

## What Helps in Decision Making- Values or Emotions?

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**H**ealth sector of Nepal is facing a difficult scenario of blame and condemn of malpractice which is evident by news of unexpected outcome of patients in different social media, TV channels and news papers. Despite of ethical treatment given to the patient, such news are still affecting the overall health system of Nepal. Most of these issues seem to be under taken by emotional factors involved among the family members of the patients involving in the treatment. There are lot of researches and articles published in the past regarding emotions and values in the decision making in medical fields. Emotions can vaguely be described as alteration in state of body and mind in response to various stimuli.<sup>1</sup> There seems to be two different routs of physiological signals like heart rate, facial expression, posture, muscular tone, hormones in emotional decision making. As described by Damasio, these pathway are termed as “body loop” and “ as-if body loop”. In the former pathway physiological signal provokes the emotional signal in the brain and in the later pathway emotions are activated without direct change in the body. Like, knowing the diagnosis of brain tumors, it initiate the response of fear and anxiety and will initiate physiological signal., this can be understood as “ body loop”. Fear of being diagnosed with brain tumor during

investigation, which might actually be normal, will also cause physiological response and can be summarized as “as-if body loop”. This physiological signal are also termed as “somatic makers”<sup>2</sup> and is supposed to be regulated by emotion circuit at ventromedial prefrontal cortex.<sup>3</sup> According to Loewenstein- Lerner the emotions can broadly be classified as anticipatory and immediate. Anticipated emotions are the exception of how one will feel in future by the decision they had made, and is largely centered around rational of risk and benefit.<sup>4,5</sup> The decision of anticipated emotion depends on knowledge of different treatment option which they gathered from health professional and their knowledge of previous experience or even Google these days. It is also affected by the time they have in decision making. The intensity of disappointment in anticipated emotion is usually counter-factual in nature, like family member who could treat a patient to return home with no disease remaining, and end up with bad outcome, base their disappointment on the loss of cured patient.

Immediate emotions are the true emotion which the person experience at the time when they know the diagnosis. These emotions has propensity to neglect the probability of possible outcome.<sup>6,7</sup> It is intense during emergency situation when there is

limited time to take decision, like decision making for craniotomy in head injuries, hematoma evacuation for large intracerebral hemorrhage, ventriculo-peritoneal shunts in hydrocephalus etc. The immediate emotion seems to fade away with time and usually anticipated emotion will take over.

The four traditional criteria on the basis of mental abilities in decision making capacity are proposed as:<sup>8,9</sup>

1. Understanding : ability to summarize treatment related information
2. Appreciation : insight into the disorder
3. Reasoning: Rational manipulation of information
4. Evidencing a choice

The role of positive and negative emotions are explained in the theory of “Mood Maintenance”. In this theory a happy decision maker are reluctant to take risky decision.<sup>10</sup> These people seems to stay away from risky surgeries. However, unhappy decision makers seem to prefer high risk options.<sup>11</sup> Knowing the different forms of emotions and timing of its occurrence during different situation by a treating doctors could aid in knowing their patients family members and situations. To some extent this could also help in decreasing the dissatisfaction related to treatment.

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