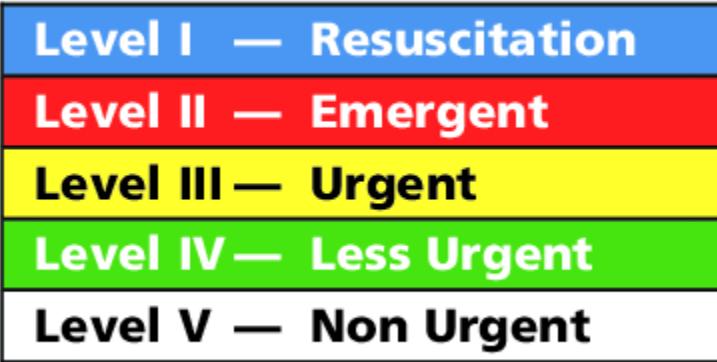


# TRIAGE



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# **TRIAGE** - dari Bahasa Perancis “*TRIER*” *(to sift/ sort)*

- **TIPE SISTIM TRIAGE:**

- Incident (Multi casualty) triage
- Military (battlefield) triage (pre-hospital)
- Disaster (mass casualty) triage (pre-hospital)
- Hospital Triage - Emergency Nurse triage
- Inpatient (ICU) triage

# Definisi TRIAGE

- Hospital based triage is the formal process of prioritizing a patients clinical need for medical treatment based upon their presenting symptoms chief complaint (Handysides, 1996)

- ✓ Egalitarian
- ✓ Utilitarian

# *Incident (multicasualty) Triage*

- Didesain untuk berespon terhadap suatu insiden yang mengakibatkan korban yang banyak
  - ✓ kebakaran
  - ✓ kecelakaan beberapa kendaraan bermotor
- Korban yang mengalami injuri kritis mendapatkan prioritas transport dan treatment



# *Military (Battlefield) Triage*

- Biasanya *care givers* dan pasien adalah personel militer
- *Friend or foe* (teman atau musuh)
- Geneva Conventions



# *Disaster (Mass Casualty) Triage*

- Destruksi dalam skala besar
- Skills assesmen yang cepat

- ***World Medical Association:***

- **RED:** immediate, Prioritas 1 - who can be saved & life is in immediate danger
- **YELLOW:** delayed, Prioritas 2 - life not in immediate danger, need urgent but not immediate medical care
- **GREEN:** minimal, Prioritas 3 - require only minor treatment
- **No specific tag** - trauma psikologis
- **BLACK:** expectant, no priority - cannot be saved, beyond available care



# ICU Triage

- Best utilization of ICU beds



# TUJUAN PRIMER dari TRIAGE di ED

- Memberikan intervensi segera pada situasi yang mengancam kehidupan
- Memperlancar perawatan pasien dengan *initial assessment* yang akurat
- Melakukan screening pasien yang efektif untuk memberikan perawatan secara prioritas
- Menurunkan kematian/ tingkat keparahan yang berkaitan dengan kondisi medis dengan intervensi sedini mungkin
- Memastikan keefektifan dan kesesuaian utilisasi sumber yang tersedia



# TUJUAN SEKUNDER dari TRIAGE di ED

- Menurunkan *delay treatment* dengan menginvestigasi prosedur diagnostic preliminer
- Bertindak sebagai pusat rujukan pada pasien dan keluarga dari area lain atau pelayanan komunitas
- Memberikan informasi yang reliabel kepada pasien yang menunggu penanganan

# Quality Care

- Memberikan suatu sistem komunikasi
  - common language
- Perbaikan kualitas
  - under triage
  - over triage
  - consistency

# Duty of Care

What is the triage nurse legally responsible for?

- ✓ Accurate diagnosis of urgency  
(based on available, objective & subjective data)
- ✓ Observation & documentation
- ✓ All care while the patient is in waiting room

# Decision-making processes

- Pattern-”eyeball”
- Feature-salient information
- Psychological representation of the problem-  
  ”febrile” “tachycardic”
- Combine cues eg: “central crushing chest pain + tachycardia”
- Determine chief complaint & urgency

# CLINICAL URGENCY

- ❖ Defined as the maximum time in which assessment & treatment should be implemented in order to achieve an optimal outcome
- ❖ Urgency is not synonymous with severity of disease
- ❖ Clinical factors
- ❖ Environmental factors
- ❖ Social factors

# Physiological predictors of urgency

- Vital signs
  - ✓ HR, RR, temperature
- GCS
- Skin
  - ✓ Color, temperature, diaphoresis
- Pain



# Other useful indicators of urgency

- Mechanism of injury
- Co-morbidities
- Age
- Behavior
- Pre-hospital treatment
- Mobility
- Child at risk

# The Australasian Triage Scale

TRIAGE	CATEGORY	ACUITY
Resuscitation	1	Immediate
Emergency	2	$\leq$ 10 minutes
Urgent	3	$\leq$ 30 minutes
Semi-urgent	4	$\leq$ 60 minutes
Non-urgent	5	$\leq$ 120 minutes

# Category 1

## Immediately life threatening

- Conditions that are **threats to life** (or imminent risk of deterioration) and require **immediate aggressive intervention**



Response	Description	Descriptor
<b>CAT 1</b> <b>Immediate simultaneous assessment and treatment</b>	<p>Immediately life threatening</p> <p>Conditions that are threats to life (or imminent risk of deterioration) and require immediate aggressive intervention.</p>	<p>Cardiac arrest Respiratory arrest Immediate risk to airway-impeding arrest Respiratory rate &lt;10/min Extreme respiratory distress BP &lt;80 (adult) or severely shocked child/infant Unresponsive or responds to pain only (GCS &lt;9) Ongoing/ prolonged seizure IV overdose and unresponsive or hypoventilation Severe behavioral disorder with immediate threat of dangerous violence</p>

## Category 2 Imminently life threatening

- There is the **potential of life threat** or organ system failure if not treated within **10 minutes**
- Potential for time critical treatment to make an effect on clinical outcome
- Very severe pain

Response	Description	Descriptor
<b>CAT 2</b>  <b>Assessment &amp; treatment within 10 minutes.</b>  Assessment and treatment often simultaneous	Potentially life-threatening  The patient's condition is serious enough or deteriorating so rapidly that there is the potential of threat to life, or organ system failure, if not treated within 10 minutes of arrival.	Airway risk Severe respiratory distress Circulatory compromise Clammy or mottled skin, poor perfusion HR <50 or >150 (adult) Hypotension with symptoms Severe blood loss Drowsy, decreased responsiveness any cause (GCS <13) Acute hemiparesis/ dysphasia Fever with signs of lethargy Acid or alkali splash to eye-requiring irrigation Major multi trauma (requiring rapid organized team response) Severe localized trauma-major fracture, amputation

# Category 3

## Potentially life threatening

- The patients condition **may progress to life threatening**, or may lead to significant morbidity if assessment is not commenced within **30 minutes** of arrival
  - or
- There is potential for adverse outcome if time critical treatment is not commenced within **30 minutes**
  - or
- Humane practice dictates that relief of severe discomfort or distress within **30 minutes**



RESPONSE	DESCRIPTION	DESCRIPTOR
<b>CAT 3</b>  <b>Assessment &amp; treatment within 30 minutes</b>	Potentially Life Threatening  Situational urgency  Humane practice mandates the relief of pain within 30 minutes	Severe hypertension Moderately severe blood loss any cause Moderate SOB SaO <sub>2</sub> 90-95% BSL > 16 mmols Seizures now alert Any fever if immuno-suppressed Persistent vomiting Dehydration Head injury with LOC-now alert Moderate severe pain, any cause Moderate limb injury Trauma high risk history no high risk features Stable neonate CAR Behavioral/ psychiatric Risk of self harm Thought disordered

# Category 4

## Potentially Serious

- The patient condition **may deteriorate, or adverse outcome may result** if assessment is not commenced within 1 hour.
  - or
- Situational urgency
  - or
- Significant complexity or severity
  - or
- Humane practice mandates the relief of discomfort or distress within 1 hour

RESPONSE	DESCRIPTION	DESCRIPTOR
<b>CAT 4</b>  <b>Assessment &amp; treatment within 1 hour</b>	Potentially serious  Situational urgency  Significant complexity or severity  Humane practice mandates the relief of pain within 30 minutes	Mild hemorrhage Foreign body aspiration with no respiratory distress Chest injury without rib pain or respiratory distress Minor head injury no LOC Eye inflammation or foreign body, no inflammation Minor injury-sprained ankle, possible # uncomplicated laceration requiring investigation or intervention, tight cast, no neurovascular impairment Moderate pain Behavioral/ psychiatric Semi-urgent mental health problem Under observation, no immediate risk to self or others

# Category 5

## Less-urgent

- The patient condition is **chronic or minor enough** that symptoms or clinical outcome will not be significantly affected if treatment is delayed up **2 hours** from arrival.

or
- Clinico-administrative problems

RESPONSE	DESCRIPTION	DESCRIPTOR
CAT 5  Assessment & treatment start within 2 hour	Less urgent  Clinico-administrative	Minimal pain no high risk features Low risk history now asymptomatic Minor symptoms of existing stable illness Minor symptoms of low risk conditions Minor wounds Small abrasions, minor lacerations not requiring sutures Scheduled re-visit Immunization only Behavioral/ psychiatric Known patient chronic symptoms Social crisis, clinically well patient

# TRIAGE ASSESSMENT

- Objective data
  - ✓ Vital signs, GCS, SpO<sub>2</sub>
- Clinician's subjective data
- Patient's symptoms
- History
  - ✓ Medical & social if relevant



# GENERAL APPEARANCE

- Mode of arrival
  - Private car, ambulance, police
- Mode of referral
  - self, LMO in custody (tahanan)
- Mobility
  - normal or restricted?
- Speech articulation
  - normal, slurred, dysphasic, aphasic

# General appearance

- Behavior
  - ✓ posture
  - ✓ eye contact
- Emotional state
  - ✓ mood
  - calm/ distressed/ anxious/ aggressive/ withdrawn?
  - ✓ thought content
  - risk of self harm/ harm to others/ paranoid
- Mind altering substances
  - ✓ alcohol, cannabis, stimulants, narcotic

# General appearance (Pediatric)

- Activity
- Intake/ output
- Immunizations
- Developmental milestones
- Interaction with mother



# HISTORY

## ILLNESS

- Age & gender: <5 >60
- Pain history: PQRST
- Allergy/ medications
- Pregnancy
- Collapse
- Blood loss
- Overdose/ poisoning
- Seizure

## INJURY

- Age <5 >60
- Mechanism
  - Evidence of high impact
  - Falls ≥ 6m
  - Car ≥ 60km per hour impact/ pedestrian ≥ 30km or more
  - Passenger compartment intrusion
  - Rearward displacement of axel
  - Ejection of patient
  - Roll over
  - Death of same car occupant

# OBSERVATIONS

- Respiratory
  - ✓ Rate, WOB
  - ✓ Oxygen saturation ( $\leq 89\%$ ,  $90\text{-}95\%$ ,  $\geq 96\%$ )
- Pulse
  - ✓ Rate (cardiac arrest,  $\leq 49$ ,  $50\text{-}100$ ,  $151\text{-}200$ ,  $\geq 200$ )
  - ✓ Characteristics (regular, irregular, weak)
- BP
  - ✓ Systolic ( $\leq 50$ ,  $50\text{-}100$ ,  $151\text{-}200$ ,  $\geq 200$ )
  - ✓ Diastolic ( $\leq 50$ ,  $50\text{-}100$ ,  $\geq 100$ )
  - ✓ Postural drop

# Observations

- Temperature
  - ✓ ( $\leq 35$ ,  $35.6 - 37.5$ ,  $37.6 - 38.5$ ,  $\geq 38.6$  °C)
- Neurological status
  - ✓ GCS (<9, 9 - 13, >13)
  - ✓ LOC (signs of raised ICP e.g.: vomiting, headache, nausea)
- Limb observation
  - ✓ capillary return (delayed, normal)
  - ✓ peripheral pulses
  - ✓ limb deformity
  - ✓ loss of movement
  - ✓ altered sensation

# PAIN

- Around 70% chief complaints involve pain
- Pain influences urgency
- People in pain become agitated or aggressive
- Patients have an expectation that their pain will be dealt with

# Infection Control

- Hazards
- Gloves, hand washing, sharps containers
- Potentially infectious illnesses
- Immuno-suppressed persons

## **Documentation:**

The documentation of the triage assessment should include at least the following essential details:

- Date & time of assessment
- Name of triage officer
- Chief presenting problem(s)
- Limited, relevant history
- Relevant assessment findings
- Initial triage category allocated
- Re-triage category with time & reason
- Assessment & treatment area allocated
- Any diagnostic, first aid or treatment measures initiated

# Kesimpulan:

**Kecepatan dan keakuratan penilaian tenaga medis yang bekerja di ED sangat menentukan outcome dari pasien gawat darurat.**

**Triase merupakan sebuah sistem yang digunakan untuk menentukan kecepatan pelayanan dan penilaian pada seluruh pasien yang datang ke ED.**



# References

- Australasian College for Emergency Medicine. (2000), *Guidelines for implementation of The Australasian Triage Scale.*
- Gerdtz, M., and T. Bucknall. (2000). Australian triage nurses' decision making and scope of practice. *Australian Journal of Advanced Nursing*, 18(1).
- Iserson, K.V. and Moskop, J.C. (2007). Triage in Medicine, Part I: Concept, History, and Types. *Annals of Emergency Medicine* (49): 275-281.