INTRODUCTION. FOAM is a new concept where freely accessible resources are created online. Concerns have been expressed that whilst FOAM is an easy way to access medical education, its lack of peer review may make its reliability uncertain.
OBJECTIVES. Thirty FOAM resources related to three common intensive care procedures (central venous catheterisation, urinary catheterisation and nasogastric tube insertion) were reviewed to assess compliance with UK national and international guidelines. These procedures were chosen because the existence of international guidance, the frequency of their use in the ICU and the potential for significant harm from infection (CVC and catheter) and misplacement (NGT).
METHODS. The search strategy was predefined to gather five web and five video resources for each procedure.
The search terms "Central Line Insertion", "Male Urinary Catheterisation" and "Nasogastric Tube Insertion" were used (Google). Irrelevant, foreign language or paid resources were excluded.
Important elements within each guideline were pre-defined and their presence was compared to gauge compliance (CVC 28, NGT 22, catheterisation 28) [EPIC2 guidelines (Pratt, 2007) were used for specific guidance on CVC and catheter insertion. NPSA guidelines (National Patient Safety Agency, 2011) for NGT insertion].
RESULTS. 34% of guideline elements were included correctly, 64% were not included and 2% of elements were contradicted. Resources originated from a wide range of countries (CVC: 3 UK, 4 US, Canada, Australia, Pakistan, Catheterisation: 7 UK, 2 US, 1 Canada, NGT: 5 UK, 3 US, 2 Canada). In no single resource were more than 57% of elements correctly included (mean compliance per procedure CVC 36.2%, NGT 47.2%, catheterisation 29.6%).
Compliance with guideline elements ranged from only 17% for cleaning equipment to 100% for use of sterile drapes. The 19 contradictions included use of incorrect cleaning and flushing solutions, incorrect handling of sharps, contamination of sterile fields, incorrectly sized catheters and incorrect methods of confirming NGT placement (e.g. auscultation).
Due to incorrect placement of NGT being a UK 'never event' these incorrect placement methods give rise to significant patient safety concerns.
CONCLUSIONS. FOAM provides medical education in an easy to access format, but is not peer reviewed. We found substantial gaps in the information they conveyed. Contradictions to the guidelines were rare but clinically significant.

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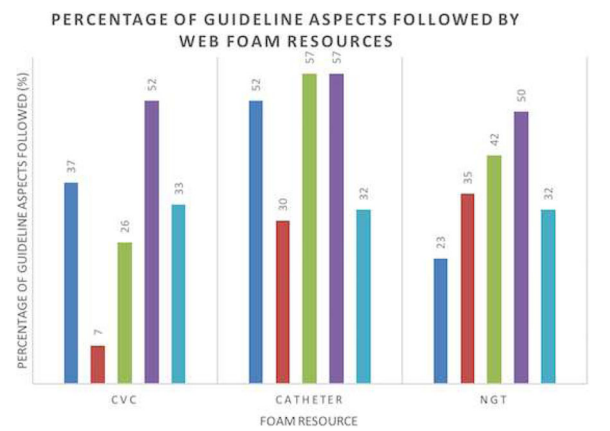

Fig. 1 (abstract 1137). Percentage of guideline aspects followed by web FOAM resources

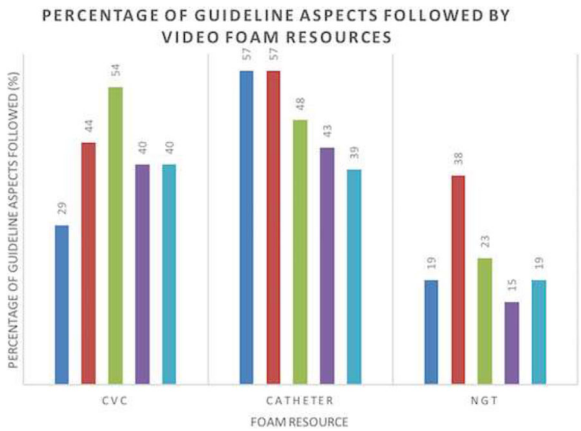

Fig. 2 (abstract 1137). Percentage of guideline aspects followed by video FOAM resources

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Healthcare workers and nursing students´ attitudes and beliefs during an influenza pandemic

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INTRODUCTION. Healthcare workers are a key player in a pandemic, since they will be the first to expose themselves to it. Therefore, it is important to know their beliefs and attitudes when exposing them to it.
OBJECTIVES. The objective of this project is to analyze the beliefs and attitudes of healthcare workers and nursing students in an influenza pandemic, and their differences.
METHODS. A transversal and descriptive study was carried out, through a personal and anonymous inquest, among the healthcare personnel and students of the Degree in Nursing of the Las Palmas de Gran Canaria University (ULPGC), with a sample of 277 people. The instrument used to measure up the beliefs and attitudes of health workers before an epidemiological alert was the one published and validated by Professor Heather Draper of the University of Birmingham in June 2008, after obtaining the approval of the author to carry out this work (Draper H 2008, Damery S, Ives J 2009 & Damery S 2010).
The statistical analysis was carried out using the statistical package SPSS 15.0. Student-t and Chi-square tests were used to compare continuous and categorical variables, respectively.
RESULTS. 84.5% believe that a pandemic is likely to occur. Almost half do not believe there is a vaccine that protects them. And this percentage is much lower among students (52 versus 30.4%). In addition, students, unlike workers, fear that if there were an effective vaccine do not have access to it. 41.9% would not go to their workplace if their family had a higher risk of contracting the disease. But the most relevant fact is that only 5.8% have a high possibility of going to work, during a hypothetical pandemic, despite almost all adverse circumstances identified.
CONCLUSIONS. Almost everyone is aware that a possible influenza pandemic could happen and are willing to work for it, despite the personal risks they might be exposed. However, they place the family before work, since they would not be willing to fulfill their responsibilities if there was a greater risk than usual in infecting their relatives; being able to reach figures of absenteeism higher than 94%.

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Evaluation of SAPS-3 score in patients older than 80 years. Impact on the mortality of the previous functional situation

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INTRODUCTION. In recent years, the number of patients older than 80 years admitted to the Intensive Care Unit (ICU) has increased exponentially.

OBJECTIVES: To analyze the predictive capacity of SAPS-3 score in patients older than 80 years admitted to Intensive Cre Unit (ICU) and to evaluate the influence of the previous functional situation on the mortality.

METHODS. Multicentric prospective observational study in the ICU of 7 Spanish hospitals (Carlos Haya in Malaga, Cabra (Córdoba), Jaén, Burgos, Arnau Vilanova in Valencia, Clinic of Zaragoza, Ronda).

Data were expressed as the mean and standard deviation for quantitative variables and percentages for qualitative variables. For the comparison of two means we used the Student´s t-test and the chi-squared test was used to compare proportions and logistic regression for multivariate analysis. Statistically significant differences: $p< 0.05$.

RESULTS. 2008 patients in total. Of these, 181 (9%) between 80-85 years, 57 (3%) between 85-90 years old and only 4 patients were older than 90 years.

62% for medical pathology. Acute coronary syndrome (20% of all patients, 12% with ST-segment elevation myocardial infarction (STEMI), arrhythmias especially bradycardia with need for vigilance and / or pacemaker (17% of the total), 5% for sepsis and 4% for cardiac or respiratory arrest.

38% are surgical, of them 10% only for central venous catheterization, and 7% for emergency surgery. The most frequent were cardiac and maxillofacial surgery.

At admission, 26% required mechanical ventilation, with mortality of 40% and of non-ventilated patients of 17% (p=0.001). Previous functional situation (normal, self-sufficient but with dysfunction and not self-sufficient) was: 50%, 36% and 14%, with hospital mortality: 14.4%. 35.9% and 23.1% respectively.

SAPS-3 on admission of 53.83±12.71 points. The predicted mortality of 26% and hospital mortality of 23%, (ICU of 14%).

The multivariate analysis with logistical regression shows complementarity between SAPS-3 and previous functional situation to predict hospital mortality. OR: Normal = 1, Self-sufficient but with dysfunction = 2.9(1.25-7.13) and Not self-sufficient = 1.65(0.49-5.52).

In younger than 80 years, mortality was associated with previous functional situation and there was complementarity with SAPS-3. OR: (Normal = 1, Self-sufficient but with dysfunction = 1.57(1.1-2.24) and Not self-sufficient = 4.01(2.41-6.67)).

CONCLUSIONS. SAPS-3 is useful for predicting the mortality of elderly patients admitted to the ICU, the hospital mortality was similar to predicted mortality. The functional situation dysfunction is an independent factor associated with mortality, both in elderly patients and in those under 80 years.

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Daytime and its association with risk of death and chance of discharge in critically ill patients: a retrospective study

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INTRODUCTION. Variation of outcomes in critically ill patients due to admission day was demonstrated in past studies [1]. Some studies suggested that an additional "off-hours" effect was also associated with unfavourable outcomes.

OBJECTIVES.

a) To assess, whether daytime of ICU admission is associated with variation in risk of death and chance of discharge.
b) To assess, whether time of day is associated with differences in the immediate risk of death and chance of discharge during ICU stay.
c) To assess, whether previously reported "weekend effects" occurred independently from possible "daytime effects".

METHODS. Retrospective study in the Austrian Centre for Documentation and Quality Assurance in Intensive Care (ASDI) database [2]. Adult patients admitted due to medical reasons or following emergency surgery to ICUs participating in the project between 2012 and 2016 were included. ICU readmissions during the same hospital stay were excluded.

Multivariable competing risk analysis using the Fine and Gray proportional subdistribution hazards model concerning ICU mortality and ICU discharge was performed [3]. The following variables of interest were included in the model: time of admission (4h blocks), time of event (4h blocks), weekend or working day, year of admission, month of admission. 08:00-11:59 was chosen as the reference range for all daytime variables. The model was adjusted using ICU as fixed effects, type of admission and SAPS3 score [4].

RESULTS. 146,004 patients were included in the analysis. Risk of death varied significantly with time of admission [HR (95% CI) for ICU admission time: 12:00-15:59 0.99 (0.92-1.07), 16:00-19:59 1.08 (1.00-1.16), 20:00-23:59 1.11 (1.03-1.19), 00:00-03:59 1.24 (1.14-1.36), 04:00-07:59 1.23 (1.11-1.36)]. Significant variation in the risk of death during ICU stay with regards to daytime was observed [HR (95% CI) for time of death: 12:00-15:59 1.06 (1.00-1.13), 16:00-19:59 0.94 (0.89-1.01), 20:00-23:59 0.92 (0,85-1.00), 00:00-03:59 0.50 (0.46-0.55), 04:00-07:59 0.53 (0.49-0.58)]. Chance of discharge was drastically lower in the afternoon and at nights [HR (95% CI) for time of discharge: 12:00-15:59 0.62 (0.54-0.72), 16:00-19:59 0.15 (0.12-0.18), 20:00-23:59 0.08 (0.06-0.10), 00:00-03:59 0.02 (0.02-0.03), 04:00-07:59 0.03 (0.02-0.03)]. Risk of death following weekend ICU admission was elevated nevertheless [HR (95% CI) 1.19 (1.06-1.35) compared to working days].

CONCLUSIONS. Daytime is associated with significant variation in both risk of death and chances of discharge in critically ill patients admitted to ICUs for reasons other than scheduled procedures and following adequate adjustment for severity of illness.