

KOMUNIKASI RISIKO



“Risk Communication –
Introduction and Concept”

Objectives

- Define definitions – Crisis, Hazards, & Risk.
- Understand the concept of Risk Communication.
- Appreciate perceptions and factors in effective risk communication.

Definition Of 'CRISIS'

- 'Krino' - To separate, to determine.
- The decision state of things, or the point of time when an affair has reached its height, and must soon terminate or suffer a material change.

...Webster

CRISIS

- “The unthinkable”/Unexpectedness.
- **Characteristics:**
 - **Threat** to organisation – Survival, system disruption, image.
 - **Time pressure** – Urgency/demand for immediate attention & decision.
 - **Stress** -Turning point – for better or worst.

CRISIS



- **Categories:**
- **Technological.**
- **Confrontational.**
- **Crisis of malevolence.**
- **Management failure.**
- **Threat from other organisation.**

CRISIS



- **Bound to occur**
- **Only 50% of corporate body has management plan/strategy**
- **Rarely notices its imminence**
- **Media – Adversary or partner**
- **Need for media communication strategy**

Health CRISIS To Media

- **Outbreaks that leads to epidemic – Nipah, Enterovirus 71 .**
- **When monitoring is lax.**
- **Preventive measures not in place.**
- **Absence of ‘circuit breaker’**
- **Slow response.**
- **Attempted cover-up.**
- **Increasing casualties.**
- **Death list climbing.**
- **Solutions not forthcoming.**

WHAT IS RISK?



- Risiko - kemungkinan mendapat bahaya atau kerugian.

(Kamus Dewan, 1989)

WHAT IS RISK?



- Possibility of meeting danger or suffering harm, loss.

(Oxford Advanced Learner's Dictionary, 1993)

HEALTH RISK

- Cumulative incidence:
Proportion who are exposed with disease
- Attack rate:
Proportion who are exposed sick.
(Epidemiologist - CH. Hennekens)

HEALTH RISK



- Risk is the probability/likelihood/chance of harm or undesired event and the severity of the consequences as a result of exposure to the hazard.

HEALTH RISK



- Is a function of the likelihood of harm occurring and the severity of the harm. The likelihood and severity of the harm are a function of exposure to the hazard.

WHAT IS RISK ?



RISK = HAZARD X PROBABILITY
OF EXPOSURE

HAZARD



Any agent (physical, chemical, biological, ergonomic, psychosocial) which has the potential to cause harm, injury, ill health, death to human or environment.

HAZARD IN HOSPITALS



Biological hazards

Hepatitis B

HIV/AIDS

Tuberculosis

Varicella/Herpes zoster

Enteric infections

Chemical hazards

Waste anaesthetic gases

Ethylene oxide

Chemotherapeutic agents

Formaldehyde

Detergents

HAZARDS IN HOSPITALS (cont.)

Physical/Mechanical hazards

Radiation

Noise

Slips and falls

Needle prick injuries

Back injuries

Psychosocial factors

Stress

Shift work

HAZARD RATING

Hazard Rating	Definition in Terms of Potential to Cause Harm to People
1	Slight injury/illness – not affecting work performance or causing disability.
2	Minor injury/illness – affecting work performance such as restriction of activities or need a few days to recover.

HAZARD RATING (cont.)

Hazard Rating	Definition in Terms of Potential to Cause Harm to People
3	Major injury/illness – result in permanent partial disability or affecting work performance in the long term.
4	Permanent total disability or fatality.
5	Multiple fatalities (large exposed population).

EXPOSURE RATING

Exposure Rating	Definition
Very Low (A)	Exposures are negligible.
Low (B)	Exposures are controlled and likely to remain so in accordance with screening and performance criteria

EXPOSURE RATING (cont.)

Medium (C)	Exposures are currently controlled to meet screening and performance criteria but control cannot be assured.
High (D)	Exposures are not adequately controlled to meet screening and performance criteria and continuously/regularly exceed exposure limits.
Very High (E)	Exposures are excessive and will almost certainly result in health damage to persons exposed.

HEALTH RISK COMMUNICATION

The purposeful exchange of information about the existence, nature, form, severity or acceptability of health risks between policy makers/health care providers and public/media with the intention of changing behaviours and inducing action to minimize/reduce the hazard.

RISK COMMUNICATION

Is interaction with internal and external stakeholder groups about risks.

Aims at mobilizing action.

Aims at implementation of a transparent decision making process with the involved groups (employees, community).

Is evidence of commitment to maintain a safe and healthy workplace.

RISK COMMUNICATION

Rationale

- ❖ Communication - Component of management
- ❖ Affect perception
- ❖ Reduce fears
- ❖ Allay - misconception, anxiety, confusion
- ❖ Counter rumours
- ❖ Enhance image

CONSIDERATIONS IN RISK COMMUNICATION

1. Objective/Statistical Risk vs Risk perceptions.
2. Use of Risk Comparisons.
3. Framing Effects.
4. Scientific and Lay perspectives.
5. Indirect effect and Social amplification.
6. Role of media : “Trigger Factors”.

CONSIDERATIONS IN RISK COMMUNICATION

1. **Objective/Statistical Risk vs Risk Perception.**
 - ❖ Objective/statistical risk – Scientific – Function on the magnitude of risk.
 - ❖ Risk perception - “Fright /Outrage Factors”

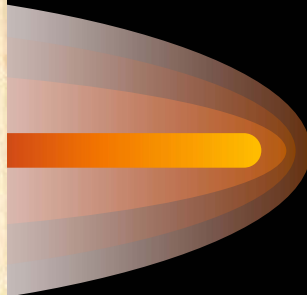
HAZARD VS OUTRAGE FACTOR

	High Outrage	Low Outrage
High Hazard	1	2
Low Hazard	3	4

CONSIDERATIONS IN RISK COMMUNICATION



❖ Perception



CONSIDERATIONS IN RISK COMMUNICATION



- ❖ Risk perception - “Fright /Outrage Factors”.
- ❖ Irrational fear.

***Risks perceived to ...
are more accepted than***

Be voluntary
Be under an individual's control
Have clear benefits
Be fairly distributed
Be natural
Be clear damage
Be generated by a trusted source
Be familiar
Affect adults

Risks perceived to ...

Be imposed
Be controlled by others
Have little or not benefit
Be unfairly distributed
Be manmade
Be hidden damage
Be generated by an untrusted/
conflicting source
Be poorly understood
Affect pregnant wife/children

CONSIDERATION IN RISK COMMUNICATION

1. Risk perception :

- ◆ perceived risk has many dimensions.
- ◆ Public vs Individual reaction.
- ◆ Disagreement for both facts and values.
- ◆ Perception of specific risks often linked to wider beliefs.

CONSIDERATION IN RISK COMMUNICATION (cont.)

2. Use of Risk Comparisons.

- Difficult to appreciate statistic:

Small risk - $1:10^6$ / 0.00015

- Tables of risk comparisons:

Over estimate - unusual risk.

Under-estimate - common killers

(“availability bias”).

***EXAMPLES OF RISKS ESTIMATED TO INCREASE
THE ANNUAL CHANCE OF DEATH BY 1 IN ONE
MILLION (US STATISTICS)***

Activity

Smoking 1.4 cigarettes

Spending 1 hour in a coal
mine

Living 2 days in New York
or Boston

Travelling 10 miles by
bicycle

Flying 1,000 miles by jet

Cause of Death

Cancer, heart disease

Black lung disease

Air Pollution

Accident

Accident

***EXAMPLES OF RISKS ESTIMATED TO INCREASE
THE ANNUAL CHANCE OF DEATH BY 1 IN ONE
MILLION (US STATISTICS) (cont.)***

Living 2 months in Denver (rather
than New York)

Cancer (cosmic radiation)

One chest X-ray in a good hospital

Cancer (from radiation)

Eating 40lbs. Of peanut butter

Liver cancer (aflatoxin B)

Drinking 30 12oz cans of diet soda

Cancer (from saccharin)

Living 150 years within 20 miles
of nuclear power plant

Cancer (from radiation)

(Source: Wilson, 1979)

CONSIDERATIONS IN RISK COMMUNICATION

3. Framing Effects :

- ◆ Choices depends on “Frames” (provider/recipient):
 - Baselines - Half empty/full.
Survival/death.
 - Choice: Riskier - Losses.
Play safe - Gains.

CONSIDERATIONS IN RISK COMMUNICATION

- ◆ Absolute vs relative risks:
 - Can mislead.
 - Absolute: Death increase from 1 to 2
 - Relative: Death increase by 100%.
(favored by press).
 - Important to state baseline.

CONSIDERATIONS IN RISK COMMUNICATION

4. *Scientific vs Lay perspective :*

- ◆ Science/Gov. - Risk on population.

Assume – Individuals representative of population/Average person.

- random risk/sensitivity.

- ◆ Lay person - Risk to individuals.

CONSIDERATIONS IN RISK COMMUNICATION



5. Indirect Effects & Social amplification:
- ◆ Direct vs Indirect (unintended) effect.
Social, economic, political.
 - ◆ Repercussion – Over distance and time.

CONSIDERATIONS IN RISK COMMUNICATION



6. Role of media :

“Media Trigger Factors”.

Media Triggers:

1. Questions of blame
2. Alleged secrets and attempted “cover-ups.”
3. “Human interest” through identifiable heroes, villains, etc. (as well as victims).
4. Links with existing high-profile issues or personalities.
5. Conflict (between experts and/or between experts and public).
6. Signal value: the story as potent of further ills (“What next?”).
7. Many people exposed to the risk, even if at low levels (“It could be you”).
8. Strong visual impact.
9. Sex and/or crime.
10. “Snowballing” of reportage: the fact that something is a “major story” is often itself a story, and this becomes self-fulfilling as media compete for coverage.

EFFECTIVE RISK COMMUNICATION:

- Earn the trust as a reliable source of information:
 - Prevent disclosure - Reasons.
- The objectives of risk communication be clearly defined:
 - What.
 - For whom.

FACTORS AFFECTING TRUST & CREDIBILITY



1. Empathy and Caring
 2. Competence and expertise
 3. Honesty and openness
 4. Dedication and commitment.
- * Trust and Credibility:
- Difficult to achieve
 - If lost, even more difficult to regain.

CONCLUSION

- Need to Plan, identify and quantify health risk
- Prioritize risk
- Communicate
 - Public and media
 - Alert, accept, control
- Public – importance of perception
- Media – sensitivity
- Effective communication – Trust and credibility