### SELECTED ABSTRACTS FROM PUBMED

1. Vancini-Campanharo CR, Vancini RL, Lira CA, Andrade Mdos S, Góis AF, Atallah ÁN. Cohort study on the factors associated with survival post-cardiac arrest. Sao Paulo Med J. 2015 Nov-Dec;133(6):495-501.doi:10.1590/1516-3180.2015.00472607.Epub 2015 Oct 20.

### **ABSTRACT**

**Context and Objective:** Cardiac arrest is a common occurrence, and even with efficient emergency treatment, it is associated with a poor prognosis. Identification of predictors of survival after cardiopulmonary resuscitation may provide important information for the healthcare team and family. The aim of this study was to identify factors associated with the survival of patients treated for cardiac arrest, after a one-year follow-up period.

**Design and Setting:** Prospective cohort study conducted in the emergency department of a Brazilian university hospital.

**Methods:** The inclusion criterion was that the patients presented cardiac arrest that was treated in the emergency department (n = 285). Data were collected using the In-hospital Utstein Style template. Cox regression was used to determine which variables were associated with the survival rate (with 95% significance level).

**Results:** After one year, the survival rate was low. Among the patients treated, 39.6% experienced a return of spontaneous circulation; 18.6% survived for 24 hours and of these, 5.6% were discharged and 4.5% were alive after one year of follow-up. Patients with pulseless electrical activity were half as likely to survive as patients with ventricular fibrillation. For patients with asystole, the survival rate was 3.5 times lower than that of patients with pulseless electrical activity.

**Conclusions:** The initial cardiac rhythm was the best predictor of patient survival. Compared with ventricular fibrillation, pulseless electrical activity was associated with shorter survival times. In turn, compared with pulseless electrical activity, asystole was associated with an even lower survival rate.

## 2. Pourafkari L, Ghaffari S, Afshar AH, Anwar S, Nader ND. Predicting outcome in acute heart failure, does it matter? Acta Cardiol.2015 Dec;70(6):653-63.doi:10.2143/AC.70.6.3120177.

### ABSTRACT

**Background:**Acute heart failure (AHF) is a cardiac condition with multiple aetiologies that carries a high fatality rate. The development of heart failure following a coronary event has a poor prognosis. The main aim of this study was to predict in-hospital and long-term prognosis of AHF based on co-morbidities, physical and paraclinical findings at the time of admission.

**Methods:** The charts from 366 AHF patients, admitted for the first time during a 4-year period at a major university hospital, were reviewed. In addition to the demographic information, a comprehensive social and medical history was obtained. Presenting symptoms and physical findings were also recorded along with admission values of laboratory and myocardial injury markers. Echocardiographic examination was performed and recorded. Angiographic findings were only recorded in patients with acute coronary ischaemia. Univariate and multivariate analyses were performed to examine the relative contribution of clinical factors on in-hospital and long-term mortality.

**Results:** Preceding acute coronary syndrome (STEMI/NSTEMI) was the strongest predictor of in-hospital death for AHF (OR 3.74; 1.94-7.22, P = 0.001). Multivariate binary logistic regression identified that older age, female gender presence of acute myocardial infarction (higher cTNI or higher CKMB levels), lower blood pressure, lower LVEF and higherWBC were independently associated with long-term mortality.

**Conclusion:** AHF following an acute coronary syndrome carries a higher fatality rate. Higher levels of cardiac injury markers and white blood cell counts may present as a poor prognostic indicator secondary to an acute ischaemic event.

Keywords: Acute Heart Failure; Hospital Length of Stay; Mortality; Outcome.

# 3. Izzo CR, Monteleone PAA, Serafini PC. Human reproduction: current status. Rev Assoc Med Bras 2015;61(6):1-6.

### ABSTRACT

The concern about the maintenance of the human species has existed since the earliest civilizations. Progress in the diagnosis and treatment of infertility has led to the development of assisted reproductive techniques (ART) which,

along with the evolution of genetics and molecular biology studies, have contributed in a concrete way to the management of infertile couples. Classic in vitro fertilization was initially developed 35 years ago for the treatment of women with tubal blockage, however, it remains inaccessible to a significant proportion of infertile couples around the world. This can be explained by the lack of specialized clinics in some countries and by the high cost of the procedures. Efforts have been employed to increase the number of treatment cycles for assisted reproduction, as for example, the creation of low-cost programs. Even today, infertility remains a problem of global proportions, affecting millions of couples. The estimate of the incidence of infertility is uncertain, mainly because of the criteria used for its definition. This article aims to review the most important aspects, succinctly, regarding the incidence, etiology, and treatment options available to infertile couples.

Keywords: Infertility; Techniques of Assisted Reproduction (ART); InVitro Fertilization.

4. Sorpreso ICE, Soares (Jr.) JM, da Fonseca AM, Baracat EC. Female aging. Rev Assoc Med Bras 2015;61(6):553-6.

### ABSTRACT

Female aging is a process that involves hypoestrogenism time, the individual impact on each woman, and what we can do as experts to reduce morbidity and provide quality of life. This natural process in the female life cycle has been of concern to women after menopause. Changes in different biophysical and psychosocial aspects, and their individual experiences, have repercussions on the lives of patients seeking specialized and multidisciplinary support to reduce the harmful effects of prolonged hypoestrogenism. Overweight and obesity, inadequate living habits and the presence of multi-morbidities cause damage to the quality of life and impact the functional capacity. Behavioral prescription and hormone therapy are among the treatments given to ease symptoms and reduce morbidity. A better understanding of these factors can help identify groups that require more care after menopause.

Keywords: Post-Menopause; Women; Aging.

5. Karpa KD1, Hom LL2, Huffman P3, Lehman EB4, Chinchilli VM5, Haidet P6, Leong SL7. Medication safety curriculum: enhancing skills and changing behaviors. BMC Med Educ. 2015 Dec 29;15:234. doi: 10.1186/s12909-015-0521-0.

### **ABSTRACT**

**Background:**Adverse drug reactions are a leading cause of death in the United States. Safe and effective management of complex medication regimens is a skill for which recent medical school graduates may be unprepared when they transition to residency. We wished to assess the impact of a medication safety curriculum on student competency when evaluating medication therapeutic appropriateness as well as evaluate students' ability to transfer curricular material to management of patients in clinical settings.

**Methods:** To prepare 3rd and 4th year medical students to critically evaluate medication safety and appropriateness, we developed a medication reconciliation/optimization curriculum and embedded it within a Patient-Centered Medical Home longitudinal elective. This curriculum is comprised of a medication reconciliation workshop, in-class and individual case-based assignments, and authentic patient encounters in which medication management skills are practiced and refined. Pre- and post-course competency and skills with medication reconciliation/optimization are evaluated by assessing student ability to identify and resolve medication-related problems (MRPs) in case-based assignments using paired difference tests. A group of students who had wished to enroll in the elective but whose schedule did not permit it, served as a comparison group.

**Results:** Students completing the curriculum (n = 45) identified 75 % more MRPs in case assignments compared to baseline. No changes from baseline were apparent in the comparison group. Enrolled students were able to transfer their skills to the care of authentic patients; these students identified an average of 2.5 MRPs per patient from a panel of individuals that had recently transitioned from hospital to home. Moreover, patient questionnaires (before and several months following the medication encounters with assigned students) indicated that patients felt more knowledgeable about several medication parameters as a result of the student-led medication encounter. Patients also indicated that students helped them overcome barriers to medication adherence (e.g.cost, transportation, side effects).

**Conclusions:** Novice learners may have difficulty transitioning from knowledge of basic pharmacology facts to application of that information in clinical practice. Our curriculum appears to bridge that gap in ways that may positively impact patient care.

6. Luchterhand C, Rakel D, Haq C, Grant L, Byars-Winston A, Tyska S, et al. Creating a culture of mindfulness in medicine.WMJ 2015 Jun;114(3):105-9.

### ABSTRACT

Background: Well-documented challenges faced by primary care clinicians have brought growing awareness to the