



NIHILISM IN EMERGENCY NEUROSURGICAL PATIENTS IN A RURAL SETUP: OUR EXPERIENCE

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ABSTRACT

Aim: To evaluate the aspect of Clinical Nihilism and Self fulfilled prophecy (SFP) in emergency neurosurgical patients in our Centre, Jorhat Medical College Hospital. **Method and materials:** A retrospective analysis was done in Jorhat medical college from November 2016 to October 2018 in which 483 patients critically ill patient evaluated with predicted poor outcome or death by neurosurgery department were included in the study. Data was collected using patients' data sheets and presented in tables and graphs. Simple descriptive data analysis was done with MS Excel. **Results and observation:** 483 patients who were predicted with poor outcome or death were included in our study. Among these 49 patients underwent operative management (14%) and 304 patients were treated medically (86%). The mortality in post operative group was 3 (6%) and in that of medical group were 42 (14%). 130 patients refused aggressive management (27%) and left against medical advice of which 113 (87%) died during transportation. 4 patients (3%) came back for follow up after 1 month with neurological improvement and rest 13 patients lost to follow up. 64.5 % patients survived who were critically ill and was expected to have a poor outcome. **Conclusion:** There is no universally accepted accurate prediction model. Decisions to limit treatment should be balanced with avoidance of self-fulfilling prophecies of poor outcome due to clinical nihilism.

KEYWORDS :

INTRODUCTION:

Nihilism is an inappropriately pessimistic view of a patient's outcome and the ability of a patient to benefit from aggressive care. Prognostication is an essential aspect of every new patient interaction, regardless of the medical disease being treated or its severity (1). Patients, as well as their relatives and surrogates, frequently inquire about their prognosis, seeking information on their future well-being. While it may not be expressly recognized as such, when a patient is informed that their hand laceration will take several weeks to heal or that their headache should disappear by morning, they are being provided with a prognostic evaluation as part of their assessment and treatment. However, the significance of forecasting becomes more pertinent when a patient faces a genuine possibility of mortality or impairment. Curiously, the clinical environment frequently exhibits a lack of understanding and misuse of the idea of prognostication. A self-fulfilling prophecy (SFP) is a prediction which becomes real or true by virtue of having been predicted or expected. Subjecting a patient to suboptimal care because it is believed they may not benefit from care has the potential to secure a poor outcome even if a good one could have been achieved. Individuals residing in rural regions face a higher likelihood of developing a traumatic brain injury (TBI) in comparison to those residing in urban areas. Furthermore, after experiencing a traumatic brain injury (TBI), individuals living in rural areas face more unfavorable consequences, such as an increased likelihood of mortality. Rural residents typically reside at greater distances from medical facilities and experience limited availability of Traumatic Brain Injury (TBI) experts. Other than these characteristics, there is limited knowledge regarding the difficulties that healthcare providers have when diagnosing and treating traumatic brain injuries (TBI) in rural areas, as well as the potential solutions to these obstacles. (2)

Aims & Objectives

This report details our initial experiences regarding clinical nihilism in emergency neurosurgery in our Centre, Jorhat Medical College Hospital. The objective of the study is:

- To evaluate the aspect of Clinical Nihilism and Self fulfilled prophecy (SFP) in emergency neurosurgical

patients

- To determine whether prognostic information affect aggressive management
- To determine whether nihilism affect treatment strategy

MATERIAL & METHOD

Place of study: The study was conducted in Jorhat medical college hospital.

Period of study: The data were collected retrospectively for the period of November 2016 to October 2018

Data collection: Those Patients evaluated and treated in neurosurgery department were included in the study. Data were collected using patients' data sheets from the case files available in medical record office. Data from Postmortem records, MLC data and Death registration office were verified. Data were recorded in a predefined proforma.

Statistical analysis

Data were presented in tables and graphs. Simple descriptive data analysis was done relevant with statistical tools using Microsoft excel.

RESULTS AND OBSERVATION:

During the period of our study, 1083 patients were evaluated for neurosurgical consultation in our centre out of which 483 (44.6%) patients were included in our study that were critically ill and were predicted as poor outcome or death. 130 patients refused aggressive management (27%) and left against medical advice of which 113 (87%) died during transportation. 4 patients (3%) came back for follow up after 1 month with neurological improvement and rest 13 patients lost to follow up. Those patients treated in our centre, 49 patients underwent operative management (14%) and 304 patients were treated medically (86%). The mortality in post operative group was 3 (6%) and in that of medical group were 42 (14%).

Table 1: Distribution Of Critically Ill Patients

	Number	Percentage
OPERATIVE	49	10
MEDICAL	304	63

LAMA	130	27
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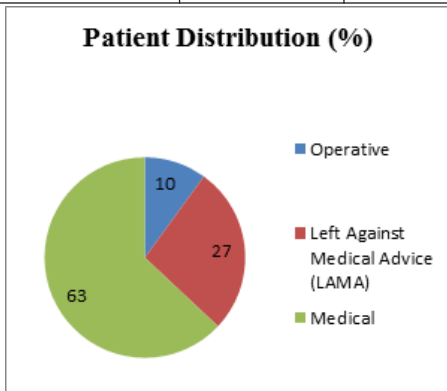


Figure 1: Distribution of critically ill patients

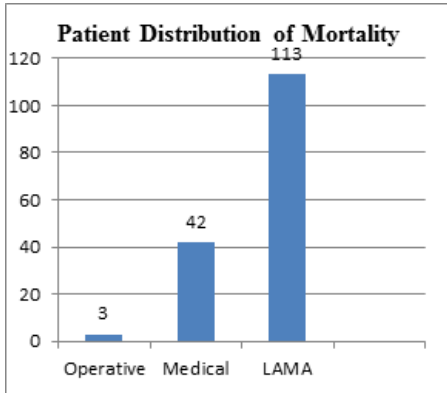


Figure 2: Distribution of mortality

Out of total 483 patients, 312 survived with medical or operative management, 158 died which includes death of post operative patients, patients in medical group as well as records of patients who left against medical advice obtained from medical record department, MLC records and death registry office, JMCH. 13 patients were lost in follow up.

DISCUSSION:

Restricting therapy for patients with severe acute neurological injuries is ethically justified when it would only serve to prolong the patient's suffering or result in an outcome that the patient deems undesirable. Limiting care in these situations also avoids the exorbitant expenses of medical treatment that would ultimately provide inadequate results, while simultaneously reallocating resources to persons who would derive greater benefits from them. Regrettably, there is sometimes significant ambiguity regarding the potential results of rigorous treatment, despite recent advancements in predicting outcomes for traumatic brain injuries. These prediction models are not ideal since they rely on a little amount of objective data that is acquired soon after the injury. Therefore, it is crucial to exercise extreme caution when applying the predictions to particular patients. Clearly, if there was absolute certainty that a patient would not derive adequate benefits from intensive therapy, then the provision of useless care could be readily prevented. Therapeutic nihilism is a concept that is different from this. Nihilism is an excessively bleak view regarding a patient's prognosis and the potential for a patient to get benefits from intensive medical treatment. This can deny patients the opportunity to achieve an outcome that they find acceptable and believe to have a realistic possibility of achieving. (3)

In 44.6% situation patients were prognosticated with Poor outcome. No standard prognostication model /tool was used. Prognostication was based on self-fulfilled prophecy and clinical nihilism hinder clinical decision in those cases.

In our study, 64.5 % patients survived who were critically ill and was expected to have a poor outcome which makes us rethink regarding the aspect of clinical nihilism and SFP SFPs can potentially result in higher mortality rates among patient groups with anticipated poor prognosis, induce a sense of causative responsibility among clinicians for patient deaths, and hinder open and honest communication with patients and their families on prognosis. However, the SFP is an essential outcome of making decisions when confronted with uncertainty. The prevailing consensus is that it is morally acceptable to restrict or discontinue medical intervention when there is doubt, as long as it aligns with the patient's desires or their overall well-being (in cases when their desires are unknown). Withdrawing therapy based on a negative prognosis, regardless of whether the predictions may become true due to the withdrawal itself, might be justified by considering the expected value or the evidence-based understanding of what should be done. Adult child usually refuse palliative care have less insight into the patients' wishes as compared to patients' parents or spouse (4). Nonetheless, the SFP poses a significant epistemic challenge when it comes to evaluating the true prognosis of patients who may or may not undergo therapeutic withdrawal. When a bad prognosis is driven by a single factor or variable, it becomes very challenging to calculate the prognosis that would result if all treatment options were offered. However, making an effort to accomplish so is a crucial method for doctors to validate their predictions and their choices to permit sufferers to pass away. (5)

CONCLUSION

There is no universally accepted accurate prediction model. Decisions to limit treatment should be balanced with avoidance of self-fulfilling prophecies of poor outcome due to clinical nihilism.

REFERENCES

1. Hemphill JC 3rd, White DB. Clinical nihilism in neuroemergencies. *Emerg Med Clin North Am.* 2009 Feb;27(1):27-37, vii-viii. doi: 10.1016/j.emc.2008.08.009. PMID: 19218017; PMCID: PMC2676162.
2. Daugherty J, Waltzman D, Popat S, Horn Groenendaal A, Cherney M, Knudson A. Challenges and opportunities in diagnosing and managing mild traumatic brain injury in rural settings. *Rural and Remote Health* 2022; 22: 7241. <https://doi.org/10.22605/RRH7241>
3. Hirschi R, Rommel C, Hawryluk GWJ (2017) Should we have a guard against therapeutic nihilism for patients with severe traumatic brain injury. *Neural Regen Res* 12(11):1801-1803.
4. Rei K M, Reddy V, Brazdzionis J, et al. (December 04, 2023) Determinants and Disparities of Neurosurgery Patients Refusing Inpatient Palliative Care After Provider Recommendation. *Cureus* 15(12): e49925. DOI 10.7759/cureus.49925
5. Wilkinson D. The self-fulfilling prophecy in intensive care. *Theor Med Bioeth.* 2009;30(6):401-10. doi: 10.1007/s11017-009-9120-6. PMID: 19943193.