

## Psychological Aspect of Infusion Therapy and Age-related Considerations

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## Psychological Aspect of Infusion Therapy

### Definitions

**Autonomic nervous system** - It innervates glands, smooth muscles, and your heart

**Peripheral** - Seen from the outside or located far from the center.

**Venipuncture** - A procedure that involves puncturing a vein.

**Needle** - A slender, pointed, hollow, metal device.

**Catheter** - A hollow plastic tube used to enter the vascular system.

**Vein** - A blood vessel that transports blood from the body to the heart

**Electronic infusion device** - An electronic device that regulates the flow rate of the prescribed therapy.

**Phobia** - an extreme or irrational fear of or aversion to something

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## Psychological Aspect of Infusion Therapy

Whenever the healthcare provider is about to perform a venipuncture, the patient's anxiety level increases. Many patients will experience a great deal of stress during medical procedures, creating both real and perceived worries.

In the minds of most people, pain is a major stress accelerator. Anxiety and pain anticipation will trigger the autonomic nervous system to move blood from the peripheral veins to the central core. As a result, this will cause peripheral vasoconstriction. Vasoconstriction will cause the veins to be less visible thus make the venipuncture more difficult for clinician which will cause more discomfort for the patient.

Finding ways or techniques to reduce stress and anxiety before and during a venipuncture will benefit both the patient and the clinician.

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## Psychological Aspect of Infusion Therapy

### How to facilitate IV therapy in different age groups

#### Pediatric Patients

The procedure of venipuncture can be difficult for both the parent and the pediatric patient. Child Life Specialists can be helpful in emotionally preparing pediatric patients receiving infusion therapy.

To preserve the sense of safety and security when in their hospital room, stressful and/or painful procedures may be conducted in a treatment area instead of their room.

For young children, parental presence may be indicated to make the child feel more comfortable. In this case, make sure the parent does get involved in immobilizing the child as this may damage the child's perception of its parent as a protector.

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## Psychological Aspect of Infusion Therapy

### How to facilitate IV therapy in different age groups

#### Pediatric Patients (Cont'd)

Play therapy and diversion using toys may help educate and gain the pre-school or school-aged child's cooperation during venipuncture. Try to use age-appropriate language to describe the procedure.

For young children who cannot read, pictures are helpful. Using dolls and role-playing may also reduce anxiety in young children.

Honesty from the clinician is imperative, the clinicians must not tell children that the venipuncture is painless, or that it is going to be just one stick. Do not make promises you're not sure you can keep. The child should know that the venipuncture will hurt for a short amount of time. Dishonesty may result in negative long-lasting consequence for the patient and their ability to trust healthcare workers.

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## Psychological Aspect of Infusion Therapy

### How to facilitate IV therapy in different age groups

#### Pediatric Patients (Cont'd)

Reinforce facts, such as "like although the venipuncture may be painful, the medicines will make the patient feel better." Also, emphasize that this procedure is not meant as a punishment. The use of topical anesthetics may reduce or eliminate the pain associated with venipuncture.

Many school-age children like to be involved in the procedure by helping identify a vein and preparing supplies. It is healthy for children to cry as a coping mechanism. A child who displays this reaction should never be reprimanded or mocked, praise their bravery instead.

Incentives, like stickers, may be a good reward after venipuncture among young children. A good approach will result in the child having greater self-confidence and belief that he/she can cope with difficult situations.

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## Psychological Aspect of Infusion Therapy

### How to facilitate IV therapy in different age groups

#### Adolescent Patients

Infusion therapy involves special psychological consideration for adolescents. Adolescence involves accepting adult responsibilities and defining oneself independently of parents. They may think they are mature, but emotionally they are not quite as mature as they think. Infusion therapy and venipuncture may cause significant emotional turmoil in this age group.

Adolescents should be included as much as possible in education and decision-making, and expectations should be clear. Parental participation can be optional during procedures and in decisions regarding the type and location of the venous access device. Make sure patient privacy is protected. Educate in non-technical but adult language to respect the patients' cognitive and intellectual abilities without overwhelming patients with the information they cannot comprehend.

Providing care that adheres to the adolescent's concerns may increase compliance and cooperation.

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### How to facilitate IV therapy in different age groups

#### Elderly Patients

Many elderly patients have a negative association with infusion therapy from their childhood. Until a generation ago, IV therapy was only used in the most critical of cases.

Because this intervention was ordered, many believe they are critically ill. In a few decades, technological advances like IV catheters instead of needles have greatly improved IV therapy and reduced complications and pain for the patient.

Today's catheters only leave a soft, flexible cannula in veins. Patients may find it helpful to see a catheter without the stylet. It is uncommon for older people to be able to speak out about their feelings or ask for details about their prescribed therapy. Most older men were taught that outward expressions of emotion are inappropriate.

It is also important to understand that patients may react differently to IV therapy depending on their culture. Some cultures display negative feelings when touched or exposed. Other cultures have negative feelings toward medical interventions. Always prioritize maintaining your patient's dignity.

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## Infusion Therapy Age-related Considerations

### Facilitate IV therapy for patients with impaired sensory functions.

Some patients have sensory impairments that increase anxiety. Hearing and vision impairments are particularly common in the elderly. Clinical staff should speak loudly and clearly for patients with hearing impairments.

Written communication should be provided to deaf patients. Communicate with blind patients to keep them informed of where you are and what you are about to do.

The most common sources of anxiety related to IV therapy are pain, needles, and confinement. Fear of needles is not the same as fear of pain. Some patients may tolerate pain with remarkable ease but fear needles.

Frequently, patients try to avoid viewing an IV insertion by turning their heads or asking others to hold their hands. The fear is phobic. The sight of the needle stick causes anxiety and fear. They would rather not see the needle penetrate their own skin.

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## Infusion Therapy Age-related Considerations

### Useful techniques to reduce Stress while performing IV therapy or venipuncture

#### Clinicians may use stress-reducing approaches to alleviate real and perceived fears.

- The first is confidence. When a clinician radiates confidence, they say, "Trust me, I am not worried at all, you shouldn't be either." An attitude of empathy can reduce patient stress and anxiety. Confidence does not imply arrogance or bluffing and calms the patient.
- A confident clinician also uses diversion. A method is used to divert the patient's attention. The IV needle is the object of his/her anxiety. Some clinicians use humor to divert attention, laughter is an excellent way to relieve tension. Before the patient can refocus, the IV insertion can be quickly and expertly performed. There are some situations where humor won't work, but laughter is an excellent tool if you can manage it. Practice can help you develop your own laugh diversion style.
- Communication is another diversion method. Many patients discuss themselves, their kids, grandchildren, pets, work, or hobbies. The IV may be inserted while recounting their story or interests. By showing care and concern for the patient, you can also alleviate anxiety.

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## Infusion Therapy Age-related Considerations

### Useful techniques to reduce Stress while performing IV therapy or venipuncture (Cont'd)

**Clinicians may use stress-reducing approaches to alleviate real and perceived fears.**

- An informed patient is usually less anxious. Good patient care includes a clear explanation of what to expect before, during, and after the therapy.
  - Use terminology the patient can understand. The patient sometimes has difficulty understanding nursing or medical lingo.
  - Step by step, tell the patient that intravenous means "inside the vein" and that a plastic tube will be inserted into his/her vein. In this case, fluids containing certain nutrients or drugs will flow from the IV bag, through tubing, and into the patient's vein. The patient should see the actual equipment.
  - Tell the patient how long the catheter will stay in place. Provide information on what type and how much fluid/medicine is necessary.

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## Infusion Therapy Age-related Considerations

### Useful techniques to reduce Stress while performing IV therapy or venipuncture (Cont'd)

**Clinicians may use stress-reducing approaches to alleviate real and perceived fears.**

- An informed patient is usually less anxious. Good patient care includes a clear explanation of what to expect before, during, and after the therapy.
  - Inform your patient that removing the peripheral IV is simple. Reassure the patient that he/she will be able to use his/her arm normally once the device is removed and the bleeding stops.
  - Let the patient know that a clinician will regularly assess the infusion site.
  - Encourage the patient to verbalize any questions or concerns they might have. Remind the patient to report any pain or discomfort during the infusion.

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## Infusion Therapy Age-related Considerations

### Useful techniques to reduce Stress while performing IV therapy or venipuncture (Cont'd)

**Clinicians may use stress-reducing approaches to alleviate real and perceived fears.**

- An informed patient is usually less anxious. Good patient care includes a clear explanation of what to expect before, during, and after the therapy.
  - If there are any restrictions, explain them. Remind the patient he/she can walk while receiving infusion, if applicable. It may also be possible for them to take a bath or shower during treatment, depending on the insertion site.
  - Educate the patient on how to care for the IV system by avoiding pulling at the insertion site or lying on the tubing.
  - Discuss the possible alarms that may occur when using an electronic infusion device (pump).

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## Infusion Therapy Age-related Considerations

In general, the extremely anxious patient feels greater discomfort and tolerates less pain. Use these methods to calm your patient's anxiety and improve his or her outcomes.

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