need to automate EWSS before implementing it at a large scale to decrease workload, record duplication, and score calculation errors. More efforts need to be carried out in staff training, motivation, and support as they are key aspects towards success.

59 REDUCING IV INFILTRATION AND POTENTIAL HARM IN THE PEDIATRIC EMERGENCY DEPARTMENT – KASCH
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Background There was a significant increase in intravenous (IV) infiltration in the month of March 2016 in the Pediatric Emergency Department - KASCH. The Acute Care team noted an increase in IV-related incidence and there were 30 generated safety reporting system (SRS) reports from January to March 2016. This prompted the unit leaders to create a task-force in order to review the causes and the factors leading to incidence and causing patient harm.

Methods Using the PDSA (plan-do-study-act) quality model, the quality improvement team collected data generated through the SRS on IV infiltration/extravasation. The reports were analyzed as to the causes and harm of the incident. Using a cause and effect diagram, the team identified the root causes as non-adherence to the insertion and sterility technique, staff competency on IV insertion and monitoring, type of dressing used, lighting, and lack of guidelines to support the practice. In order to draw a reliable conclusion, several PDSA cycles were tested and implemented: (1) data collection and audit tool design; (2) staff education and standardized documentation; (3) formulation of the escalation process and guidelines; and (4) continuous monitoring and auditing of IV infiltration/extravasation and regular reporting to the daily key performance indicator (KPI).

Results For the initial throughput of the project, the IV Watchers on the Move Team noted a marked decrease in infiltration in August 2018 as evidenced by the nurses’ compliance in IV infiltration prevention strategies - i.e., (1) hourly IV site checks, (2) mandatory use of smart pumps, and (3) timely and accurate documentation of IV assessment.

Conclusion The IV Watchers on the Move QI Project was able to design a mechanism to reduce the potential harm caused by infiltration. Part of the intervention was the hourly assessment and early recognition of impending infiltration. Nurses were instructed to be cautious when administering highly concentrated medications. With all of the efforts and initiative shown throughout, the pediatric patients benefited from the successful interventions that finally led to the safe delivery of nursing care.

60 EFFECTIVENESS OF PROCEDURE EXPLANATION IN REDUCING ANXIETY FOR PATIENTS UNDERGOING MAGNETIC RESONANCE IMAGING
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Background Magnetic resonance imaging (MRI) is potentially considered as the greatest invention in the world. In addition, all the people in the medical field have been surprised by the capability of MRI in the past 25 years. There has been a massive increase in the use of MRI in the clinical field. More than 80 million MRI procedures occur every year around the globe. Patients who are undergoing MRI examinations infrequently experience anxiety as a consequence of the procedure or the environment. Reducing patient anxiety is considered as one of the most common concerns affecting the outcome of the MRI scan. The purpose of this study was to investigate the effectiveness of procedure explanation on controlling anxiety levels in adolescent patients undergoing MRI.

Methods The Institutional Review Board (IRB) ethics committee approved this cross-sectional study. Convenient sampling techniques were used to select 37 adolescent patients (19 females and 18 male) who attended the MRI appointment unit at the Medical Imaging Department of King Abdulaziz Medical City, Riyadh, Saudi Arabia. Three tools were used to collect data: the sociodemographic data sheet, patient assessment knowledge sheet, and the State-Trait Anxiety Inventory (STAI) questionnaire. STAI is a self-report test designed to measure patient anxiety level; 40 questions are divided into two subcategories; 20 state (defined as fear, nervousness, discomfort, etc. and how the person feels right now), and 20 traits (defined as stress, worry, discomfort, etc. that the person experiences on a daily basis).

Results The state anxiety level showed a statistically significant difference in patients’ knowledge between the pre-test and post-test with or without instruction. For the group with instruction, their anxiety level significantly reduced. The trait anxiety level showed no significant difference between pre-test and post-test with or without instruction.

Conclusion Because of lack of awareness about the procedural instructions for the patient before undergoing MRI, it may affect the procedure prognosis and outcome. Our suggestion for the future is to increase awareness about MRI and to improve communication skills of MRI staff to educate the patient in a good way to reduce patient anxiety.
CONSUMPTION OF RAW MILK IS THE MAIN CAUSE OF
PREVALENCE AND RISK FACTORS OF GESTATIONAL
DIABETES MELLITUS AMONG PREGNANT PATIENTS
ATTENDING NATIONAL GUARD PRIMARY HEALTHCARE
CENTERS IN JEDDAH CITY

ABSTRACT

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Background Gestational diabetes mellitus (GDM) is defined as glucose intolerance with onset or first recognition during pregnancy, and is usually screened for at 24–28 weeks of gestation. Risk factors that have been identified include persistent glucosuria, history of macrosomic fetus, obesity, age older than 25 years, congenital malformations, and strong family history of type 2 diabetes, which is a common illness in our country. In our study, we estimated GDM prevalence and evaluated its risk factors among female patients attending National Guard Primary Healthcare Centers in Jeddah city in 2017.

Methods This was an observational cross-sectional study. Our sample size was calculated to be 347. We included all pregnant females, aged 15–45 years, who attended National Guard Primary Healthcare Centers in Jeddah, and had been following up there during the study period. We collected data from antenatal visit notes, and labor and delivery sheets using the electronic file system BestCare. Screening for GDM at 24–28 gestational weeks was done using the American Diabetes Association (ADA) two-step approach, starting with 1 hour 50 g glucose challenge test, followed by 3-hour 100 g glucose tolerance test. We used SPSS 24.0 to analyze data.

Results The prevalence of GDM among our population was calculated to be 19.6%. Glucose challenge test was abnormal in 36.6% (n=127) of the sample, and 6.9% (n=24) had diagnostic value. Glucose tolerance test was abnormal in 18.7% (n=65) of the sample, and 15% (n=52) had diagnostic value. Several factors were significantly associated with GDM including age (p<0.001), height (p=0.028), and body-mass index (BMI; p=0.045).

Conclusion Prevalence of GDM is considered high among our population. Dietary habits and high BMI play an important role in the increasing amount of GDM cases. It is important to prevent GDM to minimize risks for both the mother and fetus.