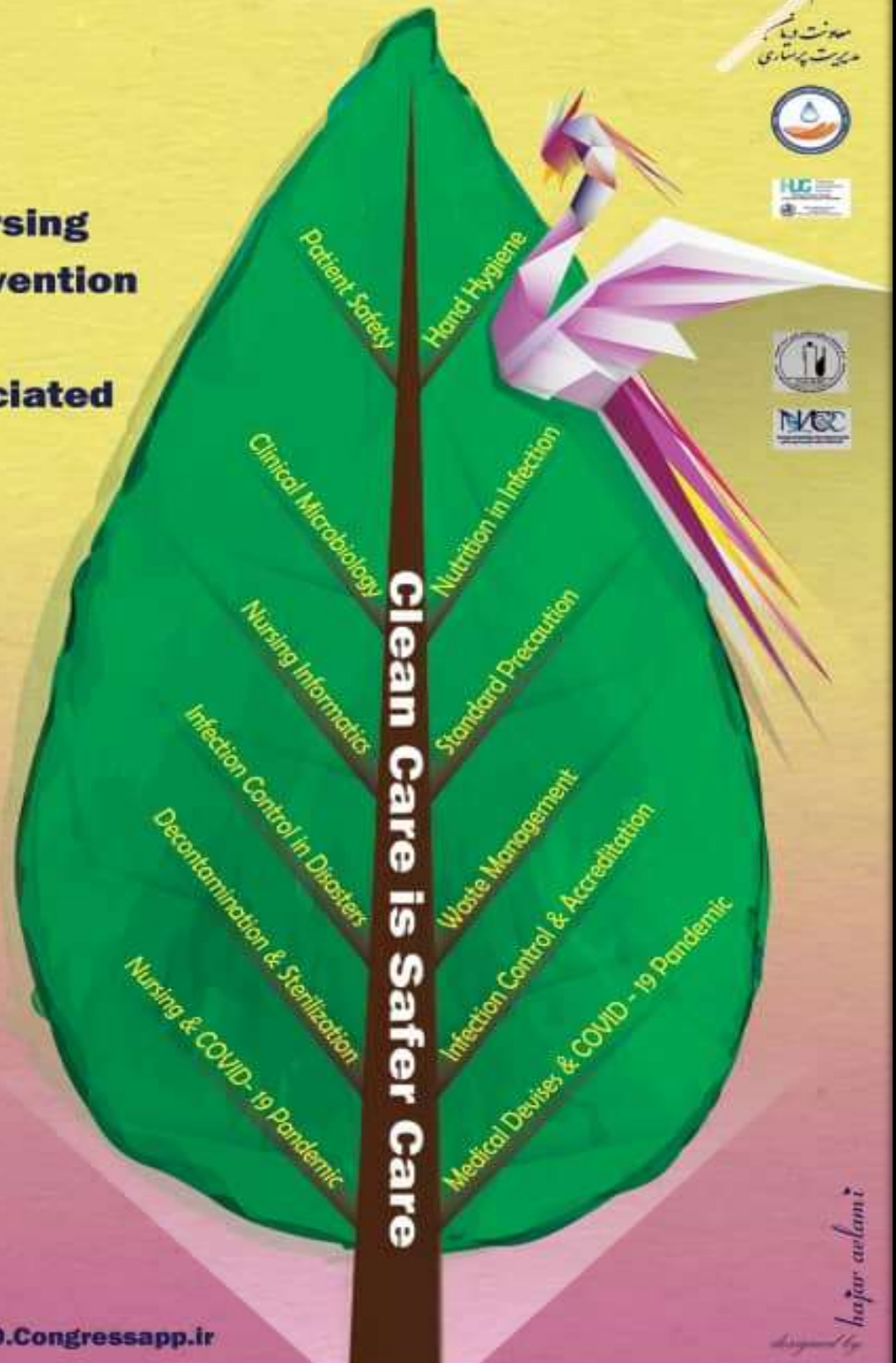




3rd

**International Nursing
Congress on Prevention
Strategies for
Healthcare-associated
Infections**



EMAIL: ICHRC@mums.ac.ir

Website: <http://Phcai2020.Congressapp.ir>

hasan avlami
designed by

**Mashhad-Iran
19-17 November 2020**



President
Shapour Badiee Aval
Associated Professor of Acupuncture



Scientific Secretary
Amir Reza Saleh Moghaddam
Assistant Professor of Nursing Management



Executive Secretary
Mohammad Hassan Aelami
**Associated Professor of Pediatric
Infectious Diseases**

Use of the Global Point Prevalence Survey of Antimicrobial Consumption and Resistance (Global-PPS): Role of Nurses in Building Capacity for Antimicrobial Stewardship

Ann Versporten

Laboratory of Medical Microbiology, University of Antwerp, Belgium.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Antimicrobial stewardship, Antimicrobial consumption Global point prevalence survey</p>	<p>Introduction:</p> <p>The World Health Organization includes antimicrobial resistance as one of the top 10 threats to global health in 2019 (WHO, 2019b). Antimicrobial resistance is enhanced by inappropriate antibiotic use. Antimicrobial stewardship (AMS) is the cautious use of antimicrobials to decrease unnecessary exposure to them and improve infection cure rates, reduce adverse drug reactions, minimize the emergence of antibiotic resistance, and lower health care costs (ANA & CDC, 2017). The Global-PPS is a simple, freely available web-based tool to measure and monitor antimicrobial prescribing and resistance in hospitals worldwide (www.global-pps.com). Since 2015, this ambitious project has established a worldwide network providing quantifiable measures to assess and compare the quantity and quality of antibiotic prescribing and resistance in hospitalized adults, children and neonates worldwide. Iran participated to the Global-PPS in 2015, 2017 and 2019. Striking results included prolonged antibiotic prescribing for surgical prophylaxis and rare documentation of a stop/review date for the antibiotherapy. Could there be an important role to play for nurses in enhancing appropriate antibiotic prescribing? Can nurses for example initiate an antibiotic timeout prompting the clinical team to assess and re-assess antibiotic treatment 48 to 72 hours after the initial start of the antibiotic course? The WHO has designated 2020 as the International Year of the Nurse and the Midwife. This is with good reason as nurses play an important role in combatting antimicrobial resistance. A great deal of capacity could be found among them helping physicians achieving goals set by the WHO global action plan on antimicrobial resistance: improve awareness and understanding of antimicrobial resistance; strengthen knowledge through surveillance and research; reduce the incidence of infection; optimize the use of antimicrobial agents; and ensure sustainable investment in countering antimicrobial resistance.</p>

Relationship Between ABO Blood Group and RH Distribution in Patients with COVID-19

*Hamide Safarian Bana¹, Dina Javidjam¹, Sousan Darroudi¹, Saied Eslami¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: ABO blood group, COVID-19, RH</p>	<p>Introduction: COVID-19 was reported in January 2020 as a serious infection leading to marked complications and mortality in China. To date, no specific biological markers have been reported to help predict the disease. Few studies have currently examined the association between SARS-Cov-2 and blood groups. In this study, we intend to investigate the relationship between blood type and RH with the risk of coronavirus in individuals with a positive immunology test in the staff of medical university of Mashhad population.</p> <p>Materials and Methods: A total of 215 patients with COVI-19 were investigated at PERSIAN cohort center in Emam Reza Hospital. We aimed to evaluate the ABO antigens and RH distribution in patients with positive COVID-19 antibody test among staff of medical university of Mashhad population.</p> <p>Results: It has been shown that antigen O has the highest frequency (33.3%) and antigen AB has the lowest (11.3%) among patients with COVID-19. The distribution of negative RH and positive RH were 13.1% and 85.9% , respectively.</p> <p>Conclusion: Patients with blood group O+ had an increased risk for infection with SARS-CoV-2, whereas blood group AB- was associated with a decreased risk, indicating that certain ABO blood groups were correlated with SARS-CoV-2 susceptibility.</p>

Influenza Vaccination Coverage and Obstacles in Healthcare Workers (Hcws) and the Follow Up of Side Effects: A Multicenter Investigation in Iran

Mahboubeh Hajiabdolbaghi¹, Nazanin Ghorbanian Havastin¹, Mahnaz Montazeri¹, Esmail Mohammadnejad¹, Parvin Rezaei¹, Mitra Hajinoori¹, Azam Ghahan¹, Akram Afifeh¹, Roghayeh Babaei Vesroudi¹, Shirin Afhami¹, Azar Hadadi¹, Ali Asadollahi-Amin¹, *Arash Seifi¹

Tehran University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Healthcare workers, Influenza; Vaccination</p>	<p>Introduction: Influenza is a highly contagious acute respiratory illness. Due to high exposure of hospital's personnel, widespread vaccination of these high-risk groups seems to be a necessity in healthcare centers. To determine vaccination coverage in the personnel of four tertiary referral collegiate hospitals in 2019, and to further investigate individual obstacles for Influenza vaccination.</p> <p>Materials and Methods: In this cross-sectional descriptive study, 637 personnel were selected randomly of distinctive hospitals in a list-wised. Ones vaccinated filled the side effects questionnaire and who not vaccinated filled the vaccination obstacles questionnaire.</p> <p>Results: The mean vaccination coverage was 29.4% and the coverage difference among centers was not statistically significant (P=0.192). The following items had the most impact on personnel decision: confidence about one's immune system (P<0.05), experience of side effects from previous vaccinations (P=0.011), attitude about vaccination in colleagues (P=0.021) and work experience (P<0.05). About 23% of vaccinated individuals reported side effects following vaccination and the most common side effect was mild cold symptoms with 12.3% prevalence.</p> <p>Conclusion: The results of the current study revealed that influenza vaccination coverage among HCWs is not satisfactory in Iran. Hospital authorities and infection control units should plan to remove the obstacles of influenza vaccination.</p>

Nursing Care Against COVID-19: Views of the Iranian Nurses

Vajiheh Atashi¹, *Shima Safazadeh¹, Fariba Taleghani¹, Ramin Sami¹, Shekoufeh Ahmadi¹, Pourandokht Pourkermanian¹

1. Isfahan University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p>	<p>Introduction: The role of nurses in COVID-19 crisis is of such great value that one could say success in tackling this crisis depends on the efficiency of the nurses. The execution of nursing care in the midst of this crisis faces obstacles. The aim of this study was to determine the nurses' perception of care towards COVID-19 patients.</p>
<p>Key words: COVID-19, Care, Nurse</p>	<p>Materials and Methods: In this qualitative-descriptive study, 19 nurses of a COVID-19 general hospital were chosen through purposive sampling. Data collection was done by semi-structured interviews. The interviews were recorded digitally and were transcribed immediately. They were then analyzed through inductive content analysis.</p> <p>Results: Four main categories and 11 sub-categories were extracted; main categories were intensification of work-load during the crisis, mental and social tensions, quality during the crisis, and management during the crisis. These were all challenges of an efficient nursing care in dealing with COVID-19 patients, according to the nurses.</p> <p>Conclusion: The results of this study suggest that decision makers and executive managers of nursing have a better understanding of the issues nurses face in such crises, so that they would be able to provide patients with safe care. In addition it would lead to preservation of the human resources and a better crisis management.</p>

Managing the Care and Treatment of Near-Death Mothers at Home to Prevent Transmission of Infections in the Corona Pandemic

*Maryam Salari Hadaki¹, Fatemeh Tara¹, Human Baharvahdat¹, Zolika Saadati¹, Aazam Moradi Zarmehri¹

Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Coronavirus, Home care, Intracerebral hemorrhage.</p>	<p>Introduction: Intracerebral hemorrhage is the third leading cause of indirect maternal mortality and requires surgery and subsequent intensive care. Long-term intensive care in hospital increases the risk of infections.</p> <p>Materials and Methods: The patient is a 25-year-old pregnant woman who suddenly suffered from severe headache and seizures in the 14th week of pregnancy, with loss of consciousness and diagnosis of IVH, extensive ICH by intubation and ventilation with GCS = 3 was sent to Level 3 training center. She underwent emergency ventriculostomy, in the supplementary study, AVM was involved in embolization of mca branches and was embolized. After two months, the patient's consciousness increased and at 38 weeks of pregnancy, cesarean section and a healthy baby were born and she was discharged from the hospital in a normal general condition.</p> <p>Results: The health of this mother and baby was provided with hope, family support, frequent communication with the required specialists, and the use of special nursing and midwifery measures at home during pregnancy and after delivery.</p> <p>Conclusion: Except for immediate surgery and good management after surgery, it seems that intensive care at home is preferable to the hospital if the family is accompanied and under the supervision of relevant specialists in critical situations, the prevalence of infections.</p>

The Effect of Implementing Conflict Management Program on Nurses' Job Conflict During the COVID-19 Epidemic

*Fatemeh Akhlaghi Rezaei¹, Amirreza Saleh Moghadam¹

1. Mashhad University of Medical Sciences

ARTICLE INFO

ABSTRACT

Nursing

Introduction:

With the prolongation of the COVID-19 epidemic, a lot of tension has been put on the medical staff, especially nurses, which has led to fatigue, burnout, and increased conflict between them. In this study, we examined and compared the effects of conflict management programs in reducing occupational conflict affected by the COVID-19 epidemic.

Key words:

COVID-19, Dobrin Job Conflict Questionnaire, Epidemic, Job conflict.

Materials and Methods:

In this interventional study conducted in Shahid Kamyab Hospital of Mashhad in 2020, three groups of 13 nurses in sections of male surgery 1 (non-COVID-19 intervention), male surgery 2 (Intervention involve with COVID-19), and neurosurgery (control group) were included in the study. For the intervention groups, conflict management workshops were held in the form of lectures and discussions. Job conflict in the pre-intervention, immediately after the intervention, and one month after the intervention was examined by the Dobrin Job Conflict questionnaire.

Results:

In the intervention group involved with COVID-19, the rate of conflicts decreased immediately after the intervention and one month later compared to other groups of study (P=0.005 and P=0.001 respectively).

Conclusion:

Holding conflict management programs for nurses involved with COVID-19 is useful in managing conflicts between them during an epidemic.

Five Neonatal COVID-19 Infection Case Report in a Tertiary Hospital in Northeast of Iran

*Maryam Sadat Razavi¹, Samaneh Akbari Shandiz¹, Hanieh Kahdooee¹, Batool Khairkhah¹

1.Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19 infection, Newborn, NICU</p>	<p>Introduction: COVID-19 pandemic make a great impact on maternal and newborn health around the world and we as a tertiary center hospital (Ommolbanin Hospital in Mashhad medical university) in northeast of Iran had encountered with this infection and aim of this case report is sharing our experiences in this regard.</p> <p>Materials and Methods: We just reviewed hospital documents of all suspected or confirmed case of COVID-19 infected newborns. In case of PCR positive cases we provided a focus group discussion toward making confirmation about exact diagnosis with neonatologist and pediatrics infection sub-specialist and our care providers.</p> <p>Results: From first march till 30th September 2020 we had 24 suspected infected newborns to COVID-19, PCR test just performed for 18 cases and 5 out of 18 suspected tested newborns confirmed by PCR positive test and one of them died with appearance of birth asphyxia and acute respiratory failure. Just one of them who died need ventilation. 3 of PCR positive cases had meconium aspiration syndrome. All mothers had clinical findings of COVID-19 infection, but just one of them had PCR positive confirmation.</p> <p>Conclusion: Based on our experience we did not vertical transmission of COVID-19 from mother and neonatal infection did not affect neonatal mortality in our hospital.</p>

Intravenous Immunoglobulin

Maryam Khoshkhui

Mashhad University Of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p>	<p>Introduction: Intravenous immunoglobulin (IVIG) contains the pooled immunoglobulin G (IgG) immunoglobulins from the plasma of approximately a thousand or more blood donors. IVIGs are sterile, purified IgG products manufactured from pooled human plasma and contain more than 95% unmodified IgG, which has intact and only trace amounts of immunoglobulin A (IgA) or immunoglobulin M (IgM).</p>
<p>Key words: IVIG, Immunodeficiency</p>	<p>Materials and Methods: There are currently eight indications for which the FDA has licensed the use of IVIG:</p> <ol style="list-style-type: none"> 1. Primary immune deficiencies 2. Prevention of bacterial infections in hypogammaglobulinemia and in the setting of recurrent infections in chronic lymphocytic leukemia 3. Prevention of coronary artery aneurysms in Kawasaki disease 4. Prevention of infections after bone marrow transplant 5. Reduction of serious bacterial infections in HIV 6. To increase platelet counts in ITP to prevent or control bleeding 7. To improve neuromuscular disability in chronic inflammatory demyelinating polyneuropathy (CIDP). 8. To improve muscle strength and disability in multifocal motor neuropathy. <p>Results: In spite of these rate recommendations, patients may develop headaches, chills, wheezing, or backache. In the event of a reaction during an infusion, the infusion should be slowed.</p> <p>Conclusion: For severe reactions, the infusions should be stopped. Rarer adverse events have been described, including nausea, seizure, thrombotic events, and CNS symptoms.</p>

The Importance of Scientific and Practical Training on Empowerment of Infection Control Nurses in Mashhad University of Medical Sciences

*Parastoo Tajzadeh¹, Mohsen Arefnezhad¹, Irandokht Mostafavi¹, Samaneh Qayyumi Aval¹, Zohreh Rokni¹, Shahram Taherzadeh¹

Department of Medical Laboratory Sciences, Kashmar.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: APIC, Case report, Decisions forcing, Education, Lecturing.</p>	<p>Introduction: The nurses are attending in the field of nosocomial infections often without prior training. For this, they need more knowledge and awareness in the some fields as epidemiology, microbiology and health, etc.</p> <p>Materials and Methods: According to the long history of Mashhad University of Medical Sciences (MUMS) in the management of prevention and control of nosocomial infections since 1998, the scientific committee including of faculty members and experts designed a 200-hour training course based on the Association professional in infection control and epidemiology, Baltimore, USA (APIC) international course. This course held 130 hours of theory and 70 hours of practice using lecturing, case reporting and decision forcing methods: Fifty infection control nurses were trained for 9 months in the years 98-97.</p> <p>Results: Infection prevention and control management, disinfectant identification, microbiology and epidemiology in various infections were among the topics of this training course.</p> <p>Conclusion: Empowered nurses could act as a main member of the Infection Control Committees to provide more specialized services in the COVID 19 epidemics. In the near future, MUMS as the educational hub of the country in the future, will have a training mission to thousands of nurses in Iran and foreign missions in the field of providing this training course.</p>

Management of ARDS in COVID-19

Seyed Hossein Ardehali

Department of Anesthesiology & Critical Care Medicine , Faculty of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: ARDS, COVID-19, Hypoxemia</p>	<p>Introduction: In December 2019, an outbreak of coronavirus disease 2019 (COVID-19), which was caused by severe acute respiratory syndrome , broke out in Wuhan, China . WHO declared this outbreak a significant threat to international health. COVID-19 is highly infectious and can lead to fatal comorbidities especially acute respiratory distress syndrome (ARDS).</p> <p>Materials and Methods: COVID-19 mainly affected the respiratory system with minor damage to other organs. Injury to the alveolar epithelial cells was the main cause of COVID-19-related ARDS, and endothelial cells were less damaged with therefore less exudation. The clinical manifestations were relatively mild in some COVID-19 patients, which was inconsistent with the severity of laboratory and imaging findings. The onset time of COVID-19-related ARDS was 8–12 days, which was inconsistent with ARDS Berlin criteria, which defined a 1-week onset limit. Some of these patients might have a relatively normal lung compliance.</p> <p>Results: The severity was redefined into three stages according to its specificity: mild, mild-moderate, and moderate-severe. The elderly and those with comorbidities are at highest risk of death. The death appeared to be related to ARDS.</p> <p>Conclusion: HFNO can be safe in COVID-19-related ARDS patients, even in some moderate-severe patients, thus the timing of invasive mechanical ventilation is very important.</p>

Nutrition and Immunodeficiency

Bahareh Imani

Mashhad University Of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: <i>Cell-mediated immunity, Protein-energy malnutrition, Immunity, Micronutrients, low- birth-weight infants.</i></p>	<p>Introduction: Nutrition is a critical determinant of immune responses and malnutrition the most common cause of immunodeficiency worldwide. Protein-energy malnutrition is associated with a significant impairment of cell-mediated immunity, phagocyte function, complement system, secretory immunoglobulin A antibody concentrations, and cytokine production. Deficiency of single nutrients also results in altered immune responses: this is observed even when the deficiency state is relatively mild. Of the micronutrients, zinc; selenium; iron; copper; vitamins A, C, E, and B-6; and folic acid have important influences on immune responses. Low-birth-weight infants have a prolonged impairment of cell-mediated immunity that can be partly restored by providing extra amounts of dietary zinc. In the immunodeficiency disorders, impaired immunity can be enhanced by modest amounts of a combination of micronutrients. These findings have considerable practical and public health significance.</p>

Pre-Transplant Management of Cadaver in "Solid Organ Transplant"

Mahin Ghorban Sabbagh

Mashhad University of Medical Sciences.

ARTICLE INFO

ABSTRACT

Nursing

Key words:

*Cadaver, Management,
Solid organ transplant*

Introduction:

There are 7 Coronaviruses known to infect humans. Four Coronavirus strains normally circulate in humans. Three of them are SARS CoV & MERS CoV and SARS COV-2. Transmission is from person to person via respiration droplets, fomites, with infected particles and maybe from stool. Each Transplant program needs to decide their own policy for new transplant and outpatients visits when Covid-19 is circulating in the region. Resource availability need to be balanced against the need for an organ transplant. Evaluation of Intensive care beds, ventilators, blood Products, dialysis supplies, and hospital staffing. We must consider the risk of nosocomial transmission to a new transplant recipient, living donor or to health care worker. Uncertainty about the adequacy of available SARS-COV-2 testing and concerns about the potential risk of transmitting a virulent disease to heavily immunosuppressed transplant recipients and otherwise healthy live donors are important problems. In a report of "88 US transplant institutions", 70.8% live Kidney donors had suspended and 84% restriction for deceased donors had implemented. About 90% reduction in solid organ transplant in France had reported. In abdominal transplantation centers we prefer: use of HEPA- filtered rooms, use of positive pressure rooms, use special room cleaning, doors closed at all times, additional hand hygiene, isolation gown use , use of gloves, designated medical equipment use, masks when leaving hospital rooms, masks required when outside of hospital.

Investigation of Chemical Compounds and Antibacterial Activity of Capsicum Annum Essential Oil on Salmonella Typhi and Listeria Innocua In Vitro

*Neda Movahedi Saber¹, Bakhshi Gholamreza¹, Behzad Nasehi¹, Behroz Alizadeh Behbahani¹

1. Payame Noor University, Tehran East.

ARTICLE INFO	ABSTRACT
<p>Nursing</p>	<p>Introduction: In recent years bacterial resistance to antimicrobial agents, is one of the important problems in Nosocomial infections. The aim of this study was to identify the evaluation of Capsicum Annum essential oil antibacterial activity on <i>Listeria innocua</i> and <i>Salmonella typhi</i> invitro.</p>
<p>Key words: <i>Antibacterial, Capsicum Annum, Essential oils, Chemical composition</i></p>	<p>Materials and Methods: In this paper, the Capsicum Annum essential oil, was extracted using Disk diffusion method was used to measure the diameter of the inhibition zone, and broth microdilution method was used to determine the minimum inhibitory concentration (MIC) and The components of the essential oil, were identified by gas chromatography/mass spectrometry (GC/MS) device.</p> <p>Results: The major compound of the essential oil was 2,3-dihydroxypropyl elaidate. The diameter of inhibition zone for <i>Salmonella typhi</i> and <i>Listeria innocua</i> at concentrations of 500 and 1000 mg / ml (both bacteria at both concentrations were 15 ± 0.50 and 16 ± 0.50, respectively) compared to the vancomycin antibiotic. Increasing the concentration of this essential oil reduced the diameter of the inhibition zone on concentration (512 mg / ml), prevented the growth of this yeast.</p> <p>Conclusion: The results showed, the Capsicum Annum essential oil has antibacterial effect which is higher than vancomycin. Therefore Capsicum Annum essential oil can be presented as a new antimicrobial compound of the essential oil.</p>

Hand Hygiene and Cutaneous Side Effects

Mohammad Javad Yazdanpanah

Mashhad University Of Medical Sciences

ARTICLE INFO

ABSTRACT

Nursing

Key words:

Hand hygiene, Skin, Side effects

Introduction:

Sometimes preservation of good hygiene for hands in health care workers can causes some problems. On the other hand, skin have two important barriers, including stratum corneum of epidermis and surface lipid. Frequent use of soaps , handrubs ,... may be damage to these barriers .The most common skin reaction is irritant contact dermatitis. Potentially each person could be affected with this problem if exposed for enough exposure time and concentration ,therefore this potential can vary between different person and this reaction may have different clinical pictures. The other type of skin reaction that is relatively rare in comparison to irritant contact dermatitis is allergic contact dermatitis. There are some methods to protect skin barrier and to reduce this adverse effects, including to use product with lower potential for irritation, avoidance of unnecessary irritants and proper use of moisturising skin care products.

Infection Prevention Among Health Workers who work in Pediatric Intensive Care Unit During New Coronavirus Outbreak

*Sima Oudi Aval¹, Zahra Mohammadi Yazdi¹

Mashhad University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Coronavirus, Health worker, Pediatric, intensive care units</p>	<p>Introduction: Since December 2019, there has been an outbreak of novel coronavirus (2019-nCoV) infection around the world. For it is a never been experienced respiratory disease before and with infection ability widely and quickly, it attracted the world's attention but without treatment and control manual. Thousands of health workers have been infected, especially in pediatric intensive care units in which keep social distances or other hygiene protocols seem to be unworkable. The objective of this review was to summarize the current knowledge base on the prevention of coronavirus among health providers in pediatric intensive care units (PICUs).</p> <p>Materials and Methods: Multiple electronic databases, including the WHO database of publications on coronavirus disease and the medRxiv preprint server (2003 through 27 March 2020, with ongoing surveillance through 24 April 2020), and 55 studies addressed burden of HCW infections (15 on SARS-CoV-2), and 34 studies addressed risk factors (3 on SARS-CoV-2).</p> <p>Results: The use of PPE ,especially appropriate mask in both groups (patient and health workers)has played and important role in reducing transmission of infection.</p> <p>Conclusion: Health care workers experience significant burdens from coronavirus infections, including SARS-CoV-2. Use of PPE and infection control training are associated with decreased infection risk, and certain exposures are associated with increased risk.</p>

Hospitals Safety Versus Disasters Mashhad University: The Results of 42 Hospitals Assessment

Shahram Taherzadeh

Mashhad University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: <i>Disaster, Hospital, Mashhad, Safety.</i></p>	<p>Introduction: Iran is exposed to a variety of natural and man-made disasters. Disasters impose considerable damages to the population and infrastructure including hospitals. In both developing and developed countries, hospital safety versus disasters is a challenge because the hospitals must be able to continue their functions during disasters. To assessment of hospital safety for disasters, the WHO has developed the Hospital Safety Index that is a rapid, reliable and low-cost tool. This study presents the results of the disaster safety assessment in mashhad hospitals in 2019. We applied adapted version of HIS (FHSI) and self-assessment approach to assess the disaster safety in 42 hospitals. This tool is consist of 152 items categorized in 3 components consist of structural, non-structural and functional dimensions. Safety level was categorized into 3 levels in each item: not-safe (0). Average-safe (1) and high-safe (2). Hospitals were classified to three safety classes according to their total score: low (≤ 34.0), average (34.1-66.0) and high (>66.0) safety. Our study showed that the overall disaster safety score of the khorasan's hospitals was 63.14/100. Average scores 65.65/100 for functional capacity, 63.00/100 for non-structural and 62.21/100 for structural. To enhance the hospital safety for disaster, we require multi-disciplinary collaboration and a commitment from high levels of authorities.</p>

Effect of Head Hair Shaving VS Shorting in Male ICU Patients on the Ulcer Incidence

Vajihe Biniiaz

Baqiatallah University

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: <i>Bed sore, Intensive care units, ICU, Pressure ulcer,</i></p>	<p>Introduction: Pressure ulcer is the third most costly disorder after cancer and cardiovascular diseases for the patient and the health system which its preventing, decreases mortality and hospital stay. Our goal was investigating the effect of head hair shaving VS shorting on the head wounds in male ICU patients.</p> <p>Materials and Methods: In a randomized, double-blind clinical trial, 50 male patients under mechanical ventilation with stable hemodynamic, were assigned to intervention and control group randomly. In the 25-person intervention group, hair shorting done for six-week and in the control group, hair shaving. Preventive proceedings for pressure ulcer such as position changing every 2 hours, using air mattress, enteral or parenteral nutrition administration according nutrition advise were same in both groups. Then, new pressure ulcers were investigated. Data analyzed with SPSS software.</p> <p>Results: In this study, 68% of patients were in the 60-75 age group. During the six-week period, 14 patients in the control group and one in the intervention group received head sore that was significant (P <0.05).</p> <p>Conclusion: Hair shaving can increase head ulcer and it training to nursing staff during patient hospitalization and to families of coma patients at the transmission time to home, can be effective in reducing the incidence of pressure ulcers.</p>

Important Challenges in Implementing Infection Control and Prevention in Intensive Care Unit of Iran: A Qualitative Study

Zahra Salehi¹, Fatimah Ghonoodi¹, Seyyedeh Roghyeh Ehsani¹, *Esmail Mohammadnejad¹

Nursing Department, Faculty of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Intensive care unit, Iran, Nosocomial infections, Qualitative study.</p>	<p>Introduction: Nosocomial or hospital-acquired infections (HAI) are a major problem in ICUs and one of the major causes of hospitalization, medical costs, and mortality. The purpose of this study was to investigate the barriers factors in the prevention and control of nosocomial infections in the intensive care unit.</p> <p>Materials and Method: The present study was a qualitative research with conventional content analysis approach. Twenty-one healthcare workers were selected by purposive sampling method and a deep and semi-structured interview was conducted with them. Data were analyzed using qualitative content analysis method.</p> <p>Results: Data were analyzed using qualitative content analysis method. Data analysis revealed the main theme of Barriers factors, which included four categories of Human factors, Environmental factors, Individual factors and Complexity.</p> <p>Conclusion According to the findings, it is necessary to identify facilitators to make nosocomial infections better diagnosed and provide appropriate and effective planning to improve the safety and quality of patient care.</p>

COVID-19 (Coronavirus) in Children and Prevention Strategies

Monir Ramezani

*Nursing and Midwifery Care Research Center, Mashhad University of Medical Sciences, Mashhad, Iran;
Department of Pediatric Nursing, School of Nursing and Midwifery, Mashhad University of Medical Sciences,
Mashhad, Iran.*

ARTICLE INFO

ABSTRACT

Nursing

Key words:
*COVID-19, Children;
symptoms, Prevention*

Introduction:

Research suggests that The main symptoms of coronavirus are: a high temperature; a new, continuous cough; a loss or change to sense of smell or taste. Illnesses can make them very unwell quickly. It's important to get medical help in these conditions: is <3 months old and has a temperature of 38oC or higher; is 3-6 months old and has a temperature of 39oC or higher; has other signs of illness, such as a rash, as well as a high temperature; has a high temperature that's lasted for 5 days or more; does not want to eat, or is not their usual self; has a high temperature that does not come down with paracetamol; is dehydrated. There are many steps that parents can take to prevent their child from getting the COVID-19 and to avoid spreading it to others. The CDC and WHO recommend that family: Keep hands clean; Practice social distancing; Clean and disinfect home; Wear cloth face masks; In addition, keep up with their child's well visits and vaccines.

Rout cause Analysis of Isfahan Covid-19 Mortality Scenarios: A Retrospective Study

Azam Cheraghi Rezveh¹, *Shima Safazadeh¹, Amirhissein Shirani¹, Zahra Janghorban¹, Mohammadhassan Abdi¹, Forozan Moazami¹

1.Isfahan University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Coronavirus, Mortality, Rout cause analysis.</p>	<p>Introduction: Numerous studies that have been done on Covid-19 were mostly based on clinical, epidemiological, and radiological specifications of the infected. Treatment procedure and follow up on recovered patients have had less attention. Thus, this study pursuit the raise in quality of care and treatment services presented to patients.</p> <p>Materials and Methods In this study, 1475 documents of patients suspected of Covid-19 in hospitals under coverage of Isfahan Medical Sciences, were reviewed retrospectively, from 20.feb.2020 to 21.oct.2020. Alongside with it, hospital field visits and interviews with stakeholders were done, and hospital committee documents were assessed.</p> <p>Results Rout cause analysis in three areas of management, care, and treatment were assessed and it showed that in management, professional human resources management and medical equipment, in care, initial nursing assessment and respiratory tract care, and in treatment, doctors' central role, attention to drug reconciliation, and respiratory tract management need improvement. Statistical analysis showed that patients with diabetes, cardio-vascular condition, chronic respiratory conditions and high blood pressure, had a higher chance of mortality.</p> <p>Conclusion The findings of this study can be helpful in decision-making and policy-making of executive managers in order to improve the quality of services, patient-safety, and decrease the mortality rate.</p>

Investigating the Relationship Between Knowledge and Attitude with Home Quarantine Behavior in COVID-19

Mansoureh Khandehroo¹, *Nooshin Payman¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Attitude, COVID-19, Knowledge, Practice,</p>	<p>Introduction: This study aimed to identify the current status of knowledge, attitude and practice regarding COVID-19 pandemic among residents of Suburbs of Iran in to detect related associated sociodemographic variables and home quarantine behavior.</p> <p>Materials and Methods: In this cross-sectional study, simple random sampling method and research measurement tool was a researcher-made questionnaire (CVR=0/593,CVI=0/885). The demographics, mean knowledge, attitude, and practice of the participants were investigated, and the scores were calculated liner regration and ANOVA were used for statistical analysis.</p> <p>Results: In this study, 238 questionnaires was completed. mean age 37.4 and standard deviation of 16.1 ; %57.5 were female and 41.2 were male; 72% of the participants had very well knowledge, but 34.6% had good attitude and 24.6% had acceptable performance; 93.4 of them followed social distance; 36.8 percent washed their hands after each touch, 13.6 before meals, 16.2 before touching eyes and mouth. Based on ANOVA and liner model,there was a positive relationship between knowledge and attitude and gender with behavior. The most important relationship was between attitude and behavior.</p> <p>Conclusion: in our study the association was seen between higher attitudes with higher practice. Further implantation and encouragement from the government is required for the transforming of these well-adjusted attitudes into suitable practice.</p>

Perceived Barriers to Behaviors Related to the Control of Nosocomial Infections in Hospital Staff

Seyed-Mousa Mahdizadeh¹, *Mehrsadat Mahdizadeh¹, Nooshin Peyman¹

1. Mashhad University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Barriers, Behavior, Hospital, Nosocomial infections</p>	<p>Introduction: One of the health problems in communities is nosocomial infections which increase the costs to the patient and the health system, reduce the quality of life of patients, and even mortality. The aim of this study was to determine the barriers to infection-related behaviors in Mashhad teaching hospitals.</p> <p>Materials and Methods: This descriptive-analytical study was conducted with the participation of 211 staff of educational hospitals in Mashhad, Iran. Hospital staff were selected by available methods. Data were collected using perceived barrier questionnaire. Then the data were analyzed using SPSS 22 software.</p> <p>Results: The mean age of participants was (35.61±8.41) years. The mean score of the obstacles was (14.19±4.52). (60) 29.1% Insufficient facilities for separation of infectious and non-infectious waste, (12) 48.1% Insufficient facilities for disinfection and hand washing facilities, (120) 60.1% Congestion and high workload, (88) 43.1% reported lack of information and incentive support as barriers to infection control.</p> <p>Conclusion: High workload and congestion, insufficient access to facilities and lack of support programs are factors that make it difficult for hospital staff to observe behaviors related to infection control. Standardizing the work environment to improve service delivery and provide facilities and support programs can provide the conditions for adherence to behaviors related to the infection control.</p>

Infection Control in the Face of Respiratory Diseases

Mahboobeh Haddad Namaghi

Mashhad University of Medical Sciences

ARTICLE INFO

ABSTRACT

Nursing

Key words:

*Infection control,
Respiratory tract
infections.*

Introduction:

Hundreds of millions of people suffer and millions people die from respiratory diseases each year. most major respiratory illnesses are preventable. Acute respiratory infections (ARIs) cause widespread diseases globally and are responsible for millions deaths each year. The incidence of ARIs is specially high among infants, children, and the elderly and is more pronounced in low and middle-income countries. the most common etiologies of ARIs are viral and they are frequent causes of hospital admission and nosocomial outbreaks. To develop effective strategies for infection control, it is critical to first understand about the disease and rout of transmission of these viruses.

Materials and Methods:

This review will be done using a review of recent article and based on them clinclal manifeatations, route of transmission, diagnostic methods and infection control measures in the face of most common viral respiratory tract infections will be explained.

Results:

Most of respiratory tract infections are transmitted through droplet and in some situations as airborne and understanding about their rout of transmission will help to prevent them.

Conclusion:

To develop effective strategies for infection control, it is critical to first understand the rout of transmission of these viruses. Avoiding transmission of acute respiratory infections can prevent considerable mortality, morbidity and healthcare costs.

Hospital Incident Command System; dos and don'ts

Fatemeh Kokabi Saghi¹, *Hamidreza Shabanikiya¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Command, Hospital, Incident, System.</p>	<p>Introduction: Despite the fact that Hospital Incident Command System (HICS) is considered as the most well-known model for managing hospitals in disasters, its applicability and effectiveness have often been questioned. Therefore, the present study was conducted to identify the areas that can increase the efficiency of HICS.</p> <p>Materials and Methods: This study was a best evidence review. The search strategy was constructed using the words: hospital, system, command, and incident. The Keywords were searched in online databases and electronic journals including ScienceDirect, Proquest, Embase, Pubmed, Scopus and Web of Science. After evaluating the title, abstract and full text of the obtained articles, five articles were selected as the best available evidence related to the research topic, and their main findings were extracted.</p> <p>Results: The issues presented at related literature as "dos and don'ts" are actually solutions to overcome the weaknesses and eliminate factors that hinder the effectiveness of HICS. These were in three categories: modifying the content and structure of HICS, training and education and finally providing extra-hospital necessities for the proper establishment and functioning of HICS.</p> <p>Conclusion: By taking some basic actions such as revising the HICS according to the managerial structures of the target community, its applicability and effectiveness can significantly increase.</p>

The Effect of Plantago Major Cream on Episiotomy Wound Healing in Prim Parous Women

Bahareh Baghal¹, *Raheleh Babazadeh¹, Roshanak Salari¹, Hamid Hedarian¹

1.Department of Midwifery, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Episiotomy, Plantago major, Prim parous, Wound healing.</p>	<p>Introduction: One of the medical interventions in childbirth is episiotomy which is used to widen the pelvic outlet. The aim of this study was to determine the effect of plantago worm on episiotomy wound healing in nulliparous women.</p> <p>Materials and Methods: This three-blind clinical trial study was performed in 1398 on 107 prim parous women aged 18 to 35 years in Valiasr Hospital in Birjand. The participants were randomly divided into two groups of placebo and drug. 12± 2 hours after delivery, mothers use 2-3 cm of prescribed cream in the suture area twice a day for 10 days and on the third, seventh and tenth days after delivery. Wound healing was assessed using Rida instrument. Data were analyzed using SPSS 21 and Chi-square and Mann-Whitney tests. P value less than 0.05 was considered significant.</p> <p>Results: The mean score of wound redness and bruising on the third and seventh days showed there was a statistically significant difference between the two groups (P=0.000). The mean score of edema on the third and tenth days showed that there was a statistically significant difference between the two groups (P=0.000 and P=0.312). The mean score of the distance between the two edges of the wound on the third day showed there was a statistically significant difference between the two groups (P=0.000).</p> <p>Conclusion: Plantago cream accelerates the healing of episiotomy wounds.</p>

The Effect of Scheduled Preventive Care Program in Reducing Nosocomial Infections in the ICU

*Parastoo Tajzadeh¹, Mohsen Arefnezhad¹, Zahra Mehmandoost¹, Mehdi Bastani¹, Mehdi Bastani¹, Nona Taherian¹

1.Department of medical Laboratory Sciences -Kashmar Faculty of Nursing-Mashhad University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Preventive care program, Nosocomial infection, ICU ward</p>	<p>Introduction: The present study was conducted to investigate the effect of scheduled preventive care of patients from the early admission to end of hospitalization in the ICU on the reduction of nosocomial infections.</p> <p>Materials and Methods: All intubated patients in the ICU of Hazrat-E- Abolfazl Hospital in Kashmar were subjected to scheduled preventive care for one year from 2016 to 2017 from the time of admission to the end of the hospital stay. This type of monitoring is scheduled every 24 to 48 hours until the patient was discharged through sampling of endotracheal tube suction for direct smear and microbiological examination once at the arrival of the patient and if positive every 48 hours. In patients whose initial culture was negative, clinical monitoring was performed every 24 hours and in case of new symptoms such as bad smelled and colored discharge and fever, microbial examination were used.</p> <p>Results: Data were analyzed using descriptive statistics with SPSS statistical software. The scheduled preventive care was significantly effective in reducing nosocomial infections .The average bed occupancy and the average dose of antibiotics were decrease significantly because of this preventive meditation.</p> <p>Conclusion: The scheduled preventive care can be very helpful in reducing the rate of nosocomial infections in the ICU.</p>

Investigation of Risk Factors for Ventilator-Associated Pneumonia in Pediatric Intensive Care Unit: A Review Article

Fatemeh Moradi Koosha

School of Nursing and Midwifery, Gonabad University of Medical Sciences, Gonabad, Iran

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Hospital-acquired infections, Pediatrics, Neonates, Pneumonia, Ventilator-associated pneumonia</p>	<p>Introduction: Ventilator-associated pneumonia (VAP) is one of the most common hospital-acquired infections in PICUs and has significant patient and economic effects. The aim of this study was to Investigation of risk factors for ventilator-associated pneumonia in pediatric intensive care unit.</p> <p>Materials and Methods: A number of review article indexed in PubMed, Google Scholar and Medline databases were scrutinized in this study. The chosen review articles surveyed experimental/quasi-experimental studies published during 2010-2020 using Keywords including; hospital-acquired infections; pediatrics; neonates; pneumonia; ventilator-associated pneumonia.</p> <p>Results: According to the results, The most common risk factors for VAP children are listed as follows: length of stay in PICU, reintubation, part-time ventilation, supine body positioning, steroid usage, genetic syndrome, enteral feeding, mechanical ventilation, transfusion, low birth weight, premature infants, parenteral nutrition, bronchopulmonary dysplasia and tracheal intubation</p> <p>Conclusion: Special methods of preventions should be taken in the light of risk factors of VAP in PICU so as to decrease the rate. This shall further help in formulating better Hospital infection control Policies and practices in the Pediatric intensive care unit.</p>

Hospital Surge Capacity in Emergencies and Disasters: Strategies and Challenges

Hamidreza Shabanikiya

Mashhad University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Capacity, Disasters, Emergencies, Hospital, Surge, Strategies</p>	<p>Introduction: Many emergency situations and disasters cause a surge of casualties/patients rush to hospitals. This requires a sudden and large increase in hospital capacity, called Hospital Surge Capacity (HSC). Although various strategies have been proposed for HSC, but the literature is scattered and the challenges have not been studied. The present study aimed to identify the strategies for the HSC and its challenges.</p> <p>Materials and Methods: This was a literature review. The Keywords included hospital, surge and capacity which were searched in databases and electronic journals. After evaluating the title, abstract and full text of the obtained articles, the main findings of related articles were extracted.</p> <p>Results: The study suggests two groups of strategies, general and specific, for HSC. Among the general strategies, calling all hospital staff during emergencies and disasters is a solution but the challenge is the low rate response. The challenge in using alternative care sites is the need for extensive coordination. On storing vital equipment such as ventilators, the problem is severe financial constraints. Finally, early discharge is a specific strategy. Its main problem is the lack of standard clinical protocols for non-medical clinical staff.</p> <p>Conclusion: With some considerations, the strategies can be used to increase hospital capacity effectively.</p>

Evaluation of COVID-19 Patients' Satisfaction with the in-Hospital Patient's Educations

*Sayyed Majid Sadrzadeh¹, Elnaz vafadar Moradi¹, Tahereh Mohebi¹, Tayebeh Hoseinzadeh¹

Emergency Department, Faculty of Medicine, Mashhad University of Medical Science, Mashhad, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Pandemic, Patients education</p>	<p>Introduction: The maintenance and development of health in the community is the outcome of patient's education. This lead to increase patients care by themselves, improve life quality, reduce the incidence of complications and increase the patient's independence in performing daily activities can be mentioned. Due to COVID-19 pandemic, it is very important to pay special attention for patient's education for this disease and its complications.</p> <p>Materials and Methods: During the first 7 months of COVID-19 pandemic, 257 patients referred to the Shahid Hasheminejad Hospital clinic.</p> <p>Results: Of these 38.52% were female and the rest were male. The mean age of women was 61 years and the mean age of men was 55 years. 92.2% were married and 10.5% had a history of readmission. 40% were illiterate, 32.29% had primary education and 17% had a diploma. The most common underlying diseases were diabetes and hypertension (29.18%). The average duration of training was 15 minutes of face-to-face training. Patient satisfaction for their education is reported to be 80%.</p> <p>Conclusion: Considering the average age and literacy level of the clients, it seems that the best method and its duration for patient's education is face-to-face training.</p>

When Should COVID-19 be Considered in the Differential Diagnosis for Post Transplant Phase?

Rozita Khodashahi

Mashhad University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Post transplant, Respiratory symptom</p>	<p>Introduction: Transplant patients with symptoms of a flu-like illness may have infection with SARS-CoV-2 as well as other infections. Many symptoms of COVID-19 are typical of respiratory viral infections.</p> <p>Materials and Methods: Transplant patients should be instructed to call the transplant center or their local physician if they have symptoms including, but not limited to, fever, chills, rigors, cough, dyspnea, myalgias, headache, sore throat, diarrhea, or new loss of sense of taste and/or smell. They should notify the transplant center or hospital before presenting for care if possible.</p> <p>Results: There are many different causes for flu-like/respiratory symptoms such as respiratory viral infection, CMV, EBV, PCP and Fungal infection. Patients suspected of COVID-19 should wear a surgical mask, be placed in isolation and local infection control should be notified.</p> <p>Conclusion: Each hospital should have protocols in place for transplant patients with flu-like/respiratory symptoms in the era of COVID-19; these may vary seasonally in your geographic area.</p>

Artificial Intelligence Using in the Health Management of COVID-19 Disease: with Emphasis on Setting up Makeshift Hospital

*Zahra Eskandari¹, Zohre Ghomian¹, Arezo Dehghani¹

1.Department of Health in Emergencies and Disasters, school of Public Health and Safety, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Artificial intelligence, COVID-19 disease, Makeshift hospital.</p>	<p>Introduction: COVID 19 is an emerging disease that has challenged the health system as a front line of service delivery due to its high rate of transmission and the increasing number of deaths and patients in need of hospitalization.</p> <p>Materials and Methods: In this systematic literature review, Database from 1990 to 2020 were searched to use of artificial intelligence in the health management of COVID-19 disease.</p> <p>Results: In such situations, because of resources limitation, the use of information technology can help in the effective resources management, providing optimal and high quality services to this patients. Artificial intelligence as an information technology has become extremely popular today in the world and its use as a management tool that can play an important role in providing cost benefit services, making practical decisions, saving people's lives and effective management of emerging diseases.</p> <p>Conclusion: Artificial intelligence algorithms are a powerful and usable tool for performing and designing complex optimization models. It can be used in the optimal development of makeshift hospital locations due to the increasing trend of COVID-19 patients, effective management of resources, increasing the quality of services, patient and companion satisfaction and reducing hospitalization time and treatment costs.</p>

Comparative Study of the Frequency of Hospital Infections in the Wards of Akbar Children's Hospital in the two Time Periods of the First 6 Months of 1398 and the First 6 Months of 1399

*Fatemeh Moradi Koosha¹, Zahra Abbasi Shaye², Shokoufeh Nasri³

1.School of Nursing and Midwifery, Gonabad, Iran

2.Akbar Clinical Research and Development Unit, Mashhad University of Medical Sciences, Mashhad, Iran

3.Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p>	<p>Introduction: Nosocomial infection refers to an infection that occurs during hospitalization. The present study compares the frequency of infections in Akbar Children's Hospital in the first 6 months of 1398 and the first 6 months of 1399.</p>
<p>Key words: <i>Hospital, Nosocomial infection</i></p>	<p>Materials and Methods: In this cross-sectional study, first the diagnostic form for patients who were admitted without any symptoms of infection and had symptoms of infection 48 hours after admission, was completed in the INIS system and then the frequency of infections to Separation of type in two time periods of the first 6 months of 1398 and the first 6 months of 1399 were studied.</p> <p>Results: In the first 6 months of 1398, 52 cases of nosocomial infections (46% surgical site infection) and in the first 6 months In 1999, 65 cases of nosocomial infections (64% blood infection) were registered in the system. The incidence of nosocomial infections in the first 6 months of 1398 was 0.43% and in the first 6 months of 1399 was 1.16% with no statistically significant difference (P: 0.36).</p> <p>Conclusion: In this study, the frequency of nosocomial infections was reported at a low level, the main reason for which is probably the lack of diagnosis and reporting of actual cases of nosocomial infections.</p>

Management Strategies for Establishing A COVID-19 Medical Shelter

Zohreh Ghomian

School of Public Health and Safety, Department of Health in Disasters and Emergencies, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Medical shelter, Management, Strategy.</p>	<p>Introduction: The medical shelters were providing services for patients who had tested positive for COVID-19 and received hospital care. After acute phase they did not need to stay in the hospital for completing recovery treatment phase. on the other hand they didn't have preparation for living alone or with their families yet.</p> <p>Materials and Methods: The establishment of medical shelters was planned in the target provinces with aim of making the best use of the hospital's capacity and resources, and responding to the demands of patients without possibility of home quarantine. In the first period of using the COVID-19 medical shelters, lesson learned shows that reviewing the management plans and strategies are necessary.</p> <p>Results: Cost-effectiveness analysis, optimal location, establishment of work processes, recording information and documentation, and patient tracking are some of the strategies that should be considered in the management plan of medical shelter. The results of setting up medical shelters in Iran at the initial weeks of spreading COVID-19 indicate that most of the proportion of capacity and facilities were provided in medical shelters were not used properly.</p> <p>Conclusion: A systematic approach, comprehensive and integrated planning, and making strategies with a quality approaches are important and essential.</p>

Exploring Pregnant Women's Perception of Corona Virus Epidemic Threat and its Impact on Precautionary Actions: A Directed Content Analysis

*Samira Ebrahimzadeh Zagami¹, Robab Latifnejad Roudsari¹

Nursing and Midwifery Care Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Corona virus, Content analysis, Pregnant women</p>	<p>Introduction: Coronavirus-2019 (COVID-19) is an emerging disease that causes a rapid increase in mortality. Limited information is available on the disease during pregnancy. The rapid spread of the disease, which can have a significant impact on our health care and medical infrastructure, the unique needs of pregnant women should be included in care programs. Therefore, the present study aimed to explain pregnant women's perception of Corona virus epidemic threat and its Impact on Precautionary Actions.</p> <p>Materials and Methods: This study was conducted based on a qualitative approach and using guided content analysis methodology based on conservation motivation theory. Participants were pregnant mothers who were purposefully selected. The method of data collection was in-depth individual interview using telephone interview. Data analysis was performed by guided content analysis by Aloe and Kingas (2008).</p> <p>Results: It was conducted 18 interviews. Participants were 12 pregnant women, two pregnant women's husbands, a midwife and a gynecologist. Most pregnant women experience stress, anxiety, and fear of the COVID 19 pandemic, and some factors are involved in reducing or increasing their stress. Precautionary behaviors of pregnant women and understanding the impact of the disease on the Personal, marital and social lives were obtained.</p> <p>Conclusion: Pregnant women know corona pandemic threatens their lives.</p>

Nursing Care For Asthmatic Patients

Farahzad Jabbari azad

Mashhad University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: <i>Asthmatic patients, Nursing care</i></p>	<p>Introduction: Asthma is a chronic inflammatory disease of the airways that causes airway hyperresponsiveness, mucosal edema, and mucus production. Causes of Asthma are: allergy, chronic exposure to airway irritants, exercise, stress/ emotional upset and medications. Clinical manifestations are include: Cough, dyspnea and wheezing. One imple way to assess asthma is to use a peak flow meter that helps measure asthma severity and along symptom monitoring, indicates the current degree of asthma control. The immediate care of patients with asthma depend on the severity of the symptoms. Nursing evaluation of an asthmatic patient is by the following: severity of the symptoms, assess for breath sounds, the patient's peak flow, the level of oxygen saturation through the pulse oximeter and monitor the patient's vital signs. To achieve success in the treatment of a patient with asthma, the following goals should be applied: Maintenance of airway patency, expectoration of secretions, demonstration of absence/reduction of congestion with breath sounds clear, verbalization of understanding of causes and therapeutic management regimen, demonstration of behaviors to improve or maintain clear airway and identification of potential complications and how to initiate appropriate preventive or corrective actions.</p>

Investigating on Prevent and Control of Nosocomial Infections in the Hemodialysis Ward with Focusing on MRSA Carrier Nurses

*Parastoo Tajzadeh¹, Mohsen Arefnezhad¹, Mobarra Arefnezhad¹, Spinoush Sajjadi¹, Bahman Zanganeh Moghadam¹, Azam Farhadi Balqour¹

1.Department of Medical Lab Sciences, Kashmar School of Nursing, Mashhad University of Medical Sciences.

ARTICLE INFO

ABSTRACT

Nursing

Key words:

Hemodialysis, Nose and throat flora, Nurses, Prevention and control of nosocomial infections.

Introduction:

Hemodialysis patients are susceptible to nosocomial infection. Recently, increase in the number of hemodialysis centers make nosocomial infections more important. Patients may develop sepsis and catheter site infection after receiving hemodialysis services. Lack of sufficient knowledge of nursing about microbial flora of the upper respiratory tract and hands affect the rate of possible nosocomial infections

Materials and Methods:

Ways to prevent and control nosocomial infections in the hemodialysis ward include human reservoir (microbial quality of nurses' flora), device quality (input solutions, water quality, type of device and its connections) and disinfectants (type and effective amount of solutions). It is necessary to prioritize the practical training for nurses.

Results:

There is no periodic monitoring for microbial flora. Limited studies have conducted only as research projects on the relationship between patient's positive culture and colonized nurses. Nurses' health literacy can effectively implementing association plans on MRSA caries.

Conclusion:

The periodic microbial examination of nurse's flora probably effect on the health of hemodialysis patient. The examination of the nose, throat and nurses' hands can determine colonization. Interventions such as managing MRSA carrier nurses, improving health literacy of hospital staff can reduce infections in patients such as catheter site infection and sepsis based.

Occupational Exposure to Blood and Other Body Fluids amongst Pre-Hospital Emergency Employees in Mashhad

Masoumeh Sarbaz¹, Reza Vafaeinezhad¹, Khalil Kimiafar^{1,*}, Ali Darroudi¹, Raheleh Ganjeali¹, Abolghasem Soltani¹, Vahid Zahiri¹

1. Mashhad University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Health staff, Occupational exposure, Prehospital emergency.</p>	<p>Introduction: The emergency medical service (EMS) staff are at risk of blood-borne infections. The aim of study was to review the occupational exposure to blood and other body fluids amongst Pre-Hospital Emergency Employees in Mashhad.</p> <p>Materials and Methods: This descriptive cross-sectional study was conducted in 2020 using an online valid and reliable questionnaire. The total number of EMS staffs received the questionnaire.</p> <p>Results: In this study, 79.88% of staffs participated in this study (N=425). The mean age of the participants was 31.67 and 95% (N=405) of the staff had the experience of blood exposure and 31% (n=132) of staffs had the experience of needlestick injury and 36% of them did not report such an experience. 53% (n=225) of the staff believed that the risk of infection with HIV as a result of working in EMS is very high.</p> <p>Conclusion: Results suggest that due to the high rate of occupational exposure in EMS, there is a serious threat of infectious diseases among staffs. Considering the concerns expressed by EMS staffs, a more detailed study of the type and rate of exposures and their causes and training on standard precautions and creating a safe working conditions for EMS staffs seem to be essential.</p>

Evaluation of the Incidence of Ventilator-Associated Pneumonia and its Bacterial Resistance Pattern in the Pediatric Intensive Care Unit of Akbar Hospital in 2017-2018

*Fatemeh Moradi Koosha¹, Shokoufeh Nasri², Nayereh Kargarkakhki³, Zahra Abbasi Shaye⁴

1. School of Nursing and Midwifery, Gonabad University of Medical Sciences, Gonabad, Iran.

2. Mashhad University of Medical Sciences.

3. School of nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran.

4. Akbar Clinical Research and Development Unit, Mashhad University of Medical Sciences, Mashhad, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Bacterial resistance pattern, Incidence, Pediatric intensive care, Ventilator-associated pneumonia, VAP</p>	<p>Introduction: The incidence of ventilator-associated pneumonia (VAP), its pathogens and bacterial resistance patterns vary between different regions. Since VAP is one of the most common nosocomial infections in pediatric intensive care unit, this study was performed to evaluate the incidence of VAP and its bacterial resistance pattern in the PICU of Akbar Hospital.</p> <p>Materials and Methods: This descriptive study was performed in PICU for a period of one year from April 2017 to April 2018 in Akbar Children's Hospital in Mashhad. A total of 77 samples were taken from the endotracheal tube of inpatients after 48 hours of hospitalization and sent to the hospital laboratory. Bacteriological diagnosis and determination of microbial susceptibility were performed based on standard laboratory methods.</p> <p>Results: The incidence of VAP was 22%. The causative bacteria of pneumonia isolated from the endotracheal tube were Scentobacter pneumonia (27%), Candida (16%), Staphylococcus epidermidis (11%), Klebsiella pneumonia (8%) and Pseudomonas aeruginosa (5%), respectively. The highest antibiotic resistance of gram-negative bacteria was related to Acinetobacter (75% MDR) and Klebsiella (57% ESBL).</p> <p>Conclusion: The 22% incidence of ventilator-associated pneumonia in the present study deserves serious attention. Therefore, compliance with infection control standards for prevention of VAP is recommended.</p>

Assessment of Hospital Safety for Disasters

*Shahram Taherzadeh¹, Shapour Badiee Aval¹, Mohammad Kalani¹, Ali Nikroo¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Risk assessment, disasters, Hospital, Mashhad.</p>	<p>Introduction: Iran is exposed to a variety of natural and man-made disasters. Disasters impose considerable damages to the population and infrastructure including hospitals. In both developing and developed countries, hospital safety versus disasters is a challenge because the hospitals must be able to continue their functions during disasters. To assessment of hospital safety for disasters, the WHO has developed the Hospital Safety Index that is a rapid, reliable and low-cost tool. This study presents the results of the disaster safety assessment in mashhad hospitals in 2019</p> <p>Materials and Methods: We applied adapted version of HIS (FHSI) and self-assessment approach to assess the disaster safety in 42 hospitals. This tool is consist of 152 items categorized in 3 components consist of structural, non-structural and functional dimensions. Safety level was categorized into 3 levels in each item: not-safe(0). Average-safe(1) and high-safe(2). Hospitals were classified to three safety classes according to their total score: low (≤ 34.0), average(34.1-66.0) and high(>66.0) safety.</p> <p>Results: Our study showed that the overall disaster safety score of the Khorasan's hospitals was 63.14/100. Average scores 65.65/100 for functional capacity, 63.00/100 for non-structural and 62.21/100 for structural.</p> <p>Conclusion: To enhance the hospital safety for disaster, we require multi-disciplinary collaboration and a commitment from high levels of authorities.</p>

Pneumonia Nosocomial Infection and Antibiotic Use: Evidence from Intensive Care Units of a Large Hospital

Seyyede Maryam Esmaeili¹, *Mehdi Yousefi¹, Hamid reza Naderi¹, Ali Taghipour¹,
Mohammad Hassan Aelami¹, Elaheh Eftekharpour¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Nosocomial infection, Pneumonia</p>	<p>Introduction: Pneumonia is one of the most common nosocomial infections in intensive care units. The aim of this study was to investigate the changes in antibiotic use in terms of frequency and cost of nosocomial infection in ICU at Imam Reza Referral Hospital in Mashhad.</p> <p>Materials and Methods: The present study is a descriptive and cross-sectional on the records of hospitalized patients with nosocomial pneumonia in ICU in Imam Reza hospital in 2016. Refer to patient records, identify antibiotics consumed Based on the prescribed dose for all patients studied, separation was confirmed for each hospitalization day. Then calculations were performed for the mean frequency of each drug item and its cost per day for one patient for the periods before, during and after pneumonia.</p> <p>Results: The results showed that the average cost of antibiotics per day for each patient during the period of nosocomial infection was 538431 million Rials and 343979 million Rials in the previous period.</p> <p>Conclusion: Over 50% increase in the volume of prescribed antibiotics during pneumonia nosocomial infection is important both in terms of health care costs and microbial resistance.</p>

Nurses' Opinions on how to Implement Infection Control Policies in the COVID-19 Crisis in the Largest Hospital in the East of the Country

*Somayeh Fazaeli¹, Ali Khorsand Vakilzadeh¹, Saeed Fazaeli¹, Zahra Ebrahimi¹, Mahdi Yousefi¹

1. Mashhad University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Hospital, Infection control, Nurses</p>	<p>Introduction: The nature of COVID-19 disease and its rate of spread caused hospitals to become potential outbreaks of the disease. The purpose of this study was to examine the views of nurses in different wards on how to implement infection control policies in the COVID-19 crisis in the largest hospital in the east of the country.</p> <p>Materials and Methods: This was a descriptive analytical and cross-sectional study. The research sample was 194 nurses from infectious and non-infectious wards of Imam Reza Hospital. The research tool was a researcher-made questionnaire with 9 questions, the validity and reliability of which were measured and confirmed. Data were entered into SPSS22 software and analyzed using Mann-Whitney chi-square.</p> <p>Results: 80% of the nurses were female and 70% were married and their work experience average was 16 years. There was a significant relationship between work experience and employment status with satisfaction. In proper information, staff safety training, screening, there was a significant difference between the viewpoints of infectious and non-infectious nurses.</p> <p>Conclusion: There was a difference between the views of different nurses regarding hospital infection control measures, which was related to the different experiences of the two groups. Improving information and adhering to infection control standards is recommended.</p>

Survey of staff with COVID-19 in Imam Reza Hospital in Mashhad During the First four Months of the Outbreak

*Somayeh Fazaeli¹, Ali Khorsand Vakilzadeh¹, Zahra Ebrahimi¹, Nafiseh Arfa Shahidi¹,
*Mahdi Yousefi¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Hospital, Staff</p>	<p>Introduction: Health care workers caring for coronavirus 2019 (COVID-19) patients are at risk for infection. This study was conducted to investigate the characteristics of cases of COVID-19 among the staff of Imam Reza (AS) Hospital in Mashhad, the largest hospital in eastern Iran during the first 5 months of the crisis.</p> <p>Materials and Methods: In this descriptive, cross-sectional and single-center study in Imam Reza (AS) Hospital, demographic characteristics and working status and symptoms of employees with Quid 19 (proven by RT-PCR) in the first 4 months of the Quid 19 crisis were examined. Data were entered into the software and statistical analysis was performed using SPSS21 software. To evaluate the relationship between variables, χ^2 test and risk ratio were used with $P < 0.05$.</p> <p>Results: In this study, 177 employees were infected with COVID-19, 94.4% of them in clinical wards, 60% of them were nurses and 65% were women, 19.2% of patients had underlying disease. There was no significant difference between the level of personal protective equipment used and COVID-19 infection. ICU staff were 2.495 times more likely to be infected. Common symptoms were: sweating (91.1%) and fever (84.93%).</p> <p>Conclusion: Staff training, especially in the ICU, about protect themselves should be increased.</p>

Study of Situation of Imam Reza Hospital in Mashhad in the Field of IPC at the Beginning and three Months after the onset of the COVID-19 Crisis

Mehdi Yousefi¹, Ali Khorsand Vakilzadeh¹,* Somayeh Fazaeli¹

1.Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Hospital, IPC, Indicator, WHO.</p>	<p>Introduction: The COVID-19 crisis led to more attention being paid to infection prevention and control (IPC) programs in the hospitals. The aim of this study was to study of readiness of Imam Reza Hospital in Mashhad regarding compliance with IPC indicators at the beginning and three months after the onset of the COVID-19 outbreak.</p> <p>Materials and Methods: This study was a cross-sectional descriptive study. The Due for review , in progress and completed were checked and entered into the tables, then presented by Excel software.</p> <p>Results: Out of 15 indicators, 6 and 9 indicators, respectively, at the beginning and 3 months later, were in the complete stage. Indicators of ensuring adequate knowledge of staff and patients and compliance with safety standards by individuals from stage one to three. Observance of sterilization of wards and personal protection protocols and restriction of visits was done from the beginning of the crisis.</p> <p>Conclusion: Allocating more funds for the provision of disposable tools and optimal management of resources and access to more personal protective equipment can be effective in this way.</p>

Assessment of Occupational Exposure of Infected Healthcare workers to COVID-19

*Maliheh Sadeghnezhad¹, Mostafa Ahmadi¹, Zoleikha Saadati¹, Nikou Fathi¹, Somayeh Alirezai¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Exposure, Health workers, Infection, Pandemic, PPE</p>	<p>Introduction: COVID-19 pandemic has put all health workers (HCWs) at risk of infection. Aim of this study is to determine how infected HCWs were exposed to COVID-19.</p> <p>Materials and Methods: 233 infected HCWs were included in this study from March 4 to August 4, 2020, at a general hospital in Mashhad, Iran. Data collected by COVID-19 virus exposure risk assessment form for HCWs that was released by WHO at 19 March 2020.</p> <p>Results: Age average of HCWs was 36.06 years. 21.5% HCWs had a chronic diseases. The most common clinical manifestation in this sample were respectively comprised muscle aches (89.7%), headache (79.8%). The most of infected HCWs (93.6%) had close exposure to an infected patient with COVID-19 in the last 14 days before they were infected. Using of PPE was assessed in all subjects. PPE were not often changed during a work shift. Most HCWs who were exposed to patients directly observed hand hygiene.</p> <p>Conclusion: No replacement of PPE during work shifts and insufficient disinfection of patients' environment and personnel's rest rooms are main reasons to expose HCWs to COVID-19. In addition, compliance of infection control recommendations in night work shifts could be helpful to prevent HCWs from get infected with COVID-19.</p>

How to wash your Hands Properly

*Hanieh Fazel Vazifeh Shenasi¹, Hasehm Sadeqi Bajestani¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Hand hygiene, washing hands</p>	<p>Introduction: Washing hands alone is one of the most important ways to preventing different kinds of illnesses since.</p> <p>Materials and Methods: Here is how to wash your hands; In the following we will visually show you the correct way to wash your hands</p> <ol style="list-style-type: none"> 1. Wet your hands with mild water, pour hand washing liquid on the palm of your hand and create foam by rubbing your hands against one another. 2. Wash the back of your hands as shown below. 3. Next, wash between your fingers. 4. Lock your fingers and clean the back of your fingers and nails by rubbing. If your hands are so dirty, wash every nail one by one. 5. Wash your thumb in a rotational form and separately. 6. Wash the tip of your fingers by rubbing them against the palm of your other hand 7. Finally wash your wrists in a rotational form. <p>Results: As it is mentioned, hands hygiene is improved with proper educations and awareness of its importance is the first step towards controlling infections in hospitals.</p> <p>Conclusion: As it is mentioned, hands hygiene is improved with proper educations and awareness of its importance is the first step towards controlling infections in hospitals.</p>

The Controlling Methods Of COVID-19 Disease in Selective Countries

Athena Rafieipour¹, *Arezoo Dehghani¹, Gholamreza Masoumi¹

1.School of Public Health and Safety, Students' Scientific Society, Shahid-Beheshti University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Disaster management, Health, Pandemic, Lessons learned</p>	<p>Introduction: Sharing experiences and learning lessons from national health measures in pandemics is an important issue that lead to the correct decisions at disaster time. In this study, by reviewing the controlling methods of COVID-19 disease in some countries, key points in health management were extracted.</p> <p>Materials and Methods: The present study was a comparative analysis among the health response of Italy, South Korea and Iran. Data were collected from published papers in the Google Scholar, PubMed, Web of Science and Scopus databases, official COVID-19 health management websites. Data were analyzed by matrix content analysis.</p> <p>Results: The success of the studied countries in the management of COVID-19 disease varies according to the time, type and manner of implementation and monitoring of criteria. Using the telemedicine services and providing free face masks in Italy, doing maximum diagnostic tests and prepared the traffic map of infected people in Korea, maximum ability to produce personal protective equipment and setting up the makeshift hospitals in Iran were the most important measures of each country. Korea was the most successful country to combat COVID-19 disease.</p> <p>Conclusion: Speed of action in diagnosing patients and integration in the implementation of health guidelines were the most important measures against pandemics that should be considered as lessons in the management of health crises and emerging diseases.</p>

Analysis the Methods of Controlling Hospital Infections During the COVID-19 Pandemic in Selective Countries

Athena Rafieipour¹, Gholamreza Masoumi¹, *Arezoo Dehghani¹

1.School of Public Health and Safety, Students' Scientific Society, Shahid-Beheshti University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Disaster Management, Hospital Infection, Health, Pandemic</p>	<p>Introduction: Prevention of hospital infections plays an important role in controlling epidemics that should be considered by health managers. The present study investigated the methods of controlling hospital infections during the COVID-19 pandemic.</p> <p>Materials and Methods: The present study is a comparative analysis of hospital infection control methods in Germany, Japan, Turkey and Iran during the COVID-19 outbreak. Data were collected from papers published in the Google Scholar, PubMed, Web of Science, and Scopus databases, or from control of the COVID-19 Centers. Data were analyzed by matrix content analysis.</p> <p>Results: Isolation of COVID-19 patient's beds, staff training for proper use of personal protective equipment, hospital visits forbidden or limitation, surface disinfection and proper management of hospital waste were performed in all study countries. The use of robots to deliver food and medicine to COVID-19 patients and screening at the entrance to the hospital were prominent Japanese measures and reducing unnecessary medical visits by online appointments and banning hospital visits were important policies that taken by Iran in the management of COVID-19.</p> <p>Conclusion: Separation of COVID-19 patients from other hospital wards, use of personal protective equipment and reducing the exposure of medical care staff are the best measures to control hospital infections that should be considered by health managers.</p>

Importance of Hand Hygiene and COVID -19

*Manizheh Kalantari Meibodi, Najme Ajudaniyan

1.Mashhad University of Medical Sciences

ARTICLE INFO

ABSTRACT

Nursing

Key words:

Iran, Hand hygiene,
Nosocomial infections

Introduction:

The rate of preventable infection is estimated about 40% in developing countries , which in turn increases the length of hospitality. hand hygiene has been shown to reduce the incidence of infection, But it has remained poor especially among some groups, The main aim of this study was compare the hand hygiene before and during COVID-19 crisis

Materials and Methods:

this is a descriptive study which compare the hand hygiene before and during COVID 19 period with checklist

Results:

The finding show that total mean of hand hygiene in 6 months before COVID period was 60.2 while slightly increasing during the crisis to 60.3.the mean of hand hygiene in 2 occasion before contact to patient was 47.8 but during corona crisis was 33. however, the mean in 3 occasion after contact with patient was 68/6 but during crisis was 78.6

Conclusionhh:

The results of study illustrate that although the rate of hand hygiene was increasing during the corona virus period but before contact with patient is poor. more studies should be conducted to investigate hand hygiene in healthcare staff. In before contact occasion. Furthermore, investigating effectiveness of various interventions for improving hand hygiene knowledge in 2 main occasion before patient contact is recommended.

Development of a New Function to Control Viral Agents in the Hospital During the Outbreak of Coronavirus

Hadi Alimoradi¹, Reza Jafari Noudoshan¹, *Mahsa Nazari¹, Alireza Ajdani¹, Mohammad Shervin Bina¹

1. Shahid Sadoughi University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, New coronavirus, Supervision, Health care staff</p>	<p>Introduction: Coronaviruses are hexagonal viruses that cause acute respiratory syndrome. In January 2020, scientists in Wuhan, China, isolated a new coronavirus responsible for the spread of the unknown pneumonia epidemic, which had not previously been reported in humans. The virus was transmitted through respiratory droplets to another person.</p> <p>Materials and Methods: The present study was a cross-sectional study of health care workers to evaluate the effectiveness of personnel protection strategy in a 1600-bed private hospital in Isfahan province. The hospital has taken a multifaceted approach to protecting and monitoring potential COVID-19 staff. Providing: (1) risk-based personal protective equipment, (2) thermometry and the use of thermal cameras, and advanced medical supervision of staff and disease progress. Data analysis was performed with SPSS software.</p> <p>Results: A total of 10,583 staff members were monitored for fever and respiratory mask in the hospital, of which 1,524 front-line personnel were working in COVID-19 areas under close supervision. Among the front-line staff, 10 staff members showed signs of illness within 20 days and approximately (291) were hospitalized.</p> <p>Conclusion: A staff health protection and monitoring system, typically implemented in non-outbreak periods and enhanced during COVID-19 outbreaks, is effective in protecting front-line personnel against infection.</p>

Evaluation of Performance and Pre-Hospital Emergency Equipment in Isfahan Province

Hadi Alimoradi¹, Reza Jafari Nodoushan¹, *Mahsa Nazari¹, Alireza Ajdani¹

1.Shahid Sadoughi University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Emergency, Hospital, Performance, Isfahan</p>	<p>Introduction: Primary prevention is still considered as one of the most important ways to reduce the burden of injuries and injuries. Many long-term deaths and disabilities can be prevented through increased trauma and emergency care. The aim of this study was to evaluate the performance of pre-hospital emergency in Isfahan province</p> <p>Materials and Methods: The present study is a descriptive cross-sectional analysis that was performed in 1398 in all emergency stations in Isfahan province. In this study, data related to staff and equipment in Isfahan emergency bases were obtained using a checklist. Also, 820 mission reports registered in the central database were reviewed, 22 SPSS software was used for data analysis.</p> <p>Results: Emergency response time in different urban areas of Isfahan province was 7 minutes and in suburban areas was 14 minutes. Total coverage by emergency management, 33% of the number of ambulances per 100,000 population, 19.3 devices, communication coverage, 80% of the ratio of first aid learners from the total target groups was 58% and the model of care used was combined.</p> <p>Conclusion: Although response time is a very important factor in reducing casualties from illness and emergencies, deficiencies in manpower and ambulance equipment can reduce the effectiveness of missions.</p>

Investigating the Status of Health Services and Error Management in Order to Promote the Organizational Culture of Patient Safety in a Private Hospital in Shahid Motahari, Isfahan

Hadi Alimoradi¹, *Mahsa Nazari¹, Alireza Ajdani¹, Mohammad Shervin Bina¹

1. Shahid Sadoughi University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: <i>Error management, Health services, Hospital, Organizational culture, Patient safety.</i></p>	<p>Introduction: Patient safety is a subset of organizational culture and as a set of priorities, values, attitudes and individual and organizational behaviors that seek to minimize errors. The purpose of this study was to describe the experiences of Shahid Motahari Medical Center staff of culture. Organized patient safety and error management.</p> <p>Materials and Methods: This research is a qualitative study with a phenomenological approach. Target-based sampling consisted of 170 staff members and staff providing health services in medical centers and participants were interviewed.</p> <p>Results: Findings include 353 basic codes, 14 thematic categories and 7 main themes with the titles of culture of principled error reporting versus error concealment; The culture of punishment and inspection versus the culture of encouragement in dealing with mistakes; Investigating and rooting out the causes of errors with an individual approach versus a systemic approach; Organizational learning and sharing of experiences of mistakes; Establishing an organizational mission based on compliance with patient safety standards and error prevention corrective measures; The culture was teamwork and respect for the patient's legal rights.</p> <p>Conclusion: Developing a safety culture and improving quality is essential to creating, maintaining and promoting a culture of principled error reporting.</p>

Effect of Washing with Clove Extract on Inflammation and Infection Place Logging Shaldon Needle

*Ali Bazzi¹, Zahra Abbasi¹

1.Facility of Nursing , Mashhad University Medical of Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Clove extract, Catheter, Hemodialysis, Inflammation, Infection</p>	<p>Introduction: Infections related to use of catheters, are an important cause of patient morbidity and increased health care costs. This study evaluated the efficacy of skin disinfection with Clove Extract for preventing catheter related adverse skin.</p> <p>Materials and Methods: This study was registered with US Clinical Trials (NCT02865980). This RCT conducted involving 60 patients under hemodialysis to Imam Reza and Montasareyeh hospitals of Mashhad in 2016. Patients were assigned to experimental and control groups of 30 people, randomly (double block). In the both group, first washed the Catheter with chlorhexidine , But in intervention group, after 2 minutes used of the clove extract with 2 ml of scrub for 15 seconds. The incidence of inflammation as well as infection of vascular assessed in patients on hemodialysis for each patient before starting the process over a period of 2 weeks (6 sessions of hemodialysis).</p> <p>Results: Chlorhexidine and Clove Extract was associated with lower incidence of catheter related inflammation (hazard ratio=0.555, 95% CI, 0.309–0.997; P=0.029). Scrubbing was not associated with a significant difference in catheter colonisation (P=0.38).</p> <p>Conclusion: Use of Chlorhexidine and Clove Extract effective means of reducing vascular catheter related inflammation.</p>

Comparison of the Hand Hygiene Compliance Among Nurses Before And after the Onset of COVID-19

Leila Hashemizadeh Fard Haghighi¹, *Zahra Jamshidi², Tahereh Rezaie¹, Amir Emami³, Mahboobeh Hosseini Moghadam⁴

1. Shiraz University of Medical Sciences (Nursing management department), Shiraz, Iran.

2. Department of Nursing University of Social Welfare & Rehabilitation Sciences, Tehran, Iran & Shiraz University of Medical Sciences (Nursing management department), Shiraz, Iran.

3. Burn & Wound Healing research center, Shiraz University of Medical Sciences, Shiraz, Iran.

4. Student Research Committee, Shiraz University of Medical Sciences, Shiraz, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID- 19, Hand hygiene, Pandemic, Nurses</p>	<p>Introduction: COVID-19 epidemic has created many challenges for the health. One of the most important solutions to better infection control is to maintain hand hygiene procedure. The purpose of this study was comparing the hand hygiene compliance among nurses before and after the onset of COVID-19.</p> <p>Materials and Methods: This was a cross-sectional study in which 25 hospitals of Fars province. The tool was a hand hygiene checklist that was developed using the guidelines of the World Health Organization and its validity and reliability were examined. Data were analyzed using SPSS software 21.0 and using descriptive and inferential statistics.</p> <p>Results: In a period of six months before COVID-19, out of 445 opportunity of hand hygiene, 310 cases and out of 510 opportunity after COVID-19 crisis, 446 cases were observed right hand hygiene in the nurses. The rate of hand hygiene in the nurses, increased from 69.6% before onset of COVID-19 to 87.4% after COVID-19 and compliance of 5 hand hygiene moments, has increased from 43.33% before onset of COVID-19 to 67.45% after COVID-19.</p> <p>Conclusion: Repeated hand hygiene training and community susceptibility can remove barriers of hand hygiene. Using appropriate monitoring as well as providing timely and sufficient facilities can be effective in improving this process.</p>

Chronic Diseases and Prognosis of COVID-19

*Sahar Sobhani¹, Atena Aghaee¹, Saeed Eslami¹, Reyhane Ariyan¹

1. Mashhad University Medical of Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COPD, COVID- 19, Death</p>	<p>Introduction: COVID-19 pandemic is an outbreak that initially appeared in Wuhan, Hubei Province, China, in December 2019, but it has already evolved into a pandemic spreading rapidly worldwide. Our aim in this study was to determine the effect of chronic diseases on the prognosis COVID 19.</p> <p>Materials and Methods: A total of 388 patients affected by COVID-19 admitted in Imam Reza hospital of Mashhad from February 20, 2020 to May 21, 2020 were enrolled in the study. All patients were admitted because of moderate to severe degrees of disease. COVID-19 infection was proved in all patients by means of PCR or lung HRCT characteristic findings.</p> <p>Results: The sample of this study consisted of 388 participants (223 (56.2%) males and 174 (43.8% females) with a mean age of 61/4 ± 17.8years. There was a signification relationship between COPD, CLD, duration of hospitalization and icu admission with death (p<0.001). The men were more prone to death due to COVID-19 infection than women (P-value=0.035). From the total of 388 patients, 60 patients (15.46%) died because of COVID-19 infection and 84.5% survived.</p> <p>Conclusion: Our study highlighted that chronic obstructive pulmonary disease (COPD) and chronic lung disease (CLD), male gender and older age causes a severe form of COVID-19 and death.</p>

Assessment of Nursing Staff Willingness with Hand Rubs Versus Hand Wash in COVID Care Department

*Sadegh Shabab¹, Shamsa Ahmadian², Zahra Arab², Mehdi Abaszadeh²

1. Physiology Department, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.

2. Nursing Department, Samen Hospital, Mashhad, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Hand hygiene, Hospital facilities, Hand rub, Hand wash</p>	<p>Introduction: Hand hygiene is the first recommended step to control infections. Inappropriate hand hygiene can lead to the spread of nosocomial infections. The prevalence of infection due to inappropriate hand sanitation will increase morbidity and mortality. In this study, we evaluated the willingness of nurses with hand rub versus hand wash in COVID ward.</p> <p>Materials and Methods: The willing of nurses to hand rub and hand wash was evaluated by a checklist in COVID ward in selected hospital in Mashhad in 2020. The data evaluated by EXCEL software.</p> <p>Results: The results of this study showed that the satisfaction rate of nursing staff with hand rub and hand wash facilities was 68.25% and 72.59% respectively, 63.13% of staff preferred to use hand wash, 26.35% hand rub and 10.52% both of them. The most causes for reluctance to hand rub included uncertainty about disinfection hand rub, skin sensitivity and nasty odors. In other hand convenient and fast use was the most important causes for the desire to use hand rub.</p> <p>Conclusion: Hand hygiene is importance in infection controlling in hospitals. Considering to the importance of staff satisfaction from the hand hygiene facilities, it is recommended in addition to availability, improved the quality of the relevant facilities.</p>

What are the Clinical and Paraclinical Characteristics of COVID-19 Patients?

*Afsaneh Karami¹, Houri Lahijanian¹, Zeinab Ghaffari¹

1.Isfahan University Medical of Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID 19, Clinical characteristics, Isfahan</p>	<p>Introduction: COVID-19 has been started to spread in December 2019 and developed in the world. According to the special features of COVID-19 in different populations and also due to this unknown disease this report is prepared to manage this disease in consider of characteristics of these patients.</p> <p>Materials and Methods: This article is a descriptive case series in which the demographic, clinical and paraclinical features of 15 samples in the age of 18 to 65 where randomly gathered from documents of hospitalized patients of Isfahan Farabi hospital in 2020, whom were approved RT- PCR positive.</p> <p>Results: The most patients were in the age of 30 to 60 and 60% of the population were women. 60% had been in touch with an approved COVID-19 patients, 46.7% of these patients had an underlying disease. The most common signs were 73% headache, 60% fever. 46.7% of patients showed contaminated lungs and 73.3% showed positive CRP. 33% of patients administered antiviral 100% antibiotics and 53.3% corticosteroids.</p> <p>Conclusion: Middle-aged patients who had an underlying disease and had been in touch with COVID-19 patient where more infected so these people should be considered more sensitive and should be prior in protective plans. Also, people with headache and fever, should be checked from COVID-19 infection.</p>

Evaluation of Urea and Creatinine Levels in the Serum of Patients Before and after Infection with COVID-19

*Dina Javidjam¹, Hamide Safarian-Bana¹, Sousan Daroudi¹, Saeid Eslami¹

1.Mashhad University Medical of Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Creatinine, Kidney injury, Urea.</p>	<p>Introduction: Coronavirus 2019 (COVID-19) is a disease caused by SARS-CoV-2. In these circumstances, it is essential that the laboratory results of patients with improved COVID-19 and the side effects of the disease be determined by long-term analysis. Acute kidney injury (AKI) has been reported in SARS-CoV-2 patients. Therefore, in this study, we intend to investigate the possibility of underlying kidney disease caused by this virus by examining the levels of urea, creatinine before and after coronavirus infection.</p> <p>Materials and Methods: A total of 184 patients with COVI-19 were investigated at PERSIAN cohort center in Emam Reza Hospital. They were divided in two groups of case (n= 84) and control (n=80) due to their antibody test result. Then changes in urea and creatinine level were examined before and after infection with coronavirus.</p> <p>Results: Serum urea and creatinine rose significantly after infection in case group (P<0.001). In addition, changes in serum urea and creatinine level had significant relationship with age group of >40 (P<0.001).</p> <p>Conclusion: According to our findings, the prevalence of kidney disease in patients with COVID-19 is possible. Hence, clinicians should increase their awareness of kidney disease in patients with COVID-19.</p>

Epidemiological Trend of COVID 19 Disease in the Elderly of Mazandaran Province During 8 Months

*Zeinab Sajadi¹, Hassan Talebi¹, Ebrahim Hoseinkhani¹, Ali Zare¹

1.Mazandaran University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Elderly, Underlying disease</p>	<p><i>Introduction:</i> Since December 2019, several cases of pneumonia of unknown cause caused by coronavirus have been reported in Wuhan, China. The global spread of the virus has affected global health systems and the world economy. Elderly are the most vulnerable to this disease. Knowledge of epidemiological characteristics and clinical manifestations of the disease and other epidemiological parameters in the elderly is important for modeling and estimating the course of epidemic diseases.</p> <p>Materials and Methods: the demographic information, symptoms and clinical manifestations of all elderly admitted with COVID-19 diagnosis in Mazandaran hospitals, who were admitted in the period of February 2019 to October 10, 2020, examined.</p> <p>Results: Out of 34039 patients, 15290 cases (45%) were elderly. The incidence was 7825 cases (51%) in women and more than men. 4959 elderly people had a history of contact with a patient with COVID 19. Among the underlying diseases heart problems (3741), diabetes (3578) and hypertension (3234), were the most common respectively. 2090 (13.6%) of the elderly died, accounting for approximately 71.9% of all deaths.</p> <p>Conclusion: According to the results and the high incidence and mortality of the elderly during the COVID-19 epidemic, there is a need for support structures, screening systems, community-based planning to prevent coronavirus infection in the elderly.</p>

A Case Report of Duodenal Fistula to the Skin and its Infection: Direct Removal of Food from the Skin of the Abdomen

*Zahra Zamani¹, Mohammadreza Hakimian¹, Ilia Asadi¹

1.Semnan University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Anastomosis, Common bile duct, Duodenum</p>	<p>Introduction: The common bile duct is a small tube-like structure formed where the common hepatic duct and the cystic duct join. The flow of bile into the intestine is done with several surgeries, such as a choledochoduodenostomy or choledochojejunostomy.</p> <p>Materials and Methods: Information was collected through Patient file, patient interviews and medical tests.</p> <p>Results: A 42-year-old man who underwent cholecystectomy and anastomosis of the common bile duct to the duodenum due to gallstones. The site of the anastomosis was infected in the first week and then leaked. In the second operation, a part of the jejunum is fixed at the site of the anastomotic leak. After 3 months with the start of oral feeding, we witnessed the removal of undigested food from the wound of the surgical site (directly from the patient's skin). In the third operation, the common bile duct is released and the distal part of the duct is closed. proximal part is connected to the jejunum and a stent is placed. The duodenal rupture is repaired .T-tube is fixed.</p> <p>Conclusion: There were complications such as postoperative infection, severe weight loss, rupture of the duodenum, and vitamin deficiency. The patient recovered after nursing and medical care.</p>

Demographic Characteristics and Clinical Characteristics of COVID-19 Patients in Health Centers of Mazandaran University of Medical Sciences

*Hassan Talebi¹, Zoya Hadinejad¹, Zeinab Sajadi¹, Ali Zare¹, Ebrahim Hoseinkhani¹

1. Mazandaran University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Clinical manifestations, Epidemiology</p>	<p>Introduction: Since December 2019, the new coronavirus outbreak has spread rapidly throughout China and many other countries. The most important challenge of this pandemic is to endanger the health and lives of people around the world. The aim of this study was to provide primary evidence and findings about epidemiology and clinical manifestations in referring to medical centers of Mazandaran during 8 months.</p> <p>Materials and Methods: In this retrospective study, demographic information, symptoms and clinical manifestations of all patients diagnosed with COVID-19 that were admitted in medical centers of Mazandaran University of Medical Sciences from February 2019 to October 2020 were examined.</p> <p>Results: In this study, 3409 people were admitted to the medical centers of Mazandaran with a diagnosis of COVID-19. The highest incidence was reported in the elderly (15,290) and the lowest in infants (117); 17170 were female. Fever, cough and respiratory distress were recorded as the most common symptoms in these patients. Diabetes and then heart problems were the most common underlying diseases. The mortality rate in patients was 8.55% and more in the elderly.</p> <p>Conclusion: Planning to immunize vulnerable groups, identify and diagnose cases quickly, provide accurate information, and provide food, medicine, and basic necessities during quarantine are some of the steps that can be helpful in this regard.</p>

Epidemiological Study of Nosocomial Infections in the Nosocomial Infections Care System in Amir Al-Mo'menin Hospital, Badar Genaveh

*Maryamalsadat Shamszadeh¹, Farkhondeh Behzadi¹, Gafar Mohamadi¹

1. Bushehr University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Care system , Epidemiological study, Nosocomial infections</p>	<p>Introduction: Nosocomial infections are a common problem in all countries of the world. The aim of this study was to determine the prevalence of nosocomial infections and related factors.</p> <p>Materials and Methods: This descriptive cross-sectional study was performed for all patients diagnosed with nosocomial infections the first six months of 1399.</p> <p>Results: In the present study, out of a total of 2813 hospitalized patients during the first six months of 1399, the mean prevalence was 1.13%. The highest rates of infection belonged to infection (VAE) 25%, surgical infection (SSI) 21.87%, urinary tract infection (UTI) 18.75%, blood infection (BSI) with 11.5% and respiratory infection (PENU) 2.12% has the lowest rate of infection. Also, other infections reported in INIS system were 20.76%. The incidence of UTI was highest in the ages of 44-65 years and the highest incidence was in the ages of 25-44 (SSI). The prevalence of nosocomial infections was 56.25% in women and 43.75% in men, with a significant difference. The highest pathogens were 12.5%, Staphylococcus aureus 9.37% and Citrobacter 9.37%, respectively. It was analyzed at the significant level of $P < 0.05$.</p> <p>Conclusion: Prevention and control of nosocomial infections requires the use of a systematic scientific approach, coordinated teamwork, and support of the authorities.</p>

Frequency of Occupational Injury Due to Needle Stick among the staff of the 9th De Torbat Heydariyeh Hospital

*Azam Momenizadeh¹, Azam Kamali¹, Mohammad Taher Khatibzadeh¹, Massoud Shah Mohammadi¹, Masoumeh Pashaei¹

1. Torbat Heydariyeh University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Occupational exposures, Needle stick</p>	<p>Introduction: One of the causes of nosocomial infections is injuries caused by occupational exposure and prevention is considered as a vital principle in maintaining the health of employees. This study, in order to identify the causes and frequency of these injuries, is cross-sectional among ninth hospital staff. Dey was done in 1399.</p> <p>Materials and Methods: Out of a total of 500 employees exposed to occupational exposure, 300 were selected by census method and completed the questionnaire. Data were analyzed using SPSS v.16 software.</p> <p>Results: The highest incidence of needle sticks was in morning shift nursing experts with a history of 1 to 10 years and age 20 to 35 years. There was a significant relationship between work experience and the incidence of this accident. The highest incidence was 80% dipping of the needle head and the highest immediate action after the accident was 66% washing of the wound with soap and lukewarm water. The reason for the occurrence of needle stick in the opinion of 70% of employees is the non-observance of safe injection technique, 30% of high workload.</p> <p>Conclusion: In order to reduce occupational exposure, it seems necessary to upgrade training and occupational safety exercises</p>

Reflective Learning in Take Care of Patients with COVID-19

*Zahra Ayazi¹, Soleiman Ahmady¹

1.Shahrekord University of Medical Sciences, Shahrekord, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Patient, Reflection, Reflective learning</p>	<p>Introduction: The corona pandemic surrounded the world, that the need to respect social distance, affected the public health, the provision of services, student education,..."Reflective learning" through experience, integrate and interpret existing knowledge to generate new knowledge & with effective learning, provide suitable medical services to patients with COVID-19.This cyclical process with: doing & gaining experience, evaluating & analyzing experience & planning for future performance. It is important in the care of patients with COVID-19 by providing experimental care to the patient through reflective learning.</p> <p>Materials and Methods: The 8-step process of "Walker and Avent approach"of Wilson's methods used to clarify the concept,explain the features, introductions and consequences of reflective learning in the clinical education.</p> <p>Results: "Reflective learning"transforms experience into more understanding so that one person can reach to high levels of learning.In the care of patients with coronavirus,the experience and provision of appropriate services in the treatment of patients and the health of service providers,has particular importance & helps to students with reflective learning to combine the theory and knowledge gained from experience during their studies and improve future performance with planning(with Critical Incident Report or narration)</p> <p>Conclusion: COVID-19made the active student passive in clinical education,that with Reflective learning can providing effective clinical services to patients.</p>

Evaluation of Compliance of Prophylactic Antibiotics in Comparison with National Guidelines in Selected Hospital of Mashhad

*Sadegh Shabab¹, Shamsa Ahmadian², Zahra Arab², Najme Sadrizade²

1. Physiology Department, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.

2. Nursing Department, Samen Hospital, Mashhad, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Guidelines, Infection, Prophylactic antibiotics, Surgical prophylaxis</p>	<p>Introduction: Surgical site infection is one of the major causes of increased morbidity and mortality as well as imposed a high cost on the health care system which can be reduced by appropriate antibiotic prophylactic use. The aim of our study was to evaluate the compatibility of prophylactic antibiotic use in surgical patients with national guidelines.</p> <p>Materials and Methods: The use of prophylactic antibiotics in the groups of general surgery, orthopedics, urology, obstetrics and neurosurgery in the spring and summer of 2020 compared to six months earlier in the selected hospital of Mashhad was evaluated. The data evaluated by EXCEL software.</p> <p>Results: The compliance of prophylactic antibiotics with national guidelines in a total of 1420 cases was 88.53%. That was 82.36% in the previous six months. The highest and lowest compliance with national guidelines was reported in the gynecology group with 93.78% and in the neurosurgery group with 34.68% respectively.</p> <p>Conclusion: Due to the importance of appropriate antibiotic prophylactic use in reducing postoperative complications and infections, Educational interventions are recommended. It is also suggested to more supervision be given to the prophylactic antibiotic prescription and the necessary feedback be given in case of non-compliance.</p>

Investigating the Common Causes of Stress in Medical Staff in the Face of Caring for Patients with COVID-19

*Ezzat Dolatkhah¹, Masoud Khani¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Patient, Stress</p>	<p>Introduction: In the definition of stress, it can be said that when the pressure on a person exceeds his capacity, stress and anxiety occur. Stressors are one of the main hazards in the workplace.</p> <p>Materials and Methods: A total of 100 medical staff working in the nurse visa care department with an average age of 34.5%, which is a maximum age of 24 years and a minimum age of 45 years, were examined. Information was collected through a questionnaire and using software spss was analyzed.</p> <p>Statistical analysis: 84% were female, 16% were male, 63% were married and 36.95% were single, 58% lived with their parents and 42% lived independently; 21% of the staff had a physical illness and 79% were in perfect physical health.</p> <p>Results: In this study, the stress rate was 87%, , children and kept their children with their parents, were worried about the carrier of the child and the infection of their parents. The study found that about 68% of the stress staff had their parents infected because of the possibility of carrying themselves or their child.</p> <p>Conclusion: The greatest stress of personnel working in wards with coronary heart disease is due to family illness.</p>

A Method in Infection Control Training for Healthcare Providers: Mixed Multimedia and Lecture Workshops

Mahboubeh Hajiabdolbaghi¹, Nasim Hosseini¹, Jalil Makarem¹, Mohammadreza Salehi¹, Esmaeil Mohammadnejad¹, Mahnaz Hadipour¹, *Arash Seifi¹

1. Tehran University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Infection control, Physician, Training</p>	<p>Introduction: Healthcare-associated infections are problems in all hospitals. One preventive strategy is training hospital staff. In many cases, the focus of training is on nurses as the most exposed personnel to patients; but it's also necessary to train physicians. This study conducted to train physicians through special workshops.</p> <p>Materials and Methods: Based on the number of physicians in a big tertiary collegiate hospital, 14 one-day workshops were held, by the help of pioneer professors in this field and the hospital infection control unit. Physicians' knowledge about the infection control components was assessed using standardized questionnaire before and after the workshop. Training multimedia (http://medicine.tums.ac.ir/infectious-disease/en/page/ipc-training-movies) along with the brief lectures was used.</p> <p>Results: The basic knowledge was the most in internal medicine faculty members (19.52/30), followed by surgery faculty members (18.70/30), internal medicine residents (15.63/30), and surgery residents (13.11/30). After the workshop, the mean knowledge score of physicians increased by 9.57%, 6.46%, 22.6%, and 16.6% for internal medicine faculty members, surgery faculty members, internal medicine residents, and surgery residents respectively.</p> <p>Conclusion: Findings of this research showed the need for improving physicians' knowledge about infection control, and the effect of such mixed multimedia and lecture workshops.</p>

Knowledge and Perception of Hand Hygiene: A Survey Using whO Standardized Tools in Tehran, Iran

Seyed Ali Dehghan Manshadi¹, Mojtaba Sedaghat¹, Fatemeh Mohammadhashem¹, Mohammadreza Salehi¹, Esmaeil Mohammadnejad¹, *Arash Seifi¹

1. Tehran University of Medical Sciences.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Hand hygiene, Health care associated infection, Knowledge, Perception.</p>	<p>Introduction: Healthcare-associated infections affect millions of people worldwide. Proper hand hygiene during patient care is an important action in preventing infections. In this study, the knowledge and perception of hand hygiene assessed among nurses as the most exposed personnel to patients.</p> <p>Materials and Methods: In this analytical cross-sectional study, 101 nurses working in different wards of a collegiate tertiary hospital in Tehran are investigated by standardized WHO questionnaires.</p> <p>Results: There was no significant difference in the self-reporting of the hand hygiene practice among nurses in different wards ($P=0.131$). There was no significant relationship between the self-reporting of the hand hygiene practice and the work experience and the age of the nurses ($P=0.64$ and $P=0.68$ respectively) nor the degree of education ($P=0.574$). There was a significant reverse relationship between the self-reporting of the hand hygiene practice and the supposed difficulty level of doing hand hygiene ($P=0.049$). There was a significant direct relationship between the self-reporting of the hand hygiene practice and the real performance of hand hygiene ($P=0.001$). The mean score of nurses' knowledge was 66.53 (± 9.41) based on the answers to the questions of the knowledge questionnaire.</p> <p>Conclusion: Nurses' self-reporting, rather than individual perception, is influenced by subjective norms and control believes.</p>

Assessing the Knowledge and Attitude of Razavi Hospital Staff in Relation to Proper Management of Hospital Waste in 2019

Marzieh Sadat Mousavi

Razavi Hospital, Mashhad, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Education, Hospital waste, Monitoring</p>	<p>Introduction: Proper management of hospital waste is one of the goals of the operational plan of each hospital. Training on separation of hospital waste and proper monitoring of the performance of staff can play an important role in reducing the volume of hospital waste.</p> <p>Materials and Methods: From six different occupational groups of the hospital, 210 samples were randomly selected and by distributing a questionnaire in each occupational group, the knowledge and attitude of the staff by attending the wards and completing the checklist were evaluated and the results obtained using one-way ANOVA test in soft SPSS software was analyzed.</p> <p>Results: The mean scores of knowledge and attitude were different in different occupational groups of the hospital, the highest scores of knowledge and attitude were related to health workers, nurses and the lowest were related to secretaries and operating room technicians, respectively. There was a significant relationship between job categories, service history, duration of training and knowledge and attitude.</p> <p>Conclusion: For the proper implementation of waste management, continuous training and monitoring as well as the use of legal leverage has a significant impact on the implementation of waste management laws, and one of the reasons for success in this regard is continuous visits to department officials</p>

Evaluation of the Performance of Gynecological Emergency Staff in Observing the Principles of Personal Protection in A Corona Pandemic in Ghaem Hospital

*Maryam Salari Hadaki¹, Fatemeh Ramezanpour¹, Zahra Fariborzi¹

1.Ghaem Hospital, Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Corona virus, Personal protection, Women's emergency</p>	<p>Introduction: Due to the coronavirus pandemic and the effect of personal protection in preventing the transmission of this disease, It seems that women's emergency workers are still at high risk despite using personal protective equipment.</p> <p>Materials and Methods: This cross-sectional descriptive-analytical study was performed on the health status, observance of personal protection and infection control of 59 employees in the care of 2132 gynecological emergency clients of Ghaem Hospital in the second quarter of 1399.</p> <p>Results: During the study period, 30.5% of employees and 1.12% of clients were infected ,In terms of infection control and personal protection, 70.3% of employees always washed their hands while caring for patients. And 70% used gloves and 98% simple masks. It is worth noting that only 15% of those who used the n95 mask and shield, knew how to use these devices properly. The reasons for the staff's illness were 20% of asymptomatic patients, 70% of their lack of complete personal protection, and 35% of non-observance of protection points during rest.</p> <p>Conclusion: This study recommends that in addition to providing adequate personal protective equipment, seek to identify and use more effective methods to protect their personnel against this disease.</p>

Evaluation of the Confirmed Patients with COVID-19 among Patients Referred to Shahid Hasheminejad Hospital

*Elnaz VafadarMoradi¹, Hesein Ghasemi Sabaghi¹, Fateme Mohammadi Khomartash¹, Sayyed Majid Sadrzadeh¹

1. Emergency Department, Faculty of Medicine, Mashhad University of Medical Science, Mashhad, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Eemergency, Pandemic, PCR test.</p>	<p>Introduction: Due to COVID-19 pandemic and due to the large number of patients referred to Shahid Hasheminejad Hospital in Mashhad, the present study was performed to evaluate patients who were admitted to this hospital with a the suspicion of COVID-19. Patients were evaluated for clinical and laboratory symptoms and outcome (including mortality and definitive diagnosis.</p> <p>Materials and Methods: During COVID-19 pandemic, 3112 patients were studied of which 46% of patients were female and 54% were male. The mean age of admitted patients was 61 years. The most common findings in CT scan were bilateral ground-glass pulmonary infiltration and the most common complaints were dyspnea (52.9%) and fever (32.4%). The most common past medical history was diabetes (18.16%) followed by hypertension (9.1%).</p> <p>Results: In these patient's 398 patients (12.79%) were transferred to the ICU and 13.9% of patients died. PCR was obtained form 834 patients, of which 22.3% were positive and 66.9% were negative.</p> <p>Conclusion: Education for patients and families is of great importance in preventing the spread of COVID-19 infection Positive only 22.3% of PCR test may be related to improper sampling, non-compliance with technical conditions and sending samples in non-standard conditions.</p>

Assessment of the Effect of Patient Participation in Promoting Hand Hygiene in Health-Care Workers of Razavi Hospital

*Mitra Vaziri¹, Kiarash Ghazvini¹, Reza Boland Nazar¹, Mohsen Mehvar¹, Kambiz Totonchi¹, Mahsa Sayadi¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Hand hygiene, Nosocomial infection, WHO</p>	<p>Introduction: Hand hygiene has been regarded as the simplest, most economical and most effective measure taken by clinical staff to prevent and reduce healthcare-associated infections. Concentrating on the importance of hand hygiene observation, this study aimed to evaluate the effect of intervention measures to promote hand hygiene based on the WHO standards framework.</p> <p>Materials and Methods: This cross-sectional interventional study was performed during the first six months of 1399 Solar Hijri (SH) in two stages including before (the first quarter 1399) and after (the second quarter 1399) the patient intervention in 13 general wards of Razavi Hospital. Hand Hygiene Surveillance Form and Hand Hygiene Self-Assessment Framework introduced by WHO in 2010 were used as the assessment tool in this study.</p> <p>Results: In this study, 1984 hand hygiene opportunities were totally assessed during the study period. The degree of adherence to hand hygiene was reported 33.6% and 55% before and after the patient intervention respectively. The findings revealed the improvement of hand hygiene after patient intervention.</p> <p>Conclusion: Patient education program as well as patient intervention to observe hand hygiene as the strategies to prevent nosocomial infections in form of continuous education could lead to increase the adherence of clinical staff to hand hygiene observation.</p>

Hand hygiene in COVID-19 Crisis

*Simindokht Khoshnoodi¹, Amirreza Saleh Moghadam¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Hand hygiene, Healthcare workers, Hand rub</p>	<p>Introduction: The 2019 coronavirus disease (COVID-19), caused by SARS-CoV-2, is spreading around the world and practitioners must play their part to contain the outbreak. Hand hygiene is one of the most important measures to prevent the transmission of SARS-CoV-2 and stop the spread of COVID-19.</p> <p>Materials and Methods: We reviewed seven articles related to hand hygiene in COVID-19 control. Then, using the results of these articles and WHO/CDC recommendations discuss the importance of hand hygiene in controlling this pandemic.</p> <p>Results: Good hand hygiene; regular hand washing with soap and water for at least 20 seconds or using an alcohol-based hand sanitizer with at least 60% alcohol if soap and water are not readily available; reduces the spread of germs that can cause illness, especially if done at key times throughout the day. Hand hygiene with alcohol-based hand rub (ABHR) is widely used around the world as one of the most effective, simple and low-cost procedures against COVID-19 cross-transmission.</p> <p>Conclusion: According to the results of studies related to hand hygiene and patients of COVID-19, it seems that by regular and correct hand washing by health system staff and the general public, the incidence of the disease can be significantly reduced.</p>

Detectable Occupational Exposure Rate Among Operation Rooms and Intensive Care Unit Staffs of Urmia Pediatric Hospital

Mahnaz Mohammadpouri¹, *Zhaleh Zeinali¹, Zahra Amirkhazadeh¹, Houriyeh Rahimi¹, Iran Khalili¹

1.Motahari Teaching Hospital, Urmia University of Medical Sciences, Urmia, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Blood, body fluids, Health care workers, Occupational exposure.</p>	<p>Introduction: Health care workers (HCWs) often are at great risk of needle stick injuries and infectious diseases which transmitted via blood including HIV, Hepatitis B and C. Due to lack of coherent system to record occupational exposure to body fluids in Iran, there is no exact statistics in this regard. So we decided to study rate and causes of injuries caused by exposure to blood and secretions in the Motahari hospital.</p> <p>Materials and Methods: We conducted a cross-sectional study included 100 HCWs using convenience sampling. Data collection tools consisting of demographic characteristics: age, gender, designation, working hours /week, work experiences, hepatitis B vaccination and the second part including: the number of injuries and reporting status. Data were analyzed by SPSS 18.</p> <p>Results: In this study, 77.2% of HCW's had at least once exposure which (56.6%) were not reported. The most injury happened at night shift, reason was high workload (31.7%) and needle was injury equipment. There was significant differences between ward and needle stick ($p=0.002$) and between job and sprinkled ($p=0.017$).</p> <p>Conclusion: There is a high rate of exposure and low reporting. Implementation such as personnel training, using standard protocol for reporting and management of exposure reasons will be useful.</p>

Prevalence of Hospital-Acquired Infections in Hospitalized Patients in one of The Educational Hospitals, Iran, 2019-2020

*Zoleikha Saadati¹, Kiarash Ghazvini¹, Neda Movahedi Saber¹, Malihe Siasar¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p>	<p>Introduction: Nosocomial infections are still an important issue in wards. Hospital-acquired infections (hai) are a major public health challenge especially in developing countries. The survey data indicated an array of preventive priorities which will be exploited during the current hospital infection control programme.</p>
<p>Key words: Hospital-acquired infections, ICU ward, Nosocomial infection, Prevalence rate</p>	<p>Materials and Methods: This retrospective study was conducted in all wards of the hospital, during the 1 year period (2019); the data were collected from the wards records and HIS system and analyzed by the SPSS software (version 19).</p> <p>Results: In the present study, of total 42456 hospitalized patients in different wards of the one of the biggest hospital was reported 18/14% of nosocomial infection. The most prevalent organism was <i>Acinetobacter baumannii</i> with a prevalence of 37.2% and the minimum was linked to the <i>Bacillus</i> species with a prevalence 0.3%. The highest and lowest prevalence of the nosocomial infection was in the ICU and CCU with 40.4% and 0.3%, respectively. In general, among all wards of the mentioned hospital, the most frequent nosocomial infection was pneumonia (38/03%) and the lowest belonged to CSF (1.3%).</p> <p>Conclusion: In this research, the ICU ward was accounted for the highest rate of nosocomial infection, due to the critical importance of this ward. Preventive measures and surveillance system for reduction of nosocomial infections is needed.</p>

Make shift Hospitals Risk Assessment with Focus on COVID-19

*Arezoo Dehghani¹, Zohreh Ghomian¹, Zahra Eskandari¹

1. Shahid Beheshti University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Risk assessment, Health, Make shift hospital, Pandemic</p>	<p>Introduction: COVID-19 was discovered in December 2019 that affected a large population. The Health System in the COVID-19 outbreak has focused on identifying, treating, tracing and quarantining and etc.</p> <p>Materials and Methods: One of the concerns of health managers was the shortage of hospital spaces and beds in COVID 19 new peaks. The Armed Forces and Non-Governmental Organizations designed and created post-hospital spaces as Make shift Hospital. More than 27,000 beds were provided in 300 locations with good logistical, service, pharmaceutical and therapeutic measures. More than 3,000 nurses and 2,000 social worker volunteers worked at Make shift Hospitals.</p> <p>Results: This is the third experience of running the make shift hospital since 40 years ago. The first one adjusted in the Iran-Iraq war and the second one provided in Bam earthquake. Most make shift hospitals have another uses in the past. Doing a risk assessment in the make shift hospitals that might cause harm to patients and staffs, can help managers and policy makers to find ways of removing the hazards and planning for responses.</p> <p>Conclusion: A tool provided for non-structural and functional safety for risk assessment. This tool will help eliminate risk factors and in the future can be a basic criteria for designing and setting up a make shift hospital.</p>

Development of Roadmap and Risk Communication Standards in Emerging Diseases (With A Focus On COVID-19)

Arezoo Dehghani

Shahid Beheshti University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Covi19, Disaster, Health, Media, Pandemic, Risk communication</p>	<p>Introduction: Access to credible news and information is one of the daily human rights and communication needs that need to be increased in certain circumstances. Disaster is a situation that increases the public's desire for accurate news. But if the common criteria for selecting attractive news for the audience (dimensions, conflict, proximity, rarity ...) are used, Social capital such as peace, empathy and trust will be endangered.</p> <p>Materials and Methods: In the development process of any country, it is necessary to pay attention to three factors. Information-oriented development, information management, information policy-making.</p> <p>Results: Determining the information and educational needs of the people at the time of the epidemics with a focus on COVID-19, Identify the main information channels that people trust for broad and fast information, determining the source of accountability and reliable information of the people for effective information is the three measures taken during the COVID 19 epidemic in order to prevent the occurrence of rumors and the effectiveness of health information increased during the outbreak of the COVID-19 in Iran.</p> <p>Conclusion: Other results will be the creation of appropriate information infrastructure in epidemics and the creation of appropriate virtual structures and purposeful social networks to attract audiences and Public Opinion management.</p>

Evaluation of hand Hygiene in operation field students of Islamic Azad University, Mashhad in Training Environment and in the Corona Crisis

Zohreh Rezaie Nesuad

1. Islamic Azad University of Mashhad

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Hand hygiene corona, Infection control, Operating room, Student.</p>	<p>Introduction: After the onset of the COVID-19 outbreak in Wuhan, China, and its spread to other countries, confrontation with it as an international emergency in all countries was seriously on the agenda of governments. Our country was not immune to this outbreak. In surgical rooms, this is especially important for students in preventing hospital infection in this section.</p> <p>Materials and Methods: This descriptive cross-sectional study was carried out on 19 students attending anesthesiology clinic in Mashhad Azad University in 2020. To collect the data, the Ministry of Health submitted a checklist and each of the subjects of the research community was observed three times as unobserved. Data analysis was done with the software spss 19</p> <p>Results: The results of this study showed that from a total of 240 hand-hygiene positions, 85 hygiene conditions were observed (35.4%), and the highest proportion of hygiene related to contact with secretion and wearing gloves instead of hand washing had the highest share in situations.</p> <p>Conclusion: Considering to the prevalence of coronary and the importance of hand hygiene and the presence of students, it is possible to emphasize the training and supervision of hygiene in the clinic as a necessity.</p>

The Effect of Virtual Education on Performance of Staffs in the Implementation of Infection Control Guidelines in Imam Reza Hospital

*Mahbobeh Mohebbi¹, Fateme Borzoei¹, Marjan Shoghi¹, Fateme Sayadi¹, Narjes Heshmatifar¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Education, Employee performance appraisal, Infection control</p>	<p>Introduction: Since hospital staffs have a key role to play in hospital infection control, they must have sufficient skills in this regard. This study aimed to investigate the effect of virtual education on performance of staffs in the implementation of infection control guidelines among Imam Reza Hospital staffs.</p> <p>Materials and Methods: This was an interventional study on hospital staffs including nurses, midwives, orderlies and assistant nurses. Virtual education was made available to all employees by providing the contents of infection control guidelines through the WhatsApp application. The contents prepared in simple language through the text and short videos approved by the Infection Control Supervisor and Infectious Diseases Specialist. Education, replication and follow-up were performed on 1300 people during one month. Evaluation and data collection was performed by simple randomization on 708 people using standard infection control checklists.</p> <p>Results: The mean age of employees was 37/05±11/54. The majority of employees 488 (69%) were nurses. Before education, the mean score of performance on infection control was 18/11±12/54, which was increased to 33/15 ±83/98 after education. The paired t-test showed this difference significantly (P= 0.001).</p> <p>Conclusion: Based on the findings of the present study, virtual education has increased the competency of personnel in applying infection control guidelines.</p>

A Comparative Study of Hand Hygiene of Nurses Working in COVID and Non-COVID Wards in Imam Reza Hospital in 1399

*Fateme Sayadi¹, Mahbobeh Mohebbi¹, Fateme Borzooe¹, Marjan Shoghi¹, Narjes Heshmatifar¹, Mohsen Aghakhani¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Hand hygiene, Nurses</p>	<p>Introduction: The best, most effective and simplest way to prevent nosocomial infections hand hygiene. This study was aimed to investigate the hand hygiene of nurses working in COVID compared non-COVID wards.</p> <p>Materials and Methods: This was a descriptive-analytical study on 350 randomly selected nurses of Imam Reza in 1399. The hand hygiene in nurses were observed thorough the standard checklist in 5 positions before contacting the patient, before any aseptic procedure, after contacting the patient, after contacting The patient's environment, after contacting The patient's secretions.</p> <p>Results: The most hand hygiene performed after contacting the patient's secretions 108 (31%) and contacting with the patient 87 (25%) respectively. The least hand hygiene was done before contacting with the patient 59 (17%), before any aseptic procedure 52 (15%) and after contacting with the patient's environment 42 (12%) respectively. Overall, the rate of hand hygiene in nurses was 73 (21%) in COVID and 84 (24%) in non-COVID wards. Independent t-test did not show this difference significantly (P= 0.001).</p> <p>Conclusion: Training is needed to increase hand hygiene, especially in the Coveid wards. Solving the current deficiencies in protective equipment such as alcohol-based solutions and gloves is essential for all nurses, regardless of the type of work department.</p>

A Comparative Study of Occupational Exposure of Working in COVID and Non-COVID Wards in Imam Reza Hospital in Mashhad In 1399

Fateme Borzooe¹, Mahbobeh Mohebbi¹, Fateme Sayadi¹, *Marjan Shoghi¹, Narjes Heshmatifar¹, Mohsen Aghakhani¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID -19, Nurses, Occupational exposure, Personal protective equipment</p>	<p>Introduction: Occupational exposure involves skin, eye, mucous, or intradermal contact with blood or other Body fluids when providing services that cause occupational injuries. This study was aimed to investigate the occupational exposure of employees working in COVID and non-COVID departments.</p> <p>Materials and Methods: The present descriptive-analytical study was done on 60 employees who referred to infection control unit after their exposure in the first 6 months of the year. The rates of occupational exposure of these people are compared in the COVID and non-COVID wards using a standard checklist.</p> <p>Results: The most common type of exposure was needle stick (60%). overall, the occupational exposure rate in employees of COVID and non- COVID wards was 11% and 8%, respectively. Independent t-test did not show a significant difference (P=0/001).</p> <p>Conclusion: the rate of occupational exposure between COVID and non-COVID ward's employees is similar, the necessary training in Reduce exposure and make protective coatings available such as shields and gloves on all employees regardless of the type of work area. changing the attitude optimally is also necessary to the proper using of existing protective equipment.</p>

Investigation of the Causes of COVID-19 Infection in Healthcare Workers in Isfahan Province

Hamid Ganji¹, Zahra Saberi¹, *Parisa Ataabadi¹, Shima Safazadeh¹, Behrouz Kaleidari¹

Isfahan University Of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Nurse, Infection control</p>	<p>Introduction: Introduction: One of the most concerning aspects of COVID_19 is the risk of infection among healthcare workers. HCW caring a person suspected of having COVID-19, or those who have been exposed to a patient or coworker with COVID-19, have expressed concerns regarding self-quarantine and exclusion from work.</p> <p>Materials and Methods: In this retrospective descriptive study, all cases of personnel infection for six months in hospitals of Isfahan province were interviewed in order to investigate the challenges and provide preventive solutions.</p> <p>Results: Studies showed that out of 8% of the total staffs were infected with COVID-19; the most patients were related to the professional nursing group and women. The highest mean age of patients was in the age group of 30 to 40 years and 9% of patients had underlying disease. Studies have shown that the main challenges that increase the risk of HCW include: Deficiencies in hand hygiene, inadequate quality of PPE distributed and intolerance by staff, and physical and mental fatigue.</p> <p>Conclusion: According to this study, the readiness of the crisis management team, training of basic instructions for infection control and improving the safety of physical structure and ventilation of hospitals, psychological support of medical staff are effective in preventing HCW infection.</p>

Investigating compliance with the protection standards against COVID-19 in the operating room from the perspective of surgical team members

*Omid Zadi¹, Mojgan Lotfi¹, Zahra Sheikhalipour¹, Vahid Zamanzadeh¹, Ahmad Mirza Aghazadeh Attari¹

1. Tabriz University Of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Operating room, Protective standards, Surgical team.</p>	<p>Introduction: Due to the highly contagious nature of the novel coronavirus, the surgical team is exposed to the disease during surgical care of patient with COVID-19. Therefore, the necessary measures should be taken to protect surgical caregivers. This study was conducted to determine the status of compliance with the protection standards against COVID-19 in the operating room from the perspective of surgical team members.</p> <p>Materials and Methods: This cross-sectional study was conducted on 183 surgical team members (surgeons, perioperative nurses and residents) in 2020. Participants were selected by stratified random sampling. The required data were collected by a researcher-made questionnaire according to the standard protocols of SAGES, EAES and AORN. This questionnaire assessed the observance of protection standards in three phases of Pre, Intra and Post-operative. The data was analyzed using SPSS16.</p> <p>Results: The obtained results revealed that the mean values of the protection standards against COVID-19 in the operating room, in all three phases of pre (14.4±4.4), intra (20.5±3.4) and post-operative (20.3±5.5) was moderate.</p> <p>Conclusion: According to the results, The level of compliance with the principles of standards in applying protective measures was not favorable, so the surgical team is exposed to COVID-19 and the necessary measures and improvements should be considered in compliance with standards.</p>

Comparison of the Effect of Copper, Brass, and Polymer Surfaces with Different Percentages of Copper on the Amount of Nosocomial Infectious Bacteria

Vajihe Biniaz

Emam Hosain Hospital, Baqiatallah University

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: <i>Anti-bacterial, Brass Sheet, Copper sheet, Methicillin resistant Staphylococcus aureus, Acinetobacter baumani</i></p>	<p>Introduction: The aim of this study was to investigate the effect of copper, brass (composite copper), and polymer surfaces with different percentages of copper on nosocomial infectious bacteria.</p> <p>Materials and Methods: In this study, inoculation of 20 µl of suspension with 100 million methicillin-resistant <i>Staphylococcus aureus</i> and <i>Acinetobacter baumani</i> using a pipette on 2 cm 22 cm sheets of pure copper, composite copper and three polymer composite bridges 3, 7 and 10% copper was done and the standard time for drying was observed. Then sheets transferred by a sterile forcep inside Sterile Falcon with 20 ml of phosphate buffer and 20 to 30 glass spheres and vortexed for 50-60 seconds. 100 ml of them, after dilution to ten thousandths spreaded on plates with Müller-Hinton agar and incubated at 37°C for 18-24 hours.</p> <p>Results: The amount of gram-positive bacteria of resistant <i>Staphylococcus aureus</i> to Methicillin and gram-negative bacteria of <i>Acinetobacter</i> in pure and composite copper sheets reached zero in 10 minutes and in polymer composite sheets with 10% copper reduced more than three and one logs, respectively.</p> <p>Conclusion: The results of this study showed that copper sheets and copper-containing polymer composites both have antibacterial properties and can reduce nosocomial infectious bacteria to an acceptable level.</p>

A Case Report of Successful Team work Management of Mucormycosis in a DKA Patient

Vajihe Biniiaz

Emam Hosain Hospital, Baqiatallah University

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Diabetes, Eye infection, Fungal infection, Mucormycosis</p>	<p>Introduction: Mucormycosis is a severe and rare fungal infection that can affects on patients with uncontrolled diabetes mellitus and Immunodeficiency and has high mortality rate. Hence, timely diagnosis and treatment in this disease is essential.</p> <p>Materials and Methods: Case report: A 66-year-old woman that had admitted in hospital due to diabetic ketoacidosis (DKA), complained from severe headaches on the second and redness and swelling around the right eye on the third day of hospitalization respectively.</p> <p>Results: Mucormycosis diagnosis was confirmed in the fifth day of hospitalization after consultation with neurologist, Internist and specialist of infectious disease and ENT and diagnostic tests performance such as brain CT scan- MRI and sinuses biopsy.</p> <p>Conclusion: Antibiotics and antifungal medications (intravenous Vancomycin and Amphotericin B) were administered. Sinus black discharge suctioning and debridement of necrotic tissues was performed in the operating room under sterile conditions several times. Fortunately, early recognition and team work management led to a better outcome. Although vision of right eye in patient became very low, but was saved her left eye and patient was discharged after 12 day with posaconazole oral medication.</p>

The Relationship Between Job Stress and COVID 19 Affecting Among Nurses in Vasei Hospital of Sabzevar in 1399

Narjes Heshmatifar¹, *Fatemeh Borzoei¹, Mahbobeh Mohebbi¹, Mohsen Aghakhani¹, Fateme Sayadi¹, Marjan Shoghi¹, Tahora Afshar Saleh¹, Manijeh Yousefi Moghadam¹, Roghaye Zardosht¹

1.Sabzevar University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Job stress, Nurses</p>	<p>Introduction: Today, nurses face with coronavirus (COVID-19), consider as a new occupational stressor in the nursing profession. this study aimed to investigate the relationship between job stress and COVID 19 affecting among nurses.</p> <p>Materials and Methods: The present Prospective case-control cohort study was done on 152 nurses working in Vasei hospital of sabzevar. They fullfill the occupational stress questionnaire in first month of year (Farvardin) and were fellow up untill 6 month (Shahrivar) . We explored the COVID 19- affection among nurses. case group were considered who had high score of occupational stress and control group were the nurses with lower occupational stress score. actually . the occupational stress was the exposure and the COVID 19- affection was the outcome variables .</p> <p>Results: The mean score of occupational stress in case group was 152.3± 14.2 and 90.1± 7.2 in control group. the rate of COVID-19 affection were 77% and 32% in case and control group respectively. this showed a statistically significant relationship between occupational stress and COVID- 19 affection (P<0.001).</p> <p>Conclusion: Occupational stress can be a risk factor for nurses affection to COVID-19.</p>

Field Study of the Operational Readiness of a Safe, Resilient and Responsive Hospital in a three-Level Drill Maneuver

Vajihe Biniaz

Baqiatallah University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: <i>Crise, Hhospital, Resilient, Responsive, Safe</i></p>	<p>Introduction: The occurrence of severe crises in Iran, which has a special geological, geographical, political, and regional position, seems very likely. Our goal was to evaluate the level of preparedness for dealing with multiple crises and to achieve the strengths and weaknesses of the hospital in the face of such situations.</p> <p>Materials and Methods: In the first phase, using the SWOT method. in the second phase, the conditions for hospital staff to face three simultaneous crises in different wards: a fire in one of the medical wards full of patients, a fire due to electric spark in one of the rooms of the specialized clinic and chemical leakage in one of the warehouses. Then, the level of readiness of staff as well as the efficiency of firefighters to provide timely and multiple assistance to the hospital with specific geographical conditions was evaluated.</p> <p>Results: According to the checklist for evaluating the performance of the hospital in crisis in terms of timely, safe, and quality assistance to patients and their families and safe, timely, and effective evacuation of patient records and hospital equipment was in good condition.</p> <p>Conclusion: increasing the specialized knowledge of medical staff, and training and practice of these people to deal with crisis situations.</p>

A Case Report of a Rare Disease Called Myelitis after COVID 19 Infection

Vajihe Biniiaz

Baqiatallah University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID 19, Coronavirus, Cerebrospinal fluid, Neurological symptom</p>	<p>Introduction: COVID-19 pandemic started in December 2019 with new coronavirus and respiratory symptoms is its most common symptoms.</p> <p>Materials and Methods: Although the virus normally is found in the secretions of the throat and respiratory system of patients, that is rarely found in the cerebrospinal fluid.</p> <p>Results: The patient is 51-years-old woman that after six weeks of being diagnosed with COVID 19 and decreased respiratory symptom, developed new symptoms such as muscle weakness, movement disorders and cognitive impairment and these symptoms progressed to the point that she lost the walk ability and power of normal mental focus. She also had the other symptoms and signs including the back and limbs pain, Blurred vision and skin reflexes changes. After performing several diagnostic tests, such as lumbar puncture (LP), cervical, thoracic and spinal MRI and blood tests, coronavirus detected in cerebro spinal fluid (csf) and "post COVID 19 infection myelitis" was raised.</p> <p>Conclusion: Fortunately, early recognition and management lead to a better outcome and the treatment was successful and the patient recovered greatly within three months after receiving anti inflammatory medication and regular physiotherapy.</p>

Physical Activity, Inactivity and COVID -19: An Integrative Review of Literature

Sheida Vahidi¹, Nastaran HeydariKhayat¹, Marzieh Noorbakhsh¹, Arezoo Gholizadeh¹

1.Shahid Beheshti University of Medical Sciences, Tehran, Iran,Treatment Affairs- Iranshahr University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: COVID-19, Physical activity, Physical inactivity</p>	<p>Introduction: Introduction and objective: Pandemic event of COVID-19 is one of the leading modifiable risk factors for global mortality by closure of sport clubs, restrictions on presence in crowded places, and forced physical inactivity. This integrative review aimed to review the results of studies on promoting of physical activity and exercise during of isolation COVID -19.</p> <p>Materials and Methods: Material and Method: This review article included 10 English language studies about physical inactivity, physical activity and exercise during COVID -19 pandemic from December 2018 to 2020.</p> <p>Results: Results:Physical activity and exercise are essential to improve the function of immune system, respiratory and brain system, and for preserving muscle mass through the activation of muscle protein synthesis. It can elicit systemic influences on the entire body. Physical activity is not recommended during any systemic viral disease.</p> <p>Conclusion: Conclusion:During periods of isolation, all socioeconomic groups, ethnicities, and ages should maintain good health by following the WHO physical activity recommendations of 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity per week, or a combination of both. In children/adolescents the recommendations include at least 60 minutes per day of vigorous or moderate intensity physical activity.</p>

The Role of Negative Pressure Wound Therapy (NPWT) on Diabetic Foot (DF) Healing

*Mina Mostafavi¹, Behnaz Samie¹, Saeid Pasban Noghabi¹, Mahboobeh Honarmand¹, Ali Asghar Mottaghian¹, Kiarash Ghazvini¹, Hosein Tayarani¹, Nadereh Hojjati¹

1.Nursing office, Deputy of Treatment, Mashhad University of Medical Sciences, Mashhad, Iran.

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Diabetic foot, Negative pressure wound therapy, Wound dressing</p>	<p>Introduction: The aim of this study is effect of NPWT on DF healing.</p> <p>Materials and Methods: A review study according of articles published between 2015 and 2019 in journals of web of sciences.</p> <p>Results: One type of dressing cannot be used for all types of wounds due to the heterogeneous nature of diabetic wounds. The appropriate dressing should be taken in to consideration by the therapist based on the location, size, and depth, the amount of exudate, the presence of infection or necrosis, and the condition of the tissue around the wound. Today, NPWT is one of the new treatments for diabetic foot ulcers. In a study patients in the NPWT (n= 169) and wet dressing (n= 166) groups were evaluated for closure and secondary amputation. In the NPWT group and the wet dressing group, the wound closure rate has been reported to be 43.2% and 28.9%, respectively. The rate of secondary amputation in the NPWT group was lower than the wet dressing group (P= 0.035). The most important challenges in this regard are the high costs of NPWT and the lack of insurance.</p> <p>Conclusion: Therefore, the use of NPWT is highly recommended for the management of diabetic wounds.</p>

Examining Ways to Reduce Post-Surgical Infections in Heart Patients and Understanding the Pain by the Nurses

Shirindokht- Sadat Naseri¹, Azadeh- Sadat Naseri¹, Fereydoun Hashemi Bidokhti¹, Fatemeh Abbaspour¹

1. Mashhad University of Medical Sciences

ARTICLE INFO	ABSTRACT
<p>Nursing</p> <hr/> <p>Key words: Heart, Nurses, Post-surgical infections</p>	<p>Introduction: Surgery as a curative procedure, is one of the most important causes of post procedure unpleasant sensation, specially at the site of surgical wound. Based on statistical analysis, for the majority of patients, 40 to 60 percent, it is severe, and only 20 percent of the cases experience mild pain, also 20 to 40% have moderate pain. Surgical wound infection, specially post cardiac surgery is the leading cause of this complication. This review article aim is exploring different ways of postsurgical infection and pain reduction, especially for those who are undergoing cardiac surgery, by nurses and staffs involved in post procedural care. Based on our study, it is obvious that personnel training for better communication and care skills as well as increasing the desire for better performance causes less post-surgical wound infection and its painful consequences. In addition, optimal presurgical stress management has an enormous role for reducing these complications.</p>

Education of Health Issues by Intimate Families

*Azar Mohamadian Gouchani¹, Naser Amini¹, Barat Ali Arabnejad¹, Seyed Kazem Farahmand¹

Mashhad University of Medical Sciences, Mashhad, Iran

ARTICLE INFO	ABSTRACT
<p data-bbox="193 611 304 645">Nursing</p> <hr/> <p data-bbox="193 819 411 943">Key words: Breast cancer, Education, Health volunteer</p>	<p data-bbox="496 584 687 618">Introduction: Health volunteers Program is one of the ways to organize people's participation mostly women in health system.</p> <p data-bbox="496 685 823 719">Materials and Methods: In this study a number of Health volunteer and their families covered by Mashhad Health Center No. 1 were selected by random sampling. Each urban health volunteer provided training for 5 neighborhood families and 5 intimate families and each rural health volunteer provided training for 3 neighborhood families and 3 intimate families. The subject of training was about health information based on breast cancer booklet approved by the Ministry of Health. Pretests and five months later posttests were done after completing education.</p> <p data-bbox="496 999 616 1032">Results: In this health research, 548 families were included; 267 neighborhood families and 281 intimate families. Significant differences were observed between the mean scores before and after training p.value =0.000.</p> <p data-bbox="496 1133 663 1167">Conclusion: Health education is better conveyed through intimate families, including relatives, friends, and better selected intimate individuals.</p>