraffins and lanolin.⁴
5. *Preservatives* protect the tear substitute from bacterial growth once the bottle is opened. Some can irritate the eyes, especially in severe dry eye cases.⁵

Note: Some single-use tear-film substitute products are preservative free.

Artificial tears come in various forms: liquids, gels, and ointments, and are available in bottles, tubes or unit dose vials (refer to Table I). Thicker formulations may only be suitable for use at night as they can blur the vision. Factors to consider when recommending an artificial tear replacement are contact lens use, cost, convenience, and environmental impact.

Studies have shown that certain nutrients help the eyes stay properly hydrated.^{3,6,7}

- Omega fatty acids are responsible for forming the stabilising oil layer in the tear film, in addition to having an anti-inflammatory effect.

- Vitamin A (retinol), helps protect the cornea or outer surface of the eye, improving tear smoothness and quantity.
- Vitamins B2, B5 and B12 protect the eye from cell damage, encourage a healthy tear film and aid optical nerve function.
- Vitamin C protects against oxidative stress, benefits blood circulation and assists collagen synthesis.
- Vitamin D may improve the coating of the tears across the eye surface and reduce inflammation.
- Vitamin E is necessary to protect eyes against cell damage.
- Lutein and zeaxanthin are antioxidants that protect eyes against harmful UV rays.
- Zinc is responsible for getting vitamin A from liver to retina and produces melanin, a pigment that protects eyes.
- "Vitamin W" = Water: staying hydrated can help improve eye comfort.

Specific combination formulations are available as oral supplements to help improve dry eye symptoms, such as:

- Ocuvite Complete™
- Fithealth Dry Eye and Dry Eye Plus™
- Biogen Ocumax Plus™
- Vital Eye Health™

Research on supplements for dry eyes is still evolving and patients should consult a healthcare professional before taking any supplements for dry eyes. In high doses, some of these supplements can be unsafe or contraindicated, for example, products containing omega fatty acids should be used with caution in patients on blood thinners.⁷

Long-term outlook

It is likely that a dry eye sufferer needs to take measures indefinitely to control their symptoms. People who have dry eyes may experience complications such as eye infections, damaged and inflamed corneas, vision loss and decreased quality of life.²

Refer a patient to a doctor or optometrist if there is:

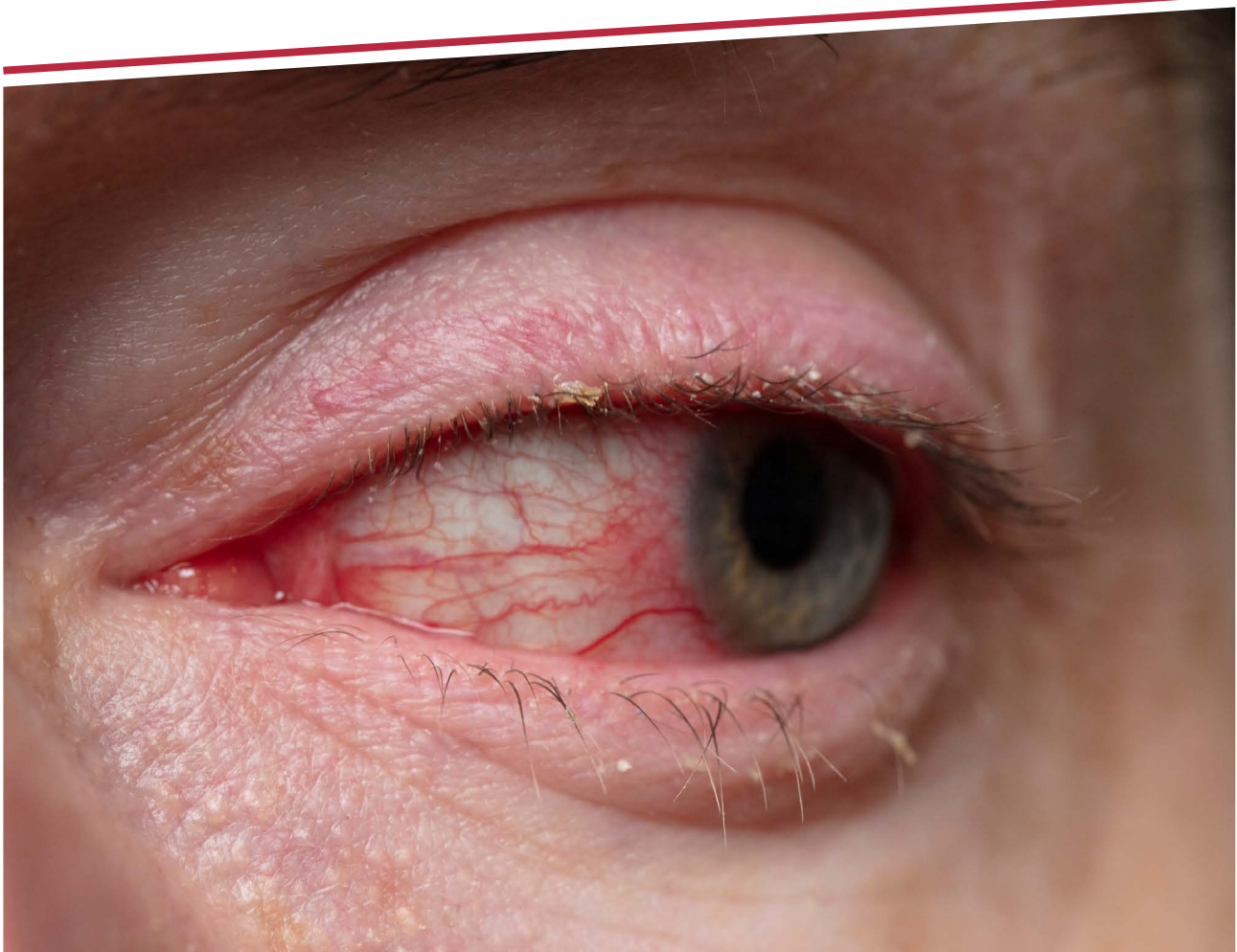
- a sudden change in vision
- severe pain or redness
- persisting irritation

Conclusion

Pharmacists and pharmacist's assistants can be instrumental in identifying agents that may contribute to or exacerbate dry eye.⁷ Healthy nutrition and staying hydrated helps to ensure eyes get the vitamins and minerals needed, but a topical eye remedy may be required to relieve symptoms and improve the tear film quality.²

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Nutrition and supplements for fussy eaters

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Abstract

When children prefer to consume only a limited variety of foods, they are often labelled as “fussy” or “picky” eaters. Fussy eating is a common challenge in childhood and can lead to nutritional deficiencies, poor growth, and a higher risk of illness. Deficiencies of essential nutrients can negatively impact both short-term and long-term health outcomes. Key dietary components for children include protein, omega-3 fatty acids, vitamins, minerals, and fibre, all of which play crucial roles in healthy development. Managing fussy eating involves behavioural strategies such as repeated exposure to new foods and promoting a positive mealtime environment. Nutritional supplements can serve as a supportive measure during periods of limited dietary variety. It is important to note that supplements should not replace a healthy diet and that a food-first approach is always encouraged.

Introduction

Fussy eating can turn mealtimes into daily struggles for many families. Fussy or picky eating typically develops in childhood and describes the tendency to only eat familiar foods, while being reluctant to try new foods. Fussy eating can lead to frustration and concern among caregivers.¹ Beyond the dinner table drama, eating only a limited number of foods may lead to nutrient deficiencies, poor growth and a higher risk of chronic disease later in life.^{2,3,4} Managing picky eating usually involves behavioural strategies such as repeated exposure to new foods and establishing positive mealtime routines.⁵ However, during periods when dietary variety is limited, nutritional supplements may play a valuable role in helping children meet their nutrient needs.⁶

Importance of nutrition for children

Good nutrition is essential for supporting the health, growth, and development of children.⁷ During early childhood, the body and brain undergo rapid changes, and a diet lacking in energy and essential nutrients can negatively impact physical growth, cognitive development, and immune function.⁷ In South Africa, deficiencies in energy, protein and micronutrients have long been a public health concern.⁸ Insufficient intake of vitamins and minerals can cause micronutrient deficiencies, which may lead to various health problems.^{7,8} Deficiencies of vitamin A, iron, and zinc are relatively common.⁸ Other nutrients and dietary components particularly important for children include vitamin C, vitamin D, vitamin E, folate, vitamin B12, calcium, omega-3 fatty acids and fibre.^{2,6,7} A poor intake of key nutrients can have short-term consequences such as poor immune function and digestive problems and may contribute to the development of chronic diseases later in life.²

Key nutrients

Macronutrients

Calorie-containing macronutrients provide the energy our bodies need to perform basic functions and support growth and development in children.⁹ Carbohydrates, fat and protein are examples of macronutrients. Carbohydrates are the body's preferred energy source and are predominantly found in grains, fruits and starchy vegetables. Healthy fats, especially essential fatty acids like omega-3s, play a significant role in brain development and overall health. Omega-3s are found in foods like fatty fish, nuts and seeds. Protein is one of the most important nutrients for growth and development and can be found in foods such as meat, dairy and legumes.⁹ Children who are fussy eaters often fail to consume sufficient protein, increasing the risk of malnutrition, stunted growth, and poor immune function.^{2,6,7}

Table I: Essential micronutrients, their functions and food sources^{8,9}

Micronutrient	Function	Examples of Food Sources
Vitamin A	Supports healthy vision, immune function, and cell growth.	Yellow-orange vegetables, eggs, liver, fortified cereals.
Vitamin C	Essential for collagen production and immune health.	Fruits (especially citrus), and vegetables.
Vitamin D	Supports normal bone development and immune function.	Fish, eggs, liver, fortified cereals.
Vitamin E	Acts as a powerful antioxidant.	Vegetable oils, margarine.
Vitamin B12	Supports nerve function and red blood cell formation.	Animal products such as meat and eggs.
Folate	Important for normal growth and cell division.	Leafy green vegetables, legumes, fortified cereals.
Iron	Needed for red blood cell production, growth, and brain development.	Meat, green leafy vegetables.
Zinc	Supports immune health, wound healing, and growth.	Meat, legumes, whole grains.
Calcium	Essential for bone health.	Dairy products, fortified milk and grains.

Table II: Examples of nutrient supplements available at the pharmacy

Product	Key nutrients
Nutritional supplement drinks	
Abbott: PediaSure*	Protein, omega-3s vitamins A, C, D, E, B12, folate, iron, zinc, calcium and more*.
Lifegain* Junior	Protein, omega-3s vitamins A, C, D, E, B12, folate, iron, zinc, calcium and more*.
Nutritional supplements suitable for children	
Alpha: KiddyVite Immune Gummies	Vitamins A, C, D and E, Zinc
Mibiotix Kids Chews	Probiotics and a prebiotic*
Vital: Kids A-Z Multivitamin Chewable	Vitamins A, C, D, E, B12, folate, zinc, calcium and more*.
Wellvita: Star Kids Multivitamin Gummy Bear	Vitamins A, C, D, E, B12, folate, zinc and more. *

*Please see product labelling for full composition

Micronutrients

Vitamins and minerals are micronutrients that support normal body function and are essential for growing children. Failing to meet vitamin and mineral needs because of picky eating may negatively affect immunity, growth, and both physical and cognitive development.^{6,9} Micronutrients often lacking in children's diets are summarised in Table I above.

Fibre, pre- and probiotics

Fibre is not technically a nutrient but can affect nutritional status and overall health. Children who are fussy eaters often struggle to get enough fibre in their diets, which can impact their digestive health.² Fibre refers to the components of plant-based foods that are not well digested but play a significant role in maintaining gut health and function. Prebiotics are specific types of fibre that serve as food for beneficial gut bacteria, helping them grow and maintain a healthy microbial balance in the gut. Probiotics, on the other hand, are live bacteria found in certain foods or supplements that help restore and support a healthy gut microbiome. Together, fibre, prebiotics, and probiotics support digestion, support immune function, and may reduce the risk of chronic diseases, making them essential for children's health and development.¹⁰

Managing fussy eating

Navigating fussy eating can be challenging for caregivers, especially when mealtimes become a source of stress and concern over a child's nutrition. However, several effective strategies can help manage picky eating.^{6,11} Caregivers should use positive or responsive feeding practices, which involve respecting a child's hunger and fullness cues and giving the child some control at

mealtimes. For example, the caregiver decides what food is offered and child decides how much to eat. In contrast, pressuring children to eat or using food as a reward has been linked to increased levels of food fussiness.² Frequent exposure to new or "problem" foods and involving children in grocery shopping and meal preparation is also beneficial.¹¹ Although difficult, caregivers should aim to foster a positive environment during mealtimes.^{2,11} Resolving fussy eating is a gradual process that requires time and patience. While working toward a more balanced and varied diet, nutritional supplements can be useful in helping to meet a child's nutrient needs.⁶

Choosing a supplement

Children who eat a balanced diet usually don't need supplements.⁹ However, fussy eaters may benefit from them temporarily while their diet is being improved.⁶ When choosing a supplement, look for one that contains the key nutrients often lacking in children's diets and choose multi-nutrient supplements over multiple single-nutrient supplements. Some supplements are available as a nutritional drink for children (e.g. PediaSure*) while others are vitamin and mineral or probiotic supplements suitable for children. See Table II for some examples.

Supplements should never replace healthy food and must be used with care, as excessive intake can be harmful.⁹ It is advised to consult a healthcare professional before deciding to use supplements.

Conclusion

Poor nutritional intake because of fussy eating can negatively affect growth, development, and overall health. Managing fussy eating involves a variety of behavioural strategies and requires time and patience. While a food-first approach is always recommended,

nutritional supplements can be useful during periods of limited food intake.

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