A photograph of several nurses in white uniforms and blue masks working in a clinical setting, possibly an operating room or intensive care unit. They are focused on a patient lying on a table. The background is slightly blurred, emphasizing the medical staff.

NURSING PROCEDURES in Special Areas

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Nursing Procedures in Special Areas

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Universiti Malaysia Sarawak
Kota Samarahan
2015

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Preface

This handbook is a manual on clinical procedures commonly carried out in the hospital settings. It serves as a reference for nursing students during their clinical placement in specialised areas.

It focuses on procedures pertaining to eye; ear, nose and throat; renal and burn nursing. Each procedure begins with an overview, purpose and requirements needed to carry out the procedure. The rationales for each step are also presented to help students understand the reasons for their decision making.

This manual complements the recommended medical and surgical nursing textbooks and can be used as a reference for nursing students.

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General principles

General principles

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General principles

General principles

Overview

This chapter outlines general principles in relation to:

- Consent
- Patient confidentiality, privacy and dignity
- Documentation
- Correct patient identification
- Hand hygiene

These general principles should be considered and applied when carrying out any nursing procedures.

Consent

Overview

A patient must consent to treatment before any nursing care can be carried out. "Consent" here refers to a patient's agreement for nurses to provide care and perform procedures. Consent can be given by a patient/authorised primary caregiver in writing, verbal and/or non-verbal depending on the type of procedure which is to be carried out. Please refer to the respective institution's/organisation's policy, protocol and procedures on consent to determine which type of consent is needed for the intended procedure.

It is common for informed consent to be obtained before surgery, invasive treatments or procedures, and administration of general anaesthesia or sedation. For consent to be valid, the following criteria must be met:

- given by a competent individual
- given voluntarily and
- informed

Underlying Principles

1. Consent should be obtained before any care is provided with the best interests of the patient considered.
2. If for any reason an individual requiring emergency interventions is unable to give consent, immediate interventions that are deemed to be life-saving should not be withheld.
3. Every adult has the right to make his/her own decision and must be assumed to have the capacity to do so unless identified incompetent by appropriately qualified healthcare providers.
4. If an individual is shown to lack decision making capacity, nurses have a statutory duty to act in the best interest of the patient.
5. Patients have the right to receive information about their care, thus, information should be given in a clear and explicit manner by trained personnel.
6. Patients should be afforded sufficient information in a manner and language that the patient can understand to facilitate their decision on whether to give consent.
7. Patients have the right to accept or decline treatment/care and their decisions should be respected.
8. Patients can change their mind or withdraw their consent at any time before the treatment or a procedure.
9. All nursing actions relating to obtaining consent or refusal have to be documented.
10. Special consent forms may be used for certain procedures depending on individual organizational/institutional protocols.

(Randle, Coffey & Bradburry, 2010; Joint Commission International, 2014)

Patient confidentiality, privacy and dignity

Overview

Information concerning any patient is deemed confidential and nurses have a duty to protect all patient information. A patient entrusts nurses with a high degree of confidence when sharing their personal information. Any breach of this trust can compromise the nurse-patient relationship and has serious implications on the nurse's professional standing.

A patient's privacy in healthcare encompasses both their personal data and personal space. Information obtained from patients should only be used for the purpose of their health management. Patient information should not be disclosed either deliberately or unintentionally to any third party who is not involved in the patient's care. Patient care records should also be secured to prevent any accidental disclosure of patient's information to any undesired individuals. Personal space is defined as provision of privacy to patients during procedures and nursing care.

Dignity encompasses respect, privacy, autonomy and self-worth. Dignity in care refers to the kinds of care, in any setting, which support and promote rather than undermine a person's self-respect.

Underlying Principles

1. In the event that patient information has to be disclosed to other healthcare personnel, the patient has to be made aware of this.
2. Information sharing with the patient's significant other and/or friends requires the patient's consent.
3. If consent to share information is refused or cannot be obtained for other reasons, information can be given in exceptional circumstances by order of the court to protect the patient and/or the public.
4. When performing procedures, limit the number of individuals present witnessing and/or performing the procedure to only those necessary and/or are agreed upon by the patient.
5. If procedures have to be performed, ensure that the patient is adequately covered or screened in a common ward or ensure that the patient's room door is closed to prevent unauthorized entry of other individuals.
6. Broadcasting images, videos and/or images related to a patient's care over the internet and other social media without prior consent from the patient is also deemed a breach in confidentiality where the nurse responsible can be held accountable.

(Randle, Coffey & Bradburry, 2010; Joint Commission International, 2014)

Correct patient identification

Overview

Wrong patient errors could occur in virtually all aspects of health care. Patients may be sedated, disorientated, or not fully alert; may have sensory disabilities; may change beds, rooms, or locations within the hospital that may lead to errors in identification of correct patients.

The intent of this principle is two-fold:

- to identify the individual as the correct person for whom the service or treatment is intended
- to ensure that the correct individual receives the intended treatment

In line with international patient safety goals, policies and/or protocols are developed by institutions to improve patient identification processes, in particular, the processes used to identify a patient when giving medications, blood or blood products; taking blood and other specimens for clinical testing; or providing any treatments or procedures.

Underlying Principles

1. Patients are identified before:
 - a. administering medications, blood and blood products
 - b. taking blood and other specimens for clinical testing
 - c. before providing treatments and procedures
2. Correct patient identification requires at least two ways/ identifiers to accurately confirm a patient identity. Identifiers used should include either:
 - a. patient's name
 - b. identification number
 - c. birth date
 - d. a patient identification wristband
 - e. other ways e.g., hospital registration number; patient information from significant others
3. The patient's room number or location **CANNOT** be used for identification purposes.

(Joint Commission International, 2014)

Documentation

Overview

Documentation is used to communicate the care provided and record any significant findings/events. Documentation can function as evidence, to investigate a complaint and/or for criminal and other court proceedings. Documentation also has the following uses:

- encourages continuity of care
- encourages good inter-professional communication
- provides detailed and accurate accounts of care delivery and management
- facilitates detection of problems and continuous monitoring of changes in the patient's condition
- promotes higher standard of quality care

Underlying Principles

1. A nurse is held accountable for what he/she documents or does not document.
2. All documentations relating to patients must be kept secured and protocols must be in place to safeguard confidentiality.
3. Professional judgment must be used when identifying the relevant information to be documented and frequency of entry.
4. Document entries should be accurate, legibly written in indelible ink, dated (including time in some instances), and signed.
5. Use of non-standard or non-institutionally approved abbreviations as well as offensive subjective statements should be avoided in formal patient records.
6. Documentation written by students should be countersigned by a qualified nurse/health care personnel supervising the student.

(Randle, Coffey & Bradburry, 2010; Joint Commission International, 2014)

Hand hygiene

Overview

Health care-associated infections (HCAIs) are the most frequent adverse events in patient care. Most HCAIs are preventable through proper hand hygiene practices – cleaning hands at the right times and in the right way.

The World Health Organization (WHO) approach outlines the following FIVE moments for hand hygiene as critical to the prevention and control of HCAIs:



Figure 1: The WHO five moments for hand hygiene (WHO, 2013)

Underlying Principles

1	Before Touching a Patient	When?	Clean your hands before touching a patient when approaching him/her.
		Why?	To protect the patient against harmful germs carried on your hands.
2	Before clean/aseptic procedure	When?	Clean your hands immediately before performing a clean/aseptic procedure.
		Why?	To protect the patient against harmful germs, including the patient's own, from entering his/her body.
3	After body fluid exposure risk	When?	Clean your hands immediately after an exposure risk to body fluids (and after glove removal).
		Why?	To protect yourself and the healthcare environment from harmful patient germs.
4	After touching a patient	When?	Clean your hands after touching a patient and his/her immediate surroundings, when leaving the patient's side.
		Why?	To protect yourself and the healthcare environment from harmful patient germs.
5	After touching patient surroundings	When?	Clean your hands after touching any object or furniture in the patient's immediate surroundings, when leaving – even if the patient has not been touched.
		Why?	To protect yourself and the healthcare environment from harmful patient germs.

(World Health Organisation, 2013)

Eye nursing

Underlying Principles



Visual acuity

Introduction

Visual acuity measures the clarity or sharpness of a patient's central vision. It is the ability to distinguish fine details and shapes of objects. Distant vision is tested using a Snellen chart (see Figure 2) with differently sized letters/numbers from a distance of six meters away (American Academy of Ophthalmology, 2014).

Visual Acuity Measurement

The distance between the chart and the individual undergoing the test is approximately 6 meters. This is considered to be "close enough" to optical infinity (Burns, Korn & Whyte, 2011). Refer Appendix 1 on how to interpret the scoring.

For patients who have problems with literacy, an E-chart (see Figure 3) may be used. Using the E-chart, patients are asked to indicate the direction in which the letter "E" is pointing.

Each eye is tested separately with the aid of a pin-hole occluder (see Figure 4).

at the recommended distance	reading.
Instruct patient to occlude one eye with the pin-hole occluder.	To ensure an accurate measurement of the non-dominant eye.
Point to the numbers/letters in question.	To ensure that the patient does not block the numbers/letters which is intended to be read.

Note:

- Ensure that the patient does not block the numbers/letters which is intended to be read.

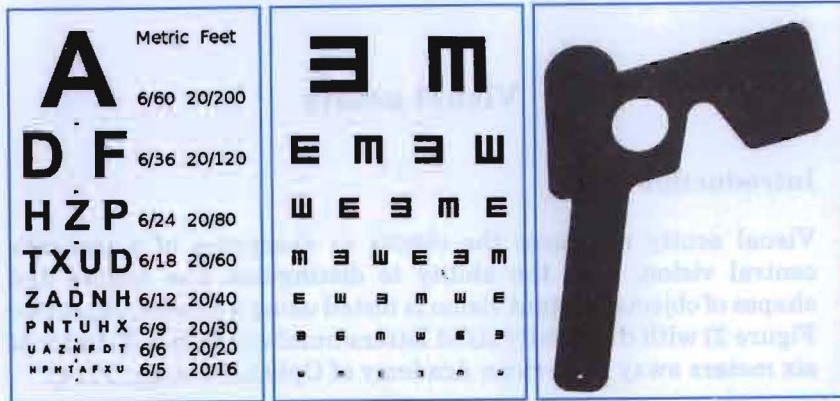


Figure 2: Snellen Chart

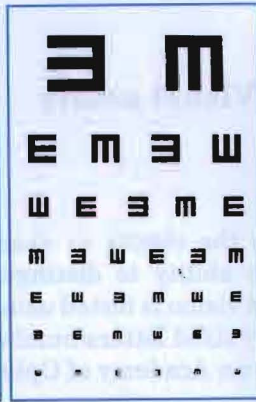


Figure 3: E-Chart



Figure 4: Pin-hole Occluder

Overview

Patients with eye conditions may have problems with their vision and require a visual acuity test. This test result is used as a screening tool that aids in the diagnosis of visual acuity problem.

Purpose

- to assess patient's visual acuity
- to detect signs of vision impairment

Requirement

- Snellen Chart
- Pin-hole occluder
- Measuring-tape

Procedure

No	Steps	Rationales
1.	Prepare requirements.	To enable the procedure to be performed smoothly without interruptions.
2.	Ensure that lighting is adequate.	To enable to chart to be visualized clearly.
3.	Place the Snellen chart on the wall at the same level as the patient's eyes.	To ensure the chart is placed at the recommended height for the chart to be visualized clearly.
4.	Measure and mark the distance between the Snellen chart and where the patient is supposed to sit/stand (distance of 6 meters) using the measuring-tape.	To ensure that the Snellen Chart is placed in accordance to the standard recommended distance to be read.
5.	Explain procedure to patient.	To address the patient's information needs and gain consent.
6.	Instruct the patient to sit/stand at the recommended distance.	To obtain the correct reading.
7.	Instruct patient to occlude one eye with the pin-hole occluder.	To enable assessment of the non-occluded eye.
8.	Point to the numbers/letters at random.	To indicate to the patient which numbers/letters are intended to be read.
	<p>⚠ Note:</p> <ul style="list-style-type: none"> • Ensure that the pointer does not block the numbers/letters which is intended to be read 	

9.	Instruct patient to read (as prompted). <ul style="list-style-type: none"> • numbers/letters on Snellen chart • from top to bottom lines • from left to right of the lines • smallest numbers/letters three times 	To assess the patient's ability to see the numbers/letters.
10.	Record the scoring (refer Appendix 1). ⚠ Note: <ul style="list-style-type: none"> • Specify in your documentation if the visual acuity score was achieved "aided" for patient's using visual assistive devices (e.g., spectacles/ contact lenses) or "unaided" when patients are not using visual assistive devices 	To document and communicate findings.
11.	Repeat steps 6 to 10 to assess the other eye.	To assess the visual acuity of the other eye.
12.	Perform steps 6 to 10 with patient's spectacles or contact lenses on for patients who are using visual assistive devices.	To assess the patient's visual acuity with the help of visual assistive devices.
13.	Inform patient about the results.	To meet the patient's information needs.

Appendix 1

Visual Acuity: How to interpret the scoring.

The visual acuity score should be recorded at the level where the patient is able to read more than half the numbers or letters in that row.

If the patient gets more than two (2) numbers/letters wrong, assume they can only read the line above/prior.

The scoring consists of two numbers x/y . The numerator (x) is the viewing distance from the chart (i.e., 6 meters in this context) and the denominator (y) is the letter/number size that the eyes can read correctly. The visual acuity is made of the number misread for example, if patient can read the numbers 6, 4 and 9 at level 6/18, but cannot read no. 5, then this is recorded as 6/18 - 1

A score of 6/18 - 1 means that the patient at 6 meters is able to read letters/numbers that the normal eye can read at a distance of 18 meters and made one error.

If vision is less than 6/6, a pin-hole occluder should be used for the eye being tested, to see whether this improves vision.

These are examples of scoring:

- 6/24 - 2; with PH (pinhole = 6/18).
- NIPH (no improvement with pin-hole assessment).

(Randle, Coffey & Bradburry, 2010)

 Notes

1. If the patient is unable to read 6/60 at 6 meters, instruct them to sit/stand closer to the chart at a distance of 3 meters and then 1 meter. Vision should be recorded as 3/y or 1/y ("y" here indicates the level read on the Snellen chart).
2. If the patient is still unable to read the Snellen chart from 1 meter away, hold your fingers half a meter away from the patient's eye and instruct the patient to count the number of fingers you are holding up— if he/she is able to count your fingers, record "count fingers" (CF - 1/2m).
3. If the patient is still unable to count fingers at half a meter, move your fingers 30cm from the patient's eye. If the patient is now able to count your fingers, record your findings as CFCF (counting fingers close to face).
4. If fingers cannot be counted but hand movements can be detected, this would be recorded as "hand movements" (HM).
5. If the patient is unable to perceive hand movements, a light should be shone into the eye (using torchlight).
6. Depending on the outcome, this would be recorded as "perception of light" (PL) or "no perception of light" (NPL).
7. If the patient is experiencing difficulties in comprehending letters/numbers, check their literacy.

(Randle, Coffey & Bradburry, 2010; Burns, Korn & Whyte, 2011)

Eye swabbing

Overview

Eye swabbing removes any eye discharges or contaminants from the eyes to reduce risk of infection. Eye swabbing is done for patients who have eye infections or post-surgery. It is a sterile procedure using sterile swab soaked with normal saline (National Health Service, 2011; National Health Service, 2012b).

Purposes

- to clean an infected eye
- to clean eye from crust or discharge
- to clean eye before instilling eye drops or eye ointments

Requirements

Eye dressing set containing

- 1 small gallipot and 6 swabs
- Kidney dish
- 1 sterile hand towels
- Normal saline
- Sterile gloves
- Clinical waste bag
- Non-clinical waste bag

Procedure

No	Steps	Rationales
1.	Prepare requirements.	To enable the procedure to be performed smoothly without interruptions.
2.	Explain procedure to the patient.	To address the patient's information needs and gain consent.
3.	Position patient with head tilted towards the affected eye. ⚠ Note: • If swabbing is indicated/ ordered for both eyes, treat the uninfected or non-inflamed eye first to prevent spreading an infection to the unaffected eye	To minimize the risk of accidental infection from the other eye. To facilitate performance of the procedure.
4.	Ensure adequate light source.	To enable maximum observation of the eyes without causing any harm or discomfort.
5.	Wash hands and don sterile gloves.	To prevent cross infection.
6.	Rinse sterile gloves with normal saline.	To remove powder from gloves and prevent powder particles from entering the eyes.

7.	Dry sterile gloves with sterile towel.	To remove excess cleansing solution.
8.	Stand behind the patient's head (if patient is lying down). If patient is sitting, stand facing the patient.	To facilitate performance of procedure.
9.	Prepare swabs • ensure swabs are not too moist • flatten swabs	To prevent dripping of excess cleansing solution. To ease cleansing of the eyelids.
10.	Swab the eyelids gently from the inner to the outer canthus, using one swab once. ⚠ Note: • Each stroke may be repeated with a new swab each time until all discharge has been removed	To reduce the risk of solution entering the lacrimal duct, or contamination the other eye.
11.	Instruct the patient to look downward while cleaning the upper eyelid.	To facilitate the procedure and to reduce the risk of damaging the cornea as well as to remove any crusted discharge.
12.	Instruct the patient to look upward while cleaning the lower eyelid.	
13.	Instruct the patient to close his/her eyes while cleaning the upper and lower eyelids together.	
14.	Discard each swab into the clinical waste bag immediately after use.	To reduce nosocomial infection.

15.	Inspect the eye for any signs of bleeding, opacity, discharge, signs of infections and/or condition of sutures (if present in post-surgery patients). Inspect the size, shape and reactivity of the pupils (instruct assistant to shine torchlight about 10cm away from the affected eye).	To detect any abnormalities.
16.	Apply medication if prescribed.	
17.	Apply eye dressing or eye pad/ eye shield if prescribed.	To keep area clean and reduce infection.
18.	Remove and discard gloves.	
19.	Make patient comfortable.	To ensure patient comfort.
20.	Wash hands.	To reduce risk of infection.
21.	Document and report any abnormal findings.	For legal documentation and to ensure continuity of care.

Eye irrigation

Overview

Eye irrigation is done to remove any foreign bodies from the eyes. A sterile saline solution is ideally used to irrigate the eyes. Under emergency circumstances, such as when encountering chemical splash to eyes, the best way to prevent further injury is to irrigate the eye(s) under copious clean running water (National Health Service, 2011).

Purposes

- to cleanse the eye thoroughly following chemical splash
- to prevent corneal and conjunctival scarring
- to remove foreign bodies from the eye

Requirements

Top shelf of trolley

- Irrigating syringe, undine or any small receptacle with pouring spout or IV Normal Saline drip and infusion set
- Kidney dish
- Local anaesthetic eye drop if prescribed
- Sterile cotton swabs
- Irrigating solution at room temperature (Solution that is too cold is painful, solution that is too warm may cause scald)


Bottom shelf of trolley

- Protective sheet
- Clinical waste bag
- Towel
- Sterile gloves

Procedure

No	Steps	Rationales
1.	Check the patient's full name and the doctor's order.	To identify patient and purpose of procedure.
2.	Prepare requirements.	To enable the procedure to be performed smoothly without interruptions.
3.	Explain procedure to the patient.	To address the patient's information needs and gain consent.
4.	Assist patient to lie in recumbent position with his/her head tilted towards the affected side.	To prevent solution flow across the bridge of the nose into the other eye.
5.	Lay out requirements with sterile forceps.	To prevent cross infection.
6.	Hang the irrigation solution on an IV drip stand or hook if it is in use.	To ensure free flow of fluid during irrigation.
7.	Place protective sheet and towel under the patient's head.	To prevent solution from flowing down the neck.
8.	Place kidney dish against patient's cheek, and request him/her to hold it in position.	To collect fluid running from the eye.
9.	Wash and dry hands thoroughly.	To prevent cross-infections.
10.	Don gloves.	To prevent cross-contaminations.
11.	Get the normal saline infusion running with slow flow or draw up the prescribed amount of solution using an irrigating syringe.	To avoid causing unnecessary discomfort.
12.	Instruct the patient to fix his/her gaze ahead.	To ensure the eye ball is totally exposed.

13.	Spread the patient's eyelids by gently pulling them against the bony prominence around the eye.	The patient will instinctively try to close the eye.
14.	Drip a little of the solution over his/her cheek first.	Accustoms patient to the feel of the solution.
15.	Control the flow of fluid slowly and steadily, from a distance of no more than 5 centimeters, onto the front surface of the patient's eye, and importantly, inside the lower eyelid and under the upper eyelid.	If too high fluid flow will cause discomfort and possible damage to the eye.
16.	Request the patient to move his/her eyeball in all directions while the irrigation is in process.	To facilitate the flow of solution over all parts of the conjunctival sac.
17.	Check for presence of foreign body from the patient's upper and lower eyelids.	To ensure complete removal of any foreign body from the eyes.
18.	Wipe dry patient's eyelids with a swab when the irrigation is completed.	To ensure comfort and reduce risk of cross infection.
19.	Wash hands.	To reduce risk of cross infection.
20.	Document the procedure.	For legal documentation and to ensure continuity of care.

 **Notes**

- If intravenous infusion is used to do irrigation, place the tip of filled infusion set not more than 5cm from the eye.
- Allow fluid to flow from tubing at a pace that is comfortable to the patient.

ADMINISTERING EYE DROPS AND OINTMENT

Overview

Eye drops and eye ointment have both diagnostic and therapeutic purposes.

It may be used to treat glaucoma, infections, dry eyes or several other conditions. The eye drops or ointments are applied into the conjunctival sac. (Rosdahl & Kowalski, 2008)

Purpose

- to treat any eye infection
- to prepare for eye examination

Requirements

Eye dressing set containing

- Kidney dish
- Gallipot and swabs
- Normal saline at room temperature
- Disposable gloves
- Clinical waste bag and non-clinical waste bag
- Prescribed eye drops or eye ointment
- Tissue (optional)
- Eye-pad (optional)

Procedure

No	Steps	Rationales
1.	Prepare requirements.	To enable the procedure to be performed smoothly without interruptions.
2.	Observe the "rights" of administering the medication.	To ensure the correct patient, drug, dose, route, time & documentation.
3.	Explain procedure to the patient.	To address the patient's information needs and gain consent.
4.	Wash and dry hands.	To prevent cross infection
5.	Assist patient to lie supine or sit back on chair with head slightly extended and tilted towards the affected eye.	To provide easy access to eye for medication instillation and minimizes drainage of medication through tear duct to nasal mucosa which may lead to systemic absorption.
6.	Perform eye swabbing (refer to procedure on eye swabbing).	To remove any infected material and cleanse the eye before administering eye drops and ointment.
7.	Place a cotton swab or tissue on the patient's cheekbone just below lower eyelid.	To absorb medication that has escaped.
8.	Expose the conjunctival sac by pulling it away with the index finger against the bony orbit.	To prevent pressure and trauma to the eyeball and prevents fingers from touching the eye. This will also retract sensitive cornea up and away from conjunctiva sac and reduces stimulation of blink reflex.

9.	Ask the patient to fix his/her gaze ahead.	To ensure the distribution of the eye drops and ointment are well spread on the conjunctiva.
10.	To instill eye drops <ul style="list-style-type: none"> • Rest dominant hand on the patient's forehead • Instill the eye drop from a distance not more than 2cm above into the conjunctiva sac • Instruct patient to close the eye gently 	To prevent accidental contact of eyedropper with eye structures, thus reducing risk of injury to eye and transfer of infection to dropper.
11.	To instill eye ointment <ul style="list-style-type: none"> • Holding the ointment applicator above lid margin, apply thin stream of ointment evenly along inside edge of conjunctiva from the inner to outer canthus • Ask patient to look down • Instruct patient to close the eye and move the eyeball in all directions 	To reduce blinking reflex ointment application. To distribute medication evenly across eye and lid margin. To distribute medication without traumatizing eye.
12.	If excess medication is on eyelid, gently wipe it from inner to outer canthus.	To promote comfort and prevents trauma to eye.

13.	Apply the eye pad if applicable.	
14.	Wash hands.	
15.	Document the procedure and treatment given.	For legal documentation and to ensure continuity of care.



Notes

- If patient blinks or closes eye or if drops land on the outer lid margins, substitute the drops.
- When administering drugs that cause systemic effects, apply gentle pressure to patient's nasolacrimal duct for 30 to 60 seconds with a piece of clean gauze to
 - prevent overflow of medication onto nasal and pharyngeal passages
 - prevent absorption into systemic circulation.
- After instilling drops, ask patient to close eye gently (helps to distribute medication). Squinting or squeezing of eyelids would force the medication out.

(Randle, Coffey & Bradburry, 2010)