Case study: Making Evidence Based Decisions in the Clinical Environment

Definition
Evidence-based practice is the use of the best available evidence together with a clinician’s expertise and a patient’s values and preferences in making health care decisions. Evidence based decision making requires a systematic approach to researching and analyzing available evidence to inform a clinical decision.

Case Presentation
A 42-year-old woman presents with new onset subjective sense of numbness in right tongue and mild weakness over the right face. Over 24 hours it progresses to complete and severe lower motor neuron pattern of facial palsy. She is diagnosed with Bell’s palsy. Evidence suggests patients with severe facial palsy should be considered for combined therapy with both steroids and antiviral treatment based on these results.

Using the PICO process, the attending clinician defines the patient Problem or Population; identify Interventions; Compare alternatives; and define the Outcome expected.

P—Should patients with severe facial palsy 
I—receive steroids alone vs. 
C—combined steroid + antiviral treatment 
O—to improve recovery?

Discussion
Evidence based reasoning and decision-making is never perfect, it is not necessarily certain. Evidence is either strong or weak, or may fall in between. Statistical methods and information can be helpful but they must be combined with clinical information and judgment. Clinicians must also consider patient factors when making treatment decisions, such as comorbidities, patient’s values, and weigh risks and benefits.

References
Evidence Based Medicine Toolkit. American Academy of Neurology