“Sombrero Azul:” Implementing the Universal Protocol in a Developing Country

Shannon Tew, MD, 1 Emily M. Funk, MSN, CRNA, 1 Jennifer Neifeld, MSN, CRNA, 1 Brian C. Galack, MD, 1 Ramiro Madden-Fuentes, MD, 2 Sherry S. Ross, MD, 2 Henry E. Rice, MD, 2 Brad M. Taicher, DO, MBA 1

1Department of Anesthesiology, Duke University Medical Center/Duke Children’s Hospital, Durham NC 27710, USA
2Department of Surgery, Duke University Medical Center/Duke Children’s Hospital, Durham NC 27710, USA

BACKGROUND

The Universal Protocol for Preventing Wrong Site, Wrong Procedure and Wrong Person Surgery was approved by the Joint Commission Board of Commissioners in 2003 and has been implemented in all JCAHO accredited hospitals in the United States. 1-3 A United States based team performing surgery in a developing country has many challenges, especially pertaining to patient safety. Being in an unfamiliar environment with a language barrier contributes to the potential for a wrong site, wrong procedure, or wrong person surgery.

METHODS

Our perioperative team from Duke Children’s Hospital visited a medical center in Guatemala City, Guatemala and performed 51 pediatric general and urologic surgeries. We implemented the use of the Universal Protocol: a pre-procedure verification, surgical site marking, and a surgical “time out” prior to the procedure (Figure 1). The pre-procedure verification, or “Sombrero Azul,” consisted of verifying patient identifiers (name, medical record number, picture), signed surgical and anesthesia history and physical (H&P), allergies, correct surgical procedure and marking, and a surgical and anesthesia consent. This verification was performed by a member of the surgical nursing team alongside a member of the anesthesia team and a medical interpreter, and a blue OR hat (“sombrero azul” in Spanish) was placed on the patient as a visual cue that the verification had been completed (Figure 2). IRB approval was obtained to review the impact of the implementation of the Universal Protocol.

RESULTS

51 pediatric patients were evaluated with the pre-procedure verification. 14 (27%) had missing or incorrect patient identifiers, 1 (2%) surgical H&P had an incorrect surgical site, and 19 (37%) had missing or incorrect surgical consents (Figure 3). These errors were clarified and the verification was completed again prior to entering the pre-operative holding area and operating room.

DISCUSSION

Performing surgical procedures in a developing and unfamiliar country with a language barrier poses potential challenges with patient safety. With the Universal Protocol, we identified multiple inconsistencies or errors with patient identification, surgical procedures, and site. Implementation of the Universal Protocol was successfully used to prevent and correct these errors and minimize the potential for patient harm. It was not until the day of surgery that all of these errors were discovered and addressed, which contributed to inefficiency and surgical delays.

The Universal Protocol is also useful as an identifier of system weaknesses. One weakness at the facility was that a local Spanish-speaking physician completed and obtained surgical consent based on the documentation of the Duke Children’s surgeon. At this step, there was miscommunication of undetermined origin that led to repeated errors. A solution to this specific problem would require an additional Duke Children’s staff member to have direct involvement in the consent process. In the future, we plan to implement this solution prior to the patient leaving the preoperative clinic in order to minimize inconsistencies with the Universal Protocol on the day of surgery and reduce delays.

CONCLUSIONS

In the setting of a developing country, the Universal Protocol is a useful tool to enhance patient safety in regards to minimizing the potential for wrong patient, wrong site, or wrong procedure. In order for it to be used successfully, the entire perioperative team has to be committed and engaged in the process. It can be a beneficial tool if the team is willing to address and correct any possible inconsistencies and only move forward in the procedure process once the Universal Protocol is successfully completed.

REFERENCES: