(Mini-Mental State Examination [MMSE]) is equivocal in literature. To examine the association between them, we use longitudinal data on MMSE and cause-specific and causal inference to illustrate the relationship between two health outcomes. METHODS: Data were obtained from the Hispanic Established Populations for Epidemiologic Studies of the Elderly. Participants included 3050 noninstitutionalized Mexican Americans aged 65 and older followed from 1993-2001. Cognitive function and depressive symptoms were assessed using the MMSE and CESD at baseline and at 2, 5, and 7 years of follow-up. Independent variables were sociodemographics, CESD, medical and psychiatric disorders, and utilization. RESULTS: The average effect was estimated to evaluate the extent to which cognitive function depend not only on depressive symptoms measured at a single point in time but also on an individual’s entire depressive symptoms history. RESULTS: Our results indicate that if intervention to reduce 1 point of depressive symptoms was made at two years prior to assessing cognitive function, they would result in average improvement in cognitive function of 0.11, points of depressive symptoms were made at two years prior to assessing cognitive function.

PM18
MULTICRITERIA DECISION ANALYSIS IN ONCOLOGY: AN OVERVIEW
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OBJECTIVES: Diagnosis, treatment, and management decisions in oncology can be paralyzing due to the avalanche of information. MCDA allows stakeholders to measure the impact of decision-making frameworks within oncology, including multi-criteria decision-making frameworks (MCDM). Even though the literature includes several reviews on MCDM methods, applications of MCDM in oncology are lacking. This study sought to discuss the rationale for using MCDM in oncology. In this context, the following research question emerged: How can MCDM be used to develop a clinical decision support tool in oncology? METHODS: This study surveyed several applications of MCDM in the field of oncology. In particular, the study reviewed key contributors addressing screening and treatment decision-making in this area. It proposed research opportunities in the context of oncology, and presented a hypothetical scenario to show how MCDM could be applied in oncology. RESULTS: The literature reviewed identified eight studies. Five studies examined decision making for cancer screening. Four studies demonstrated applicability and acceptability of the Analytic Hierarchy Process (AHP) as a means to involve patients in oncology decisions and translate evidence into clinical practice. The study showed that a wide range of MCDM methods exist, each has its strengths and weaknesses. Choosing the appropriate method vary depending on the source and nature of information used to inform decision-making. CONCLUSIONS: Given recent advancements towards evidence-based decision, multidisciplinary teams, and shared decision-making, the field of oncology will continuously seek ways to make comprehensive and transparent decisions. MCDM appears to be a promising tool for these complex clinical decision-making in oncology and help assess trade-offs regarding preferences. Nonetheless, field-testing is desirable before MCDM becomes an established decision-making tool in oncology.

PM19
A COMPARISON OF PROPENSITY SCORES FOR ASSESSING PATIENT REPORTED OUTCOMES: A MONTE CARLO STUDY
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OBJECTIVES: Many medical and epidemiological research studies are based on observational data. In this study, we compare three different propensity scores: unadjusted propensity score (UPS), prognostic propensity score 1(PPS1), and prognostic propensity score 2(PPS2) using the inverse probability weighted (IPW) estimator for assessing patient reported outcomes (PROs) in terms of average treatment effect (ATE) and average treatment effect on the treated (ATT). METHODS: We conducted a Monte Carlo simulation study to evaluate these three propensity scores for estimating ATE and ATT in terms of bias, mean squared error, and coverage probability. RESULTS: The simulation results show that PPS1 has the poorest performance compared to UPS and PPS2 in terms of bias, MSE and CP. CONCLUSIONS: Based on these simulation results, we recommend using UPS and PPS for estimating ATE and ATT for patient reported outcomes in practice.

PM20
BARRIERS IN CONDUCTING RESEARCH IN THE FIELD OF RADIOLOGY: PERCEPTIONS OF HEALTH CARE PROFESSIONALS FROM A DEVELOPING NATION
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OBJECTIVES: To identify proportion of radiology health care professionals’ opinions regarding level of difficulty in conducting research in radiology and to ascertain barriers associated in conducting research activities in field of radiology. METHODS: Cross-sectional analytical study was conducted during International Conference organized by Radiological Society of Pakistan in November 2009 at Sheraton Hotel, Karachi. Data were collected using a structured, self-administered questionnaire from participants willing to participate in research registered for Annual Radiology Research Conference. Validity of the survey tool was ensured. RESULTS: Data were analyzed using SPSS versions 19.0. Means±SD were calculated for quantitative variables. Chi square and Fisher Exact tests applied for categorical variables. A p-value of < 0.001 was considered significant. RESULTS: Response rate was 76% (n=78/103), 65.4% agreed that conducting research in the field of radiology is difficult. Most of the participants (80.5%, n=63) had no belief that research in radiology is difficult despite as compared to those who had published a paper (38.5%) (p=0.026). However, age, sex, attending conferences and presenting papers did not significantly influence response of participants. The top three barriers in conducting research in field of radiology were time required to provide clinical services, lack of dedicated time for research, diminished income in research (41.5%, 33.9%, 30.8%, respectively). Similar responses were observed among residents and consultants regarding barriers in conducting research, more residents than consultants believed that lack of support from dean (p=0.037) and diminished income in research activities (p=0.003) were significant barriers. CONCLUSIONS: Most of the participants’ opinion was that conducting research in field of radiology is difficult. Time required providing clinical services, lack of dedicated time to research, diminished income in research activities were identified as the most important barriers in conducting research. Similar responses were observed among residents and consultants regarding barriers in conducting research.

PM21
VIEWS OF HEALTH CARE PROVIDERS ON MEDICAL ERRORS IN KARACHI, PAKISTAN
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OBJECTIVES: Incidence of medical errors is an area of concern for health care providers and policy makers. The large number of preventable errors, risk of litigation, patients' insecurity and lack of confidence in health care provision is a concern globally in an underdeveloped country like Pakistan, patient safety is an important untapped variable when assessing a great cost to the health care system. Objectives of this cross-sectional analytical study are, to estimate the rate of medical errors and to assess the factors that influence medical error report- ing in Pakistan. METHODS: Data were collected over period of three months, via self-administered survey questionnaire. 385 participants, including doctors, nurses and paramedics from different private and government hospitals of Karachi were selected by non-probability convenience sampling technique. Questionnaire elicited information about number of errors witnessed and reported, by health care providers and factors that influence error-reporting, after an informed consent. RESULTS: According to the preliminary review of data, approximately 95 percent of health care professional believe that medical errors are common. More than 50 percent have witnessed medical errors. 80 percent of the population surveyed has experienced a medical error. Approximately half of the participants believe that medical errors are not often reported in our country. CONCLUSIONS: Though a substantial number of the health care professionals in Karachi have ever witnessed or experienced a medical error, majority is of the opinion that not many are reported or disclosed. Improving health care system for patient safety need is of the hour. Both management and health care professionals need to improve error-reporting systems in Pakistan so as to check the cost burden on health care.